

# No. 14-0776

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## *In The Supreme Court of Texas*

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**MICHAEL WILLIAMS, COMMISSIONER OF EDUCATION, IN HIS  
OFFICIAL CAPACITY, ET AL.**

*Appellants/Cross-Appellees*

v.

**THE TEXAS TAXPAYER & STUDENT FAIRNESS COALITION, ET AL.;  
CALHOUN COUNTY ISD, ET AL.; EDGEWOOD ISD, ET AL.; FORT  
BEND ISD, ET AL.; TEXAS CHARTER SCHOOL ASSOCIATION, ET AL.;  
AND JOYCE COLEMAN, ET AL.**

*Appellants/Appellees/Cross-Appellants*

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*On Direct Appeal from the  
200th Judicial District Court, Travis County, Texas  
No. D-1-GN-11-003130*

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**BRIEF OF APPELLANTS TEXANS FOR REAL  
EQUITY AND EFFICIENCY IN EDUCATION AND  
TEXAS ASSOCIATION OF BUSINESS, ET AL.**

**(“EFFICIENCY INTERVENORS”)**

**ENOCH KEVER PLLC**

Craig T. Enoch

Melissa A. Lorber

Amy Leila Saberian

Shelby O’Brien

600 Congress Ave., Suite 2800

Austin, Texas 78701

512.615.1200 telephone

512.615.1198 facsimile

**SPRAGUE, RUSTAM & DIAMOND, P.C.**

J. Christopher Diamond

11111 Katy Freeway, Suite 300

Houston, Texas 77040

713.647.3130 telephone

713.647.3137 facsimile

## **IDENTITY OF PARTIES AND COUNSEL**

### **Appellants/Cross-Appellees**

Michael Williams, Commissioner of Education, in his Official Capacity, Glenn Hegar, Texas Comptroller of Public Accounts, in his Official Capacity, the Texas State Board of Education, and the Texas Education (collectively “the State”)

### **The State’s Counsel**

Ken Paxton  
Charles E. Roy  
James E. Davis  
Jonathan F. Mitchell  
Rance Craft  
Kristopher S. Monson  
Beth Klusmann  
Evan S. Greene  
Shelley N. Dahlberg  
OFFICE OF THE ATTORNEY GENERAL  
P.O. Box 12548 (MC059)  
Austin, Texas 78711-2548

### **Appellees/Cross-Appellants**

Calhoun County Independent School District, et al. (collectively “Calhoun County ISD”)

### **Calhoun County ISD’s Counsel**

Mark R. Trachtenberg  
HAYNES AND BOONE, LLP  
1 Houston Center  
1221 McKinney Street, Suite 2100  
Houston, Texas 77010  
  
John W. Turner  
HAYNES AND BOONE, LLP  
2323 Victory Avenue, Suite 2100  
Dallas, Texas 75219

**Appellees/Cross-Appellants**

Texas Charter School Association, et al. (collectively “Charter Schools”)

**Charter Schools’ Counsel**

Robert A. Schulman  
Joseph E. Hoffer  
Leonard J. Schwartz  
SCHULMAN, LOPEZ & HOFFER, L.L.P.  
517 Soledad Street  
San Antonio, Texas 78205-1508

James C. Ho  
GIBSON, DUNN & CRUTCHER LLP  
2100 McKinney Avenue, Suite 1100  
Dallas, Texas 75201-6912

**Appellants**

Texans for Real Efficiency and Equity in Education, Texas Association of Business, and Joyce Coleman, et al (collectively “Efficiency Intervenors”)<sup>1</sup>

**Efficiency Intervenors’ Counsel**

Craig T. Enoch  
Melissa A. Lorber  
Amy Leila Saberian  
Shelby O’Brien  
ENOCH KEVER PLLC  
600 Congress Avenue, Suite 2800  
Austin, Texas 78701

---

<sup>1</sup> The Efficiency Intervenors are Texans for Real Efficiency and Equity in Education; Texas Association of Business; Joyce Coleman, individually and as next friend of her minor children; Danessa Bolling, individually and as next friend of her minor child; Lee Beall and Allena Beall, individually and as next friends of their minor children; Joel Smedshammer and Andrea Smedshammer, individually and as next friends of their minor children; and Darlene Menn, individually and as next friend of her minor child.

J. Christopher Diamond  
**SPRAGUE, RUSTAM & DIAMOND, P.C.**  
11111 Katy Freeway, Suite 300  
Houston, Texas 77040  
713.647.3130 telephone  
713.647.3137 facsimile

**Appellees**

The Texas Taxpayer and Student Fairness Coalition, et al. (collectively “Taxpayer Coalition”)

**Taxpayer and Student Fairness Coalition’s Counsel**

Richard E. Gray, III  
Toni Hunter  
Richard E. Gray, IV  
GRAY & BECKER, P.C.  
900 West Avenue  
Austin, Texas 78701

Randall B. Wood  
Doug W. Ray  
RAY & WOOD  
2700 Bee Caves Road, #200  
Austin, Texas 78746

**Appellees**

Edgewood Independent School District, et al. (collectively “Edgewood ISD”)

**Edgewood ISD’s Counsel**

Marisa Bono  
MEXICAN AMERICAN LEGAL DEFENSE AND EDUCATION FUND, INC.  
110 Broadway, Suite 300  
San Antonio, Texas 78205

Celina Moreno  
Roger L. Rice  
MULTICULTURAL EDUCATION TRAINING AND ADVOCACY, INC.  
240A Elm Street, Suite 22  
Somerville, Massachusetts 02144

**Appellees**

Fort Bend Independent School District, et al. (collectively “Fort Bend ISD”)

**Fort Bend ISD’s Counsel**

Wallace B. Jefferson

Rachel A. Ekery

ALEXANDER DUBOSE JEFFERSON & TOWNSEND LLP

515 Congress Avenue, Suite 2350

Austin, Texas 78701

J. David Thompson, III

Philip Fraissinet

THOMPSON & HORTON LLP

3200 Southwest Freeway, #2000

Houston, Texas 77027

Holly G. McIntush

THOMPSON & HORTON LLP

Wells Fargo Tower

400 W. 15th Street, Suite 1430

Austin, Texas 78701

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## STATEMENT OF THE CASE

<b><i>Nature of the Case:</i></b>	This is a case in which multiple school districts, their taxpayers, charter schools, parents and students, and businesses sued the State, seeking declarations that various aspects of the public education system are unconstitutional and requesting injunctive relief. The parties asserted differing theories as to why the system is unconstitutional. Though the theories varied, the school districts alleged that school financing is unconstitutional because the funding is inadequate, unsuitable, and inequitable, and that the scheme effectively imposes a statewide property tax in violation of the Texas Constitution. The Taxpayer Coalition further argued “taxpayer inequity.” The Charter Schools argued financial inadequacy, particularly as related to facilities funding for charter schools, and claimed equal protection violations. The Efficiency Intervenors argued that the public education system as structured is qualitatively inefficient because it does not provide for the general diffusion of knowledge with little waste.
<b><i>Trial Court:</i></b>	Beginning in October 2012, the trial court conducted a lengthy trial in which all parties offered extensive evidence. At the end of trial, in February 2013, the court orally announced a ruling from the bench, but did not enter a written final judgment. In light of the Legislature’s 2013 amendments to portions of the Education Code, the school districts asked and the court agreed to reopen the evidence. A second lengthy trial was conducted in January 2014.
<b><i>Trial Court Disposition:</i></b>	On August 28, 2014, the trial court ruled in favor of all school districts on their state property tax, suitability, and adequacy claims. The court ruled in favor of the Taxpayer Coalition, Fort Bend ISD, and Edgewood ISD on their quantitative efficiency claims. The court ruled against the Taxpayer Coalition on its taxpayer equity claim. The court denied the Charter Schools’ request for declaratory relief related to all their claims except their adequacy claim. And the court ruled against the Efficiency Intervenors on all of their claims.
<b><i>Appellate Court:</i></b>	All parties filed direct appeals to this Court. The Court noted probable jurisdiction over the appeal.

## **STATEMENT OF JURISDICTION**

This is a direct appeal of the trial court’s judgment in a case in which multiple parties challenged the constitutionality of the Texas School System. On January 23, 2015, this Court noted probable jurisdiction over all of the parties’—including the Efficiency Intervenors’—direct appeals. *See* TEX. R. APP. P. 57.

## **ISSUES PRESENTED**

**ISSUE ONE:** Because the Texas School System fails to provide an efficient system of public free schools providing for the general diffusion of knowledge, it is unconstitutional.

**ISSUE TWO:** Because the Texas School System does not collect data on and has not determined the cost of educating a child, the System lacks financial accountability. It fails to show any dollar spent produces any educational result. The System therefore fails to provide an efficient system of public free schools for the general diffusion of knowledge and is unconstitutional.

**ISSUE THREE:** Because the Efficiency Intervenors prevailed or, alternatively, significantly contributed to the trial court's analysis of the constitutional efficiency of the Texas School System, the trial court abused its discretion in refusing to award them attorney's fees.

## INTRODUCTION

The Texas Legislature has the duty “to establish and make suitable provision for the support and maintenance of an efficient system of public free schools” for the “general diffusion of knowledge,” “essential to the preservation of the liberties and rights of the people.” TEX. CONST. art. VII, § 1. To meet this duty, the Legislature has created a system of school districts for delivery of the general diffusion of knowledge. As currently structured the Texas School System (“the System”) —a centrally controlled system riddled with state-imposed mandates— fails this constitutional mandate.<sup>2</sup>

This Court has consistently said that the term “efficient,” in the context of assessing whether the System meets constitutionally required standards, means productive of results with little waste.<sup>3</sup> There can be no serious dispute that the System is constitutionally inefficient. The Court need look only so far as the history of Texas school finance litigation. Routinely, the System, via the school

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<sup>2</sup> For ease of reference, in its brief the Efficiency Intervenors refer to the parties in the short form as stated in pages ii-v in the Identity of Parties and Counsel section.

<sup>3</sup> As stated in *Edgewood Indep. Sch. Dist. v. Kirby (Edgewood I)*, “‘efficient’ conveys the meaning of effective or productive of results and connotes the use of resources so as to produce results with little waste; this meaning does not appear to have changed over time.” 777 S.W.2d 391, 395 (Tex. 1989).

districts, essentially sues itself over the amount and allocation of its funding.<sup>4</sup> And economists uniformly decry litigation costs as unproductive. Texas’s entire tort-reform movement is predicated on this economic principle that litigation costs are unproductive. In addition, school finance litigation routinely requires Texas taxpayers to double-pay millions in legal fees (paying both the State lawyers and school district lawyers)—and as between these groups, the trial court’s award of attorney’s fees only substitutes charges against one bucket of tax revenue for charges against another bucket of tax revenue. It is with no sense of irony that one of the school district lawyers opened the trial with the statement: “I’m sorry we have to be back here, but I think this is, for whatever reason, a necessary part of the process in Texas.”<sup>5</sup>

Yet history shows these lawsuits never once litigated the foundational cause of Texas’s broken System—the *structural inefficiency* of the System (what this Court has previously referred to as “qualitative efficiency,”<sup>6</sup> as opposed to

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<sup>4</sup> These cases are: *Edgewood Indep. Sch. Dist. v. Kirby (Edgewood I)*, 777 S.W.2d 391 (Tex. 1989); *Edgewood Indep. Sch. Dist. v. Kirby (Edgewood II)*, 804 S.W.2d 491 (Tex. 1991); *Carrollton-Farmers Branch Indep. Sch. Dist. v. Edgewood Indep. Sch. Dist. (Edgewood III)*, 826 S.W.2d 489 (Tex. 1992); *Edgewood Indep. Sch. Dist. v. Meno (Edgewood IV)*, 917 S.W.2d 717 (Tex. 1995); *W. Orange-Cove Consol. Indep. Sch. Dist. v. Alanis (W. Orange-Cove I)*, 107 S.W.3d 558 (Tex. 2003); *Neely v. W. Orange-Cove Indep. Sch. Dist. (W. Orange-Cove II)*, 176 S.W.3d 746 (Tex. 2005).

<sup>5</sup> 2RR423.

<sup>6</sup> Throughout this draft, the Efficiency Intervenors use the terms “qualitative efficiency” and “structural efficiency” interchangeably. As the Court has previously explained, these terms refer to the broader structural design and statutory controls of the Texas School System rather than just to the financial component of the system. *W. Orange-Cove II*, 176 S.W.3d at 753; *Edgewood IV*, 917 S.W.2d at 729.

“financial efficiency”). The System has only fought itself over amount and allocation of taxpayer dollars. And to this day, and despite taxpayers being called on to put tens of billions of dollars more into the System, virtually no educational improvement has occurred.

This is because, as this Court has emphasized again and again, lack of efficiency is not just a problem of underfunding or financial misallocation. It is instead a problem with the System’s fundamental structure. And the Court has invited a challenge to this structural inefficiency.<sup>7</sup> The Efficiency Intervenors accept the Court’s invitation.

Efficiency Intervenors are Texas parents, school-age children, and employers represented by the Texas Association of Business. They are Texas’s educational consumers. These educational consumers represent the parties with the constitutional “right” to receive a general diffusion of knowledge (unlike school districts, which have instead a constitutional obligation to provide for the general diffusion of knowledge). While the school district parties only attack the System’s funding amount and allocation, the Efficiency Intervenors attack not only the

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<sup>7</sup> In *Edgewood III*, for example, the Court stated: “We are constrained by the arguments raised by the parties to address only issues of school finance. We have not been called upon to consider, for example, the improvements in education, which could be realized by eliminating gross wastes in the bureaucratic administration of the system.” 826 S.W.2d at 524.

funding formulae that contribute to constitutional inefficiency, but also attack the System's constitutionally inefficient *structure as a whole*.<sup>8</sup>

The parties sharply disagreed at trial whether public education funding and financial allocations impair constitutional efficiency, but both the State and school districts must concede that the System's current structure encourages litigation, substantially wastes taxpayer dollars, and to the main point, is not productive of results with little waste. The Efficiency Intervenors conclusively proved at trial that it is the very structure of the System that causes constitutional inefficiency such that the System fails to provide for the general diffusion of knowledge. Specifically, it is the System's bureaucratic, monopolized statutory scheme, riddled with state-imposed mandates, unnecessary and unproductive labor laws, arbitrary and outdated formulas, and excessive regulations that imposes waste and impairs

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<sup>8</sup> This Court explained in *Edgewood IV* that “[w]hile we considered the financial component of efficiency to be implicit in the Constitution's mandate, the *qualitative* component is *explicit*.” 917 S.W.2d at 729 (emphasis added). *Edgewood IV* also drew the critical distinction between equity and efficiency:

The district court viewed efficiency as synonymous with equity, meaning that districts must have substantially equal revenue for substantially equal tax effort at all levels of funding. This interpretation ignores our holding in *Edgewood II* that unequalized local supplementation is not constitutionally prohibited. The effect of this “equity at all levels” theory of efficiency is to “level-down” the quality of our public school system, a consequence which is universally regarded as undesirable from an educational perspective. Under this theory, it would be constitutional for the Legislature to limit all districts to a funding level of \$500 per student as long as there was equal access to this \$500 per student, even if \$3500 per student were required for a general diffusion of knowledge. Neither the Constitution nor our previous *Edgewood* decisions warrant such an interpretation. Rather, the question before us is whether the financing system established by Senate Bill 7 meets the financial and qualitative standards of article VII, section 1.

*Id.* at 730.

the System's ability to produce a general diffusion of knowledge. The problem is structural, not just funding and allocation.

Despite the fact that the evidence proved the System is constitutionally inefficient because it is highly wasteful and unproductive of educational results, and despite that the trial court's findings of fact and conclusions of law support the Efficiency Intervenors' claims, the trial court rendered judgment against them. The court reasoned that the relief the Efficiency Intervenors requested is akin to a political question rather than a request for constitutional relief. In stark contrast, the trial court rendered judgment for the School District plaintiffs and Charter School intervenors on most of their funding claims. The trial court apparently believes the System's financial litigation is of constitutional concern to the courts, but the education consumers' litigation over the structural inefficiency of the System is only for the politicians. The trial court erred: this Court has made clear it is proper for the judiciary to decide issues of qualitative efficiency.

But even if the Court ultimately disagrees that the System is unconstitutional because it is qualitatively inefficient, the Court may still bring order to the cycle of fruitless litigation over funding by requiring school district litigants to do the obvious: offer some evidence demonstrating that it is *because* of funding inadequacy that the System is unable to produce the general diffusion of knowledge with little waste. In other words, school districts should be required to tie any particular dollar of expense to student achievement. But currently, one

significant cause of the System's inability to provide for the general diffusion of knowledge is that it has neither studied nor determined the cost to educate a child. Though asked, no district superintendent, state employee, or expert could answer the question: "How much money does it take to educate a child?" And the evidence showed that irrespective of the level of funding, some schools produced good educational results while other schools failed. It is remarkable that within the same school districts, there is great disparity of funding between schools, yet there are still below-average funded schools that produced good educational results and above-average funded schools that failed to produce good educational results. This information has been and continues to be uncollected because the State does not want to know that number for fear the cost of education is greater than the amount provided, and the school districts do not want to know that number for fear the cost of education is less than the local level demands.

The Efficiency Intervenors request the Court conclude:

- (1) The System is unconstitutional because it fails to provide an efficient system of public free schools for the general diffusion of knowledge. The System is not productive of results with little waste.
- (2) The System is unconstitutional because it encourages self-litigation to reallocate funding and it fails to tie any funding to any educational results. This failure imposes unproductive costs, and thus fails to provide an efficient system of public free schools for the general diffusion of knowledge.

- (3) The Efficiency Intervenors are prevailing parties or, alternatively, they significantly contributed to the analysis of Texas's constitutional command for an efficient system of public free schools for the general diffusion of knowledge. The trial court abused its discretion by refusing to award their reasonable and necessary attorney's fees proven at trial.

### **STATEMENT OF FACTS**

Texas courts have become accustomed to a peculiar tradition: as a matter of course, the System essentially sues itself every few years for more, and reallocation of, money.<sup>9</sup> Such is this case.<sup>10</sup> While some school districts complained about an inequitable distribution of funds, all of the school districts complained they did not have enough money to meet the System's standards for student testing and graduation that had been heightened by the Texas Legislature during the 2011 Legislative session.<sup>11</sup>

The Efficiency Intervenors intervened, also challenging the constitutionality of the System, but not predicated on a demand for, or reallocation of, money. The Efficiency Intervenors contend the unconstitutionality of the System is tied not to just a funding problem, but to the System's structure.<sup>12</sup> It is funded through arbitrary and outdated funding formulas (in particular the cost of education index

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<sup>9</sup> See Footnote 4.

<sup>10</sup> Though charter schools intervened and other groups, ostensibly composed of school districts, taxpayers, and some parents, sued as plaintiffs, none asserted any claims other than a demand for more money and reallocation of funding. Because these parties' complaints are essentially aligned with the school districts' claims, the Efficiency Intervenors address the school districts' claims.

<sup>11</sup> 1CR5, 1CR26, 1CR48, 1CR69.

<sup>12</sup> 1CR119.

(CEI) and it is riddled with statutory and regulatory mandates that hinder the System's ability to produce educational results with little waste.<sup>13</sup> Among other things, the System establishes school districts as near monopolies, which by nature are inefficient. It imposes employment regulatory burdens that discourage firing bad teachers and hiring and retaining better teachers. And it imposes a statutory cap on the number of charter schools, which provide both competition for, and an economical alternative to, the System.<sup>14</sup> Finally, the System does not collect or analyze data for the purpose of determining whether any dollar spent produces any educational result. The System provides no information demonstrating any relationship between the amount the System's school districts are provided to spend and the amount actually required to provide for a general diffusion of knowledge.<sup>15</sup>

After months of discovery, trial began in October 2012 and lasted 45 days. At the conclusion of trial, the court orally announced its rulings.<sup>16</sup> The court found for the school districts on virtually all of their claims, centered around the conclusions that the State does not adequately fund the System to accomplish a

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<sup>13</sup> 1CR119.

<sup>14</sup> 1CR119.

<sup>15</sup> 1CR119.

<sup>16</sup> The trial court view of the case was rather simple. It declared that because it found the funding was unconstitutional in 2005, even though its ruling was reversed by this Court at that time, now there are more students are in the system today, and therefore because the Legislature cut funding in the 2011 legislative session, the school funding must be unconstitutional now. *See* 45RR172-75.

general diffusion of knowledge; the school finance system is financially inefficient; the System is unsuitable for low-income students and English language learners; and the System creates an unconstitutional statewide property tax.<sup>17</sup> But even though the trial court agreed that the System is inefficient and does not provide for the general diffusion of knowledge, the court denied all relief to the Efficiency Intervenors, citing their issues as ones to be decided by the Legislature, not by the courts.<sup>18</sup> This was in spite of the fact that this Court has identified qualitative efficiency as an “explicit” constitutional requirement and financing as only an “implicit” requirement. Further, the trial court ignored that the Efficiency Intervenors’ attack on the broader structure of the public free school system included facets of the System’s financing.

The trial court requested proposed findings of fact and conclusions of law from the parties and indicated it would render a written final judgment.<sup>19</sup> But before the trial court rendered that judgment, the 83rd Legislature increased and reallocated education funding and lowered testing requirements. The Legislature specifically (1) appropriated \$3.4 billion additional dollars for education funding, (2) changed funding allocations among the school districts, and (3) reduced both

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<sup>17</sup> 4CR98; 12CR188.

<sup>18</sup> 12CR188.

<sup>19</sup> 46RR30-47.

the rigor and number of student tests, as well as graduation requirements.<sup>20</sup> In light of these legislative changes, over objections of the Efficiency Intervenors and the State, the trial court reopened the evidence.<sup>21</sup> The parties conducted additional discovery, followed by an additional 11 days of trial testimony.

Ultimately, on August 28, 2014, the trial court rendered a written judgment that mostly tracked its previous oral ruling.<sup>22</sup> After extensively collaborating, *ex parte*, with the System's school districts, the trial court entered lengthy findings of fact and conclusions of law.<sup>23</sup> The findings of fact, based on the evidence, support a judgment that the System fails to provide a system of public free schools that produces a general diffusion of knowledge with little waste.<sup>24</sup> But though the trial court found the System is not providing a general diffusion of knowledge and is therefore unconstitutional, it parsed its judgment—holding that the State has to provide more to, and reallocate money among, the school districts, yet refusing to declare the System structurally inefficient on grounds that this is a political question (while also declining to dismiss the Efficiency Intervenors' claims on

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<sup>20</sup> See Act of June 14, 2013 (General Appropriations Bill – Senate Bill 1), 83d Leg., R.S., ch. 1411; Act of June 10, 2013 (House Bill 5), 83d Leg., R.S. ch. 211; Act of June 14, 2013 (House Bill 866), 83d Leg., R.S. ch. 1267; Act of June 14, 2013 (Senate Bill 2), 83d Leg., R.S. ch. 1140; Act of June 14, 2013 (House Bill 1025), 83d Leg., R.S. ch. 836; Act of June 14, 2013 (Senate Bill 758), 83d Leg., R.S. ch. 758.

<sup>21</sup> 5CR349.

<sup>22</sup> 12CR188; 4CR98.

<sup>23</sup> 12CR209-591.

<sup>24</sup> See FOF 126-208.

political question grounds, as urged by some of the school districts).<sup>25</sup> Thus the Court rendered judgment for the school districts and rendered judgment in favor of the State against the Efficiency Intervenors.<sup>26</sup>

### **SUMMARY OF THE ARGUMENT**

The Texas Constitution guarantees an efficient system of public free schools for the general diffusion of knowledge. TEX. CONST. art. VII, § 1. In line with this mandate, the Court has defined “efficient” as “producing results with little waste.”<sup>27</sup> And throughout the decades of school finance litigation, this Court has reminded litigants that, under the Texas Constitution, the Texas Legislature is explicitly required to provide an efficient school system. It is only because lack of funding may lead to an unconstitutionally inefficient system that funding is even in the discussion.<sup>28</sup> Routinely the school districts have sued the State over demands for more, or reallocation of, money.<sup>29</sup> And this Court, routinely being presented only with what is essentially the System’s self-litigation, has had to admonish that it is the very structure of the education system that is broken—something that pouring more money into cannot fix—without being able to reach the question directly.

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<sup>25</sup> 12CR188.

<sup>26</sup> 12CR188; 12CR299; *see* FOF 126-208.

<sup>27</sup> *Edgewood I*, 777 S.W.2d at 395.

<sup>28</sup> *See* Footnote 4.

<sup>29</sup> *Id.*

Nonetheless, school finance litigation continues.<sup>30</sup> In each case, the school districts sing the same song—because they do not receive enough money (or the money is not equitably distributed), they are unable to produce results, which they define as meeting state education standards.<sup>31</sup> In short, the System’s school districts redefine “efficient system of public free schools” as “efficient system of school *finance*,” under which they need only show that current funding is not producing results—but need not question whether the System is structurally inefficient.<sup>32</sup> Unstated in their case is that they must ask the Court to presume that because the System is unproductive of results, the lack of adequate funding is the sole reason.

Predictably, in light of the school districts’ focus on money, when this Court has declared the System unconstitutional (or even when there is a threat of the trial court declaring the System unconstitutional), the Legislature has appropriated more money, reallocated existing appropriations, or lowered testing standards so that the amounts appropriated, arguably, become sufficient to produce “results.”<sup>33</sup> In the past, the Court’s inability to reach the “explicit” constitutional structural efficiency directive has deprived it of the opportunity to measure whether the Legislature has failed to establish an efficient system of public free schools. Its decisions under the

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<sup>30</sup> *See id.*

<sup>31</sup> *Id.*

<sup>32</sup> *Id.*

<sup>33</sup> *See* Footnote 20.

“finance system” question have merely pushed funding and testing levers up and down. But the Legislature has not established a constitutionally efficient System and, as a result, the litigation cycle has continued, which compounds the unconstitutional inefficiency of the System because Texas taxpayers fund litigation rather than education.

Following the school finance litigation tradition, the school districts in this case argued—and the trial court found—that the school finance system is not funded adequately or equitably. And the school districts argued—and the trial court again found—that the education system does not provide for a general diffusion of knowledge, i.e. is not productive of results. But the trial court once more missed the mark. The System is not necessarily unconstitutionally inefficient because of funding. Instead, it is unconstitutionally inefficient because it fails to produce a general diffusion of knowledge with little waste. While inadequate funding could be part of that equation, to prevail solely on lack of funding, the school districts must first establish that their expenditures are not wasteful. Otherwise, the System’s funding could not be so inadequate as be unconstitutionally inefficient for the provision of the general diffusion of knowledge.

It is not funding inadequacy, but the System’s structure as a whole that is unconstitutionally inefficient. It is wasteful and unproductive of results, and as long as the System continues as structured, it can and will never be constitutionally

efficient. This is the crux of the Efficiency Intervenors' claim. And the evidence at trial proved that claim: the reason why the System cannot provide for an efficient system of public free schools for the general diffusion of knowledge is because the System designed by the Legislature is inherently inefficient. The Legislature has created a monopoly.<sup>34</sup> It has imposed mandates that impair, rather than promote, the general diffusion of knowledge. And when challenged for more money, the Legislature has both added more money and cut educational standards, neither of which has produced educational results with little waste under any reasonable measure. Rather those efforts contribute to inefficiency. When the Legislature appropriates more money or tweaks funding formulas, the System only spends more money. Yet decade after decade of experience has shown the money has not measurably changed educational results.<sup>35</sup> Indeed, it is impossible to know whether the amounts appropriated for the System are adequate because the System has never calculated the actual cost of educating a child, let alone determined whether

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<sup>34</sup> The concept of monopoly and monopsony were used in the trial. For purposes here, those terms are interchangeable. *See* 37RR80-87; 30RR23-27; 26RR240-45; 24 RR63-67; Ex.8138; Ex.8140.

<sup>35</sup> Ex.1139. In its Findings of Fact and Conclusions of Law, the trial court found that "the Texas educational system has fallen short of accomplishing a general diffusion of knowledge." 12CR207, *see* FOF 126-208; 7RR74; Ex.1001, Ex.8001; 37RR23-63; 38RR140-47; 23RR 94-97, 143-44; Ex.5670; Ex.1013; Ex.3198, p.247; Ex.3199, p.196; Ex.3201, p.240; Ex.3200, p.283; Ex.3202, p.271; Ex.3203, p.304-05; Ex.3204, p.254-55; Ex.3205, p.52-53; Ex.3206, p.58; Ex.3207, p.69; Ex.3208, p.198; Ex.3209, p.263; Ex.6334, p.92; Ex.6335, p.86-87; Ex.6336, p.22; Ex.6337, p.257-58; Ex.6339, p.96; Ex.6340, p.115; Ex.6341, p.54; Ex.6342, p.204; Ex.6343, p.81; Ex.6344, p.82-83; Ex.6345, p.58; Ex.3226, p.27; Ex.3227, p.174; Ex.5614, p.175; Ex.5615, p.57; Ex.8073; Ex.8011; 41RR79-94.

the funds currently being expended are being expended efficiently—i.e. productive of results *with little waste*.<sup>36</sup>

The Efficiency Intervenors request that the Court reverse the trial court’s judgment and render judgment for the Efficiency Intervenors on their qualitative efficiency claim. The Efficiency Intervenors additionally request rendition awarding their attorney’s fees because they were a prevailing party or, at a minimum, they significantly contributed to the courts’ analysis of the constitutional inefficiency of the System.

### ARGUMENT

**ISSUE ONE: Because the Texas School System fails to provide an efficient system of public free schools for the general diffusion of knowledge, it is unconstitutional.**

The Texas Constitution provides: “A general diffusion of knowledge being essential to the preservation of the liberties and rights of the people, it shall be the duty of the Legislature of the State to establish and make suitable provision for the support and maintenance of an efficient system of public free schools.” TEX. CONST. art. VII, § 1. This Court has admonished that to be constitutionally sound, the public free school system must be productive of results with little waste—it must be efficient. *Edgewood I*, 777 S.W.2d at 395; *Edgewood IV*, 917 S.W.2d at 729; *W. Orange-Cove II*, 176 S.W.3d at 793.

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<sup>36</sup> See Footnote 4.

All school district plaintiffs and intervenors, and ultimately the trial court, agreed that the System is not productive of results.<sup>37</sup> Even the State’s experts called Texas’s graduation rates—which are undisputedly a major component of whether the System is producing results—a “disaster.”<sup>38</sup> Where the parties disagreed, however, is whether more money, regardless of waste, is all it takes for the System to be constitutionally sound.<sup>39</sup> The school districts claimed inadequacy of the amount (and allocation) of money.<sup>40</sup> The crux of their argument is simple: if the Legislature would only appropriate more money for public education, or distribute it more fairly, *then* they would be able to produce results. Yet for years, following each school finance suit, the Legislature has appropriated more or reallocated money, lowered testing standards and graduation requirements, or both.<sup>41</sup> But it has never been enough. These suits have recurred routinely. Without changing the System’s structure, the suits will recur unabated.<sup>42</sup>

Now the Efficiency Intervenors add a new and different voice to the debate. They have brought the challenge this Court has invited.<sup>43</sup> *See W. Orange-Cove II*,

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<sup>37</sup> See Footnote 35.

<sup>38</sup> 26RR160; *see also* 12CR299, FOF 207; 12CR277-300.

<sup>39</sup> 1CR5, 26, 48, 69, 119.

<sup>40</sup> 1CR5, 26, 48, 69.

<sup>41</sup> See Footnote 4.

<sup>42</sup> In *Edgewood III*, Justice Cornyn aptly quoted from Charles Dickens’ “Bleak House”: “Jarndyce and Jarndyce drones on. This scarecrow of a suit has, in course of time, gotten so complicated that no man alive knows what it means.” 826 S.W.2d at 526 n.1 (Cornyn, J., concurring and dissenting).

<sup>43</sup> 1CR119.

176 S.W.3d at 754, 790, 793; *Edgewood III*, 826 S.W.2d at 524. The Efficiency Intervenors urge the Court to look behind the funding façade. The Efficiency Intervenors proved at trial that, because of its structure, the System fails to produce results with little waste.<sup>44</sup> Adding more money and only fine-tuning the System has produced no measurable results. Structural redesign by the Legislature is constitutionally required.<sup>45</sup>

True, this Court’s role, as the judiciary, is not to decide the System design. *See Molinet v. Kimbrell*, 356 S.W.3d 407, 414 (Tex. 2011); THE FEDERALIST No. 78, at 466 (Alexander Hamilton) (Clinton Rossiter ed., 1961). But it can strike down statutes and regulations that cause unconstitutional inefficiency, and it can strike down the current System in the whole as unconstitutionally inefficient and direct the Legislature to return to the drawing table. *See W. Orange-Cove I*, 107 S.W.3d at 582; *Edgewood IV*, 917 S.W.2d at 726; *Edgewood I*, 777 S.W.2d at 399. That is the relief the Efficiency Intervenors request.

**A. This Court has repeatedly suggested that it would address whether the Texas School System is structurally inefficient, if a party raised that challenge.**

The stated purpose of Texas Constitution, Article VII is the “preservation of the liberties and rights of the people” of Texas. TEX. CONST. art. VII, § 1. Because a “general diffusion of knowledge” was deemed essential to that ultimate goal, the

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<sup>44</sup> See Footnote 35.

<sup>45</sup> Ex.1; Ex.3145; Ex.1341; 36RR27-102; Ex. 1031; 37RR10-78; Ex.8068; Ex.8069; 39RR9-54.

founders drafted the constitutional language that requires the Legislature to “make suitable provisions for the support and maintenance of an efficient system of public free schools.” *Id.*

For years, the System has self-litigated the meaning of this provision.<sup>46</sup> Until now, the litigation has solely focused on whether the System’s *financing* is so inadequate as to be unconstitutionally inefficient, not whether the System’s structure is unconstitutionally inefficient.<sup>47</sup> But this Court has wisely and consistently stated “‘efficient’ conveys the meaning of productive results and connotes the use of resources so as to produce results with little waste.” *See, e.g., W. Orange-Cove II*, 176 S.W.3d at 752-53; *Edgewood I*, 777 S.W.2d at 395. And the Court has also consistently called for debate on the true constitutional mandate—that is, whether the System, as designed, produces results with little waste:

- ***Edgewood I***: The Court stated that “efficient” does not just mean equity. Instead, “[e]fficient’ conveys the meaning of *effective or productive of results* and connotes the use of resources so as to produce results with little waste.” 777 S.W.2d at 395 (emphasis added).
- ***Edgewood III***: Once again calling for structural change, the Court stated: “In *Edgewood I*, we stressed, ‘the system itself must be changed.’ ... As long as our public school system consists of variations on the same theme, the problems inherent in the system

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<sup>46</sup> *See* Footnote 4.

<sup>47</sup> This is not surprising, for until now only the school districts brought suit, and their interests are not aligned with the actual consumers of education. The school districts enjoy the monopoly, and thus their interest is to claim more money, not to demand constitutional efficiency.

cannot be expected to suddenly vanish.” 826 S.W.2d at 524. The Court went on to explain, “***We are constrained by the arguments raised by the parties*** to address only issues of school finance. We have not been called upon to consider, for example, the improvements in education, which could be realized by eliminating gross wastes in the bureaucratic administration of the system. The Legislature is not so restricted.” *Id.* (emphasis added).

- ***Edgewood IV***: The Court stated that qualitative efficiency is explicitly demanded by the Constitution: “While we considered the financial component of efficiency to be implicit in the Constitution’s mandate, the ***qualitative component is explicit***.” 917 S.W.2d at 729 (emphasis added). The Court reiterated that although previous rulings focused on equity, the Constitutional standard is higher: “[A]t the time *Edgewood I* was decided, we did not then decide whether the State had satisfied its constitutional duty to suitably provide for a general diffusion of knowledge. We focused instead on the meaning of financial efficiency.” *Id.*
- ***West Orange-Cove II***: Delivering the strongest call for an opportunity to evaluate structural efficiency, the Court stated: “Efficiency implicates funding access issues, but it is certainly not limited to those issues.” 176 S.W.3d at 793. Alluding to the risk of perpetual litigation without real structural reform, the Court recognized that “[p]ouring more money into the system may forestall those challenges, but only for a time. They will repeat until the system is overhauled.” *Id.* at 754. The Court referred to deep divisions in drafting of the Constitution: “The delegates to the Constitutional Convention of 1875 were deeply divided over how best to provide for a general diffusion of knowledge, finally adopting article VII, section 1 by a vote of 55 to 25. No subject was more controversial or more extensively debated.” *Id.* at 785. The Court agreed with the State regarding the focus on results: “The State defendants contend that the district court focused too much on ‘inputs’ to the public education system—that is, available resources. They argue that whether a general diffusion of knowledge has been accomplished depends entirely on ‘outputs’—the results of the educational process measured in student achievement. We agree that the constitutional standard is plainly result-oriented.” *Id.* at 788.

And the Court noted that reform is required to fulfill the constitutional standards: “There is substantial evidence, which again the district court credited, that the *public education system has reached the point where continued improvement will not be possible absent significant change*, whether that change take the form of increased funding, *improved efficiencies, or better methods of education.*” *Id.* at 790 (emphasis added).

The System’s recurring self-litigation over funding will never end unless this Court accepts the opportunity to rule on the “explicit” constitutional structural efficiency command and examines the underlying design, which violates the constitutional mandate to provide for an efficient system of public free schools for the general diffusion of knowledge with little waste. *Edgewood IV*, 917 S.W.2d at 729.

**B. The Texas School System is unconstitutionally inefficient and fails to provide for the general diffusion of knowledge because of bureaucratic mandates and insulation from competition.**

The System’s structure is wasteful and deprives Texas schoolchildren of a constitutionally required general diffusion of knowledge.<sup>48</sup>

**1. Despite massive increases in funding to the System over the years, there has been no improvement in educational achievement.**<sup>49</sup>

It was undisputed at trial that, over the years, the State has infused massive increases in public dollars into the System.<sup>50</sup> And it is equally undisputed that

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<sup>48</sup> Ex.1013; Ex.1017; 37RR10-78; Ex.1341; 36RR27-102; Ex.1001; Ex.8001; 37RR16-89; Ex.7; Ex.8145.

<sup>49</sup> It was with no sense of irony that the trial court (the same as in *W. Orange-Cove II*) began its ruling with a statement that it had declared school funding inadequate in 2005, which this Court reversed, and that because there are now more kids in the system, the funding must now truly be inadequate. *See* 45RR172-75.

<sup>50</sup> Ex.1139, p.2.

those increases in funding have led to no improvement in educational achievement.<sup>51</sup> Though the State has repeatedly tweaked the System, there has been no measurable success.<sup>52</sup>

The reason for this is, as the Court has supposed, that money is not necessarily the only problem. *W. Orange-Cove II*, 176 S.W.3d at 754. The System, by its self-litigation, always asks the courts to focus *only* on funding amounts and allocation. But rather than considering only the amount of money spent, the inquiry should be whether the System's structure is productive of educational results for Texas schoolchildren with little waste. As one of the Efficiency Intervenors' experts testified, the amount of money alone does not prove educational efficiency, but rather it is the results of the education program that determine its efficiency.<sup>53</sup> And for there to be improvement, there must be levels of flexibility, which the System resists.<sup>54</sup>

## **2. The System's bureaucracy imposes constitutional inefficiency.**

The top-down bureaucratic nature of the System imposes inefficiency.<sup>55</sup> As was shown at trial, the System exercises excessive statewide controls that stymie any System innovation at the local level.<sup>56</sup> While school districts could accomplish

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<sup>51</sup> See Footnote 35.

<sup>52</sup> FOF 298, 300-04, 308.

<sup>53</sup> 37RR24.

<sup>54</sup> Ex.1341; 36RR27-102; Ex.1013; 37RR10-78.

<sup>55</sup> Ex.1341; Ex.1013.

<sup>56</sup> Ex.1; Ex.8145; Ex.1341; Ex.1013; *see generally*, TEX. EDUC. CODE Chapter 21.

some minor innovations under the System's current regulatory structure, the regulatory structure prevents school districts from accomplishing any major innovation.<sup>57</sup> The current rules under which the System operates appear to assume that there is one best way to teach students and mandate that all school districts use this method.<sup>58</sup>

State-imposed mandates prevent experimentation with new methods of instruction and learning that might be more effective.<sup>59</sup> The evidence at trial established many examples of state mandates that waste resources, leading to failure to efficiently produce a general diffusion of knowledge.<sup>60</sup>

**a. Several provisions of the Texas Education Code, Chapter 21, cause inefficiency.**

Texas Education Code, Chapter 21 governs public school educators. As written, it protects adults at the expense of students and labor at the expense of cost-effective production of educational results.<sup>61</sup> No profession in Texas is afforded the same level of labor protection.<sup>62</sup> The chapter impedes efficient hiring and compensation decisions.<sup>63</sup> It hinders removing poor-performing teachers and

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<sup>57</sup> Ex.1341; 36RR27-102; Ex.1013; 37RR10-78; Ex.1; Ex.8145; 8RR146-47; 19RR216-17; 20RR108-12; 6RR39-48.

<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> Ex.5630, p.441; Ex.3204, p.227-29, 231, 233; Ex.1013; 37RR10-78; Ex.1341; 3RR205-16; Ex.3207, p.189-90; Ex.5630, p.430; Ex.1001; Ex.8001; 37RR16-89.

<sup>62</sup> Ex.5630, p.44-445.

<sup>63</sup> 39RR132-56; 8RR146-67; 19RR203-07; 19RR216-21; Ex.1341; Ex.1013.

rewarding effective teachers.<sup>64</sup> And it burdens the System with inefficient rules and regulations in dealing with personnel.<sup>65</sup> The uncontroverted evidence at trial showed that Chapter 21 drives millions of dollars in waste every year. Some examples of the inefficiencies in Chapter 21 are:

– *The minimum teacher salary schedule:*

The System’s minimum salary schedule and mandated teacher salary grants set the standard for paying teachers based primarily on tenure, dictating across-the-board pay raises irrespective of merit.<sup>66</sup> TEX. EDUC. CODE § 21.402. This causes huge inefficiencies in the System, as payroll is the largest single factor in school budgets.<sup>67</sup> The System directs, primarily, that Texas teachers be paid based on their years of experience.<sup>68</sup> *Id.* Thus the effectiveness of the teacher in the classroom takes back seat to a teacher’s longevity in the job. Consequently, teachers who are ineffective teachers, but effective at keeping their jobs, are paid the same as similarly tenured but effective classroom teachers.<sup>69</sup> It should go without saying that efficiency requires that educators, as in every other profession, be

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<sup>64</sup> 37RR65-89; 3RR205-16; 4RR130-41; 5RR72-83; 20RR108-12; 24RR218-21.

<sup>65</sup> Ex.5630, p.441; Ex.3204, p.227-29, 231, 233; Ex.1013; 37RR10-78; Ex.1341; 3RR205-16; Ex.3207, p.189-90; Ex.5630, p.430; Ex.1001; Ex.8001; 37RR16-89.

<sup>66</sup> Ex.5630, p.437-41.

<sup>67</sup> Ex.5630, p.452; 5RR72; 11RR86; 8RR146; 6RR127; 3RR205.

<sup>68</sup> 3RR205; 4RR137; 5RR74; 1RR87; 8RR79; 12RR37; 20RR127.

<sup>69</sup> Ex.1013; Ex.1341.

compensated based on need, performance, and productivity.<sup>70</sup> In an efficient system, labor decisions would be made based on keeping quality teachers in the classroom for students.<sup>71</sup>

In short, the minimum salary schedule has a negative influence on productivity by providing disincentives to high-performing teachers, which contributes to the best teachers leaving after three or four years and causing overpayment to long-serving teachers who are no longer performing well.<sup>72</sup> The evidence at trial showed:

- Length of teacher service after the first five years does not correlate with additional student achievement, yet Texas teachers are paid based on years of service, not student achievement.<sup>73</sup>
- The System pays poor and mediocre teachers the same as good teachers who have the same tenure.<sup>74</sup> The System's design promotes teacher job guarantee rather than student achievement.<sup>75</sup>
- The System does not measure teacher performance. It also does not require that pay be based on performance.<sup>76</sup>
- Education achievement would improve if teachers were rewarded for performance, rather than tenure and degree levels.<sup>77</sup>

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<sup>70</sup> *Id.*

<sup>71</sup> Ex.1013; 29RR132-56; Ex.3024, p.221.

<sup>72</sup> *Id.*

<sup>73</sup> Ex.3207, p.191; Ex.1001; Ex.8001; 37RR16-89.

<sup>74</sup> 3RR205; 4RR137; 5RR74; 1RR87; 8RR79; 12RR37; 20RR127.

<sup>75</sup> Ex.1341; Ex.1013.

<sup>76</sup> 3RR205; 4RR137; 5RR74; 1RR87; 8RR79; 12RR37; 20RR127.

<sup>77</sup> 19RR67; Ex.5630, p.440; Ex.1001; Ex.8001; 37RR16-89; Ex.1341; Ex.1013; Ex.5400.

- With a one-time replacement of the bottom performing five to eight percent of teachers with merely average teachers, and by paying attention after the first year to recruiting and retaining average or better teachers, Texas educational achievement would dramatically improve.<sup>78</sup>
- Low-income students and parents are the most ill-served by the current System because they receive the worst teachers and education in general.<sup>79</sup>
- The absence of competition for teachers keeps teacher pay lower than it would be in a more competitive market.<sup>80</sup>
- The System imposes significant expenses on personnel matters that make no difference to educational outcomes, including the extensive, lengthy hearings and legal fees required before a teacher can be terminated.<sup>81</sup> See TEX. EDUC. CODE §§ 21.207, .209, .251-.259, .301-.3041, .307.

– *The teacher certification process set forth in Chapter 21 makes the System inefficient and unproductive:*

Chapter 21 establishes strict certification requirements, which restrict access to the teacher profession, unrelated to the interests of the students. TEX. EDUC. CODE §§ 21.031-.61. The state-mandated teacher certification requirements are not constitutionally efficient.<sup>82</sup>

No scholarly study was offered in this case to show that certified teachers are more effective or produce better student achievement than noncertified

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<sup>78</sup> 37RR74-78.

<sup>79</sup> Ex.8068; Ex.8069; Ex.4000, p.1-2.

<sup>80</sup> Ex.1122, p.5.

<sup>81</sup> *Id.*

<sup>82</sup> Ex.1341; Ex.5630, p.436; Ex.3204, p.249-50; Ex.1122, p.6.

teachers.<sup>83</sup> Indeed, the evidence at trial showed that individuals hired through Teach for America, who are not certified teachers, produce student achievement as good (or better) than certified teachers.<sup>84</sup> Ironically, the Texas Education Code requires school districts to notify parents of a teacher that is not certified, but it has no requirement to report if a teacher is not effective. *Id.* § 21.057. In fact, teacher evaluations are deemed confidential. *Id.* § 21.355.

– *The teacher appraisal process is inefficient because the process is inherently flawed:*

The evidence at trial showed that under the current teacher appraisal rules (in Chapter 21, Subchapter H), more than 98 percent of teachers are supposedly proficient, even in schools where students are not learning.<sup>85</sup> Further, the evidence showed that while the System spends a significant amount of time and money conducting teacher appraisals each year, student educational improvement is not part of those evaluations.<sup>86</sup> Absent tying teacher performance to the teacher's student academic achievement, the appraisals are meaningless and irrelevant.<sup>87</sup> Strangely, unlike the irrelevant matter of "certification," the System prohibits parents from being apprised of a teacher's actual performance evaluation.<sup>88</sup> The

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<sup>83</sup> Ex.5630, p.436.

<sup>84</sup> *Id.*

<sup>85</sup> Ex.1013; 26RR249-50.

<sup>86</sup> Ex.5630, p.303-13.

<sup>87</sup> Ex.1013; 26RR249-50.

<sup>88</sup> Ex.5630, p.411.

System intentionally deprives parents of critical information necessary for them to determine who should teach their child. The System mandates appraisal measures that are unconstitutionally inefficient because they do not produce educational results with little waste.<sup>89</sup>

The inefficiencies inherent in Chapter 21 drive waste and prevent the general diffusion of knowledge at the most fundamental level. As many witnesses testified, the most critical factor affecting student performance and achievement is teacher quality.<sup>90</sup> And as several witnesses also testified, a year with a bad teacher can be devastating and can hinder a child's development, and the best way to improve student performance is to improve the performance of teachers and attract and retain quality teachers.<sup>91</sup> The Court should, because of these provisions, declare the System unconstitutional for failing to produce a general diffusion of knowledge with little waste.

**b. The statutory cap on the number of charter schools breeds inefficiency.**

The evidence at trial demonstrated that the statutory cap on the number of open-enrollment charter schools creates systemic constitutional inefficiency. See Tex. Educ. Code § 12.101. At the time of trial, the Legislature capped the number

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<sup>89</sup> *Id.* at 303-13.

<sup>90</sup> 37RR65-66; Ex.5630, p.22; Ex.5412, slide 32.

<sup>91</sup> Ex.5630, p.412; 8RR158-59; 19RR186.

of open-enrollment charter schools at 215. After trial, but before the entry of final judgment, the Legislature amended the Education Code to steadily increase the cap over the next several years to 305 charters. *Id.* §§ 12.101(b-1), (b-2).

Merely raising the cap does not remedy the inefficiency created by the cap. The System raises significant barriers to entry into the market by potential charter schools, which causes constitutional inefficiencies.<sup>92</sup> These barriers include both the cap on the number of charter schools allowed and state funding policies that place charters at an economic disadvantage relative to the school district System.<sup>93</sup>

The cap on the number of charter schools causes inefficiency because it does not allow the market (including consumer demand) to determine how many charter schools are needed.<sup>94</sup> Former Commissioner of Education Robert Scott testified that he has been a proponent of lifting the charter cap and has sought ways to circumvent it.<sup>95</sup> The evidence at trial showed that there were in excess of 101,000 children on charter school waiting lists—demand far outpaces supply.<sup>96</sup> The cap on charter schools, which is at best arbitrary, reduces the educational opportunity for both charter school operators and students. This arbitrary restriction produces waste in the production of educational results and is therefore unconstitutionally inefficient.

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<sup>92</sup> Ex.8110; 42RR179.

<sup>93</sup> Ex.8110; 42RR178.

<sup>94</sup> Ex.8110.

<sup>95</sup> Ex.5630, p.285.

<sup>96</sup> Ex.8110.

Notably, the trial evidence established that when charter schools are available and parents have a choice over where their children attend school, the market pressure encourages the school districts to produce results more efficiently.<sup>97</sup> More to the point, charter schools have proved the System is unconstitutionally inefficient. Overall, Texas charter schools meet the same educational outputs as school districts.<sup>98</sup> But charters do so while operating with less regulation<sup>99</sup> and spending less per student,<sup>100</sup> proving that both System funding and regulations waste resources and fail to produce results.

**c. State-imposed class-size limits lead to inefficiency.**

Statutes requiring small class sizes also impose great expense with minimal impact on student outcomes.<sup>101</sup> TEX. EDUC. CODE §§ 25.111-.114. At trial, it was demonstrated that class-size regulations above the early years only encourages hiring more adults, rather than encouraging schools to provide better, more efficient teaching.<sup>102</sup> The evidence showed that:

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<sup>97</sup> Ex.1341.

<sup>98</sup> Ex.5630, p.283-85.

<sup>99</sup> Ex.8005.

<sup>100</sup> Ex.8005; Ex.5630, p.288-93.

<sup>101</sup> Ex.1341; 13RR147-62.

<sup>102</sup> *Id.*

- Allowing class size flexibility permits superintendents to manage their budgets more efficiently.<sup>103</sup>
- Allowing flexibility in how students are grouped and taught can provide significant increases in productivity, cost savings, and improvements in learning.<sup>104</sup>
- School productivity can benefit from determining which classes are better taught to larger or smaller groups than the current mandated class size.<sup>105</sup>
- School productivity can benefit from determining when students could be taught with longer or shorter courses than the current mandated semester courses.<sup>106</sup>
- The cost savings by raising the current class-size average of 19.3 students to 22 students would be \$558 million statewide.<sup>107</sup>
- Studies from other countries like Singapore find larger class sizes can produce student performance exceeding United States schools' performances with smaller class sizes.<sup>108</sup>
- Districts, taxpayers, and students would benefit from making tradeoffs between the use of live teachers and on-line resources.<sup>109</sup>

The Court should, because of these provisions, declare the System unconstitutional for failing to produce a general diffusion of knowledge with little waste.

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<sup>103</sup> Ex. 5630, p.456.

<sup>104</sup> Ex. 1013; 37RR10-78; Ex.1341.

<sup>105</sup> Ex.1341; 8RR170-75.

<sup>106</sup> Ex.1013.

<sup>107</sup> Ex.5630; Ex.1139, p.17.

<sup>108</sup> Ex.5630, p.199.

<sup>109</sup> Ex.1341.

**d. Billions of dollars are allocated inefficiently through various formula elements including the Cost of Education Index.**

The System allocates funding using the CEI. Because the CEI is the very first adjustment to the school finance formula, it impacts and adjusts virtually every dollar that flows through the funding source, the Foundation School Program.<sup>110</sup> The CEI provides that the basic allotment for each district is adjusted to reflect the geographic variation in known resource costs and costs of education and therefore acts as a multiplier of other formula elements impacting billions of dollars.<sup>111</sup> TEX. EDUC. CODE § 42.102; TEX. ADMIN. CODE §§ 203.1-.30. But the CEI is based on data collected over a quarter of a century ago when regional economic and demographic characterizations in Texas were significantly different than today.<sup>112</sup> As such, the CEI funding formula is outdated, arbitrary, inaccurate, and wasteful.<sup>113</sup>

**e. Financial accountability for System is not constitutionally efficient.**

Financial accountability measures for the System are inefficient and inaccessible to the average citizen.<sup>114</sup> See TEX. EDUC. CODE Subchapter D, Chapter 39. The evidence at trial showed that financial data gathered and reported by the System is complex, hard to categorize, fails to link funding to results, and is

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<sup>110</sup> 7RR134-135; Ex.6322, p.56. Ex.1328, p.8; 6RR209-12.

<sup>111</sup> FOF 598 (\$2.36 billion); 7RR134-35; Ex.6322, p.56; Ex.1328, p.8; 6RR209-12.

<sup>112</sup> *Id.*

<sup>113</sup> *Id.*

<sup>114</sup> Ex.1; Ex.8000.

difficult to understand.<sup>115</sup> Further, because of the way school districts maintain records, it is nearly impossible to link specific expenditures with specific outputs.<sup>116</sup> For example, 56 percent of school district budgets are tracked under the category “instruction.”<sup>117</sup> The evidence at trial showed that:

- Educational data is collected for reporting purposes, but is insufficient for the purpose of giving educational administrators the management tools to conduct a cost-benefit analysis and drive productivity improvements.<sup>118</sup>
- Tracking costs and associated benefits is one of the most important factors in improving the efficiency of the public education system.<sup>119</sup> The System fails to do so.
- The System does not calculate how much it costs to meet its accreditation standards or to operate specific educational programs.<sup>120</sup>
- Most school district superintendents recognize it is important to do a cost-benefit analysis to determine how to best use limited funds, but most neither conduct nor report such analysis.<sup>121</sup>
- Data reported by the school districts is insufficient to calculate whether the System is operating efficiently.<sup>122</sup>
- An efficient financial data system would allow for linkage of expenditures to outputs of particular schools and particular programs.<sup>123</sup> The System does not do so.

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<sup>115</sup> Ex.1; Ex.8145, p.6-85; Ex.8000; Ex.1013; Ex.1341.

<sup>116</sup> Ex.1; Ex.8145, p.6-85.

<sup>117</sup> Ex.1.

<sup>118</sup> *Id.*

<sup>119</sup> Ex.1; Ex.8145, p.6-85; Ex.8000; Ex.1013; Ex.1341.

<sup>120</sup> *Id.*

<sup>121</sup> *Id.*

<sup>122</sup> *Id.*

<sup>123</sup> *Id.*

- An efficient system would link how much students learned per dollar spent, data files would be available that allow tracking of how money was spent on each student’s education and each student’s annual learning, and such financial accountability data would be shared with parents and the public.<sup>124</sup> Pressure from communities and families would improve the efficiency of school districts.<sup>125</sup>
- Teacher groups have pressured policymakers not to authorize data reports that link particular teachers to specific students.<sup>126</sup>

The Court should, because of this failure of financial accountability, declare the System unconstitutional for failing to produce a general diffusion of knowledge with little waste.

**3. The System suffers from an inherent lack of competition that permits wastefulness and stifles innovation.**

The System is unconstitutionally inefficient because it is a monopoly. Monopolies, by their inherent nature, shut down competitive mechanisms that encourage results produced with little waste.<sup>127</sup> See, e.g., *Eldred v. Ashcroft*, 537 U.S. 186, 215 (2003); *F.T.C. v. Ind. Fed’n of Dentists*, 476 U.S. 447, 459 (1986); *Marsh USA, Inc. v. Cook*, 354 S.W.3d 764, 783 & n.22 (Tex. 2011) (Willett, J., concurring); see also, generally, Robert H. Bork, *The Antitrust Paradox* 101 (1978). Also, as a monopoly, the System is insulated from market pressures to

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<sup>124</sup> *Id.*

<sup>125</sup> *Id.*

<sup>126</sup> *Id.*

<sup>127</sup> 37RR80-87; 30RR23-27; 26RR240-45; 24RR63-66; Ex.840; Ex.8138; Ex.8068; Ex.8069; Ex.1341.

produce better educational results at lower costs.<sup>128</sup> The trial evidence showed that public education systems benefit from applying the experience of the marketplace to the challenge of improving productivity, and it is this near total absence of competition within the System that causes the System to be inherently inefficient.<sup>129</sup> As was explained at trial, the history of economics proves that the absence of competition makes any system more inefficient.<sup>130</sup>

The current monopoly System is inconsistent with the original intent of the Texas Constitution. The first schools set up under the Constitution (the Community School System) were decentralized and consumer-driven, and consumer choice was the norm.<sup>131</sup> Specifically, in the years following the adoption of the 1876 Constitution, Texas had a mixed system of public free schools that included unlimited community schools operating alongside public schools.<sup>132</sup> Community schools could be formed at will by any group of parents.<sup>133</sup> The parents could form the school, hire the teacher, and allow any student to attend regardless of geographic residence.<sup>134</sup> Similar to today's charter schools, they were free from overreaching state regulations. But unlike today's charter schools (with the

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<sup>128</sup> *Id.*

<sup>129</sup> *Id.*

<sup>130</sup> *Id.*

<sup>131</sup> *See generally* 4CR38-50.

<sup>132</sup> *See id.*

<sup>133</sup> *See id.*

<sup>134</sup> *See id.*

statutory cap on their numbers), the public was allowed to create as many community schools as needed or desired. “Concern for efficiency in the education article in the Texas Constitution arose from a basic Texan sense of frugality, distrust of opulence, and a fear of government overreaching and excessive spending.” Billy D. Walker, *Intent of the Framers in the Education Provisions of the Texas Constitution of 1876*, 10 REV. OF LITIG. 625, 661, n.289-90 (1991) (emphasis added) (cited in *Edgewood III*, 826 S.W.2d at 524) (Cornyn, J., dissenting).

Today’s highly monopolized system is grossly inefficient when compared to the consumer/parent-driven system in place in 1876. Although the purpose of Article VII, Section 1 is the preservation of the liberties and rights of the people, today’s consumers of the System do not have adequate control or choice over where children attend school. In line with the original intent behind the adoption of the Texas Constitution, an efficient system of public education is one that fosters competition and gives families a choice in what school they choose for their children.<sup>135</sup>

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<sup>135</sup> 26RR241-45; Ex.8140.

**C. The trial court’s refusal to render judgment for the Efficiency Intervenors is not supported by its findings of fact or conclusions of law. To the contrary, the findings and conclusions dictate judgment for the Efficiency Intervenors.**

There was no dispute among the plaintiffs and intervenors (including the Efficiency Intervenors) that the System does not provide for the general diffusion of knowledge. And the trial court agreed, as reflected in its findings of fact and conclusions of law.<sup>136</sup> Yet the court rendered judgment for many of the other parties’ on their efficiency claims while refusing to render judgment for the Efficiency Intervenors (or even find them to be a prevailing party for attorney’s fees purposes, as discussed further below).

Because the trial court’s findings of fact and conclusions of law supported the Efficiency Intervenors’ efficiency claim, it erred in refusing to render judgment for them. For instance:

- The court found that the System is failing to meet the educational needs of hundreds of thousands of Texas students.<sup>137</sup>
- The court acknowledged that increasing segments of the Texas student population are experiencing performance gaps and that the System in general is not productive of results or accomplishing a general diffusion of knowledge.<sup>138</sup>

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<sup>136</sup> See FOF 126-208.

<sup>137</sup> *Id.*

<sup>138</sup> FOF 209.

- The court acknowledged the need for a high quality teaching labor force because “teacher quality is a key determinant of student achievement.”<sup>139</sup> The court found that “the absolute quality of teacher quality in Texas has declined over time.”<sup>140</sup> And the court found that higher salaries help schools attract and retain better quality teachers.<sup>141</sup>
- The court agreed that the CEI index is greatly outdated and pointed to evidence that the Legislature has recently ignored the need to update the CEI.<sup>142</sup> The court also agreed that other student and programmatic weights are out of date and contribute to the inadequacy and unsuitability of the System.<sup>143</sup>
- The court agreed with the Efficiency Intervenors regarding the failure of the System to measure costs. The court stated: “As urged by the [Efficiency] Intervenors, this is a necessary aspect of making suitable provision for public education and being productive of results without waste.”<sup>144</sup> The court agreed that the Legislature has defaulted “on its responsibility to make a reasonable effort to determine what it will cost to adequately and suitably provide for its own standards” to ensure the System is structured, operated, and funded for the benefit of Texas children.<sup>145</sup>
- The court also agreed that the State has made no effort to determine the costs of meeting its own standards.<sup>146</sup> And the court found that the State has conducted no studies or adopted rules regarding the cost of the State’s requirements and goals.<sup>147</sup>

Importantly, as detailed above, the Efficiency Intervenors put on extensive evidence supporting not just that the current System is inefficient and does not

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<sup>139</sup> FOF 529.

<sup>140</sup> FOF 529.

<sup>141</sup> FOF 541, 543.

<sup>142</sup> FOF 597-99.

<sup>143</sup> FOF 595.

<sup>144</sup> COL 30.

<sup>145</sup> COL 40.

<sup>146</sup> COL 78.

<sup>147</sup> FOF 604-06, 1245.

accomplish a general diffusion of knowledge, but proving a link between the System's structural inefficiencies and the failure of the System to provide a general diffusion of knowledge with little waste. The trial court's judgment is belied, not only by its own findings and conclusions, but also by the evidence.

Relatedly, the trial court was wrong as a matter of law in its findings that the Efficiency Intervenors invited it to make policy decisions that the Legislature has repeatedly rejected.<sup>148</sup> The Efficiency Intervenors pointed with specificity to statutes and rules that cause inefficiency and failure to produce results with little waste.<sup>149</sup> And the trial court was fully within its power not only to declare the System unconstitutionally inefficient, but to declare these statutes unconstitutional. But the Efficiency Intervenors did not ask the court to craft a new scheme or solution to the current public education system.<sup>150</sup> Instead, they requested that the court declare the System unconstitutional.<sup>151</sup> It is difficult to fathom how the Efficiency Intervenors' structural efficiency claim is a political question while the school districts' funding claims are not. The school districts' claims concern the amount of funds appropriated by the Legislature (and how these funds are distributed among school districts)—and appropriations is one of the most political policy questions addressed by the Legislature each session. Further, this Court has

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<sup>148</sup> FOF 1464-65.

<sup>149</sup> 6CR73; 8RR205-16; Ex.6334; 4RR130-41; 5RR72-83; 6RR39-48; 8RR146-47; 11RR86-94; 19RR203-07, 216-21; 20RR108-12; 24RR218-21; 39RR132-56; Ex.1341; Ex.1013.

<sup>150</sup> 6CR59-78.

<sup>151</sup> *Id.*

expressly invited discussion on structural inefficiency, and the Efficiency Intervenors have initiated that discussion. Their claims are no more political in nature than the school districts' claims.

**D. The Court should declare the Texas School System unconstitutional and direct the Legislature to comply with the explicit qualitative efficiency standard mandated by the Texas Constitution.**

On the basis of the overwhelming evidence, the Efficiency Intervenors request the Court declare the System unconstitutional because its structural inefficiencies impair its ability to produce educational results with little waste. Such a ruling is not without precedent. The Court has several times broadly concluded that Texas school financing is unconstitutional, requiring the Legislature to redo the financing. *See Edgewood I*, 777 S.W.2d at 397; *Edgewood II*, 804 S.W.2d at 498; *Edgewood III*, 826 S.W.2d at 515. The Efficiency Intervenors ask the Court to direct the Legislature to solve this constitutional infirmity through statutory change so as to make the System constitutionally efficient (i.e, productive of constitutionally required results with little waste).

**ISSUE TWO: The Texas School System does not collect data on and has not determined the cost for educating a child. The System lacks financial accountability because it fails to show any dollar spent produces any educational result. The System therefore fails to provide an efficient system of public free schools for the general diffusion of knowledge.**

- A. The cost of educating a child is unknown by those responsible for managing the System. But in order to know whether funds are being spent efficiently, it is first necessary to know that cost.**

The System is also inefficient because funds are spent with no knowledge of the cost of educating a child—i.e., how much funding is needed to actually provide for the general diffusion of knowledge. At trial, while some school superintendents shot from the hip about how much it costs to produce educational achievement for any student in their district, no district has attempted to calculate that cost.<sup>152</sup> More to the point, the System has no requirement to collect or report on data designed to identify the actual cost to adequately educate a child to the point of being college or career ready on graduation from a Texas high school.<sup>153</sup> But knowing the answer to that question is essential to determining whether the System is productive of results with little waste.<sup>154</sup>

It became apparent at trial that the System does not permit school districts to count the cost of what they do.<sup>155</sup> Every school superintendent is required to follow the Texas Education Agency's Financial Accountability System Resources

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<sup>152</sup> 5RR83-84; 11RR96-98; Ex.1; Ex.8145; Ex.1013.

<sup>153</sup> Ex.1; Ex.8145; Ex.8000.

<sup>154</sup> Ex.1.

<sup>155</sup> Ex.1; Ex.8000.

Guide.<sup>156</sup> The requirements under this “guide” are included in over 2,000 pages of detailed instruction.<sup>157</sup> The universal inability of superintendents in Texas to know how much it costs to educate a child in their schools is a direct result of the incoherent State accounting requirements.<sup>158</sup> And while the superintendents do track helpful campus-level data, there is no link between inputs and outputs such that productivity calculations can be made.<sup>159</sup>

It is a basic economic principle that to assess the efficiency of a school or instructional program, the school must know what is spent on them, as well as the outcomes.<sup>160</sup> It is also necessary to follow expenditures to the child level and have that data merged with outcomes data from the same school year. This is not currently done in Texas. The lack of such a system allows only crude measurements of productivity, but not the type necessary to operate the schools with constitutional efficiency.

Without knowing the cost of educating a child, it is impossible to determine whether the System could become constitutionally sound merely with greater funding. To the contrary, if the amount of funds appropriated to each district, when spent efficiently, is equal to or exceeds the cost of educating that district’s children, then the System’s financing cannot be unconstitutional. As such, this Court should

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<sup>156</sup> Ex.8000.

<sup>157</sup> *Id.*

<sup>158</sup> Ex.1; Ex.8145; Ex.8000.

<sup>159</sup> *Id.*

<sup>160</sup> Ex.1341.

hold that to prove financial unconstitutionality, it is necessary for a school district to *first* establish the cost of educating a child, before it could demonstrate the need for more money to educate the children in its district.

**B. Before determining whether the Texas School System is constitutionally funded, it is also necessary to determine whether the System is spending funds efficiently.**

There can also be no determination of the unconstitutionality of school funding without first showing whether the System is otherwise constitutionally efficient. Here, the school districts have asked for an alteration of funding—without confronting the Efficiency Intervenors’ challenge that the System must first demonstrate it is otherwise producing results with little waste so that a proper assessment of financial need can be made.

Historically, school finance lawsuits have required the courts to assume that the System is operating efficiently. The issue of whether the System is actually operating efficiently has not been litigated. But this Court continually urged that this *assumption be challenged*, and it is that assumption the Efficiency Intervenors now challenge in this case. *See, e.g., W. Orange-Cove II*, 176 S.W.3d at 792-793; *Edgewood I*, 777 S.W.2d at 397. The school districts, thus far, have been able to avoid proving the System’s efficiency, continually assuming they need not prove they use the current funds efficiently before being entitled to obtain additional funding through the courts.

The issues presented by the school districts should not be decided without an initial consideration of the issues raised by the Efficiency Intervenors. To allow the school districts to obtain more money without any burden of proving the amounts currently available are being spent efficiently only promotes more waste, not to mention encouraging the System's self-litigation and the attendant unproductive costs. There can be no doubt that litigation costs are wasteful, and this is especially so when the school districts sue the State, wasting millions of taxpayer dollars (used to both prosecute and defend the suit) that could otherwise be spent educating children. The Court can put a stop to this cycle by requiring school districts to *first* prove they use current funds efficiently, before bringing litigation to demand more funds.

**C. No evidence has ever been presented in the recurring school finance litigation to prove funding for the System is inadequate to the point of making the System unconstitutionally inefficient.**

The System's school districts claimed in this suit (as in previous ones) that it is only the *financing* that is unconstitutional, and this unconstitutionality flows at least in part from the insufficient availability and inequitable distribution of funds.<sup>161</sup> But to prevail on that claim, the school districts should be required to show that it is *because* of funding inadequacy that the System is unable to produce

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<sup>161</sup> 1CR5, 26, 48, 69.

a general diffusion of knowledge with little waste.<sup>162</sup> The link between funding amounts and constitutional inefficiency has always been missing in the analyses.

The Efficiency Intervenors submit that it is only when it is demonstrated that the funds allocated for schools are being spent efficiently that the Court should reach the question of whether this amount is insufficient to allow the school districts to provide for the general diffusion of knowledge. In other words, it is impossible to know what amount of funding is adequate to produce a general diffusion of knowledge when there is no evidence school districts are spending the money available in a way that is efficient. If the amounts available, when spent without waste, would be sufficient to produce constitutionally required results, then the school finance system cannot be unconstitutional. Essentially, the school districts have not shown that the *reason* they cannot provide for the general diffusion of knowledge is in fact because they do not have enough money.<sup>163</sup>

More money may or may not be required for an efficient system of public free schools. The Efficiency Intervenors do not dispute that a lack of adequate funds could interfere with the System's ability to provide for the general diffusion of knowledge. But simply assuming—without proving—a link between the amount

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<sup>162</sup> As established above, the Efficiency Intervenors proved a link between the structural inefficiency of the system and the inability of the system to provide for the general diffusion of knowledge. But if the Court believes that it is enough to just show the system is inefficient without establishing a link between the inefficiency and the inability to provide for the general diffusion of knowledge, then the Efficiency Intervenors should also prevail for this reason because (1) they established that the education system is inefficient and (2) they established it does not provide for the general diffusion of knowledge.

<sup>163</sup> 1CR5, 26, 48, 69.

of funding and the ability to produce constitutionally required results cannot be enough. To prove that the System's financing is inadequate, unsuitable, and inefficient, it should be necessary for a school district to prove that it is using the money it currently has in a cost effective manner for the purpose of educating its students and is nonetheless unable to provide a general diffusion of knowledge.

**D. The fact that the Texas School System cannot account for or demonstrate its funds are used in an efficient manner establishes as a matter of law the unconstitutional structural inefficiency of the System.**

In addition to the reasons discussed under Issue One, the System's failure to account even minimally for the cost of educating a child, or to account for expenses through tying them to educational results, establishes that the System does not produce a general diffusion of knowledge with little waste. The Court can conclude on this basis alone that the System, as structured, is unconstitutionally inefficient.

**ISSUE THREE: Because the Efficiency Intervenors prevailed or, alternatively, significantly contributed to the court's analysis of the constitutional efficiency of the Texas School System, the trial court abused its discretion in refusing to award them attorney's fees.**

Since at least 1992, in *Edgewood III*, this Court has recognized the need for a legal challenge highlighting the inefficiencies in the System's structure that impede "improvements in education which could be realized by eliminating gross wastes in the bureaucratic administration of the system." 826 S.W.2d at 524. The

Efficiency Intervenors brought that precise challenge in this lawsuit. They were full participants throughout this lengthy litigation, including participating at more than 60 pre-trial depositions. They cross-examined almost every witness in both the first and second trials (which together included at least 43 lay witnesses and 32 expert witnesses). The Efficiency Intervenors put on a case-in-chief during the first trial that lasted five trial days and included a student, parents, business leaders, a school district human resources professional, and five expert witnesses, two of whom were from the Hoover Institution at Stanford University. The undisputed evidence shows that the Efficiency Intervenors' attorneys spent more than 3,500 hours providing legal services and incurred more than \$1.5 million in legal fees.<sup>164</sup> The trial court, however, refused to award the Efficiency Intervenors any of the fees.<sup>165</sup> And it did so in spite of declaring from the bench that "there has been a great deal in the presentation by the Texans for Real Efficiency and Equity that should bear the Legislature's scrutiny."<sup>166</sup>

The Efficiency Intervenors' case is the first time in 30 years of Texas school finance litigation that the issue of qualitative efficiency has been included in the debate. A group of parents and students, joined by Texas businesses, stepped in to bring this challenge after the school districts once again refused to do so. But these families cannot afford to finance even a fraction of the costs in a lawsuit like this

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<sup>164</sup> See 4CR732-873; 10CR370-78, 606-33.

<sup>165</sup> 12CR188; COL 117.

<sup>166</sup> 45RR179.

one. If the trial court's refusal to award their attorney's fees is affirmed, this long-requested voice challenging the structural inefficiencies in the System will effectively be silenced, returning to the cycle of school finance litigation focused only on one branch of the state government suing itself for more money.

The Efficiency Intervenors should have been declared prevailing parties or, at a minimum, considered to have significantly contributed to the constitutional debate on public education law. This Court should render judgment that it is just and equitable to award the Efficiency Intervenors' reasonable and necessary attorney's fees of \$1,569,307 for trial and \$170,000 for appeal. Alternatively, the Court should remand for determination of the appropriate attorney's fee award.

**A. Reasonable and necessary attorney's fees are recoverable on a declaratory judgment claim when equitable and just.**

Under the Uniform Declaratory Judgment Act (UDJA), "the court may award costs and reasonable and necessary attorney's fees as are equitable and just." TEX. CIV. PRAC. & REM. CODE § 37.009. Whether fees are "reasonable and necessary" is generally a question of fact for the fact-finder. *Bocquet v. Herring*, 972 S.W.2d 19, 20 (Tex. 1998). Whether fees are "equitable and just" is a question of law to be determined by the court. *Id.* The UDJA does not require a party to prevail in order to obtain fees; rather, the decision as to whether to award fees is within the trial court's discretion. *See* TEX. CIV. PRAC. & REM. CODE § 37.009; *Bocquet*, 972 S.W.2d at 20; *Barshop v. Medina Cnty. Underwater Conservation*

*Dist.*, 925 S.W.2d 618, 637-38 (Tex. 1996). Yet while the trial court is afforded discretion in its refusal to award attorney’s fees, it abuses its discretion if it rules arbitrarily and unreasonably when it would have been equitable and just to award the fees. *See Feldman v. KPMG LLP*, 438 S.W.3d 678, 686 (Tex. App.—Houston [1st Dist.] 2014, no pet.). In school finance litigation, it is not an abuse of discretion to determine that an award of attorney’s fees is equitable and just for any party that made “significant contributions in what turned out to be a highly complex lawsuit.” *Neeley v. W. Orange-Cove*, 228 S.W.3d 864, 868 (Tex. App.—Austin 2007, pet. denied).

While the amount of reasonable and necessary fees must generally be determined by the fact-finder, uncontroverted issues can be determined without fact-findings. *See City of Keller v. Wilson*, 168 S.W.3d 802, 814-15 (Tex. 2005). The Efficiency Intervenors submitted uncontroverted evidence that they had incurred and would incur reasonable and necessary attorney’s fees. That evidence is:

Law Firm	Diamond <sup>167</sup>	Enoch Kever <sup>168</sup>	Total Fees
Before 3-5-2013	3,098 hours \$1,074,463	694.1 hours \$321,510	\$1,395,973
3-5-2013 through final judgment	279.8 hours \$117,920	123.3 hours \$55,414	\$173,334
			<u>For trial:</u> \$1,569,307
For appeal to this Court	\$50,000	\$120,000	<u>For appeal:</u> \$170,000

The trial court did not make any fact-finding rejecting that these uncontroverted fees were reasonable and necessary. Instead, the court concluded that:

[I]t is equitable and just to deny the attorneys' fees requests of the ... Intervenors ... because they were predominately non-prevailing parties and, while they contributed to the public debate on school finance law through this lawsuit, those contributions were not so significant as to warrant an award of fees.<sup>169</sup>

The trial court abused its discretion by concluding it was equitable and just to deny the Efficiency Intervenors any attorney's fees for their substantial efforts to finally bring to this Court, after decades of school finance litigation, its long-invited challenge to qualitative efficiency.

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<sup>167</sup> Chris Diamond's initial affidavit also included fees for two Dallas attorneys who covered three Dallas-area depositions and for substantive legal assistant work performed during trial by Kent Grusendorf. *See* 4CR736-810; *see also* 10CR370-78.

<sup>168</sup> *See* 4CR811-73; 10CR606-33.

<sup>169</sup> COL 117.

**B. The Efficiency Intervenors should be awarded attorney’s fees because they should be declared a prevailing party.**

The heart of the Efficiency Intervenors’ case is that the Texas School System is inefficient: that is, it is unable to produce the constitutionally required general diffusion of knowledge with little waste. The Efficiency Intervenors were aligned with the school districts on the issue of inefficiency. And the trial court recognized the System’s inefficiency throughout its findings of fact and conclusions of law. Yet the court arbitrarily and unreasonably declared the school districts—but not the Efficiency Intervenors—to have “prevailed” on this issue. And the court awarded those “prevailing” school districts—but not the Efficiency Intervenors—all their reasonable and necessary attorney’s fees.

In addition to providing extensive proof that the System is inefficient, the Efficiency Intervenors also did something that the school districts were unable or unwilling to accomplish: conclusively proving *why* the System is inefficient. The Efficiency Intervenors proved the link that establishes that it is the structural inefficiencies of the System (and not just insufficient funding) that causes its failure to provide for the general diffusion of knowledge.

This Court should conclude that it is equitable and just to award the Efficiency Intervenors’ reasonable and necessary attorney’s fees because they prevailed in proving that the System is unable to produce the constitutionally required general diffusion of knowledge with little waste.

**C. The Efficiency Intervenors should be awarded attorney’s fees because they significantly contributed to the debate on public education law.**

Even if the Court determines not to declare the Efficiency Intervenors prevailing parties, this Court should declare that they significantly contributed to the public education debate in this litigation.<sup>170</sup> “The award of attorneys’ fees in declaratory judgment actions ... is not dependent on a finding that a party ‘substantially prevailed.’” *Neeley*, 228 S.W.3d at 868 (citing *Barshop*). Fees may properly be awarded to parties who “made significant contributions” in school finance litigation. *Id.*

The Efficiency Intervenors made significant contributions in this litigation. Indeed, the Efficiency Intervenors brought the precise challenge that this Court has been requesting for more than two decades. In bringing their qualitative efficiency claim, the Efficiency Intervenors not only introduced the perspective into the public education debate that this Court has repeatedly suggested is an important one—whether the System, as a whole, is structurally inefficient, causing it to be unable to produce constitutionally required educational results—but it produced the evidence to prove it. The trial court abused its discretion by concluding that this challenge, repeatedly requested by this Court, is “not so significant” as to support an award of attorney’s fees.

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<sup>170</sup> *Id.*

There also cannot be any reasonable dispute that it would be equitable and just to award attorney's fees to the parents and other private litigants who stepped up to challenge the System's structural inefficiencies when the school districts once again refused to do so. The Efficiency Intervenors' case is the first time in thirty years of Texas school finance litigation that the issue of the System's structural efficiency has been included in the debate. And the surest way to ensure that this issue is never again included in the debate is to tell these private litigants, including working families and single parents (who cannot afford to finance even a fraction of the attorney's fees incurred in complex, multi-year litigation like this), that they must bear the entirety of the expense in order to have their requested voice heard. If upheld, the trial court's judgment declining to award attorney's fees will stifle these voices in cases involving the rights of parents, children, and other education consumers—when they are the very ones with the constitutional protection. And with their voice silenced, the debate will continue to be dominated by school districts asking for more money, without being questioned about—let alone being required to fix—the structural deficiencies that render the System inefficient and unable to provide a general diffusion of knowledge with little waste.

This Court should conclude that it is equitable and just to award the Efficiency Intervenors' reasonable and necessary attorney's fees because their contribution in highlighting the structural inefficiencies that cause the System to be

unable to produce the constitutionally required general diffusion of knowledge is significant.

**PRAYER**

For these reasons, the Efficiency Intervenors request that the Court:

- (1) reverse the trial court's judgment against the Efficiency Intervenors on their efficiency claim and render judgment for them on this claim;
- (2) reverse the trial court's judgment declining to award the Efficiency Intervenors' attorney's fees and render judgment for the reasonable and necessary fees proven at trial for and for court costs; and
- (3) grant any other relief to which the Efficiency Intervenors may be entitled.

Respectfully submitted,

/s/ Craig T. Enoch

Craig T. Enoch

Texas Bar No. 00000026  
cnoch@enochkever.com

Melissa A. Lorber

Texas Bar No. 24032969  
mlorber@enochkkever.com

Amy Leila Saberian

Texas Bar No. 24041842  
asaberian@enochkever.com

Shelby O'Brien

Texas Bar No. 24037203  
sobrien@enochkever.com

ENOCH KEVER PLLC

600 Congress Avenue, Suite 2800  
Austin, Texas 78701  
(512) 615-1200 / (512) 615-1198 fax

J. Christopher Diamond

Texas Bar No. 00792459  
christopherdiamond@yahoo.com

SPRAGUE, RUSTAM & DIAMOND, P.C.

1111 Katy Freeway, Suite 300

Houston, Texas 77040

(713) 647-3130/(713) 647-3137 fax

*Attorneys for the Efficiency Intervenors*

**CERTIFICATE OF COMPLIANCE**

Relying on the word count function in the word processing software used to produce this document, Petitioner certifies that this Appellants’ Brief (when excluding the sections excluded in Texas Rule of Appellate Procedure 9.4(i) (1)) contains 12,247 words.

/s/ Craig Enoch  
Craig T. Enoch

**CERTIFICATE OF SERVICE**

I hereby certify that on April 13, 2015, the foregoing Appellants’ Brief of Efficiency Intervenors was served via electronic service on the following:

Mark R. Trachtenberg  
HAYNES AND BOONE, LLP  
1 Houston Center  
1221 McKinney St., Ste. 2100  
Houston, Texas 77010  
mark.trachtenberg@haynesboone.com

John W. Turner  
HAYNES AND BOONE, LLP  
2323 Victory Ave., Ste. 2100  
Dallas, Texas 75219  
john.turner@haynesboone.com

*Attorneys for Calhoun County ISD, et al.*

J. David Thompson, III  
Philip Fraissinet  
THOMPSON & HORTON LLP  
3200 Southwest Freeway , #2000  
Houston, Texas 77027  
dthompson@thompsonhorton.com  
pfraissinet@thompsonhorton.com

Holly G. McIntush  
THOMPSON & HORTON LLP  
Wells Fargo Tower  
400 W. 15<sup>th</sup> St., Ste. 1430  
Austin, Texas 78701  
hmcintush@thompsonhorton.com

*Attorneys for Fort Bend ISD, et al.*

Marisa Bono  
MEXICAN AMERICAN LEGAL DEFENSE AND  
EDUCATION FUND, INC.  
110 Broadway, Ste. 300  
San Antonio, Texas 78205  
dhinojosa@maldef.org  
mbono@maldef.or

Roger L. Rice  
MULTICULTURAL EDUCATION  
TRAINING AND ADVOCACY, INC.  
240A Elm St., Ste., 22  
Somerville, Massachusetts 02144  
rlr@shore.net

*Attorneys for Edgewood ISD, et al.*

Robert A. Schulman  
Joseph E. Hoffer  
Leonard J. Schwartz  
SCHULMAN, LOPEZ & HOFFER, L.L.P.  
517 Soledad St.  
San Antonio, Texas 78205-1508  
rschulman@slh-law.com  
jhoffer@slh-law.com  
lschwartz@slh-law.com

James C. Ho  
GIBSON, DUNN & CRUTCHER LLP  
2100 McKinney Avenue, Suite 1100  
Dallas, Texas 75201-6912  
jho@gibsondunn.com

*Attorneys for Texas Charter School Association, et al.*

Richard E. Gray, III  
Toni Hunter  
Richard E. Gray, IV  
GRAY & BECKER, P.C.  
900 West Ave.  
Austin, Texas 78701  
rick.gray@graybecker.com  
toni.hunter@graybecker.com  
richard.grayIV@graybecker.com

Randall B. Wood  
Doug W. Ray  
RAY & WOOD  
2700 Bee Caves Rd., #200  
Austin, Texas 78746  
buckwood@raywoodlaw.com  
dray@raywoodlaw.com

*Attorneys for the Texas Taxpayer & Student Fairness Coalition, et al.*

Ken Paxton  
Jonathan F. Mitchell  
Rance Craft  
Kristofer S. Monson  
Beth Klusmann  
Evan S. Greene  
Shelley N. Dahlberg  
Charles E. Roy  
James E. Davis

OFFICE OF THE ATTORNEY GENERAL  
P.O. Box 12548 (MC 059)  
Austin, Texas 78711  
rance.craft@texasattorneygeneral.gov

*Attorneys for Michael Williams, Commissioner of Education, In His Official Capacity, Glenn Hegar, Texas Comptroller of Public Accounts, In His Official Capacity, the Texas State Board of Education, the Texas Education Agency*

*/s/ Craig T. Enoch*  
\_\_\_\_\_

Craig T. Enoch

# No. 14-0776

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## *In The Supreme Court of Texas*

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**MICHAEL WILLIAMS, COMMISSIONER OF EDUCATION, IN HIS  
OFFICIAL CAPACITY, ET AL.**

*Appellants/Cross-Appellees*

v.

**THE TEXAS TAXPAYER & STUDENT FAIRNESS COALITION, ET AL.;  
CALHOUN COUNTY ISD, ET AL.; EDGEWOOD ISD, ET AL.; FORT  
BEND ISD, ET AL.; TEXAS CHARTER SCHOOL ASSOCIATION, ET AL.;  
AND JOYCE COLEMAN, ET AL.**

*Appellants/Appellees/Cross-Appellants*

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## **APPENDIX**

- (1) **Trial Court Judgment**
- (2) **Findings of Fact and Conclusions of Law**
- (3) **TEX. CONST. art. VII, § 1**
- (4) **Erik S. Hanushek Report (Ex.1001)**
- (5) **Erik S. Hanushek Supplemental Report (Ex.8001)**
- (6) **Excerpts from Erik S. Hanushek Trial Testimony (37RR16-89)**
- (7) **Paul Hill Report (Ex.1341)**
- (8) **Mark Hurley Report (Ex.1)**
- (9) **Don McAdams Report (Ex.1013)**
- (10) **Grover J. Whitehurst Report (Ex.8140)**

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CAUSE NO. D-1-GN-11-003130

THE TEXAS TAXPAYER & STUDENT	§	IN THE DISTRICT COURT
FAIRNESS COALITION, et al;	§	
CALHOUN COUNTY ISD, et al;	§	
EDGEWOOD ISD, et al;	§	
FORT BEND ISD, et al.;	§	
TEXAS CHARTER SCHOOL	§	
ASSOCIATION, et al.;	§	
	§	
Plaintiffs	§	
	§	
	§	
	§	
JOYCE COLEMAN, et al.;	§	
	§	
Intervenor	§	
	§	
vs.	§	TRAVIS COUNTY, TEXAS
	§	
MICHAEL WILLIAMS, COMMISSIONER	§	
OF EDUCATION, IN HIS OFFICIAL	§	
CAPACITY; SUSAN COMBS,	§	
TEXAS COMPTROLLER OF PUBLIC	§	
ACCOUNTS, IN HER OFFICIAL	§	
CAPACITY; TEXAS STATE BOARD	§	
OF EDUCATION,	§	
Defendants	§	200 <sup>th</sup> JUDICIAL DISTRICT

**FINAL JUDGMENT**

On October 22, 2012, this consolidated case was called for trial. All parties appeared and announced that they were ready for trial, including the Texas Taxpayer and Student Fairness Coalition Plaintiffs (the "TTSFC Plaintiffs"),<sup>1</sup> the Calhoun County ISD Plaintiffs,<sup>2</sup> the Fort Bend ISD Plaintiffs,<sup>3</sup> the Edgewood ISD Plaintiffs,<sup>4</sup> the Charter School Plaintiffs,<sup>5</sup> the Intervenor,<sup>6</sup>

<sup>1</sup> The TTSFC Plaintiffs are those plaintiffs listed in paragraphs 2-8 of their Ninth Amended Petition filed with the Court on October 11, 2013.  
<sup>2</sup> The Calhoun County ISD Plaintiffs are those districts listed in paragraphs 2-7 of their Third Amended Petition filed with the Court on October 11, 2013.  
<sup>3</sup> The Fort Bend ISD Plaintiffs are those districts listed in paragraphs 2-83 of their Seventh Amended Petition filed with the Court on October 11, 2013.

and the State Defendants.<sup>7</sup> The case was tried to the Court over the course of forty-five trial days.

On the final day of trial, this Court orally announced its ruling on the plaintiffs' claims, finding the Texas school finance system unconstitutional in several respects. Before this Court entered its findings of fact and a final judgment, the 83rd Legislature passed several bills that potentially affected the claims in this case. On June 19, 2013, the Court granted a motion to reopen the evidence to consider the impact of the 2013 legislation, and held a ten-day evidentiary hearing beginning on January 21, 2014.

Based upon the competent evidence admitted at trial (both the main trial and upon the reopening of evidence), the arguments of counsel, and this Court's contemporaneously-entered Findings of Fact and Conclusions of Law (incorporated herein by reference),<sup>8</sup> the Court finds that the Texas school finance system effectively imposes a state property tax in violation of Article VIII, Section 1-e of the Texas Constitution because school districts do not have meaningful discretion over the levy, assessment, and disbursement of local property taxes. The Court further finds that the Legislature has failed to meet its constitutional duty to suitably provide for Texas public schools because the school finance system is structured, operated, and funded so that it cannot provide a constitutionally adequate education for all Texas

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<sup>4</sup> The Edgewood ISD Plaintiffs are those plaintiffs listed in paragraphs 2-12 of their Third Amended Petition filed with the Court on August 7, 2013.

<sup>5</sup> The Charter School Plaintiffs are those plaintiffs listed in paragraphs 2-7 of their Fifth Amended Original Petition and Request for Declaratory Judgment filed with the Court on November 21, 2013.

<sup>6</sup> The Intervenor are those parties listed in paragraph 1 of their Third Amended Plea in Intervention filed with this Court on August 7, 2013.

<sup>7</sup> The State Defendants are Michael Williams, in his official capacity as Texas Commissioner of Education; the Texas Education Agency; Susan Combs, in her official capacity as the Texas Comptroller of Public Accounts; and the Texas State Board of Education.

<sup>8</sup> The Court incorporates its Findings of Fact and Conclusions of Law in support of this Final Judgment. The Declarations, herein, summarize or restate those found in the Findings of Fact and Conclusions of Law.

schoolchildren. Further, the school finance system is constitutionally inadequate because it cannot accomplish, and has not accomplished, a general diffusion of knowledge for all students due to insufficient funding. Finally, the school finance system is financially inefficient because all Texas students do not have substantially equal access to the educational funds necessary to accomplish a general diffusion of knowledge. Consequently, the Court enjoins further funding under the system until the constitutional infirmities are corrected.

### THE CONSTITUTIONAL STANDARDS

#### *State Property Tax Prohibition.*

Because the TTSFC Plaintiffs, the Calhoun County ISD Plaintiffs, the Fort Bend ISD Plaintiffs, and the Edgewood ISD Plaintiffs (collectively, the "ISD Plaintiffs") must tax at or near the maximum allowed tax rate to fund maintenance and operations for an adequate education, they contend that the State, through the school finance system, improperly controls local property taxation in violation of Article VIII, Section 1-c of the Texas Constitution: "No State ad valorem taxes shall be levied upon any property within this State." TEX. CONST. art. VIII, § 1-c. "An ad valorem tax is a state tax when it is imposed directly by the State or when the State so completely controls the levy, assessment and disbursement of revenue, either directly or indirectly, that the authority employed is without meaningful discretion." *West Orange-Cove Cons. I.S.D. v. Neeley*, 176 S.W.3d 746, 751 (Tex. 2005) ["*WOC II*"] (quoting *Carrollton-Farmers Branch I.S.D. v. Edgewood I.S.D.*, 826 S.W.2d 489, 502 (Tex. 1992)) ["*Edgewood III*"]. The evidence clearly establishes that local districts do not have meaningful discretion in the levy, assessment, and disbursement of property taxes; therefore, the Texas school finance system imposes an unconstitutional state property tax.

***The Education Clause – Adequacy, Suitability, and Financial Efficiency.***

Like the Texas Supreme Court, this Court measures the conduct of the Legislature by its constitutional duty:

A general diffusion of knowledge being essential to the preservation of liberties and rights of the people, **it shall be the duty of the Legislature** of the State to establish and make suitable provision for the support and maintenance of an efficient system of public free schools.

TEX. CONST. art. VII, § 1 (emphasis added). As applied in this case and described by the Supreme Court, the Constitution first requires the Legislature to establish a public school system that is “adequate,” i.e., one that “achieve[s] [a] **general diffusion of knowledge** . . . essential to the preservation of liberties and rights of the people.” *WOC II*, 176 S.W.3d at 753 (quoting TEX. CONST. art. VII, § 1) (emphasis added). Second, the Legislature must make “suitable provision” to achieve the general diffusion of knowledge. That is, the Legislature must **structure, operate, and fund** the public school system “so that it can accomplish its purpose for all Texas children.” *Id.* (emphasis added). Third, in funding the public school system, the Legislature must be “financially efficient.” “Children who live in poor districts and children who live in rich districts must be afforded a **substantially equal opportunity to have access to educational funds.**” *Id.* (quoting *Edgewood I.S.D. v. Kirby*, 777 S.W.2d 391, 397 (Tex. 1989)) [*Edgewood I*] (emphasis added). In the context of a finance system that is heavily dependent upon property tax revenues and there exists a vast disparity in property values among the school districts, “[t]here must be a direct and close correlation between a district’s tax effort and the educational resources available to it. . . .” *Edgewood I.S.D. v. Meno*, 917 S.W.2d 717, 729 (Tex. 1995) [*Edgewood II*], (quoting *Edgewood I*, 777 S.W.2d at 397). The Texas school finance system is constitutionally inadequate, unsuitable, and financially inefficient.

### STANDARD OF REVIEW

This Court is mindful that its role differs from that of the Legislature.

[T]he Legislature has discretion under article VII, section 1 to determine how to structure and fund the public education system to achieve a general diffusion of knowledge. However . . . governmental discretion is circumscribed by the Constitution. Article VII, section 1 requires that public school finance be efficient and adequate [and suitable] to provide a general diffusion of knowledge.

*WOC II*, 176 S.W.3d at 775. The Legislature's "affirmative duty to establish and provide for the public free schools" is accompanied by "express constitutional mandate" by which this Court must "measure the constitutionality of the Legislature's actions." *Id.* at 776. "That provision does not allow the Legislature to structure a public school system that is inadequate, inefficient, or unsuitable, **regardless of whether it has a rational basis or even a compelling reason to do so.**" *Id.* at 784 (emphasis added).

The Legislature is entitled to determine what public education is necessary for the constitutionally required 'general diffusion of knowledge', and then to determine the means for providing that education. But the Legislature does not have free rein at either level.

\* \* \*

If the Legislature's choices are informed by guiding rules and principles properly related to public education – that is, if the choices are not arbitrary – then the system does not violate the constitutional provision.

*Id.* at 784-85.

In assessing challenges to the public education system under article VII, section 1, courts must not on the one hand substitute their policy choices for the Legislature's, however undesirable the latter may appear, but must on the other hand examine the Legislature's choices carefully to determine whether those choices meet the requirements of the Constitution. By steering this course, the Judiciary can assure that the people's guarantees under the Constitution are protected without straying into the prerogatives of the Legislature.

*Id.* at 785.

Though the Court recognizes the Legislature's discretion in crafting the public school system, "the final authority to determine adherence to the Constitution resides with the judiciary." *Id.* While the parameters are not clear, the constitutional limits are:

[A]rticle VII, section 1 dictates what the system *cannot* be: it cannot be so inadequate that it does not provide for a general diffusion of knowledge, or so inefficient that districts which must achieve this general diffusion of knowledge do not have substantially equal access to available revenues to perform their mission, or so unsuitable that it cannot because of its structure achieve its purpose.

*Id.* at 783. The Court finds the Legislature has failed to meet its constitutional mandate and has acted arbitrarily in structuring and funding the Texas school finance system.

Based upon the Court's Findings of Fact and Conclusions of Law, the Court GRANTS the ISD Plaintiffs' requests for declaratory and injunctive relief and makes the following declarations.

**I. Declaratory relief relating to Article VIII, Section 1-e state property tax claims**

This Court GRANTS FINAL JUDGMENT to the ISD Plaintiffs on their requests for declaratory relief in connection with their Article VIII, Section 1-e state property tax claims.

Accordingly, the Court makes the following declarations:

1. The ISD Plaintiffs have lost meaningful discretion to set their M&O tax rates, as their current rates effectively serve as a floor (because they cannot lower taxes without further compromising their ability to meet state standards and requirements) and a ceiling (because they are either legally or practically unable to raise rates further). Further, to the extent any of the ISD Plaintiff districts could raise their M&O tax rate to the statutory maximum rate of \$1.17 (and have not already done so), the districts would still remain unable to meaningfully use local tax dollars for local enrichment beyond the level required for a constitutionally adequate education, in violation of the prohibition on state ad valorem taxes. Thus, THIS COURT DECLARES that the ISD Plaintiffs have established an Article VIII, Section 1-e violation as to their districts.
2. Because the ISD Plaintiffs collectively have also established a systemic violation, THIS COURT DECLARES that the Texas school finance system is presently in violation of Article VIII, Section 1-e of the Texas Constitution.

## II. Declaratory relief relating to Article VII, Section 1 suitability claims

This Court GRANTS FINAL JUDGMENT to the ISD Plaintiffs on their requests for declaratory relief in connection with their Article VII, Section 1 suitability claims. Accordingly, the Court makes the following declarations (which summarize or restate those made in the accompanying Findings of Fact and Conclusions of Law):

1. The ISD Plaintiffs have shown that the State has made no effort to determine the costs of meeting its own standards or of bridging the performance gaps. The ISD Plaintiffs have further shown that the costs of providing a general diffusion of knowledge exceed the funding provided through the current system, and that multiple defects in the current design of the school finance system – including inadequately funded weights for economically disadvantaged and English Language Learner students – cumulatively prevent districts from generating sufficient resources to accomplish a general diffusion of knowledge for all students, and particularly with respect to the State’s economically disadvantaged and English Language Learner students. Accordingly, THIS COURT DECLARES that the Texas school finance system violates the “make suitable provision” clause in Article VII, Section 1 of the Texas Constitution because the system is not “structured, operated, and funded so that it can accomplish its purpose [of providing a general diffusion of knowledge] for all Texas children.” *WOC II*, 176 S.W.3d at 753.
2. The Edgewood ISD Plaintiffs have further shown that the costs of providing a general diffusion of knowledge to economically disadvantaged and English Language Learner students exceed the funding provided through the current system, due to the arbitrarily designed and insufficient weights for those students. This defect coupled with the arbitrarily designed and insufficient Foundation School Program funding made available to districts like the Edgewood ISD Plaintiffs cumulatively prevent those districts from generating sufficient resources to accomplish a general diffusion of knowledge for the State’s economically disadvantaged and English Language Learner students. Accordingly, THIS COURT DECLARES that the Texas school finance system violates the “make suitable provision” clause in Article VII, Section 1 of the Texas Constitution because the system is not “structured, operated, and funded so that it can accomplish its purpose [of providing a general diffusion of knowledge] for [economically disadvantaged and English Language Learner] children.” *WOC II*, 176 S.W.3d at 753.
3. THIS COURT DECLARES the State’s school finance system fails to satisfy the “make suitable provision” requirement because Texas school children, particularly the economically disadvantaged and English language learners, are denied access to that education needed to participate fully in the social, economic, and educational opportunities available in Texas. Moreover, the failure of the Texas school finance system to fully pay the costs of a constitutionally adequate education, whether at the maximum tax rate available without a Tax Ratification Election [“TRE”], \$1.04, or at the maximum tax rate with voter approval, \$1.17, means that the structure, operation, and

funding make it impossible for Texas public schools to accomplish a general diffusion of knowledge.

4. The TTFSC Plaintiffs, the Fort Bend ISD Plaintiffs, and the Edgewood ISD Plaintiffs have shown that the Texas school finance system is structured, operated, and funded so that it cannot accomplish financial equity. Property wealthy districts are able to access substantially more funding at all levels of the system. Further, the use of two separate funding mechanisms for M&O, formula funding and target revenue, makes it impossible for the finance system to be equalized to accomplish financial efficiency. THIS COURT DECLARES that the Texas school finance system fails to satisfy the "make suitable provision" requirement because it is structured, operated, and funded so that it is impossible to achieve a general diffusion of knowledge in a financially efficient manner.

### **III. Declaratory relief relating to Article VII, Section 1 adequacy claims**

This Court GRANTS FINAL JUDGMENT to the ISD Plaintiffs, as well as the Charter School Plaintiffs, on their requests for declaratory relief in connection with their Article VII, Section 1 adequacy claims. Accordingly, the Court makes the following declarations (which summarize or restate those made in the accompanying Findings of Fact and Conclusions of Law):

1. All performance measures considered at trial, including STAAR tests, EOC exams, SATs, the ACTs, performance gaps, graduation rates, and dropout rates among others, demonstrated that Texas public schools are not accomplishing a general diffusion of knowledge due to inadequate funding. Accordingly, THIS COURT DECLARES that the school finance system is constitutionally inadequate.
2. The ISD Plaintiffs have shown that the cost of meeting the constitutional mandate of adequacy (the "general diffusion of knowledge") exceeds the maximum amount of funding that is available to them at the \$1.04 M&O tax rate (the highest rate accessible without a TRE). Accordingly, THIS COURT DECLARES the State's school finance system fails to satisfy the Article VII, Section 1 adequacy requirement as to the ISD Plaintiffs districts. The ISD Plaintiffs also have shown that the cost of meeting the constitutional mandate of adequacy exceeds the amount of funding that is or would be available to them at the maximum \$1.17 M&O tax rate. Accordingly, THIS COURT DECLARES the State's school finance system fails to satisfy the Article VII, Section 1 adequacy requirement as to the ISD Plaintiffs districts.
3. Because the ISD Plaintiffs collectively have also established a systemic/statewide "adequacy" violation, THIS COURT DECLARES that the Texas school finance system is presently in violation of Article VII, Section 1 of the Texas Constitution. Stated another way, this Court finds that the Legislature violated the "arbitrary" standard described in *West Orange Cove II* by "defin[ing] the goals for accomplishing the

constitutionally required general diffusion of knowledge,” and then providing “insufficient means for achieving those goals.” *WOC II*, 176 S.W.3d at 785. The current structure of the school finance system is such that districts cannot generate sufficient revenues to fund and provide an adequate education.

4. The Edgewood ISD Plaintiffs, the TTSFC Plaintiffs, and the Fort Bend ISD Plaintiffs have further shown that economically disadvantaged students and English Language Learner students are not achieving a general diffusion of knowledge and that the cost of providing a general diffusion of knowledge to these students exceeds the amount of funding made available for their education under the current school finance system. The Court concludes the funding for economically disadvantaged and English Language Learner students is inadequate and arbitrary. Accordingly, THIS COURT DECLARES the current public school finance system is inadequate for the provision of a general diffusion of knowledge for economically disadvantaged and English Language Learner students under Article VII, Section 1 of the Texas Constitution.
5. The ISD Plaintiffs have further shown that the current facilities funding is constitutionally inadequate to suitably provide sufficient support for districts to maintain, build, and renovate the classrooms necessary for an adequate education. This constitutional infirmity exacerbates the problems resulting from inadequate M&O funding because many districts are forced to use those scarce funds to make up for unfunded facilities needs. Accordingly, THIS COURT DECLARES that considered separately, and as part of the total school finance system, facilities funding is arbitrary and inadequate in providing Texas school children with the constitutional mandate of adequacy.
6. The ISD Plaintiffs have shown that the M&O and I&S funding available under the school finance system as a whole is insufficient to achieve a general diffusion of knowledge. Accordingly, THIS COURT DECLARES that the school finance system is arbitrary and inadequate in violation of Article VII, Section 1 of the Texas Constitution.
7. Because the school finance system for independent school districts under the statutory formulas is constitutionally inadequate and because charter schools are financed based on state averages of school district M&O funding levels, THIS COURT DECLARES that funding for open-enrollment charter schools also is inadequate.

**IV. Declaratory relief relating to Article VII, Section 1 financial efficiency (equity) claims**

This Court GRANTS FINAL JUDGMENT to the TTSFC Plaintiffs, the Fort Bend ISD Plaintiffs, and the Edgewood ISD Plaintiffs on their requests for declaratory relief in connection with their Article VII, Section 1 financial efficiency or equity claims. Accordingly, the Court makes the following declarations:

1. The TTSCF, Edgewood ISD, and Fort Bend ISD Plaintiffs have shown that, in the current system, there is not a direct and close correlation between a district's tax effort and the educational resources available to it, as required under Article VII, Section 1, and, as a result, there are large gaps in funding levels and tax effort between low property wealth and high property wealth districts. Plaintiffs have shown that these gaps disadvantage the students in their districts in acquiring a general diffusion of knowledge and are incompatible with a system that requires that "children who live in poor districts and children who live in rich districts . . . be afforded a substantially equal opportunity to have access to educational funds." *WOC II*, 176 S.W.3d at 753. Instead, the system arbitrarily funds districts at different levels below the constitutionally required level of a general diffusion of knowledge. Plaintiffs have further shown that the school finance system violates the "efficiency" provisions of Article VII, Section 1 of the Texas Constitution in that a) it fails to provide substantially equal access to M&O and I&S tax revenues necessary to provide a general diffusion of knowledge at similar tax effort, and b) it permits an amount of unequal local supplementation in the system that is so great as to destroy the efficiency of the system. Plaintiffs have also shown that insofar as the State Defendants continue to rely on disparate property values and accompanying property taxes to fund public schools, equalization provisions such as equalized wealth levels, guaranteed yields, recapture and caps on maximum tax rates, remain essential for a financially efficient and equitable public school system under Article VII, Section 1 of the Texas Constitution. The State's failure to make facilities funding a statutorily permanent part of the Texas school finance system and failure to update the equalized wealth level/guaranteed yield (coupled with the lack of recapture) mean that low property wealth and high property wealth districts have vastly different access to facilities funding contributing to the inefficiency of the system as a whole.
  2. THIS COURT DECLARES that the school finance system violates the "efficiency" provisions of Article VII, Section 1 of the Texas Constitution in that it fails to provide substantially equal access to revenues necessary to provide a general diffusion of knowledge at similar tax effort, and instead arbitrarily funds districts at different levels below the constitutionally required level of a general diffusion of knowledge
  3. Because the TTSCF Plaintiffs, the Edgewood ISD Plaintiffs, and the Fort Bend ISD Plaintiffs collectively have established a systemic/statewide violation, THIS COURT DECLARES that the Texas school finance system is presently in violation of Article VII, Section 1 of the Texas Constitution with respect to both maintenance and operations funding and facilities funding, separately and as complementary aspects of the school finance system.
- V. **This Court denies the TTSCF Plaintiffs' request for declaratory relief relating their Article VIII, Section 1(a) "taxpayer equity" claim.**

For the reasons set forth in its Findings of Fact and Conclusions of Law, this Court declines to grant the relief sought by the TTSCF Plaintiffs in connection with their Article VIII, Section 1(a) "taxpayer equity" claim. THIS COURT DECLARES that the Texas school finance

system does not violate Article VIII, Section 1(a) and GRANTS FINAL JUDGMENT to the State Defendants on this claim.

**VI. This Court denies all pleas to the jurisdiction.**

This Court finds that it has jurisdiction to rule on the merits of all claims in this case. Accordingly, THIS COURT DENIES all pending pleas to the jurisdiction.

**VII. This Court denies the Intervenor's request for declaratory relief relating to their Article VII, Section 1 "qualitative efficiency" claim.**

For the reasons set forth in its Findings of Fact and Conclusions of Law, this Court declines to grant the relief requested by the Intervenor on their Article VII, Section 1 "qualitative efficiency" claim. THIS COURT DECLARES that the Intervenor failed to establish a "qualitative efficiency" violation of Article VII, Section 1 and GRANTS FINAL JUDGMENT to the State Defendants on this claim.

**VIII. This Court denies the Charter School Plaintiffs' request for declaratory relief relating to their claims (other than their adequacy claim).**

As noted in Part I above, this Court GRANTS FINAL JUDGMENT to the Charter School Plaintiffs on their Article VII, Section 1 adequacy claim as derived from the Court's ruling on the ISD Plaintiffs' adequacy claims. For the reasons set forth in its Findings of Fact and Conclusions of Law, this Court DENIES the remaining relief requested by the Charter School Plaintiffs in connection with their other claims and GRANTS FINAL JUDGMENT to the State Defendants on these claims.

**IX. Injunctive relief**

This Court GRANTS FINAL JUDGMENT in favor of the TTSFC Plaintiffs, Calhoun County ISD Plaintiffs, Fort Bend ISD Plaintiffs, Edgewood ISD Plaintiffs, and the Charter School Plaintiffs on their claims for injunctive relief. Accordingly, this Court:

1. ENJOINS the State Defendants from giving any force and effect to the sections of the Education Code relating to the financing of public school education (Chapters 41 and 42 and Section 12.106 of the Education Code) and from distributing any money under the current Texas school financing system until the constitutional violations are remedied. The effect of this injunction shall be stayed until July 1, 2015, in order to give the Legislature a reasonable opportunity to cure the constitutional deficiencies in the finance system before the foregoing prohibitions take effect.
2. This injunction shall in no way be construed as enjoining the State Defendants, their agents, successors, employees, attorneys, and persons acting in concert with them or under their direction, from enforcing or otherwise implementing any other provisions of the Education Code.
3. This injunction shall not bar suits for collection of delinquent taxes, penalties, and interest.
4. This injunction does not impair any lawful obligation created by the issuance or execution of any lawful agreement or evidence of indebtedness before July 1, 2015, that matures after that date and that is payable from the levy and collection of ad valorem taxes, and a school district may, before, on, and after July 1, 2015, levy, assess, and collect ad valorem taxes, at the full rate and in the full amount authorized by law necessary to pay such obligations when due and payable. A school district that, before July 1, 2015, issues bonds, notes, public securities, or other evidences of indebtedness under Chapter 45 of Education Code, or other applicable law, or enters into a lease-purchase agreement under Subchapter A, Chapter 271 of the Local Government Code, may continue, before, on, and after July 1, 2015, to receive state assistance with respect to such payments to the same extent that the district would have been entitled to receive such assistance under Chapter 42 or 46 of the Education Code, notwithstanding this injunction.
5. This injunction does not limit, modify, or eliminate the authority of a school district to issue or execute bonds, notes, public securities, or other evidences of indebtedness under Chapter 45 of the Education Code, or other applicable law, before, on, or after July 1, 2015, or to levy, assess, and collect, before, on, or after July 1, 2015, ad valorem taxes at the full rate and in the full amount authorized by Section 45.002 of the Education Code or other applicable law, necessary to pay such bonds, notes, public securities, or other evidences of indebtedness when due and payable.

6. This injunction does not limit, modify, or eliminate the authority of the commissioner of education, before, on, or after July 1, 2015, to grant assistance to a school district under Chapter 42 or 46 of the Education Code, in connection with bonds, notes, public securities, lease-purchase agreements, or evidences of indebtedness, including those described by Subchapter A, Chapter 271 of the Local Government Code.

**X. Attorneys' fees and costs**

In response to an agreed motion by all parties, this Court bifurcated the issue of attorneys' fees from the trial on the merits of the plaintiffs' claims in an order dated August 29, 2012. The parties agreed to try the attorneys' fees issues by submissions of expert affidavits to this Court. This Court is of the opinion that the TTSCF Plaintiffs, Calhoun County ISD Plaintiffs, Fort Bend ISD Plaintiffs, and Edgewood ISD Plaintiffs are entitled to reasonable and necessary attorneys' fees as set forth below, and that such an award of fees would be equitable and just, subject to the Court's rulings on the State's objections. The Court finds that it is equitable and just to deny the attorneys' fees requests of the State, the Intervenor, and the Charter School Plaintiffs because they were predominantly non-prevailing parties and, while they contributed to the public debate on school finance law through this lawsuit, those contributions were not so significant as to warrant an award of fees.

Following the conclusion of the initial trial on the merits, the ISD Plaintiffs each submitted their initial fee requests and affidavits to the Court in late February and early March 2013. The State then filed objections to these fee requests. In a communication to counsel in September 2013, the Court informed the parties of its tentative rulings on these objections, reducing each of the ISD Plaintiffs' Initial Fee Requests by varying amounts. In summary, given the extensive number of parties, witnesses, exhibits, and preparation necessary for the trial, the Court declined the State's invitation to rule that only one attorney could effectively represent each Plaintiffs' group each day during trial. Likewise, the Court declined the State's invitation to rule that any attorneys' fees related to the Intervenor's or the Charter School Plaintiffs' claims

were unnecessary. The Court further declined to strike fees for expert witnesses who were subsequently withdrawn when that decision had not been made when the fees were incurred. In general, the Court adjusted the attorneys' fee awards for amounts the Court has deemed inequitable or unjust to recover, such as time directed at recruiting districts, public relations, or technology training or time that is insufficiently described. The Court noted favorably the ISD Plaintiffs' efforts to submit fee requests that have been stripped of extraneous time. As a result, the adjustments by the Court were *de minimis* in comparison to the overall attorneys' fees the Court found to be equitable and just.

After the reopening of the evidence and the completion of the second phase of the trial, the ISD Plaintiffs submitted updated fee requests and supporting affidavits for time incurred from March 2013 forward. The ISD Plaintiffs did not challenge this Court's prior rulings on the State's objections, and each plaintiff group reduced their fee requests (for the initial phase of trial) to correspond with the Court's rulings. The State filed a second set of objections to the requests for the fees incurred from March 2013 forward. After careful review of the State's objections and the evidence related to attorneys' fees, the Court favorably notes the ISD Plaintiffs' effort to adjust their fees in response to the Court's previous rulings and to eliminate time the Court found objectionable. The Court again declines the State's invitation to rule that only one attorney could effectively represent each Plaintiffs' group each day during trial and that billable time be limited to actual time during trial. The associated time entries clearly indicate that the ISD Plaintiffs' attorneys were engaged in trial preparation when not in court. With respect to non-trial time, the Court declines to rule that only one attorney could effectively represent each plaintiffs' group and respectfully notes that the State was aptly and appropriately represented by a team of attorneys in all proceedings before the Court. The complexity of this

matter necessarily required team representation, and the Court overrules the State's objections on that basis. Likewise, the Court again declines the State's invitation to rule that any attorneys' fees related to the Intervenors' or the Charter School Plaintiffs' claims were unnecessary. The Court further declines to strike fees related to expert witnesses who were subsequently withdrawn when that decision had not been made when the fees were incurred.

The State also generally objects to attorney charges for travel time. The Court overrules these objections. The litigation involves districts from across the state with different interests and perspectives. It is entirely predictable and necessary that plaintiffs' counsel would be drawn from around the state. The charged travel time was not excessive and was linked to travel for litigation matters.

*A. TTSFC Plaintiffs' attorneys' fees*

The Court SUSTAINS the State's objections to time billed on 3/23/13, 4/5/13, 7/23/13, 7/24/13, 7/25/13, 7/26/13, and 9/27/13. The identified time entries include references to legislative matters and conferences that do not appear directly related to the litigation. Accordingly, the Court reduces the charged time by 11.3 hours and an amount of \$1,977.50. Otherwise, the State's objections to TTSFC Plaintiffs' attorneys' fees are OVERRULED.

IT IS THEREFORE ORDERED that under Section 37.009 of the Texas Civil Practice and Remedies Code, the TTSFC Plaintiffs shall recover from the State Defendants attorneys' fees in the sum of \$1,888,705.91, an amount that this Court finds to be both reasonable and necessary and equitable and just.

IT IS FURTHER ORDERED that the sum awarded to the TTSFC Plaintiffs shall bear post-judgment interest at the rate of five percent (5%), compounded annually, from the date the judgment is signed until the judgment is paid in full.

IT IS FURTHER ORDERED that the TTSFC Plaintiffs shall recover from the State Defendants appellate attorneys' fees in the following amounts that the Court also finds to be reasonable and necessary and equitable and just:

- (A) \$325,000 if the State Defendants seek and obtain direct review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date the direct appeal is perfected in the Texas Supreme Court, with all such post-judgment interest to run until the judgment against the State Defendants is paid in full; or
- (B) (1) \$325,000 if the State Defendants perfect an appeal from this Final Judgment to the Court of Appeals, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date of the notice of appeal in the Court of Appeals; plus (2) \$100,000 if the State Defendants seek review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date a petition for review is filed with the Supreme Court of Texas; with all such post-judgment interest to run until the judgment against the State Defendants is paid in full.

IT IS FURTHER ORDERED that if, following an appeal, the TTSFC Plaintiffs do not prevail on one or more of their claims, the Court finds that this award of attorneys' fees would still be equitable and just under Section 37.009 of the Texas Civil Practice and Remedies Code, because they have made significant contributions to the public debate on school finance law through this lawsuit.

**B. Calhoun County ISD Plaintiffs' attorneys' fees**

The State's objections to Calhoun County ISD Plaintiffs' attorneys' fees are OVERRULED.

IT IS THEREFORE ORDERED that under Section 37.009 of the Texas Civil Practice and Remedies Code, the Calhoun County ISD Plaintiffs shall recover from the State Defendants attorneys' fees in the sum of \$2,609,642.57, an amount that this Court finds to be both reasonable and necessary and equitable and just.

IT IS FURTHER ORDERED that the sum awarded to the Calhoun County ISD Plaintiffs shall bear post-judgment interest at the rate of five percent (5%), compounded annually, from the date the judgment is signed until the judgment is paid in full.

IT IS FURTHER ORDERED that the Calhoun County ISD Plaintiffs shall recover from the State Defendants appellate attorneys' fees in the following amounts that the Court also finds to be reasonable and necessary and equitable and just:

- (A) \$500,000 if the State Defendants seek and obtain direct review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date the direct appeal is perfected in the Texas Supreme Court, with all such post-judgment interest to run until the judgment against the State Defendants is paid in full; or
- (B) (1) \$400,000 if the State Defendants perfect an appeal from this Final Judgment to the Court of Appeals, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date of the notice of appeal in the Court of Appeals; plus (2) \$325,000 if the State Defendants seek review in the Texas Supreme Court, with post-judgment interest

to accrue on said amount at the rate of five percent (5%), compounded annually, from the date a petition for review is filed with the Supreme Court of Texas; with all such post-judgment interest to run until the judgment against the State Defendants is paid in full.

IT IS FURTHER ORDERED that if, following an appeal, the Calhoun County ISD Plaintiffs do not prevail on one or both of their claims, the Court finds that this award of attorneys' fees would still be equitable and just under Section 37.009 of the Texas Civil Practice and Remedies Code, because they have made significant contributions to the public debate on school finance law through this lawsuit.

**C. Fort Bend ISD Plaintiffs' attorneys' fees**

The State's objections to Fort Bend ISD Plaintiffs' attorneys' fees are OVERRULED.

IT IS THEREFORE ORDERED that under Section 37.009 of the Texas Civil Practice and Remedies Code, the Fort Bend ISD Plaintiffs shall recover from the State Defendants attorneys' fees in the sum of \$1,733,676.75, an amount that this Court finds to be both reasonable and necessary and equitable and just.

IT IS FURTHER ORDERED that the sum awarded to the Fort Bend ISD Plaintiffs shall bear post-judgment interest at the rate of five percent (5%), compounded annually, from the date the judgment is signed until the judgment is paid in full.

IT IS FURTHER ORDERED that the Fort Bend ISD Plaintiffs shall recover from the State Defendants appellate attorneys' fees in the following amounts that the Court also finds to be reasonable and necessary and equitable and just:

- (A) \$400,000 if the State Defendants seek and obtain direct review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date the direct appeal is

perfected in the Texas Supreme Court, with all such post-judgment interest to run until the judgment against the State Defendants is paid in full; or

- (B) (1) \$300,000 if the State Defendants perfect an appeal from this Final Judgment to the Court of Appeals, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date of the notice of appeal in the Court of Appeals; plus (2) \$250,000 if the State Defendants seek review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date a petition for review is filed with the Supreme Court of Texas; with all such post-judgment interest to run until the judgment against the State Defendants is paid in full.

IT IS FURTHER ORDERED that if, following an appeal, the Fort Bend ISD Plaintiffs do not prevail on one or more of their claims, the Court finds that this award of attorneys' fees would still be equitable and just under Section 37.009 of the Texas Civil Practice and Remedies Code, because they have made significant contributions to the public debate on school finance law through this lawsuit.

*D. Edgewood ISD Plaintiffs' attorneys' fees*

The State's objections to Edgewood ISD Plaintiffs' attorneys' fees are OVERRULED.

IT IS THEREFORE ORDERED that under Section 37.009 of the Texas Civil Practice and Remedies Code, the Edgewood ISD Plaintiffs shall recover from the State Defendants attorneys' fees in the sum of \$2,194,027.92, an amount that this Court finds to be both reasonable and necessary and equitable and just.

IT IS FURTHER ORDERED that the sum awarded to the Edgewood ISD Plaintiffs shall bear post-judgment interest at the rate of five percent (5%), compounded annually, from the date the judgment is signed until the judgment is paid in full.

IT IS FURTHER ORDERED that the Edgewood ISD Plaintiffs shall recover from the State Defendants appellate attorneys' fees in the following amounts that the Court also finds to be reasonable and necessary and equitable and just:

- (A) \$325,000 if the State Defendants seek and obtain direct review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date the direct appeal is perfected in the Texas Supreme Court, with all such post-judgment interest to run until the judgment against the State Defendants is paid in full; or
- (B) (1) \$325,000 if the State Defendants perfect an appeal from this Final Judgment to the Court of Appeals, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date of the notice of appeal in the Court of Appeals; plus (2) \$100,000 if the State Defendants seek review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date a petition for review is filed with the Supreme Court of Texas; with all such post-judgment interest to run until the judgment against the State Defendants is paid in full.

IT IS FURTHER ORDERED that if, following an appeal, the Edgewood ISD Plaintiffs do not prevail on one or more of their claims, the Court finds that this award of attorneys' fees would still be equitable and just under Section 37.009 of the Texas Civil Practice and Remedies

Code, because they have made significant contributions to the public debate on school finance law through this lawsuit.

**XI. Continuing jurisdiction**

This Court will retain continuing jurisdiction over this matter until the Court has determined that the State Defendants have fully and properly complied with its judgment and orders.

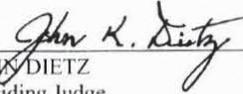
**XII. Miscellaneous**

IT IS FURTHER ORDERED that all costs of court expended or incurred in this cause by the TTSFC Plaintiffs, the Calhoun County ISD Plaintiffs, the Fort Bend ISD Plaintiffs, and the Edgewood ISD Plaintiffs are taxed against the State Defendants.

IT IS FURTHER ORDERED that all writs and processes for the enforcement and collection of this judgment or the costs of court may issue as necessary.

This Judgment finally disposes of all parties and all claims and is appealable. All other relief not expressly granted is denied.

SIGNED this 28th day of August, 2014.

  
\_\_\_\_\_  
JOHN DIETZ  
Presiding Judge

EM AUG 28 2014

At 12:47 P.M.  
Amalia Rodriguez-Mendoza, Clerk

CAUSE NO. D-1-GN-11-003130

THE TEXAS TAXPAYER & STUDENT  
FAIRNESS COALITION, et al;  
CALHOUN COUNTY ISD, et al;  
EDGEWOOD ISD, et al;  
FORT BEND ISD, et al.;  
TEXAS CHARTER SCHOOL  
ASSOCIATION, et al.

Plaintiffs,

JOYCE COLEMAN, et al.,

Intervenors,

vs.

MICHAEL WILLIAMS, COMMISSIONER  
OF EDUCATION, IN HIS OFFICIAL  
CAPACITY; SUSAN COMBS,  
TEXAS COMPTROLLER OF PUBLIC  
ACCOUNTS, IN HER OFFICIAL  
CAPACITY; TEXAS STATE BOARD  
OF EDUCATION,  
Defendants.

IN THE DISTRICT COURT

TRAVIS COUNTY, TEXAS

200th JUDICIAL DISTRICT

**FINDINGS OF FACT AND CONCLUSIONS OF LAW**

Based on the testimonial and documentary evidence in the record, this Court makes the following findings of fact and conclusions of law:

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## Executive Summary

This Court held a forty-five day trial between October 22, 2012 and February 4, 2013, hearing from over eighty live witnesses and building a record containing over 5,000 admitted exhibits. On the final day of trial, this Court orally announced its ruling on the plaintiffs' claims, finding the Texas school finance system unconstitutional in several respects. Before this Court entered its findings of fact and a final judgment, the 83rd Legislature passed several bills that implicated the claims in this case. The Court granted a motion to reopen the evidence to consider the impact of the 2013 legislation, and held another three-week evidentiary hearing beginning on January 21, 2014. During this second phase, the Court heard from another twelve live witnesses and admitted an additional 700 exhibits.

Based on the Court's review of the relevant case law and the evidence presented during the two trial phases, this Court issues the following findings of fact and conclusions of law, which are summarized below:

### A. The Legal Claims at Issue

This case involves multiple challenges to the constitutionality of the Texas school finance system and public educational system by (1) four plaintiff coalitions primarily composed of independent school districts (collectively, the "ISD Plaintiffs"), (2) a group of intervening parties referred to during the trial as the "Efficiency Intervenors" or the "Intervenors," and (3) a group of plaintiffs affiliated with the Texas Charter School Association (the "Charter School Plaintiffs").

At the heart of this dispute is the "education clause" of the Texas Constitution – Article VII, Section 1 – which provides:

*A general diffusion of knowledge* being essential to the preservation of the liberties and rights of the people, it shall be the duty of the Legislature of the State to establish and *make suitable provision* for the support and maintenance of an *efficient* system of public free schools.

Tex. Const. art. VII, § 1 (emphasis added).

From this language, four of the claims at issue in this case arise:

- Adequacy claim: The "general diffusion of knowledge" clause has been interpreted by the Texas Supreme Court as requiring the Legislature to ensure that school districts are reasonably able to provide *all* students with a meaningful opportunity to learn the essential knowledge and skills reflected in the state curriculum such that upon graduation, students are prepared to continue to learn in postsecondary educational, training, or employment settings.
- Suitability claim: The "suitable provision" clause has been interpreted by the Texas Supreme Court as requiring the school finance system to be structured, operated, and funded so it can accomplish a general diffusion of knowledge for all Texas children.

- Equity/financial efficiency claim: The “efficiency” clause has been interpreted by the Texas Supreme Court as requiring that school districts have substantially equal access to revenues necessary to provide a general diffusion of knowledge, *i.e.*, an adequate education, at similar tax effort.
- Qualitative efficiency claim: The Intervenors assert that the public education system is qualitatively inefficient because it is not productive of results with little waste.

A second constitutional provision also plays a central role in this dispute. Article VIII, Section 1-e of the Constitution provides that “[n]o State ad valorem taxes shall be levied upon any property within this State.” Tex. Const. art. VIII, § 1-e. The Texas Supreme Court has held that Article VIII, Section 1-e is violated when districts lack “meaningful discretion” in setting their property tax rates for a local ad valorem tax because of state constitutional, statutory, and regulatory mandates, such that the tax becomes a *de facto* state property tax (the “state property tax claim”).

With this legal background in mind, the Court provides an overview of what has occurred since the Texas Supreme Court last addressed these issues in 2005, followed by a summary of its rulings on these and the other claims at issue in this case.

**B. Developments since the Texas Supreme Court’s 2005 decision in *Neeley v. West Orange Cove ISD*.**

When the Texas Supreme Court last addressed the constitutionality of the school finance system in 2005, it held that the system had evolved into an unconstitutional state property tax because school districts were deprived of meaningful discretion to set their local tax rates. A major factor in the Court’s decision was the lack of local taxing capacity, as the majority of districts were taxing at or near the statutory cap on tax rates. While the Court was unwilling to also declare the system inadequate at that time, it hinted that Texas was on the cusp of violating the adequacy clause. It characterized the situation as an “impending constitutional violation,” and stated that “it remains to be seen whether the system’s predicted drift toward constitutional inadequacy will be avoided by legislative reaction to widespread calls for changes.” *Neeley v. W. Orange-Cove Consol. Indep. Sch. Dist.*, 176 S.W.3d 746, 790 (Tex. 2005) (“*WOC II*”).

The convergence of three major trends since 2005 has brought the school finance system back under judicial scrutiny. First, Texas’s student population is growing rapidly and at the same time growing poorer and increasingly diverse – to the point where more than three in every five students qualify for free and reduced-price lunches and almost one in five are English Language Learners (*i.e.*, have limited proficiency in English). Undisputed evidence shows that these populations are significantly more expensive to educate than the non-economically disadvantaged and English-proficient student populations.

Second, to its credit, Texas has substantially raised the level of academic expectations for students and school districts, incorporating college-readiness standards into the state curriculum, increasing graduation requirements, and transitioning to a much more rigorous testing regime.

The evidence before the Court credibly demonstrates that it takes more resources to enable students to meet higher levels of performance.

The third trend – a significant decline in financial support for public education – has substantially exacerbated the challenges caused by the first two trends. Ironically, this decline was set in motion by the passage of House Bill 1 in 2006 (“HB1”), which was supposed to remedy the state property tax violation found by the Texas Supreme Court.

HB1 – which was promoted by political leaders as “the largest tax cut in Texas history” – compressed school districts’ property taxes by one-third over a two-year period, resulting in the loss of over \$7 billion annually in property tax revenue. To pass legal muster, these lost local revenues were supposed to be replaced with new state revenues, including a restructured business margins tax. School districts were then authorized to gradually increase their maintenance and operations tax rates to \$1.04 without the need for an election, or to a rate between \$1.05 and \$1.17 if the rate was approved in a tax ratification election (“TRE”) by the districts’ voters. However, even at the time the Legislature passed HB1, it was aware that the new state revenues would not come close to replacing the lost local property tax revenues. Making the situation worse, the Legislature also greatly overestimated the amount of revenues that would be generated by the new state taxes. Consequently, the Legislature’s actions left Texas with what the Comptroller called a recurring \$10 billion “structural deficit” per biennium.

The State was able to avoid serious repercussions from this structural deficit during the 2009 legislative session by relying on an infusion of approximately \$12 billion in federal stimulus funds. (State general revenue support for public education actually declined by about \$3.2 billion for the 2010-11 biennium.) But the federal stimulus funds disappeared in 2011. Rather than take action to close the structural deficit and revise the funding system to account for changing demographics and rising academic standards, the Legislature opted to cut \$5.3 billion from the public education budget. This resulted in significant harm to Texas students, as discussed below.

In 2013, the Legislature reinstated approximately \$3.5 billion of the \$5.3 billion it had cut from public education in 2011. Most of this new funding came from local taxpayers, as the Legislature “replaced” the general revenue funds it had cut by using increased local revenue obtained from increasing property values. Yet as noted below, even taking the Legislature’s actions in 2013 into account, there still has been a significant decline in total per-student revenues for public education, on an inflation-adjusted basis, over the last decade. This decline in real, per-student education spending has been even more pronounced over the last five years – even as the economically disadvantaged and English Language Learner (“ELL”) populations have continued to grow, and even as the State has begun the process of implementing the most rigorous curriculum and assessment standards in its history.

Not surprisingly, over the same period, a wide variety of measures show that: (1) the performance of economically disadvantaged students and ELL students is dismal, and the gaps between these students and their peers have grown, (2) student performance overall is flat, (3) hundreds of thousands of high school students are not on track to graduate, and (4) an

overwhelming number of Texas graduates are not on track to attend college and succeed without remediation.

### C. The ISD Plaintiffs' adequacy claims

Texas's future depends heavily on whether it meets the constitutional obligation to provide a general diffusion of knowledge – such that *all* students have a meaningful opportunity to graduate college and career ready. More than 60% of Texas public school students are economically disadvantaged, more than 17% are “E.L.L.s.” and the majority (51.3%) are Hispanic. Those percentages have grown dramatically over the last decade – a trend which is almost certain to continue. According to Steve Murdock, the former state demographer and former director of the U.S. Census Bureau, if existing gaps in educational attainment and household income levels remain in place, Texas faces a stark future with declining income, higher rates of poverty, reduced consumer spending, reduced tax revenues, and higher state expenditures. However, if Texas can deliver on the constitutional promise of an adequate education and close the educational gaps described in these findings, then Texas would be far more likely to improve its long-term fiscal outlook through substantial increases in household income levels, economic growth, and state revenues. Unfortunately, in recent years, Texas has defaulted on its constitutional promise.

In the last school finance case, the Texas Supreme Court held that “[i]t would be arbitrary [and therefore unconstitutional] . . . for the Legislature to define the goals for accomplishing the constitutionally required general diffusion of knowledge, and then to provide insufficient means for achieving those goals.” *WOC II*, 176 S.W.3d at 785. What has happened since that decision was rendered plainly violates this arbitrariness standard.

The Texas Supreme Court instructs that to meet the constitutional mandate of adequacy, Texas school districts must reasonably be able to provide all students with a meaningful opportunity to achieve the academic standards set by the Legislature. Through significant amendments to Chapters 28 and 39 of the Texas Education Code, the Legislature has established college and career readiness as the outcome goal of the Texas educational system, and has raised the academic performance standards for Texas schools and students accordingly.

Defense and Plaintiff witnesses unanimously agreed that the incorporation of college-readiness standards into the state curriculum and the transition from the TAKS testing regime to the State of Texas Assessment of Academic Readiness (“STAAR”) testing regime constitute a *dramatic increase* in the level of expectations for Texas students and school districts.

But rather than provide districts more resources to meet the higher standards, the Legislature, in the 2011 session, imposed \$4 billion in cuts to the Foundation School Program (“FSP”) and an additional \$1.3 billion in cuts to special grant programs. Many of the grant program cuts fell most heavily on the at-risk student population. The Court notes that the level of funding Texas provided to public education was not high, by national standards, even before the 2011 reductions. Before implementation of the cuts, *Quality Counts*, an annual report prepared by *Education Week*, ranked Texas forty-ninth out of the fifty states on per-pupil

expenditures after adjusting for regional cost differences. Other evidence at trial yielded similar comparative results.

The “outputs” evidence adduced at trial showed that districts are not able to provide a general diffusion of knowledge at current funding levels. The failure rates on STAAR constitute a current crisis in the educational system. After three tries, 47% of the state’s economically disadvantaged 2011-12 ninth graders, and 35% of all students from that class, still had not passed all of their ninth-grade level end-of-course (“EOC”) exams required for graduation. And unlike previous results on the TAKS tests that were in place during *WOC II*, student performance on STAAR did not meaningfully improve during the second year of the tests’ implementation. After the Spring 2013 administration of STAAR, 64% of economically disadvantaged ninth and tenth graders and 51% of all ninth and tenth graders (338,038 students) failed to pass at least one required EOC exam. Even after the Summer and December 2013 administrations, hundreds of thousands of students still had not passed all exams required for graduation, according to the State’s own estimates. These failures have resulted in substantial remediation costs for districts. Student performance data from the STAAR exam, as well as other testing data, reveal that Texas is far from accomplishing its mission of producing college and career-ready graduates.

As large as the gap is between Texas’s expectations and current levels of student achievement, the gap is even larger when considering the performance levels of economically disadvantaged and ELL student populations. For example, at the current “Level II phase-in” passing standard for the STAAR EOC exams, there was a 29% gap in the passing rate between economically disadvantaged and non-economically disadvantaged students for all tests taken after the Spring 2013 administration. The performance of economically disadvantaged students is even bleaker when judged against the “final Level II” standard that students will be measured against upon the completion of the phase-in in 2015-16. Only 13% of economically disadvantaged students could meet this final Level II standard for all tests taken during the Spring 2013 administration, compared to 36% of non-economically disadvantaged students, a 23% gap. Massive gaps also exist between ELL students and non-ELL students on every performance measure.

Despite the roll-out of tougher academic requirements and the dismal performance results, neither the Legislature nor the Texas Education Agency has made any effort to determine the costs of meeting increasing standards and providing remediation to struggling students. There is no evidence that the Legislature took those costs into consideration when making the budget cuts described above. The Education Code directs the Legislative Budget Board (“LBB”) to make such a calculation and determine necessary costs per student, including the costs of the regular program, special population programs, and adjustments such as the Cost of Education Index, the guaranteed yield level for enrichment, and funding for the school facilities programs. Similar language has been in the Education Code for at least fifteen years, and yet the LBB simply has not complied with this provision, nor has the Legislature demanded compliance.

Relatedly, the special program weights and allotments in the State’s statutory school funding formulas are sorely out-of-date and in need of adjustment. They do not approximate the actual cost of education. When state formula funds do not adequately compensate districts for uncontrollable costs arising from different student, district, or community characteristics,

districts must use their own funds to cover these costs (if they can), typically with funds that were supposed to be available for enrichment.

Because the funding formulas have not been updated, they are not structured or operated in such a way as to allow school districts to provide a general diffusion of knowledge. Many of the principal strategies that substantial evidence suggests districts could employ to improve student performance (especially for economically disadvantaged and ELL students) – such as (1) smaller class sizes, particularly in the early grades, (2) full-day quality pre-K programs, (3) more competitive teacher salaries to improve the hiring and retention of quality teachers, (4) instructional coaches, (5) tutors, and (6) extended day and summer school programs – cannot be implemented without additional resources. In the absence of state funds, districts have had to increase local tax rates and use revenues that are supposed to provide districts with meaningful discretion in order to provide for an adequate education – or, worse yet, to go without these programs entirely.

The evidence provided to the Court demonstrates the detrimental impact of the cuts on school districts' ability to achieve the mandates set before them. Despite enrollment growth of 44,454 in 2011-12 (excluding charter schools), districts lost approximately 12,000 teachers and 15,000 other school employees. Districts were forced to increase class sizes, eliminate tutors and other instructional specialists, eliminate full-day pre-K programs, and implement other cost-saving measures that have negatively impacted their ability to carry out their educational mission. The evidence further established that while most districts struggled as a result of the budget cuts, low property wealth districts, which tend to educate a higher percentage of economically disadvantaged students and ELLs, bore a more difficult burden because they are unable to access similar tax revenues for maintenance and operations ("M&O") or interest and sinking fund ("I&S") rates as wealthier districts. Even taxing at the highest rates possible, these low property wealth districts were unable to generate local tax revenues to replace the lost state revenues.

Taking the 2013 Legislature's partial restoration of funding into account, Texas still has experienced a significant decline in total per-student revenues for public education on an inflation-adjusted basis over the past decade. The decline has been even sharper in the last five years. In 2003-04, total per-student operating revenues for public education were approximately \$7,128 in 2004 dollars. The 2008-09 school year reflected the largest per-student revenues during the last decade at \$7,415 (in 2004 dollars), in part due to increases in federal funding that year. By 2014-15, on an inflation-adjusted basis, public education funding per student will have dropped to \$6,816 in 2004 dollars, representing a loss of \$312 per student compared to the 2004 level and a loss of \$599 per student since 2009 – even though Texas's student population has become more challenging to educate and the bar for student performance has been raised substantially since that time.

This Court finds that current arbitrary and inadequate levels of funding do not allow school districts to provide a general diffusion of knowledge and thus do not satisfy the constitutional requirements of adequacy and suitability. As discussed in Part I.C.5 (FOF 603, *et seq.*) below, persuasive evidence shows that Texas cannot accomplish a general diffusion of knowledge without a substantial investment of additional resources. The Court also finds that

the constitutional requirement of adequacy, and the financial resources it necessarily entails, must be available to districts without being made subject to a vote in a special election; otherwise local taxpayers can deprive local students access to the constitutionally required level of education (a very real threat, considering that at least 128 TREs failed between 2006 and 2012). For this reason, at a minimum, the Court finds that school districts must be able to finance the cost of meeting the constitutional mandate of adequacy within the range of taxing authority not subject to a TRE, which is a \$1.04 M&O tax rate under the current system.

Further, districts must be able to access sufficient facilities funding. An adequate education cannot be provided without classrooms.

In summary, the plaintiff school districts, which are representative of the system at large, lack sufficient funding at a \$1.04 M&O tax rate, or even at the maximum \$1.17 tax rate intended for enrichment, to reasonably provide all of their students with a meaningful opportunity to learn the Texas Essential Knowledge and Skills and graduate from high school fully prepared for post-secondary educational or employment settings. This is particularly true with respect to the growing and large numbers of economically disadvantaged and ELL students. Thus, this Court declares that the Texas school finance system is presently in violation of the “general diffusion of knowledge” clause of Article VII, Section 1 of the Texas Constitution. The Court also specifically declares that the State is in violation of this clause with respect to its economically disadvantaged and ELL student populations.

#### **D. The ISD Plaintiffs’ state property tax claim**

The Court’s ruling on the ISD Plaintiffs’ Article VIII, Section 1-e state property tax claim rests in part on the analysis set forth above, as well as the following additional facts.

When the Legislature compressed 2005-06 tax rates by one-third (generally to \$1.00) in House Bill 1 (2006) in response to *WOC II*, it was intended that districts could use the funding generated by tax rates between \$1.00 and \$1.17 for local supplementation and enrichment above the level of funding required for a constitutionally adequate education. However, any such meaningful discretion has disappeared in the face of increasing costs (associated with higher standards and increasing percentages of disadvantaged student populations), legislative mandates on the use of additional funds, and the \$5.3 billion in budget cuts in the 2011 legislative session.

As a result, school districts are effectively out of taxing capacity. The overwhelming evidence shows that districts taxing in the \$1.04 to \$1.17 tier are doing so in an effort to obtain funds for an adequate education, not for local supplementation and enrichment. Nearly one-quarter of all districts are taxing at the maximum rate of \$1.17. These districts have increased tax rates primarily in an attempt to keep up with state standards and requirements in the face of increasing costs. They do not have meaningful discretion to lower their tax rates.

Even if all districts increased their M&O tax rates to \$1.17, the amount of revenue raised would not constitute meaningful discretion because revenue at these rates would remain insufficient even to meet the heightened adequacy standards. Superintendents from low property wealth districts that are already taxing at \$1.17, established without question that they are unable

to fund an adequate education with these tax revenues. They have no discretion to reduce their tax rates, and the system as a whole does not have the taxing capacity to fund a constitutionally adequate education for all students.

In addition, the State's failure to ensure that facilities funding keeps pace with property value growth, inflation, or the growing student population, has forced districts to issue more bonds and raise I&S tax rates. In order to finance needed facilities and comply with the State's 50 cent limit on the issuance of new bonds, districts have been forced to issue debt with longer maturities and greater interest expenses. This increasingly expensive debt, combined with rising I&S tax rates due to lack of state support, has contributed to the loss of meaningful discretion over M&O tax rates.

The State also exercises impermissible control over the levy of school district taxes through the taxing structure it has established. By forcing school districts to compress their tax rates by one-third, the Legislature eliminated \$14.2 billion of revenue capacity in the system per biennium. But it "replaced" this lost capacity with a franchise tax that it knew did not raise enough to make up for the lost revenue (leading to the 2011 budget cuts). It then lowered the statutory M&O tax cap from \$1.50 to \$1.17, thus limiting the ability of school districts to replace the lost revenue themselves. The State exercises additional control through the TRE requirement (for any tax rate above \$1.04) and the significantly lower guaranteed yield and higher recapture rate that applies to the "copper-penny tier" (above \$1.06) – a combination that effectively prevents many districts from taxing beyond this amount. Finally, the State controls the levy by using increasing property values to finance enrollment growth and (nominal) funding increases.

For the foregoing reasons, the Court concludes that the ISD Plaintiffs, individually and collectively, have established a violation of the prohibition on statewide ad valorem taxes. Just as the Texas Supreme Court found nine years ago, the current M&O rates effectively serve as a floor (because school districts cannot lower taxes without further compromising their ability to meet state standards and requirements) and a ceiling (because districts are either legally or practically unable to raise rates further). Further, to the extent districts could raise taxes to the statutory maximum rate of \$1.17 (and have not already done so), they would still remain unable to meaningfully use those additional local tax dollars for local enrichment, as these funds are needed to replace basic adequacy funding lost due to the State's cuts. Even taxing at the \$1.17 maximum, most school districts would be unable to fund even the lowest estimates of the cost of an adequate education. Because the ISD Plaintiffs collectively have established a systemic/statewide violation, this Court declares that the Texas school finance system is presently in violation of Article VIII, Section 1-e of the Texas Constitution.

#### **E. The ISD Plaintiffs' suitability claims**

The suitability clause focuses on the "means chosen to achieve an adequate education through an efficient system." *WOC II*, 176 S.W.3d 746, 793. While the Legislature has significant discretion to choose these means, the Texas Supreme Court instructs that whatever means chosen must be "structured, operated and funded so as to achieve [the] purpose" of providing a general diffusion of knowledge for *all* students. *Id.* at 753. In other words, the suitability clause would be violated if "the Legislature substantially defaulted on its

responsibility such that Texas school children were denied access to that education needed to participate fully in the social, economic, and educational opportunities available in Texas.” *Id.* at 794 (citation and internal quotation marks omitted).

The student performance evidence detailed above – including the hundreds of thousands of high school students who are off-track for graduation, the low levels of college readiness, and the substantial performance gaps (especially for economically disadvantaged and ELL students) – makes it clear that the Legislature has in fact substantially defaulted on that responsibility. Rather than attempt to solve the problem, the State has buried its head in the sand, making no effort to determine the cost of providing all students with a meaningful opportunity to acquire the essential knowledge and skills reflected in the state curriculum and to graduate at a college and career-ready level.

This Court finds that the multiple defects in the current design of the school finance system cumulatively prevent districts from generating sufficient resources to accomplish a general diffusion of knowledge for all students, but particularly with respect to its economically disadvantaged and ELL student populations. Instead of increasing resources for programs targeting at-risk students, the State eliminated funding for such programs. As already discussed above, among other flaws, the State relies on outdated, arbitrary weights and allotments that do not come close to approximating the actual cost differences that they are intended to address. Some of these weights have not been updated in over twenty-five years, and were not originally based on the actual cost of education. The weights for economically disadvantaged and ELL students have not been updated since 1984, and even then were set at half the amount recommended by a School Finance Working Group composed of members of nearly every educational organization in Texas. The Cost of Education Index – which dictates the annual distribution of \$2.36 billion to address variation of education costs beyond the control of school districts – has not been updated since 1990, despite the fact that this state has seen substantial demographic changes, uneven population growth, and significant changes in the cost of labor and housing since that time. As noted above, other structural flaws in the finance system relate to the combination of the TRE requirement and the significantly lower guaranteed yield and higher recapture rate of the copper-penny tier – which effectively prevent many districts from accessing funding needed for adequacy.

These structural flaws, combined with the evidence that districts across the state are not able to provide all of their students with access to a general diffusion of knowledge, demonstrate that the State has failed to structure, operate, and fund the school finance system so as to provide an adequate education to all students, including economically disadvantaged and ELL students, as required by the suitability provision.

**F. The TTSFC Plaintiffs, Edgewood ISD Plaintiffs, and Fort Bend ISD Plaintiffs’ financial efficiency/equity claims**

The Texas Supreme Court has consistently ruled that the State’s duty to provide funding up to the level of a general diffusion of knowledge comes with a responsibility to structure the system so that all school districts “have substantially equal access to funding up to that same level at similar tax effort.” In spite of the Court’s admonition, the school finance system

continues to treat students differently, depending on whether the students' zip code is located in a property-wealthy or a property-poor district. Although the Texas Supreme Court has never required perfect equity, the inequity has grown to the point that financial efficiency has been decimated.

Texas relies heavily on local property taxes to fund its public schools, though property values across Texas remain incredibly disparate. This decision to rely on local taxes does not by itself render the school finance system unconstitutional, but it does mean that the Legislature must take action to compensate for these disparities to ensure that all districts have sufficient funding to provide all students a meaningful opportunity to graduate career and college ready. Given the State's commitment to increasing the rigor and expectations of the Texas public education system, it is perhaps even more important now than ever before that the Legislature ensure that "[c]hildren who live in poor districts and children who live in rich districts must be afforded a substantially equal opportunity to have access to educational funds." Unfortunately, twenty-five years following the Texas Supreme Court's *Edgewood I* decision, the Legislature has once again failed to meet its constitutional duty to provide a financially efficient system by treating school children across Texas differently based upon the property wealth of the district in which they live.

The evidence overwhelmingly establishes that a number of factors – the compressed tax rate, target revenue funding, unrecaptured golden pennies and I&S pennies, and the failure to update weights and allotments to reflect a reasonable approximation of the actual cost of education – have converged in a way that substantially destroys equalization. Property-poor districts are critically deprived of the ability to access reasonably similar revenues for similar tax effort. The same holds true even after the 83rd Legislature's changes in 2013. Further, the substantial cuts to special programs for at-risk students are borne more heavily by the lower property-wealth school districts that tend to educate more at-risk students.

Ten years ago, in *WOC II*, this Court, and later the Texas Supreme Court, held that disparities between property-poor and property-wealthy districts were not so great as to run afoul of the duty to provide equal access to revenue up to the level of a general diffusion of knowledge. Since that time, the legislative changes to the structure of the system – tax compression, the target revenue system, and creation of the unrecaptured M&O "golden pennies" and I&S pennies – combined with the \$5.3 billion cut to the public education system, and the dramatically increased academic standards, have caused the system to run afoul of the State's constitutional duty to provide for a general diffusion of knowledge in a financially efficient manner. The funding changes by the Legislature in 2013 slightly closed the gaps between property-poor and property-wealthy districts but not nearly enough to make the system constitutionally efficient.

While taxing substantially lower than their property-poor counterparts, property-wealthy districts often reap over \$1,000 per student more than their neighboring property-poor school districts for no better reason (much less an educational reason) than the value of their property. For a district receiving just \$1,000 less per WADA than a neighbor, that translates into \$22,000 less for a classroom of twenty-two students or \$400,000 less for a campus of 400 students. These funds could be used on a whole range of reasonable and necessary educational resources

proven to increase student performance, including: recruiting and retaining the best teachers, improving technology, reducing class sizes, upgrading the quality of pre-K programs, and offering a fuller and deeper range of accelerated and intervention programs.

The Court heard from experts on the differences in the amount of revenue available to school districts and the corresponding levels of tax effort. Using a weighted average analysis, in order for the poorest districts with 15% of WADA in the state to raise between \$6,500 to \$7,000 per WADA in the Foundation School Program that the experts (and this Court) estimate is necessary to achieve adequacy, in 2012-13, these districts would have to tax, on average, between \$1.29 and \$1.39, respectively – tax rates substantially above the \$0.99 and \$1.06 rates levied by the wealthiest districts with 15% of the WADA in the state to raise the same amount. In fact, the poorest districts could not reach those levels because of the \$1.17 cap on M&O taxes. Even after the 2013 legislative changes, these tax gaps are expected to lower by only three or four cents in 2013-14. Because property-poor districts access far fewer dollars in the system than property-wealthy districts at \$1.04, they tend to have little-to-no discretion or ability to offer an enriched program. A system in which the poorest districts can *never* raise the level of funds necessary to provide for a general diffusion of knowledge – much less do so with room for meaningful discretion over supplemental enrichment pennies – clearly does not ensure substantially equal access to adequate funding at similar tax rates.

Perhaps more disturbing, the combination of these changes results in most districts in this state being unable to access enough revenue to provide a general diffusion of knowledge – even when using the “enrichment” pennies intended for supplementation. As noted above, the Court heard from national and state experts regarding the cost of funding an adequate educational program. Just as this expert testimony revealed the Texas system to be inadequate, it also revealed it to be inequitable. Taxing at \$1.04, 896 of the 1,021 school districts in Texas in 2013-14 cannot raise the revenue per student in WADA for the lowest estimate of the cost of an adequate education, unadjusted for inflation. Even if districts used all of their “enrichment pennies” by taxing at the cap of \$1.17 to satisfy the constitutional mandate of a general diffusion of knowledge, at least 761 districts still could not raise the revenue per WADA of any of the three estimates. These 761 districts have no access to the level of funding necessary to achieve a general diffusion of knowledge – much less access to it at a rate similar to that of the 124 districts that can raise this amount at \$1.04.<sup>1</sup>

Furthermore, under the target revenue system, the differences in funding levels match the definition of arbitrary. The target revenue system takes the quirks of a single year’s formula results – such as a “boost” in revenue from increased property values or a “hit” from declining property values or the loss of a major taxpayer – and makes them permanent. As a result, there is often no consistent relationship between a district’s wealth and/or tax effort and its target revenue. Though the State indicated during trial that target revenue was going to be phased out, the 2013 Legislature increased the factor that applies to target revenue, which over time has benefitted far more property-wealthy districts than property-poor districts. Reliance on this

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<sup>1</sup> The ability to access sufficient funding for a general diffusion of knowledge at the \$1.04 tax rate is critical to a constitutionally sound school finance system. To find otherwise would permit local taxpayers through a TRE to deprive schools of sufficient funding.

snapshot of the 2005-06 school year also affects current formula funding because each district's compressed tax rate for its share of the Basic Allotment is an individually determined two-thirds of its 2006 tax rate. If a district was not taxing at the maximum M&O rate in 2006, its current Basic Allotment is arbitrarily reduced with no relation to need or the cost of education. Finally, the use of two separate funding mechanisms, target revenue and formula funding, makes equalization across the system impossible to the detriment of all but the wealthiest of districts.

The Court also heard from superintendents in every region of the state whose districts are negatively impacted by these disparities. As the La Feria ISD Superintendent stated: "if you happen to have an island [such as South Padre Island] or you happen to be rich under the ground, or now where you have a ton of windmills in your agricultural land, you have additional resources that come your way. Those don't come to La Feria. But our kids still have to compete with [others] on the football field and at the university."

School districts across the state are, as Dr. Meria Carstarphen of Austin ISD put it, "up against the wall on the ever increasing state standards" and unable to meet them with current resources. These problems are compounded for the low-target revenue and property-poor districts across the state whose students tend to have higher, more costly, needs. It is the State's duty to provide all districts with the revenue necessary to prepare their students for college or a career – at similar tax rates and with meaningful discretion for enrichment. The evidence before this Court makes it clear that the Legislature has failed in this duty.

#### **G. The TTSFC Plaintiffs' taxpayer equity claim**

Four taxpayers in the TTSFC Plaintiff coalition brought a claim that the school finance system violates Article VIII, Section 1(a)'s requirement that taxation be "equal and uniform." They complain that taxpayers in other districts within the same county receive greater benefits in the form of revenue per WADA than they do for a similar rate of ad valorem tax effort. This claim fails as a matter of law under Article VIII, Section 1(a) because the "equal and uniform" clause requires only that taxpayers in the same taxing district (whether a state, county, or ISD) be taxed at the same rate, and does not require equal and uniform benefit from taxation. Though not a viable claim under the "equal and uniform" clause, the claim that districts do not receive substantially equal revenues at similar levels of tax effort is better stated as a financial efficiency or equity claim under the education clause.

#### **H. The Intervenor's qualitative efficiency claims**

The Intervenor's posit that the Texas educational system cannot be deemed constitutionally efficient until Texas adopts several structural reforms that have yet to attract majority support in the Legislature, including, among other things, eliminating the statutory cap on charter schools; changing laws, regulations, and practices that govern teacher compensation, hiring, firing, and certification; creating greater school choice or vouchers; and modifying school district financial reporting requirements. While the Intervenor's contend that they do not seek any particular remedy besides a declaration that the system is "qualitatively inefficient" and therefore unconstitutional, a cure for the constitutional deficiency they allege necessarily would require the Legislature to adopt some version of their preferred educational policy choices.

This Court finds that it has jurisdiction to rule on the Intervenors' claims. The Texas Supreme Court has emphasized that the judiciary's role is limited to ensuring that the constitutional standards are met, not prescribing *how* the standards should be met; however, if a party can show that a means chosen by the Legislature, *e.g.* the structure controlling compensation, hiring, firing, and certification of teachers as alleged here, has no rational relationship to a necessary function of the public school system, or if the Legislature provided no structure for a necessary function, a qualitative efficiency claim could be proved. Here, the Intervenors do not claim that the current structure makes it impossible for the public school system to carry out a necessary function; rather, they contend there are better ways to structure the public school system to address them.

The Court can decide whether or not the Legislature has created a system that reasonably addresses a constitutionally necessary function, but the Court cannot rule that system is unconstitutional just because there may be a "better" way of carrying out that function. A declaration that the system is unconstitutional for the reasons Intervenors urge would constitute a level of judicial interference in specific questions of education policy that past precedents do not justify or permit. The Court therefore declines to find a qualitative efficiency violation.

#### **I. The Charter School Plaintiffs' claims**

Because the ISD Plaintiffs established the inadequacy of their funding on the school funding formulas, and because charter schools are financed based on state averages of ISD funding levels, the Charter School Plaintiffs prevail on their claim that funding for open-enrollment charter schools is also inadequate.

The Charter School Plaintiffs' equal protection claim based on the differences between how charter schools and school districts are funded (particularly, in relation to facilities funding) fails as a matter of law because this choice is within the discretion of the Legislature. The Legislature has specially provided for a charter school system that is publicly funded but that operates outside the predominant school district system. Charter schools are subject to fewer regulations. Because charter schools and districts are subject to different requirements, the Legislature has a rational basis for funding them differently. Similarly, with respect to the Charter School Plaintiffs' complaint about the statutory cap on open-enrollment charters, this choice is within the Legislature's discretion, and the Legislature had a rational basis for implementing this cap – namely to ensure that TEA could handle its oversight responsibilities.

#### **J. Relief awarded**

In light of the foregoing analysis, the Court declares that the current school finance system is inadequate, unsuitable, and financially inefficient under Article VII, Section 1 of the Texas Constitution, and violates the prohibition on a state ad valorem tax contained in Article VIII, Section 1-e. The Court enjoins the State from giving any force or effect to the sections of the Education Code relating to the financing of public school education, including the financing of open enrollment charter schools, until these violations are remedied, but is staying the effect of this injunction until July 1, 2015 to give the Legislature a reasonable opportunity to cure these constitutional deficiencies. The Court also awards the ISD Plaintiffs their reasonable and

necessary attorneys' fees. The Court denies the requests of the State, the Charter School Plaintiffs, and the Intervenors for attorneys' fees.

### FINDINGS OF FACT AND CONCLUSIONS OF LAW

#### **I. Findings of fact**

##### **A. The parties and claims at issue**

FOF 1. This case involves five separate lawsuits and an intervention raising challenges to the State's school finance system and other aspects of the educational system. The cases have been consolidated into a single proceeding.

##### **1. The "ISD Plaintiffs"**

FOF 2. The "**TTSFC Plaintiffs**" are (1) the Texas Taxpayer and Student Fairness Coalition, a Texas non-profit corporation composed of 443 school districts identified in their Ninth Amended Petition; (2) the following individually-named school districts: Alief ISD, Canutillo ISD, Elgin ISD, Greenville ISD, Hillsboro ISD, Hutto ISD, Lake Worth ISD, Little Elm ISD, Nacogdoches ISD, Paris ISD, Pflugerville ISD, Quinlan ISD, Stamford ISD, San Antonio ISD, Taylor ISD, and Van ISD; (3) taxpayers Randy Pittinger, Chip Langston, Norman Baker, Brad King; and (4) Shelby Davidson, individually and as next friend of Cortland Davidson, Carli Davidson, and Casi Davidson.

FOF 3. The "**Calhoun County ISD Plaintiffs**" are composed of Calhoun County ISD, Abernathy ISD, Aransas County ISD, Frisco ISD, Lewisville ISD, and Richardson ISD.

FOF 4. The "**Fort Bend ISD Plaintiffs**" are composed of Fort Bend ISD, Abilene ISD, Allen ISD, Amarillo ISD, Angleton ISD, Austin ISD, Balmorhea ISD, Bluff Dale ISD, Brazosport ISD, Carthage ISD, Channelview ISD, Clear Creek ISD, Cleveland ISD, College Station ISD, Coppell ISD, Crosby ISD, Cypress-Fairbanks ISD, Dallas ISD, Damon ISD, Decatur ISD, Denton ISD, East Central ISD, Edna ISD, Fort Worth ISD, Hardin-Jefferson ISD, Hays Consolidated ISD, Hempstead ISD, Highland ISD, Houston ISD, Huffman ISD, Humble ISD, Katy ISD, Keller ISD, Kenedy ISD, Kingsville ISD, Klein ISD, La Marque ISD, La Porte ISD, Lamar Consolidated ISD, Leggett ISD, McKinney ISD, Midland ISD, New Caney ISD, North East ISD, Northside ISD, Pampa ISD, Pasadena ISD, Pearland ISD, Perrin-Whitt Consolidated ISD, Pleasant Grove ISD, Rice Consolidated ISD, Rockdale ISD, Round Rock ISD, Royal ISD, Santa Fe ISD, Sheldon ISD, Spring Branch ISD, Stafford Municipal School District, Sweeny ISD, Trent ISD, Waco ISD, West Orange Cove Consolidated ISD, Woodville ISD, Albany Independent School, Beaumont ISD, Corsicana ISD, Deer Park ISD, Dumas ISD, Duncanville ISD, Ector County ISD, Galena Park ISD, Goose Creek Consolidated ISD, Graford ISD, Liberty ISD, Sharyland ISD, Schertz-Cibolo-Universal City ISD, Splendor ISD, Sudan ISD, Weatherford ISD, Pine Tree ISD, Troup ISD, and Kerrville ISD.

FOF 5. The “**Edgewood ISD Plaintiffs**” are composed of Edgewood ISD; McAllen ISD; San Benito Consolidated ISD; La Feria ISD; Harlingen Consolidated ISD; Yolanda Canales, individually and as next friend for her minor children, Ek. and Ea. Canales; Arturo Robles, individually and as next friend for his minor child, A. Robles; Araceli Vasquez, individually and as next friend for her minor children, J.L. and Al. and Ad. Vasquez; and Jessica Ramirez, individually and as next friend for her minor children, B. and G. Ramirez.

**2. The Intervenors**

FOF 6. The “**Intervenors**” are composed of Joyce Coleman, individually and as next friend of her minor children; Danessa Bolling, individually and as next friend of her minor child; Lee Beall and Allena Beall, individually and as next friends of their minor children; Joel Smedshammer and Andrea Smedshammer, individually and as next friends of their minor children; Darlene Menn, individually and as next friend of her minor child; Texans for Real Efficiency and Equity in Education, a non-profit Texas corporation; and the Texas Association of Business.

**3. The Charter School Plaintiffs**

FOF 7. The “**Charter School Plaintiffs**” are composed of Mario Flores, individually and as next friend of his minor child; Aiden Flores; Christopher Baerga, individually and as next friend of his minor child Abby Baerga; Dana Allen, individually and as next friend of her minor child Teal Evelyn Allen; Jason and Sarah Christensen, individually and as next friends of their minor children Luke and Grace Christensen; Brooks Flemister, individually and as next friend of his minor child Ulric Flemister; and the Texas Charter School Association.

**4. The State Defendants**

FOF 8. The “**State Defendants**” are Michael Williams, in his official capacity as Texas Commissioner of Education; the Texas Education Agency (“TEA”); Susan Combs, in her official capacity as the Texas Comptroller of Public Accounts; and the Texas State Board of Education (“SBOE”).

**5. The use of focus districts**

FOF 9. Because of the large number of school districts in the TTSFC Plaintiff group and the Fort Bend ISD Plaintiff group, those groups agreed to present proof of their claims through the use of a smaller group of “focus” districts. This agreement was incorporated into the Agreed Scheduling Order signed by this Court on April 16, 2012.

- The TTSFC Plaintiffs designated Alicf ISD, Lubbock ISD, Pflugerville ISD, Los Fresnos ISD, Lufkin ISD, Brownwood ISD, Anton ISD, Van ISD, Everman ISD, Quinlan ISD, Bryan ISD, Belton ISD, Kaufman ISD, and Hillsboro ISD as their focus districts.

- The Fort Bend ISD Plaintiffs designated Aldine ISD, Abilene ISD, Amarillo ISD, Austin ISD, Corsicana ISD, Duncanville ISD, Fort Bend ISD, Humble ISD, Northside ISD, Waco ISD, and Weatherford ISD as their focus districts.

## 6. The causes of action at issue

FOF 10. The ISD Plaintiffs, Charter School Plaintiffs, and Intervenors seek declarations that the Texas educational system is unconstitutional under the following theories:

- **“Adequacy” claims.** The ISD Plaintiffs assert a violation of the “general diffusion of knowledge” clause in Article VII, Section 1 of the Texas Constitution, because, as evidenced by low student achievement results, they lack the resources needed to reasonably provide all their students with a meaningful opportunity to acquire the essential knowledge and skills reflected in the state curriculum and to graduate at a college-ready and career-ready level. The Edgewood ISD Plaintiffs more specifically assert a violation of the “general diffusion of knowledge” clause in Article VII, Section 1 of the Texas Constitution because they lack the resources needed to reasonably provide English language learner (“ELL”) and economically disadvantaged students with a meaningful opportunity to acquire the essential knowledge and skills reflected in the state curriculum and to graduate at a college-ready and career-ready level, as evidenced by low student achievement results of these students and large performance gaps between these populations and their peers.<sup>2</sup> The Charter School Plaintiffs likewise assert that the level of funding is inadequate for open-enrollment charter schools in Texas.<sup>3</sup>
- **“State property tax” claims.** The ISD Plaintiffs assert that the school finance system violates Article VIII, Section 1-e of the Texas Constitution, which prohibits the levy of a state ad valorem tax, because they lack meaningful discretion in setting their M&O tax rates (resulting in a *de facto* state property tax).<sup>4</sup>
- **“Suitability” claims.** The ISD Plaintiffs assert that the school finance system violates the “suitable provision” clause in Article VII, Section 1 of the Texas Constitution because the system is not structured, operated

<sup>2</sup> Findings of fact related to these claims can be found in Part I.C (FOF 210, *et seq.*) below. Conclusions of law related to these claims can be found in Parts II.A.3 (COL 20, *et seq.*) and II.B.1 (COL 70, *et seq.*) below.

<sup>3</sup> Findings of fact relating to this claim can be found in Part I.G (FOF 1490, *et seq.*) below. Conclusions of law related to this claim can be found in Parts II.A.8 (COL 61, *et seq.*) and II.B.7 (COL 89, *et seq.*) below.

<sup>4</sup> Findings of fact related to these claims can be found in Part I.C.1 (FOF 210, *et seq.*) below. Conclusions of law related to these claims can be found in Parts II.A.2 (COL 9, *et seq.*) and II.B.2 (COL 76, *et seq.*) below.

and/or funded so that it can accomplish a general diffusion of knowledge. Multiple defects in the current design of the school finance system cumulatively prevent districts from generating sufficient resources to accomplish a general diffusion of knowledge for all students, but particularly with respect to its economically disadvantaged and ELL student populations. For example, the State relies on outdated, arbitrary weights and allotments that do not reflect the actual cost of education for school districts (and in particular the cost of educating at-risk students), and the State has made no effort to determine what it costs to provide all students with a meaningful opportunity to acquire the essential knowledge and skills reflected in the state curriculum and to graduate at a college-ready and career-ready level.<sup>5</sup> They allege that, as a result of these structural formula deficiencies, the system is not suitably operated or funded to account for uncontrollable costs arising from different student, district or community characteristics, resulting in significant adverse impacts on student achievement. The Charter School Plaintiffs likewise assert that the level of funding is unsuitable for open-enrollment charter schools in Texas.<sup>6</sup>

- **“Quantitative or financial efficiency” or “equity” claims.** The TTSFC Plaintiffs, the Fort Bend ISD Plaintiffs, and the Edgewood ISD Plaintiffs assert that the school finance system violates the “efficiency” clause of Article VII, Section 1 of the Texas Constitution in that it fails to provide property-poor school districts with substantially equal access to similar revenues necessary to provide a general diffusion of knowledge at similar tax efforts.<sup>7</sup> The Charter School Plaintiffs also assert a violation of the efficiency clause on the theory that the school finance system fails to provide “efficient and non-arbitrary” access to revenues to open-enrollment charter schools, including funding for facilities.<sup>8</sup>

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<sup>5</sup> Findings of fact related to these claims can be found in Part I.C (FOF 210, *et seq.*) below. Conclusions of law related to these claims can be found in Parts II.A.4 (COL 36, *et seq.*) and II.B.3 (COL 78, *et seq.*) below.

<sup>6</sup> Findings of fact relating to this claim can be found in Part I.G (FOF 1490, *et seq.*) below. Conclusions of law related to this claim can be found in Parts II.A.8 (COL 61, *et seq.*) and II.B.7 (COL 89, *et seq.*) below.

<sup>7</sup> Findings of fact related to these claims can be found in Part I.D (FOF 1204, *et seq.*) below. Conclusions of law related to these claims can be found in Parts II.A.5 (COL 43, *et seq.*) and II.B.4 (COL 82, *et seq.*) below.

<sup>8</sup> Findings of fact relating to this claim can be found in Part I.G (FOF 1490, *et seq.*) below. Conclusions of law related to this claim can be found in Parts II.A.8 (COL 61, *et seq.*) and II.B.7 (COL 89, *et seq.*) below.

- **“Taxpayer equity” claim.** The TTSCF Plaintiffs assert that the school finance system violates Article VIII, Section 1(a)’s prohibition on taxation that is not “equal and uniform.”<sup>9</sup>
- **“Qualitative efficiency” claims.** The Intervenor’s assert a “qualitative efficiency” claim that they contend is distinct from the adequacy claim or other efficiency claims. They claim that the entire system of public free schools violates the efficiency clause of Article VII, Section 1 of the Texas Constitution because it is not effective or productive of results with little waste. They contend that various statutes and regulations (including but not limited to the statutory cap on the number of charter school operators, and statutes found in Chapter 21 of the Texas Education Code governing teacher compensation, evaluation, hiring and dismissal, etc.) render the system qualitatively inefficient.<sup>10</sup> The Charter School Plaintiffs also contend that the statutory cap on the number of open-enrollment charter school operators violates the “efficiency” clause of Article VII, Section 1 of the Texas Constitution.<sup>11</sup>
- **“Equal protection” claim.** The Charter School Plaintiffs assert a violation of the Equal Protection Clause on the grounds that (1) the Legislature fails to provide charter schools with substantially equal access to revenues and funding adjustments available to independent school districts, including the omission of facilities funding; and (2) the statutory cap on the number of open-enrollment charter school operators discriminates against charters.<sup>12</sup>

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<sup>9</sup> Findings of fact related to this claim can be found in Part I.E (FOF 1459, *et seq.*) below. Conclusions of law related to this claim can be found in Parts II.A.6 (COL 56, *et seq.*) and II.B.5 (COL 85, *et seq.*) below.

<sup>10</sup> Findings of fact related to this claim can be found in Part I.F (FOF 1463, *et seq.*) below. Conclusions of law related to this claim can be found in Parts II.A.7 (COL 58, *et seq.*) and II.B.6 (COL 87, *et seq.*) below.

<sup>11</sup> Findings of fact relating to this claim can be found in Part I.G (FOF 1490, *et seq.*) below. Conclusions of law related to this claim can be found in Parts II.A.8 (COL 61, *et seq.*) and II.B.7 (COL 89, *et seq.*) below.

<sup>12</sup> Findings of fact relating to this claim can be found in Part I.G (FOF 1490, *et seq.*) below. Conclusions of law related to this claim can be found in Parts II.A.8 (COL 61, *et seq.*) and II.B.7 (COL 89, *et seq.*) below.

**B. The state of the Texas public education system since *West Orange-Cove II***

**1. The demographics of Texas schools are changing, resulting in a student population that is increasingly more costly to educate.**

- FOF 11. From 2000 to 2010, Texas's population grew by almost 21% or 4.3 million people, making it one of the fastest growing states over that period. (RR3:12-14 (referencing Ex. 3228 at 4-6).)<sup>13</sup>
- FOF 12. The composition of Texas's population is also rapidly changing – it is becoming increasingly impoverished and Hispanic. From 1999 to 2010, the percentage of the non-Hispanic White population living in poverty grew from 7.0% to 9.3%, the percentage of the Hispanic population living in poverty grew from 18.1% to 25.6%, and the percentage of the non-Hispanic Black population living in poverty grew from 17.8% to 24.4%. (Ex. 3228 at 34.) In all three groups, median household income declined. (*Id.*) During the same decade, the state's Hispanic population grew by almost 42%, compared to 4.2% for non-Hispanic Whites. (RR3:17-19 (referencing Ex. 3228 at 14).) Even under conservative assumptions, the overall Hispanic population in Texas will surpass the non-Hispanic White population during the next ten years, and is already larger in every age group under thirty-five. (RR3:61 (referencing Ex. 3228 at 63, 67).)
- FOF 13. These changes are even more pronounced in the school-age population. By 2012-13, the number of "economically disadvantaged" students (meaning they are eligible for free or reduced-price meals under the National School Lunch and Child Nutrition Program) was 3,054,743, or 60.4%, of the student population. (Ex. 4258 at 13.) This is compared to 49.2% in the 2000-01 school year. (Ex. 11123 at 10; Ex. 10415 at 16.)
- FOF 14. During the 2012-13 school year, Hispanic students comprised 51.3% of all Texas public school students, and Hispanic enrollment grew by more than 50% from 2000-01 to 2012-13. (Ex. 4258 at 13.) In comparison, overall student enrollment in Texas grew by almost 25% during this same time period. (*Id.*; see also RR3:21 (referencing Ex. 3228 at 6 (Dr. Murdock discussing changing demographics of Texas population under the age of 18).)
- FOF 15. In 2012-13, there were 863,974 limited English proficient ("LEP," also referred to as "English Language Learner," or "ELL")<sup>14</sup> students. This represents 17.1% of the total student population in Texas, up from 14.5% (600,922 students) in 2001-02. (Ex. 11213 at 2; Ex. 4258 at 13; see also RR3:88-90 (referencing Ex. 3228 at 78-79, 90-92).) Texas has the second-largest ELL student population in the nation. (Ex. 1104, Izquierdo Report, at 3.) By 2050, it is anticipated that 1,480,000 children will need bilingual services in Texas. (RR3:76 (referencing Ex. 3228 at 78).)

<sup>13</sup> The Court has cited to trial transcripts as follows: "RR(volume):(page)."

<sup>14</sup> An ELL student is defined in statute as "a student whose primary language is other than English and whose English language skills are such that the student has difficulty performing ordinary class work in English." TEX. EDUC. CODE § 29.052. (Ex. 1104, Izquierdo Report, at 4; Ex. 4231 at 5.)

- FOF 16. According to Steve Murdock, the former state demographer and former director of the U.S. Census Bureau, these trends in the changing school-age population are expected to continue. Total enrollment in Texas public schools is projected to grow from 4.8 million in 2010 to nearly 9.3 million in 2050. (RR3:72 (referencing Ex. 3228 at 72).) The numbers of economically disadvantaged, ELL students, and other special-need students are projected to continue to rise much faster than the rate of overall student enrollment growth. (RR3:75-76, 88-89 (referencing Ex. 3228 at 78-79, 90-92).) Hispanic enrollment in Texas public schools is projected to increase by 148% from 2010 to 2050, while non-Hispanic White enrollment is projected to decrease by 7% during that same time period. (RR3:72-73 (referencing Ex. 3228 at 72-75).) By 2050, it is estimated that Hispanics will constitute approximately 62% of the Texas population ages five to nineteen, compared to 17% for non-Hispanic Whites. (Ex. 3228 at 66.)
- FOF 17. Unfortunately, the rapidly growing low-income and ELL populations are the very populations who are struggling the most academically. As discussed in Parts I.C.2.a.iii (FOF 298, *et seq.*), and I.C.2.b.iii (FOF 349, *et seq.*) below, significant performance gaps persist between economically disadvantaged and non-economically disadvantaged students and between ELL and non-ELL students on the State's assessments.
- FOF 18. The future socioeconomic well-being of Texas will depend largely on how successfully Texas schools educate their growing populations of economically disadvantaged, ELL, and Hispanic students and close those performance gaps. (RR3:90-93.) Dr. Murdock established that the rapidly growing Hispanic population in Texas has lower levels of educational attainment than other students, which will negatively impact income levels and increases poverty levels for that population and for the state as a whole. (RR3:43-44 (referencing Ex. 3228 at 44), 76 (referencing Ex. 3228 at 79), 85-86; Ex. 3228 at 90-91.)
- FOF 19. Based on these demographic trends, Dr. Murdock established that if existing gaps in educational attainment levels and household income remain in place between the White population and the Black and Hispanic populations, Texas' population will have substantially lower incomes (with a decline of \$7,759, or 11.6% in mean annual household income from 2010 to 2050 in constant dollars) and a higher rate of poverty (increasing from 14.4% in 2010 to 17% in 2050). (RR3:89-90; Ex. 3228 at 93-94, 96.) Further, Texas will face reduced levels of consumer spending, reduced tax revenues, higher enrollment in specialized educational programs and higher state expenditures for these programs. (RR3:79-84; Ex. 3228 at 81-82, 90-97.)
- FOF 20. Conversely, Dr. Murdock testified that higher levels of education lead to higher income for all racial/ethnic groups and that higher levels of education can reduce the differences in income disparities between majority and minority populations. (RR3:85-87; Ex. 3228 at 83-89.)
- FOF 21. According to Dr. Murdock, if the state were able to close the gap in income levels between Black and Hispanic households and non-Hispanic White households, total state income would increase to \$1.52 trillion in real dollars in 2050. (RR3:79 (referencing Ex. 3228 at 80).) This represents a \$400 billion increase over the projected state income

without such closure. (RR3:80 (referencing Ex. 3228 at 80).) Closure of these income gaps would have a comparable positive effect on consumer spending and total tax revenues available to the state. (RR3:80-90 (referencing Ex. 3228 at 81, 82, 95-97).)

FOF 22. If the gap between non-Hispanic Whites and Black/Hispanic households were closed by even half, Texas would experience substantial improvements in household income levels, consumer expenditures, and state tax revenues. (Ex. 3228 at 80-82, 95-97.)

FOF 23. The rapid growth in student enrollment requires more classrooms, teachers, support personnel, equipment, books, technology, transportation and other resources needed to educate these additional students. Moreover, because economically disadvantaged, ELL, and special education populations require significantly more funds to educate, these changing demographics have resulted in significantly higher costs for school districts that are not compensated adequately through the current school finance system, because of the insufficiency of the basic formulas and weights and allotments. (See *infra* Parts I.C.2.d (FOF 456, *et seq.*) and I.C.4 (FOF 591, *et seq.*.) The inadequacies of these weights exacerbate the demographic challenge facing Texas school districts. (See *infra* Parts I.C.2.a.ii (FOF 294, *et seq.*) and I.C.2.b.ii (FOF 345, *et seq.*.)

**2. The arbitrary changes to the structure of the school finance system since *WOC II* and the severe underfunding of Texas school districts have rendered the school finance system unsuitable.**

**a. At the time of *WOC II*, the school finance system had no significant unused taxing capacity.**

FOF 24. At the time of the last Texas Supreme Court school finance decision, *Neeley v. West Orange Cove Consolidated ISD*, 176 S.W.3d 746 (Tex. 2005) ("*WOC II*"), the public school finance system relied on a two-tiered finance structure known as the Foundation School Program ("*FSP*"). (Ex. 6396 at 2.) Locally adopted maintenance and operations ("*M&O*") tax rates were generally subject to a statutory maximum of \$1.50 per \$100 of assessed valuation. (*Id.* at 1.) In fiscal year 2003-04, 494 out of 1,031 school districts in Texas, which educated roughly 59% of the state's public school student population, were taxing at the \$1.50 cap. *WOC II*, 176 S.W.3d at 794. Furthermore, 691 districts, which educated roughly 81% of the public school student population, were taxing at or within five cents of the \$1.50 cap. *Id.* This lack of local capacity to raise additional tax revenues was a major factor in the Texas Supreme Court's decision in *WOC II*, which found that the school finance system had evolved into an unconstitutional state property tax in that school districts were deprived of meaningful discretion to set their local tax rates. *Id.* at 794-98.

**b. The passage of HBI set several structural problems in motion.**

FOF 25. In 2006, following the Supreme Court's decision in *WOC II*, the 79th Texas Legislature passed House Bill 1 ("*HBI*"). (Ex. 6393; Ex. 6396 at 1.) HBI required school districts to reduce their M&O tax rates by one third and appropriated state funds to *partially*

replace this loss of maintenance and operations tax revenue. (Ex. 6395 at 2.) This tax “compression” was phased in during the 2006-07 school year and was fully effective in the 2007-08 school year. (*Id.*) From 2007-08 to the present, each district’s “compressed tax rate” has been calculated by multiplying its 2005-06 tax rate by two-thirds. (Ex. 5653 at 12.) For districts taxing at an M&O tax rate of \$1.50 in 2005-06, the compressed tax rate in the post-HB1 system is \$1.00. (*Id.* at 11.)

- FOF 26. In passing HB1, the Legislature aimed to cut property taxes and at least temporarily provide school districts with the constitutionally required “meaningful discretion” to tax locally for supplementation and enrichment. But the Legislature failed to ensure that the constitutional standards of adequacy, suitability, and equity were protected over the long haul. (*See infra* Parts I.C (FOF 210, *et seq.*) and I.D (FOF 1204, *et seq.*.)
- FOF 27. First, for the 2006-07 school year, the Legislature replaced state funding lost through the compression of local M&O tax rates with state revenue. (RR7:17-18 (referencing Ex. 6349 at 65).) While the Legislature provided some new revenue, new state mandates limited the districts’ use of this new money, thereby reducing the intended local discretion. For example, the State required districts to use a significant portion of any new money for an across-the-board net \$2,000 pay increase for teachers, nurses, counselors, and librarians. (Ex. 6322, Moak Report, at 41; RR6:139-41 (referencing Ex. 6349 at 2).)
- FOF 28. Second, HB1 limited districts’ ability to raise their M&O taxes, by requiring districts to obtain the approval of the district’s voters at a special election known as a tax ratification election (“TRE”) in order to levy an M&O tax rate above \$1.04. This took discretion away from local school boards. TEX. TAX CODE § 26.08(a), (n).
- FOF 29. Third, HB1 established a yield structure that made it more difficult for districts to pass a TRE. The first six pennies of additional M&O taxes above the compressed rate are commonly known as “golden” pennies, because they yield higher per-penny revenues than other components of the school finance system and are not subject to the recapture requirements pertaining to property-wealthy districts. (Ex. 1188, Dawn-Fisher Report, at 1.) Beyond that, HB1 guaranteed a yield of \$31.95 per weighted student for any pennies of M&O tax effort that exceeded the compressed tax rate plus six cents (commonly known as the “copper pennies”), up to a maximum M&O tax rate of \$1.17. (*Id.*)
- FOF 30. HB1 also created a new funding element in the FSP called Additional State Aid for Tax Reduction (“ASATR”). *See* TEX. EDUC. CODE § 42.2516. This hold harmless mechanism, commonly known as “target revenue,” provided that districts would be funded at the best of three scenarios: (1) the actual M&O revenue per WADA (defined in footnote 18 below) that the district received in 2005-06; (2) the 2006-07 M&O revenue that would have existed at the 2005-06 M&O tax rate had the laws not been changed by HB1; or (3) the 2006-07 M&O revenue that would have existed had the district adopted the “effective rate,” or the rate that maintains revenue per student from the preceding year. (Ex. 5653 at 106; Ex. 1328, Casey Report, at 17-18; Ex. 1188, Dawn-Fisher Report, at 2.)

FOF 31. In the first year under the “target revenue” system, 188 districts received the greatest revenue from the first scenario, 570 districts received the greatest revenue from the second scenario, and 266 districts received the greatest revenue from the third scenario. (Ex. 1328. Casey Report, at 18.) To the extent that Tier I state aid and local M&O tax collections at the compressed M&O tax rate did not provide the revenues needed to maintain these target levels, a district was eligible for ASATR funding. (*Id.*)

**c. The Legislature’s property tax compression under HB1 resulted in a sizable structural deficit and large demands on general revenue.**

FOF 32. While one impetus behind HB1 may have been the *West Orange-Cove II* decision, the other impetus was to provide the “largest tax cut in Texas history.” (*See* Ex. 5731.) Indeed, the report of the Texas Tax Reform Commission that was the genesis behind the legislation was entitled: “Tax Fairness: Property Tax Relief for Texans.” (*See* Ex. 5732.)

FOF 33. For the reasons set forth below, the Comptroller has estimated that this tax cut has left the state with a recurring “structural deficit” of nearly \$10 billion per biennium. (RR31:90-92.) Despite the Legislature’s awareness of this structural deficit from the very outset in 2006, it has made no effort to close it.

FOF 34. The Legislative Budget Board (“LBB”) estimated that HB1’s compression of local M&O tax rates by one-third would reduce property tax revenue for school districts by \$14.2 billion in the 2008-09 biennium. (Ex. 5657 at 194.) To *partially* replace the significant loss of local revenue associated with the property tax compression, in the same special session, the 79th Legislature created the Property Tax Relief Fund (“PTRF”), to be funded from several sources, including a restructured business margins tax (but only the portion in excess of the amount that would have been derived from the prior franchise tax) and increased cigarette and tobacco taxes. (Ex. 5592 at 8; Ex. 5657 at 194.)

FOF 35. The Legislature recognized that the new taxes would not fully replace these lost property tax revenues, and state funds would be needed from other sources – including a very temporary budget “surplus” – for this purpose. (Ex. 5658 at 2; Ex. 5592 at 8; Ex. 5732 at 17, 20.) A House Research Organization Report estimated that HB1 would cost \$8.695 billion in FY 2008 (against only \$4.120 billion in projected new revenues) and \$10.131 billion in FY 2009 (against only \$4.228 billion in new projected revenues). (*See* Ex. 5733 at 20.) Similarly, the LBB’s fiscal note for HB1 projected probable revenue losses to school districts of at least \$5.85 billion annually from 2008-2011. (Ex. 6395 at 1.) Exchanges between legislators, which have been marked as statements of legislative intent, make it clear that the Legislature was fully aware of this deficit. (Ex. 6520 at 323-26.)

FOF 36. Making the deficit worse, the PTRF underperformed from the beginning. While the Comptroller estimated that the new revenue sources would raise \$8.3 billion in the 2008-09 biennium, the new funds were short of this amount by over \$3 billion. (Ex. 5658 at 2.) The largest component of the new revenue sources – the revised business margins tax –

was estimated to produce over \$6.8 billion but earned just over \$3 billion. (*Id.*) The Comptroller lowered expectations for the 2010-11 biennium, estimating increased revenues at only \$5.5 billion (Ex. 11301 at 5), but the PTRF earned just \$4.2 billion, still over \$1 billion short of the projection. (*Id.*) The Comptroller has continued to lower expectations for the PTRF, estimating just \$4.5 billion in new revenues for the 2012-13 biennium. (*Id.* at 5-6.) These amounts are far short of the \$14.2 billion per biennium that the LBB initially estimated would be needed to cover the loss of revenue from the property tax compression.

FOF 37. The State was able to avoid the consequences of its actions (and inaction) in the 2009 legislative session, by relying on the infusion of approximately \$12 billion in federal stimulus funds. (Ex. 6322, Moak Report, at 42; RR7:192-93; RR31:37-38.) This included \$5.8 billion earmarked specifically for education, while state general revenue support for public education actually declined by about \$3.2 billion for the 2010-11 biennium. (Ex. 6322, Moak Report, at 42.) The State used a large portion of these federal funds to supplant state funds and again mandated across-the-board pay increases for teachers, nurses, counselors, librarians, and speech pathologists, costing school districts about one-half of the remaining one-time federal funds. (RR6:140-41; RR7:76-78.)

FOF 38. In the 82nd Legislative Session, beginning in January 2011, federal stimulus funds had disappeared. (RR31:37-38.) Rather than take action to close the structural deficit and revise the funding system to ensure that it is “structured, operated, and funded so that it can accomplish its purpose for all Texas children,” *WOC II*, 176 S.W.3d at 753, the Legislature significantly cut funding for public education, as discussed further below. (*See infra* Part I.B.2.e (FOF 52, *et seq.*))

**d. The school finance system formulas established by HB1 and other legislative enactments were drafted without taking into consideration the cost of providing all students a meaningful opportunity to achieve a general diffusion of knowledge.**

FOF 39. The following findings describe the school finance formulas through the 2013-14 school year, while identifying several minor changes that were implemented after the 2012-13 school year.<sup>15</sup> As discussed in Parts I.C.2.d.ii (FOF 466, *et seq.*), I.C.2.d.iii (FOF 480, *et seq.*) and I.C.5.a (FOF 603, *et seq.*) below, these formulas were established without taking into account the cost of providing all students a meaningful opportunity to achieve a general diffusion of knowledge.

FOF 40. **Tier I.** School districts with compressed tax rates of \$1.00 were entitled to a “Basic Allotment” of \$4,765 in 2012-13 and are entitled to \$4,950 in 2013-14 for each student in

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<sup>15</sup> For a more detailed explanation of the structure of the school finance system, see the Texas Association of School Boards’ publication, “A Guide to Texas School Finance: January 2012,” (Ex. 6321 at App. 9, Part Q), or the presentation to the Court made by expert witness Joseph Wisnoski, a former Deputy Associate Commissioner for Finance of TEA. (Exs. 5653, 5654, 6593.)

Average Daily Attendance (“ADA”).<sup>16</sup> (Ex. 5653 at 22; Ex. 5654 at 32; Ex. 6593 at 22R.) Districts with compressed tax rates below \$1.00 receive a proportionally smaller Basic Allotment (the Basic Allotment multiplied by the district’s compressed tax rate, divided by \$1.00). (Ex. 5653 at 23; Ex. 5654 at 32-33; RR56:122-23 (referencing Ex. 6593A at 22R-23R).) The Basic Allotment is then adjusted based on (1) how much it costs to educate students in that district, via the “Cost of Education Index” (“CEI”) and (2) whether the district is small, mid-sized, or sparsely populated and therefore suffers from diseconomies of scale (the “small district adjustment,” the “mid-size district adjustment,” and the “sparsity adjustment”).<sup>17</sup> See TEX. EDUC. CODE § 42.102-.105. These changes result in an “Adjusted Allotment.” (Ex. 5653 at 22, 24-34; Ex. 5654 at 33-40.) Districts receive the Adjusted Allotment for each student in ADA that is not receiving certain special education services or career and technical education (the “Regular Program Allotment”). (Ex. 5653 at 35; Ex. 5654 at 40, 43-44.)

FOF 41. In addition, districts receive program allotments for special programs or conditions based on the number of students covered by these programs or conditions (typically calculated by the use of a “weight” multiplied by the relevant student count affected). This special program formula funding – intended to account for the varying, additional costs of educating different types of students – is provided for special education, career and technology, compensatory education, bilingual/ESL, and gifted and talented, among other categories. (Ex. 5653 at 37-56; Ex. 5654 at 44-54.) See TEX. EDUC. CODE § 42.151-.154, § 42.156-.159. Additional Tier I funding is provided based on the number of high school students (\$275 for each student in ADA in grades nine through twelve) and to cover a portion of transportation costs. (Ex. 5653 at 57-65; Ex. 5654 at 54-57.) See TEX. EDUC. CODE §§ 42.155, 42.160. The Regular Program Allotment plus these additional special program funds together comprise a district’s “Tier I entitlement.” (Ex. 5653 at 66-73; Ex. 5654 at 57-59.)

FOF 42. A school district is responsible for funding a portion of its Tier I entitlement. The portion of the Tier I entitlement that the district is responsible for is called the local fund assignment (“LFA”). TEX. EDUC. CODE § 42.251-.252. The LFA is the amount of tax collections generated by assessing the district’s compressed tax rate or a tax rate of \$1.00, whichever is lower, for each \$100 of property valuation, using the preceding school year’s property values as determined by the uniform study of property values by the Comptroller. (Ex. 5654 at 59; Ex. 5653 at 72.) The total Tier I entitlement minus the LFA equals the state’s share of the Tier I entitlement. (Ex. 5653 at 72-75; Ex. 5654 at 58-62.)

FOF 43. **Tier II.** Tier II provides a “guaranteed yield,” or guaranteed level of funding, to school districts to supplement the basic funding provided by Tier I. TEX. EDUC. CODE § 42.301.

<sup>16</sup> The Basic Allotment will be increased to \$5,040 in 2014-15. (See *infra* FOF 66.)

<sup>17</sup> The CEI was last updated in 1990, the small district adjustment and sparsity adjustments have not been updated since 1984, and the mid-size adjustment has not been updated since it was added in 1995. (Ex. 1328 at 14, 16.)

The guaranteed yield ensures that school districts will generate at least a specified amount of state and local funds per student in weighted average daily attendance ("WADA") for each cent of tax effort above the compressed rate, up to \$1.17.<sup>18</sup> (Ex. 5653 at 77; Ex. 5654 at 63.) TEX. EDUC. CODE § 42.302.

FOF 44. There are two components of Tier II. For the first six pennies of tax effort above the compressed rate, a district is entitled to a minimum of \$59.97 per penny per WADA ("Tier II-A" or the "golden pennies").<sup>19</sup> (Ex. 5653 at 85, 88; Ex. 5654 at 63, 68-75.) For any remaining cents of tax effort above Tier II-A up to a maximum of \$1.17, districts receive a guaranteed yield of \$31.95 per penny per WADA ("Tier II-B" or the "copper pennies"). (Ex. 5653 at 85, 89-90; Ex. 5654 at 63, 75-77.) TEX. EDUC. CODE § 42.302. As noted above, any M&O tax effort above \$1.04 requires the approval of the voters of the district in a TRE. TEX. TAX CODE § 26.08(a). (n).

FOF 45. **Wealth equalization.** A district is subject to the provisions of Chapter 41 if its property wealth per WADA exceeds certain equalized wealth levels ("EWL") set in statute. See TEX. EDUC. CODE § 41.002. Property-wealthy districts subject to this chapter are typically called "Chapter 41 districts," and those districts that are not are typically called "Chapter 42 districts." (See Ex. 5384, Kallison Equity Report, at 4.) The Education Code provides for three equalized levels of property wealth per WADA that either limit districts' access to the tax revenue generated by local M&O tax effort above the EWL, or, in the case of the Tier II-A EWL (see *supra* FOF 44), guarantee a yield up to a level for all school districts. (Ex. 1188, Dawn-Fisher Report, at 8.)

FOF 46. The first EWL was set at \$476,500 per WADA in 2012-13 and is set at \$495,000 per WADA in 2013-14.<sup>20</sup> (*Id.*; Ex. 6593 at 95R); see also TEX. EDUC. CODE § 41.002(a)(1). This level applies to the M&O tax pennies up to a district's compressed tax rate. (Ex. 1188, Dawn-Fisher Report, at 8.) A district with property wealth per WADA in excess of the first EWL typically will have the excess tax collections associated with these pennies recaptured unless provided otherwise by hold harmless provisions, as described in FOF 50 below. (*Id.*) Approximately 174 districts, representing 9.6% of WADA, were subject to recapture at the compressed rate in 2011-12.<sup>21</sup> (Ex. 5653 at 96.) The second EWL applies to the next six pennies above a district's compressed tax rate. (Ex. 1188, Dawn-Fisher Report, at 8.) For those pennies, the State currently ensures that districts will

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<sup>18</sup> "WADA" is defined as the number of students in weighted average daily attendance, which is calculated by dividing the sum of the school district's allotments under Subchapters B [Basic Entitlement] and C [Special Allotments], less any allotment to the district for transportation, any allotment under Section 42.158 or 42.160 [new Instructional Facility Allotment and High School Allotment], and 50% of the adjustment under Section 42.102 [Cost of Education Adjustment], by the basic allotment for the applicable year. See TEX. EDUC. CODE § 42.302.

<sup>19</sup> The Tier II-A guaranteed yield will be raised to \$61.86 per penny in the 2014-15 school year. (See *infra* FOF 66.)

<sup>20</sup> The first EWL will be raised again to \$504,000 in 2014-15. (See *infra* FOF 66.)

<sup>21</sup> For the 2011-12 school year, the first EWL was \$476,500.

receive the same revenue per penny of tax effort as that generated by the Austin ISD (presently \$59.97 per penny per WADA).<sup>22</sup> TEX. EDUC. CODE § 41.002(a)(2). (Ex. 5654 at 63; Ex. 5653 at 85.) As long as other districts are funded at the Austin yield, property-wealthy school districts that can generate per-penny revenues in excess of the Austin yield are allowed to keep the additional revenues they generate on these six pennies, without recapture. (Ex. 1188, Dawn-Fisher Report, at 8; Ex. 5653 at 95.) Since 2006, the State has funded Tier II at sufficient levels to allow Chapter 41 districts to retain all of the revenue they generate on their golden pennies of tax effort. (Ex. 1188, Dawn-Fisher Report, at 8.) In 2011-12, approximately 109 districts, with approximately 5% of the state's ADA, or approximately 250,000 students, benefited from the absence of recapture on these golden pennies because they generate local yields in excess of the guaranteed yield of \$59.97. (*Id.* at 3.) The total revenue generated by these districts in excess of the guaranteed yield was approximately \$33.9 million. (*Id.* at 3-4.)

FOF 47. The third EWL is set in statute at \$319,500 per WADA, and it applies to any tax effort that exceeds the district's compressed rate plus six cents. (*Id.* at 8.) *See also* TEX. EDUC. CODE § 41.002(a)(3).<sup>23</sup> A district whose property wealth per WADA exceeds \$319,500 and taxes in the "copper penny" tier will have the excess tax collections associated with this tax effort recaptured, subject to some exceptions. (Ex. 1188, Dawn-Fisher Report, at 8; Ex. 4240 at 8.) In 2011-12, approximately 115 districts enrolling 318,850 in ADA paid recapture at the \$319,500 EWL. (Ex. 11451 at Tab 2012, Columns P and F.)

FOF 48. Chapter 41 districts have five options to reduce their wealth level under Section 41.003 of the Education Code, including: (1) consolidating with another district; (2) detaching property; (3) purchasing attendance credits from the state; (4) contracting to educate nonresident students from a partner district; or (5) consolidating tax bases with another school district. (Ex. 1188, Dawn-Fisher Report, at 7.) TEX. EDUC. CODE § 41.003. The vast majority of Chapter 41 districts choose option three, which requires a district to send money to the state. (Ex. 5653 at 95; Ex. 5654 at 80.) These funds are used to help finance the FSP payments that are made to property-poor districts. (Ex. 1188, Dawn-Fisher Report, at 7.)

FOF 49. Because the Texas Supreme Court has directed the trial court to consider facilities funding, together with M&O, in addressing the constitutionality of public school funding, the Court notes that the facilities funding structure effectively creates a fourth EWL of \$350,000 per ADA for those districts that are successful in issuing bonds. There is no recapture of revenue generated from property values exceeding this EWL. Like the M&O weights and allotments, the Legislature has not recently updated the EWL to adjust for inflation and increased construction costs. Unlike M&O funding, however, facilities

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<sup>22</sup> The guaranteed level for these pennies will be raised to \$61.86 for the 2014-15 school year.

<sup>23</sup> Due to provisions in the Education Code that allow a school district to retain the wealth level needed to maintain its 1992-93 revenue levels, as well as various "credits" associated with certain recapture arrangements, some school districts are allowed to retain a wealth level higher than the various EWLs. TEX. EDUC. CODE §§ 41.002(c), 41.098; (*see also* Ex. 6441, Wisnoski Dep., at 55, 78-79).

funding is subject to appropriation and is not a permanent part of the school funding system. Consequently, districts cannot rely on new funding to assist with construction costs.

FOF 50. **Target revenue overlay.** While the preceding findings describe how districts would be funded “on formula.” 783 districts in 2011-12 were still funded based on the “target revenue” system (versus 246 on formula). (Ex. 6593 at 153R.) Districts are entitled to the target revenue amount if this amount exceeds what they would have received under Tier I of the school finance formulas described above. (*Id.* at 105; Ex. 5654 at 93-94.) The Legislature modified the target revenue calculation with the passage of House Bill 3646 (“HB3646”) in 2009. (*See* Ex. 6379.) HB3646 created a new funding component, based on the revenue target, known as revenue at the compressed (tax) rate, or “RACR.” The RACR amount is the sum of the state share of a district’s Tier I entitlement and the revenue from the district’s compressed tax rate, both as calculated under HB3646, adjusted as necessary based on certain minimum and maximum hold harmless provisions of HB3646. (*See id.*; Ex. 5653 at 109-10; Ex. 5654 at 99-101.) For school years 2009-10 and beyond, HB3646 provided that a district levying at least its compressed rate will be entitled to a RACR amount equal to at least the sum of the following: (1) the revenue per WADA the district was entitled to in 2009-2010; and (2) adjustments to reflect current year funding for certain other allotments. (Ex. 5653 at 109-10; Ex. 5654 at 99-102.) The first figure was based on the best of the three scenarios described in FOF 30 above, taking into account other legislative action in 2006, 2007, and 2009. (Ex. 5653 at 109; Ex. 5654 at 99-100.)

FOF 51. The use of target revenue as an alternate to formula funding undermines the equalization that is the basis of formula funding and unreasonably freezes district funding in time. As a result, the advantages and disadvantages in FY 2005-06 funding have been carried forward into subsequent school years, thereby magnifying the inequities.

**e. By reducing public education funding by \$5.3 billion, the 2011 Legislature exacerbated the funding inadequacies.**

FOF 52. In 2011, faced with a perceived revenue shortfall (based on vastly understated revenue estimates from the Comptroller)<sup>24</sup> and a recurring structural tax revenue deficit, the Legislature made a number of changes to public education finance aimed at reducing education funding through the passage of Senate Bill 1 (“SB1”). (Ex. 6322, Moak Report, at 47; *see also* Ex. 6362, article 57.) SB1 reduced funding distributed through the FSP by approximately \$4 billion for the biennium compared to what would have been provided under prior law. (Ex. 6322, Moak Report, at 47; RR6:203-04 (referencing Ex. 6349 at 38); Ex. 6362 at Article 57; Ex. 6364 at 12.)

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<sup>24</sup> The “perceived” shortfall had two components. First, the Comptroller was forecasting a shortfall in the FY 2010–11 budget. On September 30, 2011, that budget finished with a \$4+ billion surplus. Second, the Comptroller forecasted a revenue shortfall in FY 2012–13, and that budget finished with an \$8+ billion surplus.

- FOF 53. The mechanism for reducing FSP funding was different in the first year versus the second year of the 2012-13 biennium. (Ex. 6322, Moak Report, at 48.) In the first year of the biennium, the Legislature reduced the regular program allotment in Tier I to 92.39% of the prior-law levels. (*Id.*; RR6:203 (referencing Ex. 6349 at 44); Ex. 5653 at 147.) This was accomplished by applying an adjustment – known as the Regular Program Adjustment Factor (“RPAF”) – which was set in statute for the 2011-12 and 2012-13 school years at 0.9239 and 0.98 respectively. (Ex. 6322, Moak Report, at 48; Ex. 5653 at 147.) This reduced state aid not only in Tier I, but also in Tier II and in ASATR, because reducing the regular program allotment in Tier I reduced the calculated number of students in weighted average daily attendance for all districts, which in turn affected the funding calculations for both tiers and ASATR. (Ex. 6322, Moak Report, at 48.)
- FOF 54. In the second year of the 2012-13 biennium, the regular program was reduced to 98% of prior-law levels, effectively restoring part of the first-year reduction. (Ex. 6322, Moak Report, at 48; RR6:203 (referencing Ex. 6349 at 44).) The effective 2% reduction to the regular program allotment produced a state savings of \$500 million in 2012-13. (Ex. 6322, Moak Report, at 48.) The remaining funding reduction in 2012-13 came from hold harmless ASATR funds. (*Id.*) Target funds were reduced to 92.35% of prior-law levels in 2012-13, which had the effect of reducing ASATR by more than 50% because more districts would be funded via higher formula funding. (*Id.*; RR6:203 (referencing Ex. 6349 at 44); Ex. 5653 at 148.)
- FOF 55. As a result, the proportion of districts funded on target revenue versus formula decreased between the 2011-12 and 2012-13 biennia. In 2011-12, a total of 783 districts were funded under target revenue, while 238 districts were funded on formula. (Ex. 6618 at 12; *see also* Ex. 11476 at 19.) It is estimated that in 2012-13, 329 districts were funded under target revenue, while 692 districts were funded on formula. (Ex. 6618 at 12.)<sup>25</sup>
- FOF 56. To “save” an additional \$1.3-\$1.4 billion, the 82nd Legislature also eliminated or significantly reduced funding for a number of specific educational programs – many of which were designed to help the state’s highest need children and close the achievement gap. (RR6:203-07; RR32:194; Ex. 6322, Moak Report, at 47; Ex. 4000, Cortez Report, at 49-50; RR31:171-72; Ex. 10748.) These cuts included, but were not limited to:
- A reduction in funding for the Student Success Initiative (“SSI”) grant program from over \$300 million in the 2010-11 biennium to \$41 million for the 2012-13 biennium. (Ex. 5630, Scott Dep., at 44-45; Ex. 17 at 111-19.) This program, established by the Legislature in 2000, was designed to provide support for students in need of accelerated remediation to help them pass statewide

<sup>25</sup> The State provided slightly different estimates of the numbers of districts that were funded under target revenue versus on formula. According to the State’s data, 783 districts in 2011-12 were funded under target revenue, with 241 districts funded on formula (compared to 783 and 238 above). (Ex. 11451 at Summary tab, cells H38, H254.) In 2012-13, the State’s data shows 327 districts funded under target revenue, with 694 districts funded on formula (compared to 329 and 692 above). (*Id.* at Summary Tab, cells I38, I254.)

examinations, through the provision of intensive tutoring, extended day programs, and summer school programs. (Ex. 6322, Moak Report at 49; RR6:204-05; Ex. 5630, Scott Dep., at 28-29.)

- The elimination of \$201 million in grants designed to assist districts with providing full-day pre-K services, a program that Former TEA Commissioner Robert Scott described as “critical” in light of the research based on the importance of early education. (Ex. 6322, Moak Report, at 49; Ex. 5630, Scott Dep., at 30-34, 42-44.)
- Sharp reductions to programs aimed at improving teacher quality. For example, District Awards for Teacher Effectiveness (“DATE”) grants, which were used to support district-designed incentive pay programs, were reduced from \$372.5 million in the 2010-11 biennium to \$40 million for the 2012-13 biennium, despite the Commissioner’s recommendation to fund the program at approximately \$392.5 million. (Ex. 6322, Moak Report, at 49; RR6:205-06; Ex. 5630, Scott Dep., at 45-46; Ex. 16 at 55; Ex. 17 at 18.)

These special programs and grants were important to the Texas public education system and the cuts particularly impacted the state’s highest need children. (RR6:204-07.)

FOF 57. Commissioner Scott testified that determining whether to restore money to the FSP (compared to initial proposed FSP reduction released early in the 2011 legislative session) or to the special programs described above “was akin to asking the guy on the operating table whether he wants his heart or his lungs back.” (Ex. 5630, Scott Dep., at 349.) He acknowledged that with the cuts to the special programs, “the lungs never got put back.” (*Id.* at 358.)

FOF 58. As a result of these special program cuts, districts were forced to use funds that otherwise could have been used for enrichment if they wanted to continue providing these important services, further reducing what minimal “meaningful discretion” they had.

FOF 59. The 2011 budget cuts have had a deleterious impact. Even though there were 44,454 more students enrolled in the non-charter public schools statewide in 2011-12 than in 2010-11, total employment declined by over 26,000 full time equivalent staff, driving staffing ratios up for teachers and non-teachers alike. (Ex. 6322, Moak Report, at 49; RR6:208 (referencing Ex. 6349 at 45).)

Number of Staff Employed by School Districts, 2010-11 and 2011-12

	2010-11	2011-12	Difference
Teachers	325,891	314,404	-11,487
Other Staff	323,809	308,913	-14,896
Students	4,799,541	4,843,995	44,454
Students per Teacher	14.7	15.4	4.76%
Students per Other Staff	14.8	15.7	6.08%

(Ex. 6322, Moak Report, at 49.)

FOF 60. Average salaries and experience levels across staff also declined. (*Id.*) Total base pay across all staff categories declined by more than \$1 billion dollars between 2010-11 and 2011-12. (*Id.*)

FOF 61. The Legislature anticipated one major effect of the budget cuts when it added financial need as a basis for obtaining class size waivers in 2011. (Ex. 5630, Scott Dep., at 390.) The 2011 budget cuts forced many districts to seek waivers of the twenty-two-to-one class size requirement for grades K through four. In 2011-12, the TEA granted nearly 8,600 waivers of the State's class size requirement. (Ex. 5630, Scott Dep., at 391-92 (referencing Ex. 30 at 3).) The requests for waivers came from approximately 30% of all elementary schools in Texas and directly affected about 150,000 students. (Ex. 5630, Scott Dep., at 394-95 (referencing Ex. 31 at 1).) Many superintendents testified that they believed they had no choice but to increase class sizes, and that doing so adversely affected their ability to educate students. (*See infra* FOF 568 and FOF 574.)

FOF 62. Teacher salaries, staffing ratios, and class sizes were not the only area affected by the cuts. Many districts were forced to eliminate full-day pre-K programs which, according to national experts and superintendents, provide a key educational foundation for students, especially ELL and economically disadvantaged students. (*See infra* Parts I.C.2.c.i (FOF 384, *et seq.*) and I.C.3.b (FOF 550, *et seq.*.) Other districts maintained their full-day pre-K programs, but only at the expense of other interventions. (*See, e.g.*, RR20:138-39; Ex. 3208, Williams Dep., at 210-11; Ex. 3198, Garza Dep., at 22-23.) One superintendent testified regarding the cuts, "instead of culling out programs that are ineffective, you decide which of the effective programs you're going to cut back and streamline." (RR19:37 (referencing Ex. 6355 at 16).) More detailed findings concerning district-specific effects are provided in Part I.C.7 (FOF 680, *et seq.*) below. Each of these cuts came at the same time the State implemented a new, more rigorous assessment regime that superintendents testified will require significant additional resources for which to prepare students. (*See infra* Parts I.B.3.b (FOF 93, *et seq.*) and I.C.5.b (FOF 607, *et seq.*.)

FOF 63. Even before these cuts, a Quality Counts report (an annual report prepared by *Education Week*) ranked Texas forty-ninth among the states on per pupil expenditures after

adjusting for regional cost differences, and gave Texas an “F” on spending per pupil. (Ex. 6322, Moak Report, at 44.)

FOF 64. The Court finds that the cuts detailed above reflect a state funding system that does not provide the necessary support to achieve the State’s academic standards and goals, including the goal for all students to have a meaningful opportunity to graduate college and career ready. (*See infra* Part I.B.3 (FOF 81, *et seq.*.) In short, the \$5.3 billion in cuts to the FSP, Student Success Initiative, pre-K funding, and other special programs designed to overcome the challenges of increasingly demanding student populations (which resulted in larger class sizes, a less experienced teacher workforce, and less remediation for struggling students), demonstrates that the school finance system is not designed to provide a general diffusion of knowledge to all students.

**f. The 2013 legislative changes did not cure the constitutional deficiencies brought about by the structural deficit, outdated formulas, and inadequate funding.**

FOF 65. Given that the prior seven years had seen (1) the creation of a substantial structural deficit in 2006 through property tax compression combined with insufficient general revenue to replace the lost funds, (2) the absence of any corrective action in the intervening years, and (3) the largest cuts to public education in Texas in decades, the 83rd Legislature did not have a very high bar to meet. Following this Court’s February 4, 2013 oral ruling at the conclusion of the initial phase of trial, the 83rd Legislature reinstated \$3.5 billion of the \$5.3 billion of the cuts it had made to public education in the 2011 legislative session. However, most of these funds were attributable to increased local tax revenues resulting from estimates of increased property value, and only one-third came from general revenue fund appropriations. (*See infra* Part I.C.1.b.v (FOF 263, *et seq.*.)

FOF 66. While some plaintiffs’ counsel called this action a “modest step in the right direction,” this Court finds that the step was modest indeed – and plainly insufficient to satisfy constitutional standards. The Legislature accomplished this action by way of an appropriations bill rather than by statutory changes to the formulas, which means that the changes expire at the conclusion of the current biennium.<sup>26</sup> (RR63:18-20.) The four primary means by which the cuts were partially reinstated are set forth below:

- a. First, the Legislature increased the Basic Allotment from \$4,765 in 2012-13 to \$4,950 in 2013-14 and \$5,040 in 2014-15. (Ex. 6593A at 22R; RR54:103 (referencing Ex. 6618 at 5).) Correspondingly, the Tier 1 EWL was raised from \$476,500 in 2012-13 to \$495,000 in 2013-14, and will increase further to \$504,000 in 2014-15. (*See supra* FOF 46; RR54:103 (referencing 6618 at 5).)

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<sup>26</sup> Because these changes were made through an appropriations bill instead of through changes to the statutory formulas, the State would be required to prorate these amounts if it did not receive the amount of expected revenues necessary to pay its budgetary obligations in full and the 84th Legislature did not cover the difference through a supplemental appropriation. (RR54:96; RR55:108-09; RR63:18-20, 96-98.)

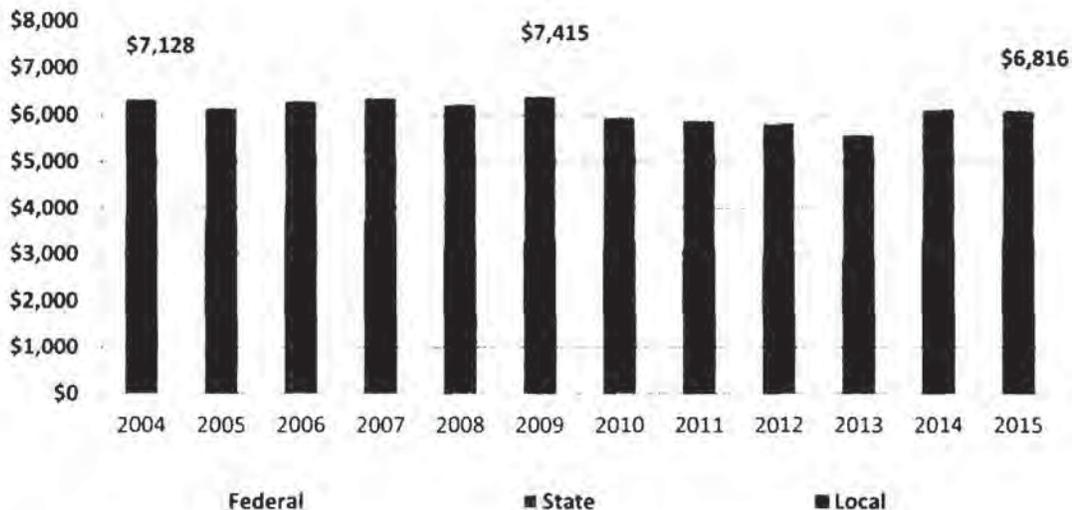
- b. Second, the Legislature increased the RPAF – the formula through which it had implemented the 2011 across-the-board cuts (*see supra* FOF 53) – from 0.98 in 2012-13 to 1.0 in the 2013-14 and 2014-15 school years. (RR56:125 (referencing Ex. 6593 at 35R).) The RPAF expires on September 1, 2015.
- c. Third, the Tier II-A guaranteed yield will be raised from \$59.97 to \$61.86 per penny in the 2014-15 school year. (*See supra* FOF 44; Ex. 6593A at 77R.)
- d. Fourth, the State slightly raised the “target revenue reduction factor” from 92.35% of prior-law levels in 2012-13 to 92.63% of prior law levels in 2013-14 and 2014-15, which resulted in a slight increase in the amount of ASATR that certain districts will be paid. (RR54:104 (referencing Ex. 6618 at 5).)

FOF 67. The Legislature did not update or modify any of the other formulas used in the school finance system. (RR56:124-27, 132, 148-49.) Most notably, the Legislature did not revisit any of the outdated weights used to provide additional money for economically disadvantaged and ELL students who are substantially more expensive to educate. (*Id.*: RR63:19-20.)

FOF 68. The Legislature restored only \$290 million of the \$1.3 billion (or 22 cents out of every dollar) that had been cut from state grant programs. (Ex. 20216-A.) Most notably, the Legislature did not restore SSI funds, which are targeted towards providing remediation to students who have failed or are in danger of failing statewide assessments. (*Id.*; *see also* RR63:111.) The Legislature also failed to restore funding for early childhood and pre-kindergarten programs, regional education service centers, and the Texas Reading, Math and Science Initiative, among other programs. (*See* RR63:108-11 (referencing Ex. 20216-A).)

FOF 69. **The impact of the 2013 legislation in a larger context.** The actions of the 2013 Legislature did not change the fact that there has been a significant decline in total per-student operating revenues for public education on an inflation-adjusted basis over the past decade, and in particular in the last five years, even as performance standards have risen. In 2004 dollars, total per-student revenues for public education were approximately \$7,128 in 2003-04. (RR54:83-85 (referencing Ex. 6618 at 7).) The 2008-09 school year reflected the largest per-student revenue during the last decade at \$7,415 (in 2004 dollars), in part due to increases in federal funding that year. (RR54:84 (referencing Ex. 6618 at 7).) By 2014-15, on an inflation-adjusted basis, public education funding per student will have dropped to \$6,816 in 2004 dollars, representing a loss of \$312 per student compared to the 2004 level and a loss of \$599 per student since 2009. (RR54:88-84 (referencing Ex. 6618 at 7).)

**Pre-K through 12 Public Education Revenue per Student**



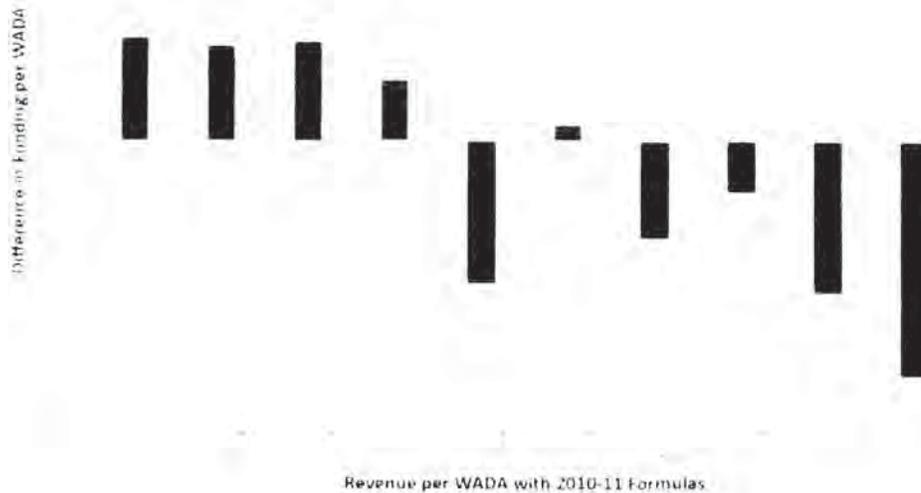
Source: MCA Analysis of Figure 181 from LBB Fiscal Size-Up. Adjusted for payment delays and enrollment.

(Ex. 6618 at 7.)

FOF 70.

In the current school year, approximately 488 districts, with nearly half the WADA in the state, remain worse off than they were in 2010-11 before the 2011 legislative cuts. (RR54:111-12 (referencing Ex. 6618 at 10).) Those districts that come out ahead do so only marginally, as shown in the chart below.

Difference in Funding Using 2010-11 Formulas Versus 2013-14 Formulas



(See Ex. 6618 at 9.)

FOF 71. Most fundamentally, given the levels of funding this Court has found necessary to achieve a “general diffusion of knowledge” (*see infra* Part I.C.5.f (FOF 625, *et seq.*)), the Legislature’s partial restoration of the 2011 cuts did not cure the constitutional deficiencies in the school finance system, which remains inadequate, unsuitable, and financially inefficient.

**g. Testimony from State witnesses does not demonstrate sufficient financial support for public education.**

FOF 72. The State Defendants presented several witnesses whose testimony suggested that educational expenditures in Texas had increased in recent years, but the Court does not find that testimony to be persuasive. Upon examining this testimony, the Court finds it does not alter the essential picture of a state where operational expenditures on education have, in recent years, failed to keep pace with inflation, standards, rapid enrollment growth, and changing student demographics.

- FOF 73. For example, Tom Currah, a senior advisor and data analysis director for the Texas Comptroller of Public Accounts, averred that “total expenditures” by school districts in the aggregate and per student have increased between 2000 and 2011, even when compared with inflation (measured by the Consumer Price Index (“CPI”) and growth in enrollment). (RR33:170-71, 173-74 (referencing Ex. 11279 at 26-35).) Mr. Currah’s presentation did not reflect the substantial budget cuts made in 2011. (RR33:170, 202-03.)
- FOF 74. The “total expenditure” values presented by Mr. Currah also include, not only operational spending, but also amounts paid by districts for debt service and capital outlays. (RR33:195-96.) Both of these most often apply to spending for the building of new facilities or renovating existing facilities. These items are not measured in the basket of goods used for the CPI. (RR33:200.) Moreover, including both debt service and capital outlays in the “total expenditures” metric double-counts the amounts school districts spend to build facilities financed by debt, since the sum includes both the initial capital outlay and the eventual repayment of the debt incurred to pay for it. (RR33:188, 196-97.) The inclusion of debt service and capital outlays in total expenditures, therefore, overstates the growth in real (inflation-adjusted) educational spending over time. (RR33:187-88, 196-97.) As a result, “total expenditure” values are not relevant to the issue of spending per student.
- FOF 75. Notably, the “total expenditure” metric is not the spending measure used in the State’s Financial Allocation Study of Texas (“FAST”). (RR33:197.) Instead, the FAST project used only operational expenditures – a measure that does not include either capital expenditures or debt service – adjusted by a comparable wage index. (RR33:149-50, 198-99.) As the FAST study’s authors appear to recognize, operating expenditures are a better measure than total expenditures of the money that can be used to deliver the educational services most directly crucial to student learning. (Ex. 965 at 44, 50 (describing the methodology for the FAST study and the use of the operating expenditures measure).)
- FOF 76. Mr. Currah also failed to account for significant cost drivers in the last decade, including the growing percentage of economically disadvantaged students and the State’s recent ramping up of performance expectations for both students and schools. (RR33:200-02; *see infra* Parts I.C.2.a.ii (FOF 294, *et seq.*) and I.B.3 (FOF 81, *et seq.*))
- FOF 77. The State also relied on Rob Coleman, Assistant Director of Fiscal Management for the Texas Comptroller of Public Accounts, to testify regarding the Comptroller’s role in settling the biennial budget and to describe the budget patterns over the past several years. Mr. Coleman acknowledged that the Legislature cut education funding from the 2010-11 biennium to the 2012-13 biennium, but added that public education funding *by the State* (*i.e.*, not counting the funding raised by districts from the local property tax) has increased from the funding levels of the 2004-05 biennium. (Ex. 11270 at 23; RR31:47-48, 52-56.) He agreed, however, that this change in appropriations over time reflects the Legislature’s shift away from reliance on local property taxes and toward greater reliance on state funds. (RR31:101-03.) This shift was necessary to make up for the \$14.2 billion

in local property tax revenue losses following the tax rate compression mandated in HBI and does not reflect an actual increase in overall education funding to districts. (RR31:91-92 (referencing Ex. 1700); Ex. 5657 at 192.)

FOF 78. The State also presented Shirley Beaulieu, the Chief Financial Officer of the TEA, who provided documentation of educational spending from all sources for each biennium from 2006-07 to 2014-15. While a focus solely on state aid to education through the FSP appears to create the impression of a slight increase in per-student spending in the 2012-13 biennium, this fails to account for the fact that approximately \$3.2 billion in federal stimulus funding was used in 2010-11 to plug the gap in state FSP spending created by the structural deficit caused by the compressed tax rate. (RR31:184; RR63:105-07 (referencing Ex. 20167-A), 108 (referencing Ex. 20216-A); *see also supra* FOF 37.) Texas did not replace these federal funds after the 2010-11 biennium. (RR31:185.) Furthermore, Ms. Beaulieu's testimony regarding total education spending included: federal grant funds, which must by law be spent for specific purposes; facilities funding, which must by law be used to repay debt; and administrative funding for the Texas Education Agency. (RR63:105-06 (referencing Ex. 20167-A), 116 (referencing Ex. 20216-A).)

FOF 79. Ms. Beaulieu's presentation did not contradict the fact that in the 2012-13 biennium, the FSP was funded at approximately \$4 billion less than its previous-law levels, and that the 83rd Legislature failed to fully restore those cuts in the 2014-15 biennium. (*See* RR31:134, 153-54; RR54:81, 87-88 (referencing Ex. 6618 at 3-4).) In addition, the numbers she presented for each biennium were not adjusted for inflation or enrollment growth. (RR31:179-80, 182; RR63:103-04 (referencing Ex. 20167-A), 107-08 (referencing Ex. 20216-A), 114 (referencing Ex. 10748).) When adjusted for inflation and presented on a per-student basis, educational spending from all sources (state, local, and federal) and for all purposes (including operating expenditures, capital spending, debt service, and state and federal programs and grants) was lower in the 2013-14 biennium than it was during the 2003-04, 2005-06, 2008-09, or 2010-11 biennia. (RR54:83-84 (referencing Ex. 6618 at 7).) This occurred despite having a historically high \$8 billion in the rainy day fund. (RR31:26-27, 57.) After the partial restoration of the cuts, Ms. Beaulieu showed total education spending per WADA for the 2014-15 biennium that was still slightly less than in 2010-11 – even when including federal grant funds and local property tax collections, which both increased by more than 10%. (RR63:115-16; Ex. 20216-A.)

FOF 80. The State's expert, Dr. Dawn-Fisher, testified that state FSP funding has increased between 2006 and 2012, primarily due to student enrollment growth and the compression of M&O tax rates under HBI. (RR32:173-74; Ex. 1188, Dawn-Fisher Report, at 5.) Dr. Dawn-Fisher's analysis also does not account for inflation during the 2006-2012 period. (RR32:174.) Likewise, Dr. Dawn-Fisher's representation that per-WADA funding increased between FY 2011 and FY 2012 does not account for the reduction in WADA caused by the RPAF, which actually reduced funding by more than \$2 billion in FY 2012. (RR32:175 (referencing Ex. 1188, Dawn-Fisher Report, at 6), at 184; *see also*

*supra* FOF 53.) Indeed, Dr. Dawn-Fisher admitted that the effect of the legislative changes to the FSP formulas was to reduce FSP funding by \$4 billion, and agreed that, when combined with the grant cuts, school districts experienced a \$5.3 billion dollar cut. (RR32:194.) Dr. Dawn-Fisher's charts in the second-phase hearing, which showed FSP revenue through fiscal year 2015, suffered from some of these same defects. (RR62:98-101.)

**3. The Legislature has significantly increased academic performance requirements for Texas public schools and students.**

FOF 81. Since the Supreme Court last analyzed the adequacy issue in *WOC II*, the Texas Legislature has substantially increased the academic performance requirements for Texas public schools and students. Specifically, the Legislature has incorporated college-readiness standards into the curriculum, introduced additional and more difficult assessment requirements, added coursework at the high school level, and implemented steps to increase the number and percentage of students graduating on more rigorous graduation plans. *See, e.g.*, TEX. EDUC. CODE §§ 4.001, 28.001, 28.008, 28.025. These changes, which are aimed at increasing the percentage of Texas students who are prepared to enter college or the workforce, "are the most significant changes [to public education] that we've seen in a substantial amount of time." (RR6:144-45, 155; *see also* Ex. 6322, Moak Report, at 16-20; Ex. 5624, Zyskowski Dep., at 25-27, 34-35.)

**a. College and career readiness is now the operational expectation of the Texas school system.**

FOF 82. The Legislature has tied the general diffusion of knowledge to the goal of preparing all Texas students to graduate from high school ready to enter college or the workforce. (*See* RR28:167-68, 177; RR5:125; Ex. 4273, Martinez Dep., at 28-29; Ex. 5785, Housson Dep., at 212; RR63:138-40.)

FOF 83. The Legislature first articulated this intent in 1995 when it adopted Section 28.001:

It is the intent of the legislature that the essential knowledge and skills developed by the State Board of Education under this subchapter shall require *all* students to demonstrate the knowledge and skills necessary to read, write, compute, problem solve, think critically, apply technology, and communicate across all subject areas. *The essential knowledge and skills shall also prepare and enable all students to continue to learn in postsecondary educational, training, or employment settings.*

TEX. EDUC. CODE § 28.001 (emphasis added).

FOF 84. The TEA's then-Associate Commissioner for Standards and Programs, Anita Givens, acknowledged that Section 28.001 describes the purpose of the State's curriculum and that this provision reflects the Legislature's intent to ensure that all students have a

meaningful opportunity to learn the subject areas laid out in the curriculum and to be ready for post-secondary education or employment. (RR28:167-68.)

- FOF 85. The Legislature also has acknowledged its duty to ensure that all Texas school children have access to an education that is adequate in the context of the competitive employment market and the changing world:

The mission of the public education system of this state is to ensure that *all Texas children have access to a quality education* that enables them to achieve their potential and fully participate now and in the future in the social, economic, and educational opportunities of our state and nation. That mission is grounded on the conviction that a general diffusion of knowledge is essential for the welfare of this state and for the preservation of the liberties and rights of citizens . . . .

TEX. EDUC. CODE § 4.001 (emphasis added).

- FOF 86. The Texas Supreme Court concluded that through the passage of Section 4.001, “the Legislature has expressly defined the mission of the public school system, including school districts, to accomplish a general diffusion of knowledge.” *West Orange-Cove Consol. Indep. Sch. Dist. v. Alanis*, 107 S.W.3d 558, 584 (Tex. 2003) (“*WOC I*”).

- FOF 87. More specifically, the mission of Texas public schools is to produce college or career-ready graduates. (RR28:177.) The Legislature has defined college readiness as “the level of preparation a student must attain in English language arts and mathematics courses to enroll and succeed, *without remediation*, in an entry-level general education course for credit in that same content area for a baccalaureate degree or associate degree . . . .” TEX. EDUC. CODE § 39.024(a) (emphasis added). To advance this mission, in 2006, the Legislature required the Commissioner of Education and the Commissioner of Higher Education to work together to establish college-readiness standards and expectations, evaluate the curriculum, and recommend how the curriculum could be aligned with those standards. TEX. EDUC. CODE § 28.008; Act of May 15, 2006, 79th Leg. 3rd C.S., ch. 5, Tex. Gen. Laws at 45 (HB1) (available at Ex. 6393). (RR28:120-21, 176-77; RR5:125-26.)

- FOF 88. In 2007 and 2009, the Legislature required these same college-readiness standards to be incorporated into the State’s assessment and accountability system. Act of May 29, 2007, 80th Leg., R.S., ch. 1312 (SB 1031) (available at Ex. 6388); Act of June 2, 2009, 81st Leg., R.S., ch. 895, 2009 Tex. Gen. Laws 2357 (HB3) (available at Ex. 6375). (See also Ex. 5624, Zyskowski Dep., at 25-26, 34-35; Ex. 5785, Housson Dep., at 33-34.) Section 39.053 of the Education Code requires the Commissioner of Education to periodically increase performance standards for students and schools until Texas (1) ranks within the top states in terms of college readiness and (2) has eliminated any “significant achievement gaps by race, ethnicity and socioeconomic status.” TEX. EDUC. CODE § 39.053(f). (See also Ex. 6322, Moak Report, at 17-18; Ex. 10336 at ii; Ex. 5785, Housson Dep., at 33-34.)

- FOF 89. To that end, in 2008, Texas adopted college and career-readiness standards (“CCRS”). (Ex. 742.) The CCRS were approved by the Texas Higher Education Coordinating Board and the Commissioner of Education and were subsequently incorporated into the Texas Essential Knowledge and Skills (“TEKS”) by the SBOE. (See RR27:13-14; RR28:119-21; Ex. 742 at iii; Ex. 10336 at 1-47 and App. B.) The curriculum is now vertically aligned so that the entire curriculum – from kindergarten all the way to high school – is designed to prepare students to meet the CCRS. (RR28:121-23.)
- FOF 90. In 2013, the Legislature adopted House Bill 5 (“HB5”), which requires school high school students to select a graduation plan that puts them on the path to earning one of five endorsements – STEM (science, technology, engineering and math), multidisciplinary, public service, business and industry, or arts and humanities – upon entering ninth grade. TEX. EDUC. CODE §§ 28.025(b), (c-1). (See RR54:125-27; see also *infra* FOF 106.) By creating the endorsements, the Legislature hoped to “maintain rigor while providing students flexibility to pursue college or career interests.” (Ex. 6532 at 4.)
- FOF 91. HB5 also requires TEA to add more achievement indicators related to college and career readiness to the accountability system beginning in 2013-14, including: (a) the percentage of students completing the curriculum for the distinguished level of achievement; (b) the percentage of students completing the curriculum for an endorsement; and (c) three additional student achievement indicators, which must include either the percentage of students completing the ISI college-readiness benchmarks in reading, writing and math, or the number of students that earn at least 12-plus or 30-plus hours of post-secondary credit, an associate’s degree, or an industry certification. (Ex. 20062A, Zamora Report, at 13.)
- FOF 92. Monica Martinez, the current TEA Commissioner for Standards and Programs, confirmed that the 83rd Legislature did not, however, alter the mission of Texas public schools, change the definition of college readiness, order the State Board of Education to remove the college-readiness standards from the curriculum, eliminate the expectation that students would graduate from high school college and career ready, or otherwise lessen the expectations of Texas public school students.<sup>27</sup> (See Ex. 4273, Martinez Dep., at 28-34, 52-54; RR63:138-40; see also RR54:125-27.)
- b. Between 2007 and 2013, the State introduced a substantially more challenging assessment regime.**
- FOF 93. As part of the move toward college readiness as the outcome standard for Texas public schools, the State is transitioning from the Texas Assessment of Knowledge and Skills (“TAKS”) assessment regime to the State of Texas Assessment of Academic Readiness (“STAAR”) regime. (RR27:33-34; RR28:12.)

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<sup>27</sup> Although Bill Hammond testified on the behalf of the Texas Association of Business that HB5 retreated from the rigor and standards previously in place, the Court does not find his testimony to be persuasive. He was not proffered as an expert, and his opinions are merely conclusory.

- FOF 94. Under the new STAAR system, students must pass a rigorous set of five End-of-Course (“EOC”) exams to graduate from high school – Algebra I, English Language Arts I, English Language Arts II, Biology, and United States History.<sup>28</sup> TEX. EDUC. CODE § 39.023(c). (RR54:138-40 at 132-35 (referencing Ex. 6618 at 22).) The STAAR tests for grades three through eight and the EOC tests are aligned with the college-readiness standards. (See RR27:33, 36-37; RR28:20-21; Ex. 38 at 10.)
- FOF 95. Plaintiff and State witnesses unanimously agree that the STAAR exams are significantly more challenging than the TAKS. (See RR28:21-22; RR27:35-36; Ex. 5624, Zyskowski Dep., at 36-37, 70, 106, 198-99, 248-49; Ex. 5620, Twing Dep., at 101-05, 125; Ex. 5630, Scott Dep., at 20, 39.)<sup>29</sup>

<sup>28</sup> Initially, high school students were going to be required to pass fifteen end-of-course exams to graduate, as reflected in much of the deposition and trial testimony from the initial trial. The original list of exams included five freshman-level tests (English I Reading and English I Writing, Algebra I, Biology and World Geography), five-sophomore level tests (English II Reading and English II Writing, Geometry, Chemistry, and World History), and five junior-level tests (English III Reading and English II Writing, Algebra II, Physics, and U.S. History). (Ex. 37 at 2.) At the time of the initial phase of trial, the first cohort of students that was subject to the EOC exams had recently finished their freshman year, and thus testimony focused on the results of those five freshman-level tests. (Ex. 6322, Moak Report, at 25-26.) In 2013, through HB5, the Legislature changed the EOC testing regime by combining the reading and writing tests into one English Language Arts exam and requiring students to pass English I, English II, Algebra I, Biology, and U.S. History to graduate. (See RR54:138-39; Ex. 5796, Zyskowski Dep. (Vol. II), at 24; Ex. 6618 at 22; Ex. 20062A, Zamora Report, at 7; see also Ex. 5796, Zyskowski Dep. (Vol. II), at 24; Ex. 11482 at 2 of PDF.) Because HB5 left the freshman-level tests in place (with the exception of World Geography, which was replaced with U.S. History), the Court finds the results of these exams and the testimony regarding them remains relevant and reliable. Furthermore, the results from the 2012-13 administration of the freshman-level tests and the sophomore-level English tests (which HB5 also requires) emphasize the continued relevance of the poor first year results. (See *infra* FOF 140 – FOF 145.) The one freshman-level EOC no longer required to be administered, World Geography, also yielded the lowest remediation rates among the districts. (Ex. 20062A, Zamora Report, at 7.) While the Court understands that the elimination of the previously-anticipated sophomore and junior-level EOCs will no longer increase the magnitude of the crisis that was discussed at the initial phase of trial, the fact that this crisis was based on freshman-level tests means that the changes also do not eliminate that crisis. The fact remains that, after the second year of STAAR testing, hundreds of thousands of students were off-track for graduation because of their performance on EOC exams required by HB5, and substantial performance gaps remain for economically disadvantaged and ELL students. (See Ex. 6618 at 23; RR54:140-42; Ex. 20062A, Zamora Report, at 11; Ex. 11366; Ex. 20313; see generally Ex. 5797; RR63:80-81.)

<sup>29</sup> Employees of the TEA and its testing contractor, Pearson, testified that the State also conducted studies empirically linking the TAKS met standard, college ready (HERC), and commended levels to performance on STAAR. (Ex. 5624, Zyskowski Dep., at 79-81, 166-67; Ex. 5621, Gaertner Dep., at 10-11; see also Ex. 49; Ex. 50; Ex. 88; Ex. 91; Ex. 10937.) The results of those studies indicate that the final standards on STAAR are much more rigorous than were the final TAKS standards. (See generally Ex. 10937.) In fact, in certain EOC subjects, the TAKS passing rate is linked to a lower score on the STAAR-EOC exam than would be expected from random guessing on the STAAR exam. (See *id.* at 4, 7, 9, 13, and 16; see also Ex. 44; Ex. 57; Ex. 5624, Zyskowski Dep., at 111, 114.) The Level II final standard on STAAR is higher than the college-ready level on TAKS in both English III and Algebra II. (Ex. 10937 at 4, 7, 9; see also Ex. 88; Ex. 91 Ex. 5620, Twing Dep., at 124-25; Ex. 5621, Gaertner Dep., at 32-34, 62.) The overwhelming evidence belies Mr. Hammond’s claim that the current STAAR regime is even *less* rigorous than TAKS. (See Ex. 8200, Hammond Dep., at 22-23.) The Court finds no credible basis for this opinion.

- FOF 96. The Legislature required the Commissioner to establish a passing/satisfactory standard (known as “Level II”) and to work with the Commissioner of Higher Education to establish an advanced/college-ready standard (“Level III”) on each STAAR EOC assessment.<sup>30</sup> TEX. EDUC. CODE §§ 39.0241(a) (passing standard), 39.0241(a-1) (college-ready standard). (See also RR27:97.) The Level II standard is being phased in over four years and in two steps (a lower Level II phase-in 1 standard followed by a higher Level II phase-in 2 standard). (Ex. 41 at 2; Ex. 5796, Zyskowski Dep. (Vol. II), at 10-12 (referencing Ex. 20321).) Thus, from 2011-12 through 2014-15, students are considered to have passed their required STAAR exams when they reach the applicable phase-in Level II standard, but beginning in 2015-16, students will be required to meet the higher, final Level II standard to pass their exams.
- FOF 97. Students meeting the Level II passing standard are deemed “on track” to graduate from high school, but the Legislature specifically noted that the satisfactory score requirement “does not require a student to demonstrate readiness to enroll in an institution of higher education.” TEX. EDUC. CODE § 39.025(a). (See also Ex. 10871 at 31; RR27:109-10; RR27:114-15.)
- FOF 98. The college-ready performance standards were set through a series of external validity studies designed to link performance on the STAAR EOC tests to external measures of performance on other state and national exams associated with college readiness (including the SAT, ACT, NAEP, Accuplacer, and others). (See Act of June 2, 2009, 81st Leg., R.S., Ch. 895, § 53, 2009 Tex. Gen. Laws 2357, 2375-2378 (HB3) (available at Ex. 6375); see also RR27:44-45.) These studies allowed the State to link a Level III score on Algebra II and English III to a 75% probability of a “C” or better in college courses in the same content area, compared to a 60% probability for a final Level II score. (RR27:96-99 (referencing Ex. 11241 at 27).)
- FOF 99. The Level III advanced standard on STAAR was set at a level that is “higher than the commended level of performance on the TAKS examination.” (See Ex. 5624, Zyskowski Dep., at 113; Ex. 41 at 2-3; Ex. 6322, Moak Report, at 25 and n.12; Ex. 10937.)
- FOF 100. The Legislature required the Commissioner to vertically align the college-ready standard established for Algebra II and English III with the exams for lower subjects and grades. See TEX. EDUC. CODE, § 39.0241(a-2) (See also Act of June 2, 2009, 81st Leg., R.S., Ch. 895, § 53, 2009 Tex. Gen. Laws 2357, 2375-2376 (HB3) (available at Ex. 6375); RR27:33-34; RR5:124-26.) TEA’s Director of Student Assessment, Dr. Gloria

<sup>30</sup> The Commissioner was also initially required to establish “a minimum score within a reasonable range of” the satisfactory performance level (“Level I”). (See Act of June 2, 2009, 81st Leg., R.S., ch. 895, § 54, 2009 Gen. Laws 2357, 2378.) Originally, high school students did not have to pass each individual EOC, but instead had to meet a certain cumulative score across all EOCs in a subject area. The Level I standard was not considered passing or satisfactory but was the minimum score that allowed a test score to count toward a student’s cumulative score in that content area. (RR27:57-58 (referencing Ex. 11241 at 27), 99; RR6:163-65; Ex. 41 at 8-9.) HB5 eliminated the cumulative score requirement and students are now required to earn a satisfactory score on each required EOC exam. TEX. EDUC. CODE § 39.025(a).

Zyskowski testified that vertical alignment means that “there is a link between the performance standards for one year that’s in grade three to the performance standard required of students in a subsequent year so that we can make statements about student performance in one year and subsequent performance and we have done that throughout the system so that ultimately we can make statements about students’ post-secondary readiness.” (RR27:33.)

- FOF 101. TEA officials – in depositions in this case and in numerous other settings – repeatedly and consistently associated the Level III standard with being on track for college readiness. (*See, e.g.*, Ex. 5624, Zyskowski Dep., at 47-50, 54, 103-06, 180-81; Ex. 37 at 8, 11; Ex. 38 at 8; Ex. 39 at 12 (Q47); Ex. 10871 at 31, 34, 36; RR30:114-15, 129-30; *see also* Ex. 1083, Lopez Report, at 7-8; RR27:169-71; RR30:114-15, 129-30.) However, at trial, Dr. Zyskowski testified that the TEA would be recommending that the final Level II standard be associated with the “college-readiness” measure for purposes of Section 39.024 of the Texas Education Code. (RR27:97-98.) This Court finds that:
- a. As discussed in FOF 96 above and as conceded by Dr. Zyskowski, the Legislature contemplated separate performance measures for “satisfactory” performance and “college-readiness” performance. (RR27:114-16.) Adopting Level II as the college-readiness measure erases any distinction between the college-ready standard and the basic standard that must be met even to graduate from high school. (RR27:113.) This contravenes the clear purpose of the statute, which directed TEA to develop one standard to measure college readiness, and another standard to serve as the basic passing standard. *See* TEX. EDUC. CODE, §§ 39.0233, 39.024, 39.025. (*See also* Act of June 2, 2009, 81st Leg., R.S., Ch. 895, § 50-55, 2009 Tex. Gen. Laws 2357, 2373 (HB3) (available at Ex. 6375).)
  - b. The Legislature defined “college readiness” as “the level of preparation a student must attain in English language arts and mathematics courses to enroll and succeed, *without remediation*, in an entry-level general education course for credit in that same content area for a baccalaureate degree or associate degree . . . .” *Id.* § 39.024(a) (emphasis added). The STAAR Level III advanced standard on the EOC tests reflects a 75% chance or greater of obtaining a “C” in the introductory level college course in that subject. (Ex. 5624, Zyskowski Dep., at 46, 70, 104-06, 111-14; RR27:99 (referencing Ex. 11241 at 27), 170.) In contrast, the Level II designation taken as a whole is associated with (1) a lower degree of confidence in a student’s college readiness, and (2) a significant (40%) possibility that some remediation in college may still be necessary. (RR27:110-12 (referencing Ex. 10871 at 31-32, 34, 36).)
  - c. TEA officials have testified that they have greater confidence in the STAAR Level III standard as a proper measure of college readiness than in the previous TAKS Higher Education Readiness Component (or “HERC”). (Ex. 5624, Zyskowski Dep., at 90.)

- d. For these reasons, the Court finds persuasive the conclusion of Dr. Kal Kallison, formerly the Deputy Assistant Commissioner at the Texas Higher Education Coordinating Board, that the Level III standard reflects a stronger measure of college readiness (*see* RR21:47) and therefore student performance at this standard should be considered when evaluating whether the State is achieving its own definition of a general diffusion of knowledge – to graduate college and career-ready graduates.

FOF 102. The increased rigor of the STAAR assessment system poses significant hurdles to high school graduation for many students. After the first two years of STAAR exams, hundreds of thousands of students had failed to meet even the lower, phase-in standard on at least one test. (*See* Ex. 6618 at 23; RR54:140-41; Ex. 11366; Ex. 20313; *see generally* Ex. 5797; RR63:80-81.) Performance on the STAAR retests was also worse than performance on TAKS retests. (RR6:183-84 (referencing Ex. 6349 at 30); *see also infra* FOF 138.) Waiting for school districts to make slow progress on improving the passing rates is not an option for the hundreds of thousands of ninth and tenth graders who are no longer on track to graduate because of their performance on EOC exams. (*See* Ex. 6618 at 23; RR54:140-41; *see generally* Ex. 5797; RR63:80:81.)

**c. The State has substantially increased requirements for graduation.**

FOF 103. The State's increasing requirements for high school graduation are linked to the Legislature's definition of general diffusion of knowledge. Students who fail to graduate from high school are, by definition, not prepared to enter post-secondary education, much less succeed without remediation. Neither are these students generally well prepared for the work force. Adults without a high school diploma are three times as likely to be unemployed as those who have earned a high school diploma. If employed, high school dropouts earn less than high-school graduates. (*See* Ex. 6330, Murdock Supp. Report, at 8-14; RR3:85-96 (referencing Ex. 3228 at 83-89); RR15:40-48; Ex. 4040, Belfield Report, at 3-5.)

FOF 104. For students entering high school between 2004-05 and 2013-14, the Legislature made the Recommended High School Program ("RHSP") the default high school program for all students. (RR28:129; Ex. 5624, Zyskowski Dep., at 41-42; RR6:152-53; RR5:127.) To graduate on the RHSP, students must complete twenty-six credits (compared to twenty-four credits prior to that time). (RR28:131, 171; RR6:151; Ex. 6349 at 5-6; Ex. 1083, Lopez Report, at 3.) This means that students must accumulate 6.5 credits every year for four years to graduate on time, assuming no need to make up courses that students did not pass. Credits must include four courses in each of the core areas of mathematics, science, social studies and language arts, as well as two years of the same foreign language. (RR6:151; Ex. 6322, Moak Report, at 18; Ex. 6349 at 5; RR28:128-29, 132.)

FOF 105. Since *WOC II*, the Legislature also established multiple barriers to prevent students from moving down to the Minimum Plan. (RR28:131; Ex. 6375 at Section 30.) Section

28.025 of the Education Code requires signatures from a parent/guardian, the student, *and* a counselor or administrator to authorize participation in the Minimum Plan. TEX. EDUC. CODE § 28.025. (RR28:131.) In addition, students must be sixteen years old, or have completed two credits in each of the four core subject areas, or have failed to be promoted to the tenth grade prior to moving down to the Minimum Plan. *See* TEX. EDUC. CODE § 28.025. (RR28:131; Ex. 6322, Moak Report, at 18.)

- FOF 106. For students entering high school in the 2014-15 school year or beyond, the Legislature, through HB5, made the Foundation Program (22 credits) plus an endorsement (4 credits) the default program for a total of 26 credits, similar to the prior default Recommended High School Program which required completion of 26 credits. TEX. EDUC. CODE § 28.025. (*See also* RR55:129-30; Ex. 4273, Martinez Dep. at 55-57; Ex. 6618 at 21; RR54:131-32; Ex. 4336, Cavazos Dep., 98:13-20; RR63:140-41.) As with the RHSP before it, the Legislature established barriers to prevent students from moving down to the Foundation Plan without an endorsement. A student must be a junior or a senior, must have written parental permission, and both the student and the student's parent be advised by the school counselor of the "specific benefits of graduating from high school with one or more endorsements." TEX. EDUC. CODE § 28.025(b). A student who graduates without an endorsement is not eligible for automatic admission into a Texas public university under the Top 10% rule. (Ex. 6618 at 21; RR54:126.) To be eligible for automatic admission to a four-year institution of higher education, students must earn a distinguished level of achievement, which requires a student to earn one or more endorsements, complete Algebra II, and complete two additional elective credits. (Ex. 6618 at 21; RR54:126; Ex. 20062A, Zamora Report, at 8, 10; RR63:141.)
- FOF 107. The Court finds that HB5's changes to the graduation requirements are consistent with, and do not diminish, the State's emphasis on graduating students who are post-secondary ready. (*See* Ex. 20062A, Zamora Report, at 8-9; Ex. 4336, Cavazos Dep., at 81.) School district officials testified that, in order to offer the array of endorsements contemplated by HB5 and provide students with multiple pathways to college or career readiness, school districts will need to alter which courses they offer, which they anticipate will require hiring new teachers who are certified to teach the new courses and/or provide staff development to help existing employees acquire additional certifications. (*See* Ex. 20062A, Zamora Report, at 8-9; RR55: 140-48; Ex. 6557, Sconzo Dep. (Vol. II), at 31-38; Ex. 6558, Frost Dep. (Vol. II), at 34-37; Ex. 3541, Pfeiffer Dep. (Vol. II), at 20-21, 22-24.)
- FOF 108. Based on the findings above and the undisputed testimony at trial, the Court concludes that – through the introduction of the STAAR / EOC regime, and in the standard-setting process associated with the new system – the State has undertaken an effort to revise the curriculum, to better align the assessment system with this curriculum, and to empirically link levels of performance on statewide assessments to a wide range of external measures of college readiness, and significantly raise standards. These statutory changes have tremendously raised expectations for Texas school districts. The witnesses universally

agreed, without contradiction, that the changes are appropriate and necessary to accomplish the general diffusion of knowledge.

FOF 109. In light of the above, the Court finds that expectations for students and schools have been substantially heightened and that performance against these heightened standards reveals a current crisis. While HB5 reduced the number of EOC exams that students must pass, it did not eliminate the dire situation presented by hundreds of thousands of the state's 2012-13 ninth and tenth graders being off track to graduate for failure to pass still-required EOC exams. It also did nothing to reduce the costs for school districts to provide all of their students with an opportunity to achieve the standards and graduate from high school college and career-ready. (RR54:152, 157-58; Ex. 6557, Sconzo Dep. (Vol. II), at 30-42 (referencing Ex. 20256).)

FOF 110. In determining whether the State has met its constitutional obligations, the Court does not focus merely on the consequences the State may choose to impose for failing to meet the standards it has now promulgated. Instead, the Court focuses on whether students are actually meeting the standards identified as reliable indicators of college and career readiness.

**d. The ISD Plaintiffs have rebutted any presumption that a “general diffusion of knowledge” is equivalent to accreditation requirements.**

FOF 111. In *WOC I*, the Texas Supreme Court noted that, “The public school system the Legislature has established requires that school districts provide both an accredited education and a general diffusion of knowledge. It may well be that the requirements are identical; indeed, as in *Edgewood IV*, we presume they are, giving deference to the Legislature’s choices; however, it is possible for them not to be – an accredited education may provide more than a general diffusion of knowledge, or vice versa – and because both are binding, a district may allege that taxation at a maximum rate in order to satisfy either is a state ad valorem tax.” *WOC I*, 107 S.W.3d at 581 (discussing *Edgewood Indep. Sch. Dist. v. Meno*, 917 S.W.2d 717, 755, n.10 (Tex. 1995)) (“*Edgewood IV*”).

FOF 112. In this case, as in *WOC II*, the Plaintiffs have rebutted any presumption that an accredited education is equivalent to a general diffusion of knowledge.

FOF 113. The state accountability system is closely related to accreditation. School district accreditation is based in significant part on whether districts have met certain standards under the State’s accountability system, including student achievement indicators. See TEX. EDUC. CODE § 39.052(b); 19 TEX. ADMIN. CODE § 97.1055.

FOF 114. The accountability system changed over the course of the trial, from the TAKS-based system in place through 2010-11 to the STAAR-based system, which took effect in 2012-

13.<sup>31</sup> The TAKS-based system was focused on whether each of five student groups had met the minimum criteria on the TAKS test, plus up to ten dropout and high school completion measures. (Ex. 20224.) If a district did not meet the minimum criteria for any one group on any one measure, it did not achieve an “Academically Acceptable” rating. (*Id.*)

FOF 115. The STAAR-based system was developed in response to House Bill 3 (“HB3”), which called for the accountability system to measure districts on closing performance gaps and post-secondary readiness. (*Id.*) Rather than requiring districts to meet minimum criteria on each individual measure, the new system has four performance indexes. (*Id.*) How the district performs on various measures for each index contributes to an overall “index score.” (*Id.*) Within each index, poor performance on one measure can be counter-balanced by higher performance on another. (Ex. 5785, Housson Dep. (Vol. II), at 24.)

FOF 116. In evaluating whether the accountability system measures the general diffusion of knowledge, it is also important to look at what the accountability system does *not* measure. Index 2, which purports to measure student progress or “growth” across various student groups, does not consider the progress of economically disadvantaged students as a disaggregated group. (Ex. 5785, Housson Dep. (Vol. II), at 158.) Index 3, which purports to measure whether districts are closing performance gaps, does not look at the performance of ELL students as a disaggregated group. (Ex. 5785, Housson Dep. (Vol. II), at 159.)

FOF 117. Whether looking at the TAKS-based system or the STAAR-based system, the accountability standards are set *not* to measure whether districts are achieving a general diffusion of knowledge, but rather to ensure that most districts and campuses fall on the “academically acceptable” or “met standards” side of the line. Shannon Housson, Director of TEA’s Division of Performance Reporting, confirmed that advisory committees that help TEA to establish the standards explicitly consider how many districts can achieve the standards when setting them. Mr. Housson testified, “That’s exactly what they’re discussing, how many schools would be impacted if the target was set at X versus Y, and that’s what they had based their recommendations on to the commissioner.” (Ex. 5785, Housson Dep. (Vol. II), at 48-50.)

FOF 118. Other aspects of the accountability system also confirm that it does not measure a general diffusion of knowledge. First, none of the indices used in the 2013 accountability system consider whether students have reached the Level II final standard that the State now equates with college and career readiness. (*Id.* at 118-19.)

FOF 119. Next, schools and districts must reach set targets on each of the applicable indices (*Id.* at 18), but the targets are set too low to measure a general diffusion of knowledge. For example, the student achievement index is set at 50, which means a school or district can be rated as having “met standard” if at least half its students, averaging across all grades

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<sup>31</sup> There was no state accountability system in place for student performance in 2011-12: the ratings for 2010-11 were merely carried over to the 2011-12 school year. (RR30:123-24.)

and all subjects, pass the State's assessments. (*Id.* at 40-41.) The target for the post-secondary readiness index is set at a level that allows a school or district to have up to 25 percent of its students not graduate or achieve the recommended or advanced diploma plans and still be rated as having "met standard." (*Id.* at 45.) In addition, targets are set based on how well students are performing under the lower phase-in standards— not on how well they need to perform to be considered on track for college and career readiness. (*See id.* at 42-43.)

FOF 120. Under the STAAR-based accountability system, a district can have what can only be described as incredibly poor performance results on the STAAR exam and still achieve "met standard" on the accountability system.<sup>32</sup> (*See Ex. 5793 at 22.*) By way of example, in 2012-13:

- Kermit ISD had fewer than 50% of its students meet the phase-in Level II standard on ten of the seventeen STAAR 3-8 exams and less than 25% of its students meet the final Level II standard on the STAAR exams was still rated "met standard." (Ex. 5785, Housson Dep. (Vol. II), at 138-39 (referencing Ex. 20247).)
- La Pryor ISD had passing rates below 30% on every fourth grade exam and was still rated "met standard." (Ex. 5785, Housson Dep. (Vol. II), at 142 (referencing Ex. 20248).)
- 80% of Edgewood's ninth and tenth graders failed to meet the Level II phase-in standard on at least one EOC exam in the 2013 Spring administration. (Ex. 6548.) District students also showed no improvement from the first administration to 2013 in Algebra, Biology, English I Reading and Writing (Ex. 4237 at 16), and Edgewood ISD was identified as "needs improvement" in 12 of 32 "safeguards." (Ex. 5785, Housson Dep. (Vol. II), at 48-50 (referencing Ex. 20247).) Yet Edgewood was still rated "met standard." (*See also infra* Part 1.C.7.d.i (FOF 1091, *et seq.*) (showing poor student performance across various metrics.)

FOF 121. Finally, the State requires much of schools and districts beyond the requirements that are measured by the accountability system. For example, IIB5 now requires schools and districts to rate themselves on student and community engagement, but the result of this

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<sup>32</sup> The State has a history of slowly phasing in standards, and thus allowing poor performance to constitute what is "acceptable," in order to ensure that most districts are accredited. For example, in 2004 under the TAKS-based accountability system, a district that had only 25% of its students pass the science exam, 35% of its students pass the mathematics exam, and 50% of its students pass social studies, writing, and reading/English language arts would have been ranked acceptable. (RR30:87 (referencing Ex. 11245 at 2).) These percentages were raised incrementally, thus ensuring that over the entire course of the TAKS-based accountability system the highest percentage of districts ever ranked "unacceptable" was 6.2% – and that number occurred in 2010-11 – the last year of the system. (RR30:87-88; Ex. 11245 at 10.)

process does not affect the State's accountability ratings. (Ex. 5785, Housson Dep. (Vol. II), at 71-72.)

FOF 122. For the reasons stated above, the Court finds that the accountability system does not measure, and accreditation is not equivalent to, a general diffusion of knowledge. The fact that a district is accredited does not answer the question of whether all students in that district have a meaningful opportunity to graduate college and career ready.

**4. The historic linkage between increased standards and increased state funding is broken, contributing to the unsuitability and arbitrariness of the system.**

FOF 123. In stark contrast with Texas's past approach to funding new reforms, the Legislature recently *reduced* school funding at the very time the substantial academic changes detailed above were introduced. Over the last three decades, major academic and operational reforms were ordinarily accompanied by school finance reforms that supplied new revenues to provide additional financial support for districts implementing those reforms. (Ex. 6322, Moak Report, at 40 and Figure 43.)

FOF 124. For example, in 1984, the year before large-scale graduation-related standardized testing began in Texas, the Legislature increased equalization aid. (Ex. 6349 at 33; RR6:187-88; Ex. 6322, Moak Report, at 37 and Figure 43.) Senate Bill 7 ("SB7") in 1993 both created the state accountability ratings system based on TAAS scores *and* provided substantial new money through the expansion of guaranteed yields. (Ex. 6349 at 34; RR6:188; Ex. 6322, Moak Report, at 38 and Figure 43.) In 1999, when passage of the TAAS became required for promotion in grades three, five, and eight, the Legislature also increased the basic allotment, the equalized wealth level, and the guaranteed yield, and created the SSI grant program. (Ex. 6349 at 36; RR6:189-90; Ex. 6322, Moak Report, at 39 and Figure 43.) In 2006, two years after the TAKS replaced the TAAS test (and after *WOC II*), the Legislature added revenues to the system once again. (Ex. 6349 at 37; RR6:191-92; Ex. 6322, Moak Report, at 40-41 and Figure 43; *see also supra* FOF 25 – FOF 27.)

FOF 125. The Legislature failed to provide additional financial support with the introduction of the STAAR regime. As described in Part I.B.2.e (FOF 52, *et seq.*) above, for the 2011-12 and 2012-13 school years, formula funding and interventional grant funding alike were dramatically reduced just as the new system took effect. While the 2013 Legislature partially reinstated the FSP cuts, it did not make any meaningful restoration of the grant funding, nor did it provide funding above and beyond the restoration of the cuts to assist districts with increased remediation costs or the costs of implementing HB5's graduation plan requirements. (*See supra* Part I.B.2.f (FOF 65, *et seq.*.) The Court finds that the decoupling of standards and funding is precisely the opposite of "structur[ing], operat[ing], and fund[ing]" the public school system "so that it can accomplish its purpose for all Texas children." *WOC II*, 176 S.W.3d at 753.

**5. Student performance measures show that the Texas educational system has fallen short of accomplishing a general diffusion of knowledge.**

**a. Texas is not meeting its objectives relating to college and career readiness.**

FOF 126. Statewide performance results using a variety of metrics reveal that the State is far from meeting its objectives relating to college and career readiness.

FOF 127. Dr. Kallison analyzed the results of various college-readiness measures. As set forth in more detail below, Dr. Kallison found that: (1) the STAAR exam, which is superior to TAKS as an indicator of college readiness, shows that an overwhelming number of students are not on track to attend college and succeed without remediation; (2) student performance on college-readiness measures other than the TAKS have been flat, and absolute performance on these measures is lower than on the TAKS-based indicators; and (3) overall, students showed some improvement in past years on TAKS-based measures of college readiness, but TAKS-based indicators are inferior measures of college readiness and the results are still unacceptably low. (RR21:45-46, 49-50 (referencing Ex. 5396 at 16); *see also infra* Parts I.B.5.a (FOF 126. *et seq.*.)

FOF 128. In short, an alarming percentage of Texas students graduate high school without the necessary knowledge and skills to perform well in college. (Ex. 1161, Kallison College-Readiness Report, at 15; RR21:49-51.) In addition, substantial gaps exist in college readiness between different racial/ethnic groups and students of different socioeconomic status. (Ex. 1161, Kallison College-Readiness Report, at 14; Ex. 6322, Moak Report, at 22.)

FOF 129. The consequences of having a large percentage of high school graduates who are not prepared for college are significant. The costs to remediate the tens of thousands of students who enter college every year unprepared for the coursework are substantial – for the state and the individual student. (Ex. 1161, Kallison College-Readiness Report, at 3; RR21:20-21, 36-40.) College graduation rates drop as students enter college unprepared, and workers without a college degree earn average salaries well below those with college degrees. (Ex. 1161, Kallison College-Readiness Report, at 3; RR21:20-21.)

**i. STAAR results show that a significant number of Texas students are not on track to graduate college and career ready.**

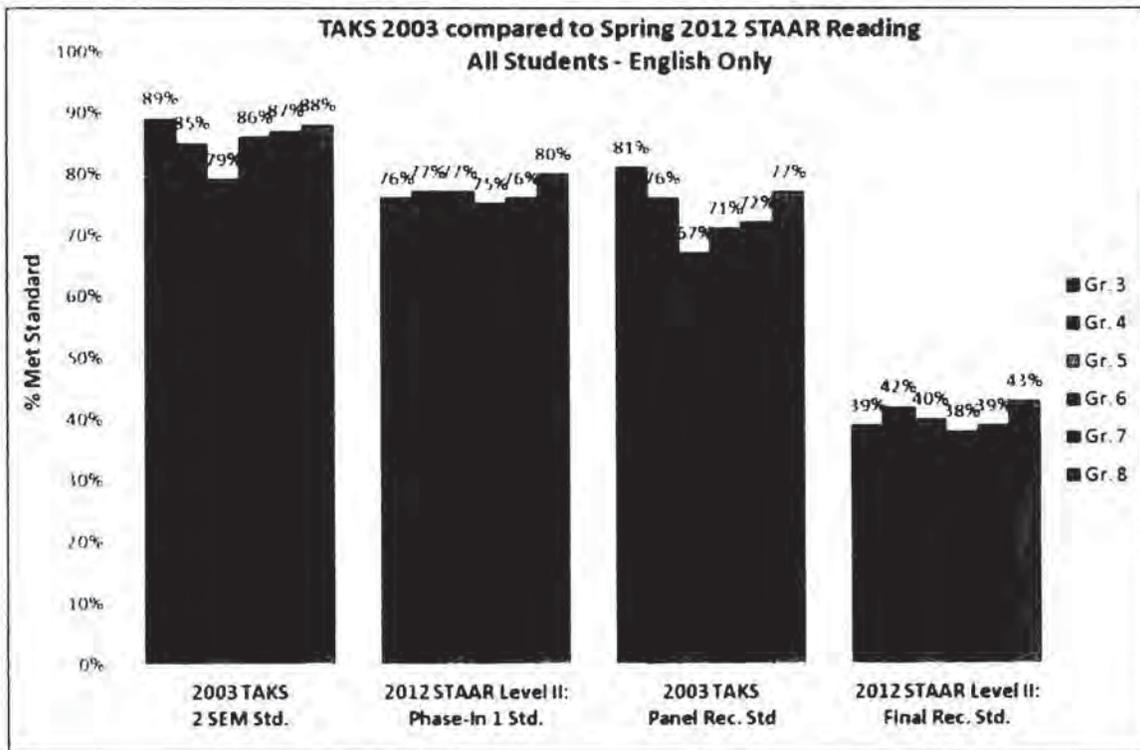
FOF 130. **2012 STAAR results.** The results of the initial round of STAAR tests were sobering. In 2012, Texas ninth graders took five STAAR / EOC assessments. (Ex. 6322, Moak Report, at 25-26.) The table below displays the number and percentage of students below various cut points on the Spring 2012 EOCs for the courses typically taken by ninth graders.

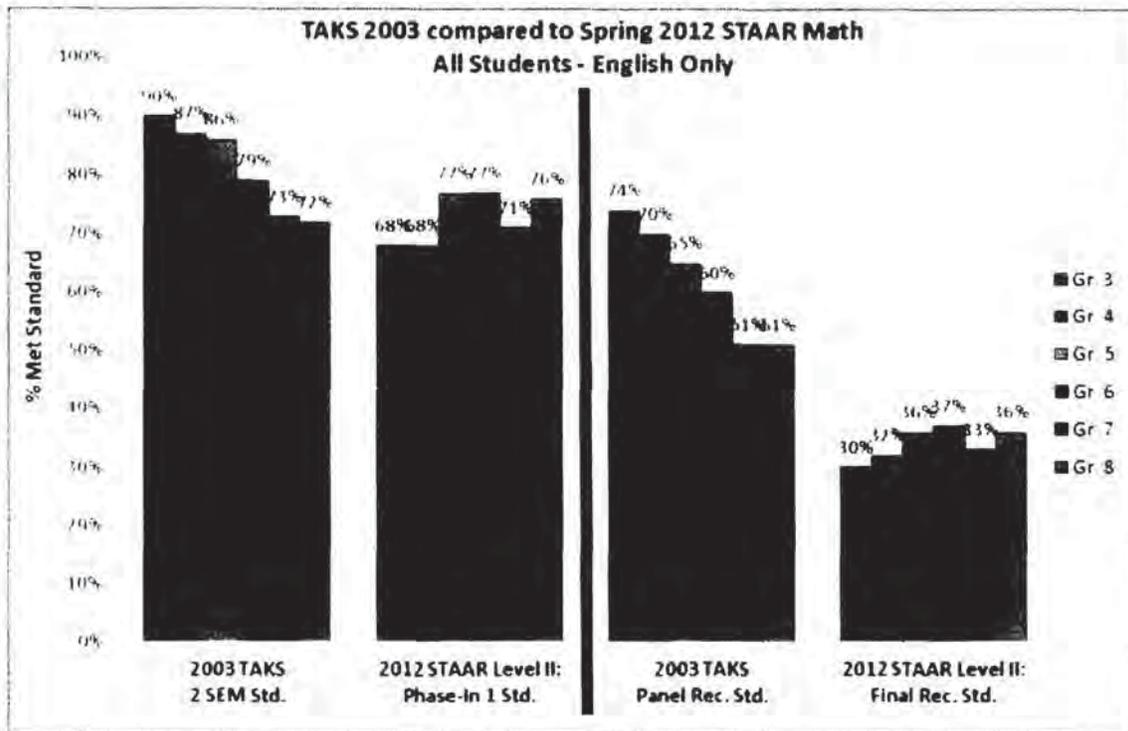
STAAR EOC Tests for Typical 9th Grade Courses	Number Tested	Below Passing Level II Standard (Below Graduation Standard)	Below Final Recommended Level II Standard	Below Level III
English I Reading	334,831	107,435 32%	181,814 54%	308,373 92%
English I Writing	334,951	152,270 45%	219,517 66%	324,483 97%
Algebra I	333,527	57,669 17%	203,688 61%	277,688 83%
Biology	319,022	41,406 13%	187,938 59%	290,137 91%
World Geography	320,925	62,270 19%	192,168 60%	277,745 87%
Failed at least one test (9 <sup>th</sup> grade only)	351,311	185,757 53%	284,544 81%	346,784 99%

(Ex. 6322, Moak Report, at 26-27; Ex. 6321, Moak Appendices, at App. 6, Sec. 2, pts. j-n, at pg. 46 of PDF.)

- FOF 131. As the table indicates, even at the initial passing standards, which were set much lower than the final standards that are expected to apply beginning in 2015-16, the following percentages of students scored *below* the passing standard in these respective subjects: 32% in reading, 45% in writing, 17% in Algebra I, 13% in Biology, and 19% in World Geography. (Ex. 6322, Moak Report, at 26.) After the initial administration of the exams, 53% of ninth-graders (representing 185,757 students) were off track to graduate from high school. (*Id.*)
- FOF 132. Looking at the Level II final standard, the picture was even worse. The table displays the percentage of students scoring below the passing standard at the final recommended performance levels, as of the Spring 2012 administration. (Ex. 6322, Moak Report, at 27.) Under these more challenging standards, more than half of students tested would have failed their first examination in each of the traditional ninth-grade subjects. (*Id.*) Approximately four-fifths of ninth graders failed to reach the Level II final standard on at least one exam. This reveals a high risk that even larger numbers of high school students will soon be off track for graduation and will require substantial levels of remediation through intensive in-classroom instruction, summer school, extended day programs, or other means. (*Id.*)
- FOF 133. Finally, the percentages of students who scored below Level III, which is reflected in the last column of the table, suggest that relatively small percentages of students are on track for college readiness. (Ex. 1161, Kallison College-Readiness Report, at 12; *see supra* FOF 101.)

- FOF 134. Passing percentages on the Spring 2012 STAAR EOC exams were lower than the TEA had anticipated. For example, the percentage of students who reached the Level II phase-in standard was seven percentage points lower on English I Reading than the TEA had anticipated. (Ex. 5624, Zyskowski Dep., at 94; Ex. 42, 44.) At the Level II final standard, the percentage of students who passed the exam was eight percentage points lower on English I Reading than the TEA had estimated. (Ex. 5624, Zyskowski Dep., at 94-95; Ex. 42, 44.)
- FOF 135. The performance of economically disadvantaged students and ELL students on the 2012 STAAR EOCs was particularly disconcerting, with average scores lagging far behind those of their peers. (See *infra* Parts I.C.2.a.iii(a) (FOF 299, *et seq.*) and I.C.2.b.iii(b) (FOF 360, *et seq.*.)
- FOF 136. Passing percentages on the Spring 2012 STAAR grades 3-8 exams also give cause for concern. While the passing rates at Level II phase-in standard for the STAAR 3-8 exams were higher than for the EOC exams, the rates were lower than the corresponding passing rates at the phase-in standard from the first year of TAKS. (Ex. 6515; Ex. 6513; Ex. 6514.) Even more troubling, the percentage of students meeting the Level II final standard was approximately half the percentage of students who met the final recommended standard on the first administration of TAKS. (Ex. 6515; Ex. 6513; Ex. 6514.)





(Ex. 6515 at 1-2.) (Sources: TEA STAAR Gr. 3-8 Statewide Summary Reports, Jan. 2013 (available at Ex. 6513); TEA TAKS Met Std. Spring 2003 to Spring 2005 (available at Ex. 6514).)

- FOF 137. In the Summer of 2012, ninth-grade students who did not meet the Level II standard on any of the Spring 2012 STAAR EOC exams had the opportunity to retest. (Ex. 6324, Moak Supp. Report One, at 1.) The Summer 2012 retest passing rates (using the Level II phase-in standard) ranged from 23% for English I Writing to 48% for Biology. (*Id.*: RR6:179-80 (referencing Ex. 6349 at 29).) The passing rate was 37% for English I Reading, 31% for Algebra I, and 27% for World Geography. (Ex. 6324, Moak Supp. Report One, at 1.) After the Summer 2012 retest, at least 132,874 of the state's 2011-12 ninth graders remained off track to graduate and in need of accelerated instruction based on the English I writing examination. (*Id.*) The ISD Plaintiffs' expert, Lynn Moak, testified that he is not aware of any other time when this many students have been off track for graduation as a result of an exam. (RR6:182-83 (referencing Ex. 6349 at 29).)
- FOF 138. When the results of the Spring and Summer administrations of the 2012 STAAR EOC tests are combined, only 53% of freshmen met the Level II phase-in passing standard for all tests taken. (Ex. 6324, Moak Supp. Report One, at 1.) By comparison, 75% of juniors met the passing standard for all tests taken on the TAKS exam in the first year that it was required for graduation. (Ex. 6324, Moak Supp. Report One, at 2.)

- FOF 139. In December 2012, students who had still not met the Level II phase-in standard had another opportunity to retake the EOC exams. (See Ex. 6518; Ex. 6519.) The December retest passing rates ranged from 20% for World Geography to 37% for English I Writing. (Ex. 6519 at 2.) After three administrations, 35% of the state's 2011-12 ninth graders, and 47% of the economically disadvantaged students from that class, still had not passed all of their ninth-grade level EOC exams. (Ex. 6519 at 1.) This means that, from that class, 122,680 students still remain off track to graduate and need remediation on collectively 262,343 exams. (Ex. 6519 at 1-2.)
- FOF 140. **Spring 2013 STAAR results.** In 2013, the second year under the STAAR program, student performance levels did not increase over 2012, and the substantial gaps between economically advantaged and disadvantaged students continued. (See RR54:140-41 (referencing Ex. 6618 at 22).) This is true both of the EOC tests administered in grades 9 and 10, and the STAAR exams in grades 3-8. When tests now required for graduation are examined between the two years, the estimated failure rates for all tests taken are 53 percent for 2012 (first time grade 9 students on five required tests) and 51 percent for 2013 (new testers only on grade 9 and grade 10 tests required for graduation).<sup>44</sup> (Ex. 6322, Moak Report, at 26; RR54:141-42 (referencing Ex. 6618 at 23).)
- FOF 141. The following chart displays the number and percentage of students in Spring 2013 falling below the Level II phase-in standard (the passing standard in 2013) and the Level II final recommended standard on the EOC assessments required of typical ninth and tenth graders. As the data indicates, over one-third (35 percent) of ninth grade students scored below the passing standard in reading, over one-half (52 percent) in writing, 22 percent in Algebra I, and 15 percent in Biology. In tenth grade, 22 percent of the students failed English II Reading and 48 percent of the students failed English II Writing. In this analysis, the World History course, generally given in tenth grade, is used as a proxy for the required examination for U.S. History, generally given in the eleventh grade. (See RR54:143-44.) Thirty percent of the students failed the World History examination. Overall, 51 percent of the students taking the normal course sequence in ninth and tenth grade in Spring 2013 failed one or more tests now required for graduation under HB5. Using this data, 338,038 students were estimated to be at risk of not graduating as of Spring 2013. At the recommended level, which is the full implementation level of the test program, the risk factors increase for future classes. (RR54:145-46.) At this level, an estimated 511,704 students (76 percent) failed to achieve the recommended passing standard on one or more tests, which is the standard considered by the TEA to be the college-ready standard. (See RR54:142.)

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<sup>44</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

Figure A-2. The Number and Percentage of All Students Reaching Various Standards on STAAR EOC Tests (Required for Graduation) at Initial and Final Recommended Passing Standards, Spring 2013

STAAR EOC Tests for Graduation	Number Tested	Below Passing Level II Phase-in I Standard	Below Passing Level II Final Recommended Standard
English I Reading*	383,558	134,986 (35%)	216,208 (56%)
English I Writing*	404,412	211,422 (52%)	284,698 (70%)
Algebra I*	364,613	78,535 (22%)	233,143 (64%)
Biology*	358,797	52,841 (15%)	191,839 (53%)
English II - Reading*	314,314	69,489 (22%)	115,165 (37%)
English II - Writing*	315,963	150,338 (48%)	222,531 (70%)
World History (Proxy Results for U.S. History)**	308,445	93,388 (30%)	200,593 (65%)
Failed at least one test Required for Graduation	669,246	338,038 (51%)	511,704 (76%)

\*Source: Texas Education Agency (TEA) Statewide Spring 2013 STAAR Results, July 2013. Texas Education Agency includes all grades tested for the individual subject matter tests, includes "above grade-level testers." Does not include students testing with STAAR-L, Modified or Alternate versions.

\*\*Source: MCA Analysis of the TEA confidential 2013 STAAR EOC student-level data files obtained via Litigation Discovery. Data shown in the last row of the table represent first time 9<sup>th</sup> Gr and 10<sup>th</sup> Gr Students only for "failed at least one test" within districts. Does not include "above grade-level testers." Does not include students testing with STAAR-L, Modified or Alternate versions.

\*\*World History is used as a proxy for U.S. History; first year of full implementation for U.S. History is Spring 2014.

(Ex. 6618 at 23.)

FOF 142. Very low percentages of all test takers reached the Level III standard on EOC exams, as shown below, which again reflects severe college-readiness deficits.

STAAR EOC Tests for Graduation	Number Tested	Below Level III
English I Reading	383,558	342,948 (89%)
English I Writing	404,412	395,530 (98%)
Algebra I	364,613	306,311 (84%)
Biology	358,797	314,333 (88%)
World Geography	366,114	311,506 (85%)

(Ex. 5707 - Ex. 5711.)

FOF 143. The pattern observed for the graduation courses is reinforced by the results for grades 3-8, as depicted in the chart below. Approximately 40 percent of the students failed the relatively low standard set for 2013. Over 1.7 million students, or almost 80%, failed to reach the higher final recommended standard in Spring 2013.

Figure A-3. Number and Percentage of All Students Reaching Standards for Grades 3-8 STAAR Tests at Initial and Recommended Passing Standards, Spring 2013.

STAAR Grade Level Tests	Number of Students Tested	Below Passing Level II Phase-in I Standard on All Tests Taken	Below Passing Level II Final Recommended Standard on All Tests Taken
Grade 3	369,630	136,311 (37%)	281,822 (76%)
Grade 4	364,898	169,203 (46%)	295,771 (81%)
Grade 5	363,246	146,297 (40%)	285,109 (78%)
Grade 6	364,854	136,230 (37%)	262,814 (72%)
Grade 7	368,161	152,913 (42%)	294,102 (80%)
Grade 8	386,197	162,496 (42%)	297,789 (77%)
Total Grades 3-8	2,216,986	903,450 (41%)	1,717,407 (77%)

Does not include "above grade-level testers". Does not include students testing with STAAR-L, Modified or Alternate versions.  
 Source: MCA Analysis of the TEA confidential 2013 STAAR Gr 3 - 8 First Administration Only student-level data files obtained via Litigation Discovery.

(Ex. 6618 at 24.)

FOF 144. In summary, the Spring 2013 administration of EOC tests combined with the grades 3-8 tests indicate that over 1.2 million students failed at the phase-in 1 standard and 2.2 million students did not reach the recommended standard for full implementation of the program. (Ex. 6618 at 23-24.)

FOF 145. As shown below, the second year of administration of the STAAR exams did not produce substantial progress either in terms of overall passing rates or in terms of closing economic-based gaps.

Figure A-8. Comparison of 2012 and 2013 STAAR Results from Spring First Administration Only, Percent Passing by Economically Disadvantaged Status

STAAR Tests – Combined English and Spanish	% Passing at Level II Phase-In 1 Standard		
	Spring 2012	Spring 2013	Difference
First Administration Only – Spring 2012 and Spring 2013			
Grades 3 – 8 Reading Econ. Disadvantaged*	67%	66%	-1
Grades 3 – 8 Reading Non-Econ. Disadvantaged*	88%	88%	0
Grades 3 – 8 Mathematics Econ. Disadvantaged*	63%	62%	-1
Grades 3 – 8 Mathematics Non-Econ. Disadvantaged*	83%	83%	0
Grades 4 and 7 Writing Econ. Disadvantaged*	63%	61%	-2
Grades 4 and 7 Writing Non-Econ. Disadvantaged*	84%	83%	-1
Grades 5 and 8 Science Econ. Disadvantaged*	62%	65%	+3
Grades 5 and 8 Science Non-Econ. Disadvantaged*	85%	86%	+1
Grade 8 Social Studies Econ. Disadvantaged*	48%	52%	+4
Grade 8 Social Studies Non-Econ. Disadvantaged*	75%	78%	+3
Algebra I Econ. Disadvantaged*	72%	71%	-1
Algebra I Non-Econ. Disadvantaged*	85%	84%	-1
English I Reading Econ. Disadvantaged*	56%	59%	+3
English I Reading Non-Econ. Disadvantaged*	81%	83%	+2
English I Writing Econ. Disadvantaged*	41%	41%	0
English I Writing Non-Econ. Disadvantaged*	70%	70%	0
Biology Econ. Disadvantaged*	81%	83%	+2
Biology Non-Econ. Disadvantaged*	93%	94%	+1
World Geography Econ. Disadvantaged*	72%	72%	0
World Geography Non-Econ. Disadvantaged*	90%	90%	0

\*Source: Texas Education Agency – Pearson Texas Assessment Management System, First Administration Only, Statewide Spring 2013 STAAR Results, August 2013. Does not include “above grade-level testers”. Does not include students testing with STAAR-L, Modified or Alternate versions.

†First time 9<sup>th</sup> grade students only. MCA analysis of the TEA confidential student-level 2012 and 2013 data files via Litigation Discovery. Does not include “above grade-level testers”. Does not include students testing with STAAR-L, Modified or Alternate versions.

(Ex. 6618 at 26.)

- FOF 146. **2013 STAAR Retests.** After the Summer and December 2013 retests, significant numbers of students remained off track for graduation, as the State’s own analyses confirm. The State prepared two separate analyses – a “cohort analysis” that is current through the Summer 2013 administration and a “class analysis” that is current through the December 2013 administration. (Ex. 5795, David Clark Dep., at 53-54; see Ex. 20312.)
- FOF 147. The State’s “cohort analysis” isolates students who took an end-of-course exam at a particular time and follows that same group of students through Summer 2013. The State’s cohort analysis presents cumulative test results for a “Class of 2015 Cohort” and a “Class of 2016 Cohort.” The Class of 2015 Cohort includes students who took at least one end-of-course exam as a ninth grader in Spring 2012. (Ex. 5795, David Clark Dep., at 35.) The “Class of 2016 Cohort” includes students who took their first end-of-course

exam as a ninth grader in Spring 2013, as well as accelerated students who took Algebra I as eighth graders in 2012. (*Id.* at 42-43.)

FOF 148. In contrast to the cohort analysis, which follows a group of students forward in time, the State’s “class analysis” looks at students who took end-of-course exams in 2013 and then looks backward in time at their scores on prior test administrations. (*Id.* at 70-71.) The “Class of 2015” that was used in this analysis includes all students who took at least one end-of-course exam in 2013 and who had “scorable” exams in Biology, English I Reading, English I Writing, English II Reading, and English II Writing. (Ex. 20312 at 1.) The “Class of 2016” includes all students who took an end-of-course exam in 2013 and who had “scorable” exams in Algebra I, Biology, English I Reading, and English I Writing. (*Id.* at 2.)

FOF 149. The table below reflects the numbers and percentages of students who failed to pass all exams taken as of the Summer 2013 administration at the Level II phase-in standard, according to the State’s cohort analysis. Roughly 139,000 students in the Class of 2015 Cohort still had not passed all exams taken after the Summer 2013 administration, despite five testing opportunities. (*See* Ex. 5796, Zyskowski Dep. (Vol. II), at 9.) Approximately 157,000 students in the Class of 2016 Cohort still had not passed all tests taken after Summer 2013, even after two testing opportunities. (*See id.*)

	Number of students having failed to pass all exams taken	Percent of students having failed to pass all exams taken
Class of 2015 Cohort	138,948	42.3
Class of 2016 Cohort	157,338	44.8

(Ex. 5797 at 4; Ex. 11366 at 18, 20, 21, 23; Ex. 5795, David Clark Dep., at 49-50, 55-57; calculated as explained in Ex. 5795, David Clark Dep., at 49-52.)

FOF 150. The State also determined the number of students who would not need to retake the English I Reading or Writing and/or the English II Reading or Writing exams by virtue of the Commissioner’s “transition rule.” Under this rule, a student is not required to retake a separate reading or writing exam if that student (1) achieved satisfactory performance on either the reading or writing exam for the course, (2) met at least the minimum score on the other end-of-course assessment for the course, and (3) achieved an overall scale score of 3750 or higher on reading and writing for the course. (Ex. 5795, David Clark Dep., at 78-79 (referencing Ex. 20313 at 3 of PDF).)

FOF 151. The transition rule affected tens of thousands of students. The following table shows the numbers and percentages of students in the State's cohorts who still had not passed all exams taken after Summer 2013, after the transition rule was applied.

	Number of students having failed to pass all exams taken (with transition rule)	Percent of students having failed to pass all exams taken (with transition rule)	Number not required to retest based on transition rule
Class of 2015 Cohort	116,006	35.4	22,667
Class of 2016 Cohort	142,714	40.7	14,210

(Ex. 5797 at 9; Ex. 11366 at 25, 27, 28, 30; calculated as explained in Ex. 5795, David Clark Dep., at 60-61.)

FOF 152. The State's December 2013 class analysis also shows significant numbers of students who have failed to pass all tests taken at the Level II phase-in standard before application of the Commissioner's transition rule, as reflected in the table below.

	Number of students having failed to pass all exams taken	Percent of students having failed to pass all exams taken
Class of 2015	107,090	34.6
Class of 2016	128,865	39.3

(Ex. 5797 at 11; Ex. 20312 at 4, 6, 7, 9; calculated as explained in Ex. 5795, David Clark Dep., at 92-93.)

FOF 153. Students in the Class of 2015 and Class of 2016 have now had, respectively, six and three testing opportunities to pass their end-of-course exams. (See Ex. 5796, Zyskowski Dep. (Vol. II), at 9.) Even after multiple testing opportunities and after application of the transition rule, nearly 183,000 students in both classes combined still have not passed all exams taken at the Level II phase-in standard, according to the State's "class analysis" reflected below. This is true only *after* more than 50,000 students in both classes combined were exempt, by virtue of the transition rule, from retaking a test they previously failed.

	Number of students having failed to pass all exams taken (with transition rule)	Percent of students having failed to pass all exams taken (with transition rule)	Number not required to retest based on transition rule
Class of 2015	75,322	24.4	31,768
Class of 2016	107,610	32.8	21,255

(Ex. 5797 at 12; Ex. 20312 at 4, 6, 7, 9; calculated as explained in Ex. 5795, David Clark Dep., at 93-94.)

- FOF 154. The Court makes several findings about the State's cohort analysis (which is current through Summer 2013 and is reflected in FOF 149 and FOF 151 above) and its class analysis (which is current through December 2013 and is reflected in FOF 152 and FOF 153 above). The class analysis presents a significant limitation compared to the cohort analysis. Because of the way the classes are defined, the classes do not include students who dropped out, students who failed to advance to English II, or students who moved to the STAAR modified exam (which is the exam for special education students). (Ex. 5795, David Clark Dep., at 87-89.) This limitation does not exist in the cohort analysis, which starts with a group of students and follows those same students forward in time. Lynn Moak was the only expert in this case to analyze the cumulative passing rates for a group of students across multiple administrations of STAAR, and he applied a cohort methodology that followed a group of students forward in time. (See, e.g., Ex. 6519 at pg. 1 of PDF; RR7:95, 170.) The State did not update its cohort analysis to reflect December 2013 data, but instead prepared a class analysis that was created specifically for this litigation and in connection with a press release to the public.<sup>34</sup> (Ex. 5795, David Clark Dep., at 24-25, 70, 72-73.) For these reasons, the Court finds that the cohort analysis presents a more credible and complete picture of student performance than the class analysis.
- FOF 155. Regardless of which analysis is examined, however, the State's data confirms that, even after multiple testing opportunities, hundreds of thousands of students still have not passed all exams taken. Districts now face the enormous burden to provide accelerated instruction to hundreds of thousands of students. (See Ex. 5796, Zyskowski Dep., at 9.)
- FOF 156. The Court also finds the following regarding the State's analyses and the expectation that districts will provide a meaningful opportunity for all students to graduate college ready.
- a. First, both the cohort and class analyses examine the number of students who have failed to pass all tests *taken*, not all tests required for graduation. (Ex. 5795.

<sup>34</sup> The State failed to provide student-level data from the Summer and December 2013 STAAR exams to the other parties in this litigation until January 27, 2014, despite the parties' efforts to obtain this information through discovery. (See Ex. 20311; RR63:84.) Thus, the only cumulative analyses of data from these administrations are the analyses prepared by the State.

David Clark Dep., at 52-53, 55, 96.) Students typically take English II during their sophomore year and U.S. History during their junior year. (See Ex. 5796, Zyskowski Dep. (Vol. II), at 10.) As a result, the overwhelming majority of students in the Class of 2015 and Class of 2015 Cohort still need to take and pass U.S. History (about 300,000 students in the Class of 2015 and 322,000 students in the Class of 2015 Cohort). (Ex. 5795, David Clark Dep., at 40-42, 76.) Similarly, the overwhelming majority of students in the Class of 2016 and Class of 2016 Cohort still need to take and pass U.S. History and English II (about 322,000 students in the Class of 2016 and 345,000 students in the Class of 2016 Cohort). (*Id.* at 44-45, 95.) Because students generally take these exams later in their high school career, they have fewer opportunities to pass the exams before their scheduled graduation date. (*Id.* at 41.)

- b. Next, the State's data reflects only performance at the lower phase-in standard. (*Id.* at 34, 93.) It does not reflect the number of students who have passed all exams taken at the Level II final standard that TEA now equates with college readiness (Ex. 5785, Housson Dep. (Vol. II), at 115-16 (referencing Ex. 20239 at 22)), or at the Level III standard that TEA previously and repeatedly associated with college readiness. (See *supra* FOF 101.) Approximately 98% of students who take an end-of-course exam during the Summer and December administrations are re-testers, or in other words, students who were unable to achieve the passing standard the first time they took the test. (Ex. 5795, David Clark Dep., at 84.) Data from the Summer and December administrations shows that very few students are able to achieve the Level II final or Level III standards, even if those students are able to meet passing standards. For example, while 45% of students achieved the passing standard in Biology during Summer 2013, only 2% of students reached the Level II final standard, and 0% reached the Level III standard. (Ex. 20242 at 1-2 of PDF.) On Algebra I, 27% of students reached the passing standard in Summer 2013, but only 1 percent reached the Level II final standard, and 0% reached Level III. (Ex. 20241 at 1-2 of PDF.) Similar trends are observed in the December 2013 test results. (See Ex. 20315 – Ex. 20319.) This data demonstrates that even if retesters are able to meet passing standards, they are largely unable to meet the higher standards associated with college readiness.
- c. Finally, even though tens of thousands of students no longer have to retake one or more exams required for graduation by virtue of the transition rule, it does not change the fact that these students were unable to meet even the lower phase-in standard on their reading or writing exams. (Ex. 5795, David Clark Dep., at 61-62.) It follows that these students also could not meet the higher standards that are indicative of college readiness. There is no evidence that the transition rule was put in place because the initial passing standards were set too high. In fact, the TEA has emphasized that the English exams now required under IIB5 will be equivalent to the prior English exams both in rigor and level of performance required for student success. (Ex. 5796, Zyskowski Dep. (Vol. II), at 24; Ex.

11482 at 2 of PDF.) The fact that students do not have to retake these exams does not mean they are now adequately prepared in these subjects.

FOF 157. In conclusion, although additional students pass the end-of-course assessments during each administration of the exam, large numbers of students still have not passed all the exams they have taken after numerous attempts. Even more students are nowhere near reaching college-readiness standards on these exams. As a result, districts must provide accelerated instruction to hundreds of thousands of students who have not met passing standards, and they must help those students who are not currently on track to being college ready to significantly improve their performance.

FOF 158. **STAAR beyond 2013.** The challenge only increases moving forward. Performance standards will increase over time according to the present schedule adopted by the Commissioner of Education. These higher levels of required performance will provide greater challenges for the public schools. The chart below displays the phase-in standards for the required performance levels on the STAAR EOC test program. Passing standards on the Algebra I examination, for example, will increase from 37 percent of items answered correctly in 2011-12 and 2012-13, to about 63 percent correct in 2015-16 and beyond.

**Percentage of Total Points/Items Needed to Reach Various Performance Standards on STAAR End-of-Course Exams Required for Graduation**

<b>Subject (paper version)</b>	<b>2011-12 and 2012-13 Level II Phase-In I Standard</b>	<b>2015-16 and beyond Level II Final Recommended</b>
English I Reading	54%	66%
English I Writing	63%	71%
Algebra I	37%	63%
Biology	37%	61%
English II Reading	54%	63%
English II Writing	68%	76%
World History (Proxy)	46%	62%
U.S. History	41%	65%

Source: Texas Education Agency Spring 2013 Raw Score Conversion Tables. Information subject to change for future administrations based on post-equating of live data following each administration.

(Ex. 6619.)

FOF 159. In the case of the grade 3-8 standards, significant increases are also scheduled to take place. As can be seen below, the initial passing rates were set in the 50 percent area, while the final passing rates are scheduled to increase to 70-75 percent correct.

**Average Percentage of Total Points/Items Needed to Reach Various Performance Standards on STAAR Grades 3-8 Tests**

<b>STAAR Grade Level Tests</b>	<b>2011-12 and 2012-13 Level II Phase-In I Standard</b>	<b>2015-16 and beyond Level II Final Recommended</b>
Grades 3-8 Reading	53%	75%
Grades 3-8 Mathematics	50%	74%
Grades 4 and 7 Writing	55%	71%
Grades 5 and 8 Science	55%	76%
Grade 8 Social Studies	50%	73%

Source: Texas Education Agency Spring 2013 Raw Score Conversion Tables. Information subject to change for future administrations based on post-equating of live data following each administration.

(Ex. 6619.)

- ii. **Significant numbers of Texas students are not meeting the State's ACT and SAT benchmarks for college readiness.**

FOF 160. Texas has set its own benchmark scores on the ACT and SAT exams to determine college and career readiness. Less than 27% of the graduating class of 2010 that took either the ACT or SAT met the state's benchmarks for readiness on the composite ACT or combined reading and mathematics for SAT. (Ex. 1161, Kallison College-Readiness Report, at 13; RR21:29-31 (referencing Ex. 5396 at 11).) This percentage dropped to less than 26% for the graduating class of 2011. (Ex. 11300 at 10.) Less than 17% of all students in the class of 2010 both (1) took the ACT or SAT and (2) met the state's benchmarks on those exams. (RR21:31 (referencing Ex. 5396 at 11).) This percentage rose to just over 17% for the class of 2011. (Ex. 11300 at 10.) Only 18% of the graduating classes of 2012 and 2013 achieved the state's college and career-readiness benchmarks on the SAT exams. (Ex. 11415 at 6-7.) ACT and SAT scores of Texas high school students indicate that many of the state's graduates are not academically prepared for college. (Ex. 1161, Kallison College-Readiness Report, at 13.)

FOF 161. The ACT exam uses its own college-readiness benchmarks. (Ex. 6322, Moak Report, at 9.) Using a broad-based sample of first-year students over a wide range of higher education institutions, ACT links student performance in college courses to their high school ACT scores. (Ex. 1161, Kallison College-Readiness Report, at 10.) Using this methodology, ACT determines a benchmark score that represents the minimum score needed on an ACT subject-area test to indicate a 50% chance of obtaining a B or higher, or about a 75% chance of obtaining a C or higher in the corresponding credit-bearing college course. (Ex. 6322, Moak Report, at 9; Ex. 1161, Kallison College-Readiness Report, at 10; RR21:40-41.) Data on the percent of students meeting the college-readiness benchmarks in all four subjects show that Texas was below the national average in all years except 2010, when Texas had the same percentage as the national average. (RR21:40-41 (referencing Ex. 5396 at 13).) Only 24% of Texas ACT test

takers met the college-readiness benchmarks in all four subject areas in 2011. (Ex. 1161, Kallison College-Readiness Report, at 10, 13.)

FOF 162. Dr. Linda Roska, Director of the Division of Research and Analysis for the TEA, testified that Texas's average scores across all public and non-public school students taking the SAT continue to decline. (RR35:124-25.) Texas students averaged a combined score of 999 on the math and critical reading portions of the exam in 2007. (RR35:124-25 (referencing Ex. 11300 at 8).) That average dropped to 973 in 2012 and then increased only marginally to 976 in 2013. (RR35:124-25 (referencing Ex. 11300 at 8); Ex. 11368 at 6 of PDF.) Texas students averaged 482 on the writing portion of the SAT in 2007 but averaged only 461 in 2012 and 2013. (RR35:124-25 (referencing Ex. 11300 at 8); Ex. 11368 at 6 of PDF.)

FOF 163. The performance gap between Texas students and students nationwide has grown during this same time period. In 2007, Texas students were averaging ten points less on critical reading, eight points less on math, and twelve points less on writing than the national average. (RR35:198-200 (referencing Ex. 11300 at 8).) These gaps grew to twenty-two points on critical reading, fifteen points on math, and twenty-seven points on writing in 2012. (RR35:198-200 (referencing Ex. 11300 at 8).) Dr. Roska did not include the average scores for just Texas public school students in her direct examination presentation, which are even more disconcerting. Texas public school students averaged a combined score of only 966 on critical reading and math in 2012 – thirty points less than the national average for public school students that same year. (RR35:196-97 (referencing Ex. 5687 at 41).) Texas public school students averaged 456 on the writing portion of the SAT in 2012 – twenty-five points less than the national average. (Ex. 5687 at 41.) Similar gaps existed in 2013, as Texas students continued to lag behind the national average. (See Ex. 11368 at 6 of PDF.)

FOF 164. From 2006 to 2012, Texas graduates' combined scores on the reading and mathematics sections of the SAT and ACT have remained flat at best and in some instances have declined. (RR21:17, 34; Ex. 5396 at 11; Ex. 11300 at 8-9.) Dr. Roska discussed the increasing participation rates for both the SAT and ACT during her direct examination and suggested that the increased participation rates may help explain this decline in test scores. (RR35:126.) Participation rates among public school graduates did not increase significantly, however, during the 2006-10 period that Dr. Kallison examined. (Ex. 1161, Kallison College-Readiness Report, at 8.) Dr. Roska also agreed that even if participation rates were increasing, the relationship between participation and performance begins to stabilize when participation reaches between 40 and 60% of the total. (RR35:192-93.) Texas, according to Dr. Roska, saw a 62% participation rate for the SAT in 2012 and a 39% participation rate for the ACT for 2012. (Ex. 11300 at 3, 6.) Dr. Kallison expressed the opinion, which the Court finds to be credible, that if Texas students were improving in college readiness, they would have shown positive movement on the SAT and ACT exams. (RR21:35.) This did not happen.

iii. **Other college-readiness measures also show that many Texas students are not graduating prepared to succeed in college without remediation.**

- FOF 165. Several additional measures that purport to assess college readiness are Texas Success Initiative ("TSI") test results, "College-Ready Graduates," and the Texas Success Initiative Higher Education Readiness Component ("TSI-HERC"). (Ex. 1161, Kallison College-Readiness Report, at 4-5.) Each of these measures relies to some extent on TAKS scores. (*Id.*; RR21:24, 26-27.) TSI test results reflect the number of first-year students matriculating at Texas public colleges or universities who either pass one of four TSI exams or are exempt from the exams by satisfying the College-Ready Graduates standard. (Ex. 1161, Kallison College-Readiness Report, at 4-5.) The College-Ready Graduates standard is met when a student meets state benchmarks for either (1) the exit-level TAKS, (2) the ACT, or (3) the SAT. (*Id.*; RR21:22-23.) The TSI-HERC is encompassed within the College-Ready Graduates measure and reflects those students who meet state benchmarks on the TAKS exam. (RR21:22.)
- FOF 166. These metrics provide a more favorable picture of college readiness than STAAR, SAT, or ACT results, but the results remain poor and substantial evidence casts doubt on the TAKS as a reliable measure of college readiness. (Ex. 1161, Kallison College-Readiness Report, at 12-13.)
- FOF 167. First, TAKS is being replaced by STAAR largely due to the limitations of TAKS as an evaluation tool. (*Id.* at 13; Ex. 3188, Baker Report, at 59.) Second, TAKS was implemented before the addition of the college and career-readiness standards to the state curriculum. (Ex. 5624, Zyskowski Dep., at 54.) The STAAR EOC exams, by contrast, are intended to assess the TEKS in the subjects tested that now include these standards. (*Id.*) The STAAR exams are intended to more accurately measure whether students are learning the required curriculum. (*Id.* at 35.) Third, STAAR, unlike TAKS, has been empirically linked to other external measures of college readiness. (*Id.* at 46, 70.) Finally, the testimony is uniformly in agreement that the STAAR exams are better than TAKS at measuring the growth of high performing students. (*Id.* at 36-37.)
- FOF 168. Even if TAKS were deemed a reliable measure of college readiness, student performance on TAKS-based college-readiness indicators is still unacceptably low. (Ex. 1161, Kallison College-Readiness Report, at 5-6, 10, 13; RR21:48-49 (referencing Ex. 5396 at 9), 19-20 (referencing Ex. 5396 at 10), 27-32 (referencing Ex. 5396 at 12).) For example, in 2010, only two-thirds of students entering Texas public colleges or universities either passed one of the four TSI exams or were exempt from taking the exams in all content areas. (Ex. 1161, Kallison College-Readiness Report, at 5, 10; RR21:35-36 (referencing Ex. 5396 at 12).) The tens of thousands of students who do not meet the TSI standards are required by law to participate in remediation before they can take a college credit course in English or mathematics. (RR21:36-38.) By definition, these students are not college ready. *See* TEX. EDUC. CODE § 39.024(a).

**b. Texas has not made the type of forward progress that was seen in *WOC II*.**

FOF 169. When *WOC II* was decided in 2005, the Texas Supreme Court observed that “undisputed evidence is that standardized test scores have steadily improved over time, even while tests and curriculum have been made more difficult. By all admission, NAEP scores . . . show that public education in Texas has improved relative to the other states.” *WOC II*, 176 S.W.3d at 789. This is no longer the case. The data described above (*see supra* FOF 145) show that STAAR scores were essentially flat from 2012 to 2013. A review of a longer time horizon through the use of NAEP and TAKS data also shows a lack of forward progress, as described below.

**i. Student performance on NAEP has not shown significant or consistent gains since 2005.**

FOF 170. The Court was presented with evidence of National Assessment of Educational Progress (“NAEP”) scores for Texas in four separate categories: (1) reading at grade four; (2) math at grade four; (3) reading at grade eight; and (4) math at grade eight. From 2005 to 2011, Texas’s scores on NAEP remained relatively flat in three of the four categories tested. (RR26:160-61, 164-72 (referencing Ex. 5678 at 11-14); Ex. 5460 at 1.)

FOF 171. On the grade four math test, Texas had made continual progress until 2005. (RR26:164-65 (referencing Ex. 5678 at 11); Ex. 5460 at 1.) From 2005 to 2011, Texas’s scores on fourth grade math essentially remained flat. (RR26:165 (referencing Ex. 5678 at 11); Ex. 5460 at 1.) The percentage of students achieving the proficient score on this test also remained flat during this same period. (RR26:65-66 (referencing Ex. 5678 at 11); Ex. 5460 at 1.)

FOF 172. Similarly, on the fourth grade reading test, scores remained stagnant from 2005 to 2011, including at the proficient standard. (RR26:167-68 (referencing Ex. 5678 at 13); Ex. 5460 at 1.)

FOF 173. On eighth grade reading, Texas’s scores essentially remained flat from 2005 to 2011, although the nation’s scores on this exam increased somewhat during this same time. (RR26:170-71 (referencing Ex. 5678 at 14); Ex. 5460 at 1.)

FOF 174. From 2005 to 2011, Texas improved against the national average only on the eighth grade math test. (RR26:166-67 (referencing Ex. 5678 at 12); Ex. 5460 at 1.) On the other three tests, Texas’s scores held close to or fallen slightly below the national average. (RR26:164-68, 170-72 (referencing Ex. 5678 at 11, 13-14); Ex. 5460 at 1.)

FOF 175. In 2013, NAEP scores still did not show any significant improvement. Texas’s scores dropped on two of the exams from 2011 to 2013 and showed only modest gains on the other two exams. (*See* Ex. 11488 at 7, 17, 27, 37 of PDF.) In contrast, the national average increased on all four tests during this same period. (*See* Ex. 11488 at 2, 12, 22, 32 of PDF.)

FOF 176. In addition, significant gaps remain between Black and White students, Hispanic and White students, and students who are eligible for free and reduced-price meals and those who are not. (RR26:172-77 (referencing Ex. 5678 at 15-18); *see also* Ex. 11488 at 2, 12, 22, 32 of PDF.) On the fourth grade reading test, the gap increased from 2005 to 2011 between Hispanic and White students and between students who are eligible for free lunch and those who are not. (RR26:177 (referencing Ex. 5678 at 17); *see also* Ex. 11488 at 12 of PDF.) Across the remaining tests and demographic groups, the gap between demographic groups has closed minimally from 2005 to 2011 in comparison to the size of the gap that still remains. (RR26:172-77 (referencing Ex. 5678 at 15-18).)

**ii. Student performance on TAKS has leveled off.**

FOF 177. Texas students improved their performance in the early years of the administration of the TAKS exams. Between 2003, which was the first year of administration, and 2007, the percentage of students meeting the passing standard on all tests taken increased by twenty-three points. (Ex. 6322, Moak Report. at 21.) Between 2007 (the first assessment data available after the Legislature's response to the Supreme Court decision in *West Orange-Cove*) and 2011 (the last year that all grade levels were tested with TAKS), the percentage of students passing all tests grew by only seven points, less than two points per year. (*Id.*)

FOF 178. With respect to the percentage of students reaching the commended performance standard, score gains were less significant. Although the percentage of students reaching the commended performance standard on all tests tripled between 2003 and 2008, the percentage achieving "commended" grew by only one additional point in the final three years of test administration. (*Id.*)

FOF 179. In 2011-12, the State administered the new STAAR testing program for students enrolled in grades three through nine, but Texas public school tenth and eleventh graders continued to take TAKS since it remains the examination that these students must pass to graduate. (*Id.*) At the tenth grade level, performance was relatively flat between 2011 and 2012. (*Id.*)

FOF 180. As with STAAR, significant performance gaps existed under TAKS between economically disadvantaged versus non-economically disadvantaged students, and ELL students compared with their peers. (*See infra* Parts I.C.2.a.iii(b) (FOF 321, *et seq.*) and I.C.2.b.iii(c) (FOF 369, *et seq.*.)

**(a) Flat NAEP scores call into question the extent of any progress under TAKS.**

FOF 181. TAKS and NAEP were both administered in Texas between 2003 and 2011 to monitor math and reading skills of fourth and eighth graders. (Ex. 5430, Klein Report. at 1.) Two comparisons of TAKS scores to NAEP scores demonstrate that improvements on TAKS during this timeframe do not reliably show student progress. The first comparison was

conducted by Dr. Stephen Klein, and the second by the National Center for Education Statistics ("NCES").

- FOF 182. To compare TAKS and NAEP scores, Dr. Klein calculated "effect sizes," which are a recognized way of putting scores from different scales on a common metric. (*Id.* at 2-3.) Dr. Klein's effect sizes calculated the difference between mean scores at two points in time (or between two groups) divided by the standard deviation of the scores among all students at time one. (*Id.* at 3.) He then compared effect sizes on NAEP and TAKS for all Texas students who took the exams, and for racial/ethnic sub-groups, to evaluate how student performance compared on the two exams from 2005 to 2011. (*Id.* at 3-7.)
- FOF 183. In comparing effect sizes on NAEP and TAKS for all Texas students, Dr. Klein observed little or no gains in effect sizes on NAEP, but large gains on TAKS from 2005 to 2011. (*Id.* at 3-5.) For example, the gain in effect size in reading between 2005 and 2011 was 0.06 on NAEP but 0.73 on TAKS, which is a twelve-fold difference between exams. (*Id.* at 3.)
- FOF 184. The gaps in mean scores between racial/ethnic groups were generally larger on NAEP than they were on TAKS. (*Id.* at 7.) The gaps also were generally larger between Whites and Blacks than they were between Whites and Hispanics. (*Id.*) They also were usually larger on reading than on math. (*Id.*)
- FOF 185. From this data, Dr. Klein concluded that the improvements in TAKS math and reading scores between 2003 and 2011 do not generalize to NAEP. (*Id.* at 10.) His findings indicate that the gains on TAKS over the past decade should not be relied upon to reflect exactly how much improvement has actually occurred in the underlying and much broader range of knowledge and skills that standardized tests such as NAEP, TAKS, and STAAR are intended to measure. (*Id.*) The Court finds Dr. Klein's methodology and analysis on these points to be persuasive.
- FOF 186. The Court also finds the NCES mapping standards reports to be instructive in evaluating TAKS scores. The NCES biennially produces mapping standards reports in which they use school level data on schools that participated in NAEP to equate the percentages of children within those schools who scored proficient on state assessments with scores on NAEP. (Ex. 5597.) The study also identifies the NAEP scale score that statistically aligns with "proficient" cut scores on state assessments. (Ex. 3188, Baker Report, at 57; *see also* Ex. 5597 at 5-6.) Further, because the data are re-evaluated every two years, NCES can determine which states have lowered or raised standards over a two-year period, relative to NAEP and relative to other states. (Ex. 3188, Baker Report, at 57; *see also* Ex. 5597 at 5.)
- FOF 187. On average, the mapping standards reports find that proficiency standards on Texas's exam, the TAKS, are relatively low among states for fourth grade reading and math assessments, and very low for eighth grade assessments. (Ex. 3188, Baker Report, at 57; *see also* Ex. 5597 at 10-13.) On each test, Texas falls below average and below the

NAEP equivalent for “basic” performance. On eighth grade reading, Texas’s proficiency standards are in last place. (Ex. 3188, Baker Report, at 57; Ex. 5597 at 10-13.)

FOF 188. From 2005 to 2009, Texas standards (as measured by cut scores on assessments) stayed relatively constant for fourth grade assessments – staying low among states and below basic on NAEP. (Ex. 3188, Baker Report, at 57-58; *see also* Ex. 5597 at 10, 12, 36-37.) However, at the eighth grade level, Texas standards appear to have drifted downward in rigor during the same time period. (Ex. 3188, Baker Report, at 58.) Both the reading and math assessment proficiency cut scores were associated with much lower NAEP scores in 2009 than in previous years. (*Id.*; *see also* Ex. 5597 at 36-37.) Again, Texas was at the bottom of states on the eighth grade reading proficiency cut score in 2009, while it had been somewhat higher in previous years. (Ex. 3188, Baker Report, at 58; *see also* Ex. 5597 at 36.)

**(b) The data do not reliably demonstrate forward progress in the transition year from TAKS (2011) to STAAR (2012).**

FOF 189. Federal law requires states to evaluate if districts are making adequate yearly progress or “AYP,” based on whether a certain percentage of students (which increases each year) have passed the State’s standardized assessments. (RR28:62.) The State undertook a “bridging analysis” to compare 2011 performance on TAKS to 2012 performance in grades three through eight on STAAR. (Ex. 1117; RR28:63-65.) The study was designed and carried out by Pearson, the State’s testing contractor. (RR28:52.) The State’s conclusion – that performance modestly improved from 2011 to 2012 – is, by the admission of the State’s witness, not supported by the strictly empirical data the study generated. (RR28:86, 90-92; Ex. 60.)

FOF 190. To determine what score on STAAR was comparable to the passing score on TAKS, the bridging study used two approaches: an “empirical” analysis and an “impact” analysis. (RR28:56-57.) The empirical approach involved embedding STAAR field test items in 2011 TAKS assessments and then using those same questions on the actual 2012 STAAR assessments. (RR28:71-72.) By comparing student performance on the same reference set of embedded STAAR questions in 2011 and 2012, Texas was then able to compare 2011 performance on TAKS to 2012 performance on STAAR. (RR28:54, 71-72.) This analysis allows for the possibility that the 2011 students might be more or less prepared or proficient than the 2012 students.

FOF 191. This empirical methodology showed declines in performance for most tests and grade levels in 2012 compared to 2011. (Ex. 60; RR28:84.)

FOF 192. In the impact analysis, the bridging study identified the score point on the 2012 STAAR exams that would pass the same percentage of 2012 STAAR test takers as passed the corresponding 2011 TAKS tests. (RR28:54.) This “bridging” method therefore assumes implicitly that statewide performance on TAKS would have remained constant from 2011 to 2012. (RR28:80.) By its very nature, this method cannot be used to determine if the

2012 students performed better or worse than the 2011 students. (RR28:81-83.) As Pearson representative Dr. Laurie Davis acknowledged, the impact method will inevitably result in a showing that the passing percentage either would have remained constant or increased from 2011 to 2012. (RR28:77, 79.) This is true even if students in 2012 are less prepared or academically capable than in the previous year. (RR28:77.)

- FOF 193. To obtain the final raw score on the 2012 STAAR exams that corresponded to the previous passing standard on 2011 TAKS, the bridging study identified, for each separate exam, the “midpoint” between the raw score generated by the empirical studies and that suggested by the impact method. (RR28:57, 64-65 (referencing Ex. 60).) When the midpoint was a non-integer, the final raw score was obtained by uniformly rounding down, rather than up, to the nearest integer, thus producing a lower raw score, which in turn yielded a higher passing percentage for 2012 test-takers. (RR28:64-65, 70-71.)
- FOF 194. Using this method to “average out” the results of the empirical studies and to round systematically to the lower raw score yields, on the whole, higher passing percentages for 2012 than would have resulted from the use of the empirical data alone. (RR28:63-67 (referencing Ex. 60).)
- FOF 195. Regardless of whether the impact method was appropriate for use in the AYP study, the State’s witness, Dr. Davis, acknowledged that the impact method cannot be used to measure statewide progress. (RR28:78-79.) Because the bridging study in most grades simply reflected the impact analysis (*see* Ex. 60 at 1), this calls into question any effort to use the bridging study itself to demonstrate statewide progress from 2010-11 to 2011-12.
- FOF 196. Dr. Davis confirmed that the results of the bridging analysis would have been less positive if the State had not used the impact method. (RR28:66-67.) In fact, the empirical analysis alone would have shown a decline in student performance from 2011 to 2012 in each of grades three through eight in math, and in grades five, six, and eight in reading (with grades three and seven reading showing a positive change and grade four reading showing no change). (RR28:83-90; Ex. 60.) While the differences are often slight, and while uncertainties are also inherent in the empirical methodology, the Court finds that on the whole, the bridge study cannot be relied upon to demonstrate positive academic progress in Texas third to eighth graders from 2010-11 to 2011-12.

**iii. The State’s evidence about NAEP scores and other student performance measures does not show any meaningful recent forward progress toward achieving a general diffusion of knowledge.**

- FOF 197. The State’s expert, Dr. Grover Whitehurst, compared Texas’s performance on various indicators to that of other states. Specifically, he looked at Texas’s performance on the NAEP, its high school graduation rate, and its Advanced Placement (“AP”) participation rate. The Court finds that Dr. Whitehurst’s opinions on these subjects shed little light on Texas students’ progress toward college and career readiness compared with other available indicators.

- FOF 198. Dr. Whitehurst acknowledged that none of the three measures he considered are specific indicators of college readiness. (RR26:145-46.)
- FOF 199. Dr. Whitehurst focused on NAEP scores in four separate categories: (1) reading at grade four; (2) math at grade four; (3) reading at grade eight; and (4) math at grade eight. Instead of comparing performance in each individual category, Dr. Whitehurst averaged the scores on the four tests. (RR26:36-37, 160-61.) This average shows that Texas is ranked only twenty-ninth on NAEP performance in the four areas. (RR26:37.) Dr. Whitehurst specifically did not analyze Texas's performance on NAEP relative to other states in any year other than 2011, and he did not consider how Texas's relative performance among the states may have changed over time. (RR26:160.) As noted above, Texas's performance on most of the NAEP tests has remained stagnant or has declined relative to the national average from 2005 to 2011. (*See supra* FOF 174; RR26:172 (referencing Ex. 5678 at 11-14).)
- FOF 200. The State contends that Texas does better on national comparisons of NAEP scores when scores are disaggregated by racial group. While such disaggregation does appear to improve Texas's relative standing among states (but note the reservations in FOF 203 below related to exclusion rates), no evidence has been presented to the Court that the scores of any racial group have improved in any meaningful way in comparison to the national average for such groups since the 2003-05 time period.
- FOF 201. Dr. Whitehurst also testified about the total gains by various subgroups in Texas since 2005, but the data demonstrate that the gains are small compared to the gaps that still remain between these groups. (RR26:175-77.) On the fourth grade reading tests, the gap has actually increased between white and Hispanic students and between economically disadvantaged and non-economically disadvantaged students. (RR26:177.)
- FOF 202. Perhaps most significantly, the Court notes Texas does not set lower standards for students because of their race, poverty status, or ELL status. Texas aims for each of these students to be college and career ready, without respect to how poorly or well students in a similar demographic group perform in other states.
- FOF 203. A final factor that calls into question the reliability of Dr. Whitehurst's cross-state comparisons is the issue of the differing rates at which students are excluded from NAEP testing in different states. States and school districts can exclude students from the small sample of NAEP test takers if those students have learning disabilities or are ELL. (RR26:189, 200-01 (referencing Ex. 5678 at 19-22).) The exclusion issue presents a two-fold problem. First, states are inconsistent in how they classify learning disabled and ELL students. (RR26:189-90.) Second, states and school districts are inconsistent in the rate at which they exclude these identified students from taking NAEP exams. (RR26:190-91.) On each of the four tests, in the year 2011, Texas's exclusion rate ranked among the highest in the nation. (RR26:191-92.) The National Assessment Governing Board has released a statement about the exclusion problem, stating that the difference in exclusion rates "may jeopardize the fairness and validity of state comparisons and other NAEP data trends." (RR26:197-98; Ex. 5678 at 23.) Dr.

Whitehurst's analysis did not adjust or account for the possibility that Texas's relative rankings are affected by its consistently high exclusion rates. (RR26:191.) The record is bereft of what influence the widely varying exclusion rates may have in the relative performance of states on NAEP, whether disaggregated by racial group or not. (RR26:189-98.) This deficiency calls into question the reliability of NAEP scores as indicators of the performance of Texas students as compared to students in other states.

- FOF 204. Finally, Dr. Whitehurst's analysis of NAEP scores, by its nature, does not address performance by ninth through twelfth graders (or students in any grades other than four and eight) or student performance since the 2011 budget cuts. (RR26:161-62.) For each of these reasons, the Court finds that Dr. Whitehurst's analysis of NAEP data, on the whole, does not provide a reliable or convincing demonstration either of forward progress or of high educational attainment by Texas students as a whole.
- FOF 205. In addition to his testimony concerning NAEP, Dr. Whitehurst provided two differing opinions about Texas's graduation rates. Relying on data from the National Center for Education Statistics, Dr. Whitehurst observed in his expert report, and testified in his deposition, that one in four Texas students fail to graduate from high school. (RR26:152, 159-60.) These rates have been the trend for a number of years and place Texas at the national average. (RR26:152, 159-60.) At trial, however, he noted that, based on data recently released by a different division in the U.S. Department of Education, Texas has a graduation rate of 86%. (RR26:155.)
- FOF 206. Dr. Whitehurst candidly acknowledged to the Court that, "I'm not sure which numbers to believe." (RR26:157.) He further testified that both measures have "obvious flaws" and "I think we need to know more before we place large scale bets on particular graduation rates generated either by the new method and we knew the previous method had estimation problems." (RR26:158-59.) The Court similarly cannot determine which – if either – measure is reliable, and is therefore unable to reliably compare Texas's graduation rates to those of other states.
- FOF 207. Regardless of these flaws, the Court concurs with Dr. Whitehurst's admission that Texas's graduation rates, as reflected in the NCES data, are "a disaster" and should be a focus of state policy. (RR26:160.) He aptly observed, "When students drop out of high school, their lives are literally at risk, because [of] their inability to get gainful employment. So it's a big problem." (*Id.*)
- FOF 208. Dr. Whitehurst's final measure of student progress is AP participation rate. This measure does not reflect how students actually perform on the exam, but only the number of students who participate. (RR26:146.) Some states require students to take the AP exams. (RR26:147.) As a result, if AP participation rates were used to gauge college readiness, states could immediately jump to the top of the college-readiness ranking simply by requiring students to participate in the exams. (*Id.*) Notably, from 2007 to 2011, the percentage of Texas AP test takers earning a score of three or more (the score needed to qualify for college credit) declined from 47% to 45%. (Ex. 6322, Moak

Report, at 11.) Only Florida ranked lower than Texas among the ten largest states in this regard. (*Id.*)

**c. Performance gaps between economically disadvantaged and non-economically disadvantaged students and ELL and non-ELL students are not closing.**

FOF 209. Student performance data on STAAR, TAKS, and other measures reveal wide gaps between economically disadvantaged and non-economically disadvantaged students, and between ELL and non-ELL students. These gaps are described in detail below in Parts I.C.2.a.iii (FOF 298, *et seq.*) and I.C.2.b.iii (FOF 349, *et seq.*). The Court is persuaded that these gaps are not narrowing and will not be narrowed, much less closed, without adequate funding for economically disadvantaged and ELL students. (*See* RR18:151-53; RR4:122-23; Ex. 4000, Cortez Report, at 24-25; RR22:143-44.)

**C. Findings of fact relating primarily to the state property tax, adequacy, and suitability claims**

**1. The State's control over local tax rates has resulted in a systemic lack of capacity to support a general diffusion of knowledge and the elimination of districts' ability to exercise meaningful discretion over their tax rates.**

FOF 210. As described below, school districts have been forced in recent years to raise their M&O and I&S tax rates to compensate for state budget cuts and to meet rising state standards, exhausting the available capacity in the system. The districts' actions have been driven by increased costs associated with a "quantum leap" in educational standards (including greater remediation costs), increasing numbers of economically disadvantaged and ELL students, and passage of unfunded mandates, among other factors. Structural aspects of the system and other legislative actions, including tax compression, the tax cap, the TRE requirement, and the yield structure, also substantially contribute to the absence of any meaningful discretion in the system. In addition, looking at the particular circumstances of the thirty-six focus/plaintiff districts, the Court has found that these districts lack meaningful discretion over their tax rates (*see infra* Part I.C.7 (FOF 680, *et seq.*)), and that these districts are representative of the system as a whole (*see infra* FOF 680). For all of these reasons, discussed in greater detail below, the Court concludes that there is a systemic lack of capacity and that school districts lack meaningful discretion over their property tax rates.

**a. There is a systemic lack of capacity.**

**i. Districts lack capacity with respect to M&O tax rates.**

FOF 211. The 79th Texas Legislature enacted HB1 in 2006 after the Texas Supreme Court's *WOC II* decision. As described more fully in Part I.B.2.b (FOF 25, *et seq.*) above, HB1 ostensibly was to provide districts with the ability to provide local enrichment over and

above the state's basic requirements and to shift more responsibility for education funding to the State, lessening the reliance on local property tax revenue. In exchange for districts compressing their tax rates, the State was to replace those lost tax revenues with state funds. However, the Legislature was fully aware at the time it passed HBI that the new state revenue sources would not generate nearly enough funds to make up for the property tax revenues lost from the tax compression, a decision that ultimately resulted in the substantial 2011 budget cuts. (*See supra* FOF 35.)

FOF 212. Originally, the post-HBI system was meant to allow districts to provide the state's basic program at districts' compressed M&O tax rates – generally \$1.00 for most districts. (Ex. 5630, Scott Dep., at 341, 343-45.) This provided districts with the ability to enrich up to the new statutory M&O tax rate cap of \$1.17, with the first four cents available without an election and the remaining eleven cents available only after approval by voters through a TRE. (*Id.* at 339-41, 343-45.) However, the original purpose to provide for local enrichment, as required by *WOC II*, has been lost as a result of increasing costs, more state mandates, higher state performance standards, and severe cuts in state funding. (*See infra* Part I.C.1.b (FOF 233, *et seq.*.) As a result, districts have relied on pennies above their compressed rates (and in many instances, above \$1.04 and up to \$1.17) to fund the state's basic program, instead of funding local enrichment. (*See, e.g.*, RR3:155; Ex. 6336, Burns Dep., at 26; Ex. 6337, Hanks Dep., at 29-30; RR12:23; *see also generally infra* Part I.C.7 (FOF 680, *et seq.*) and FOF 214 – FOF 223.)

FOF 213. Despite this Court's conclusion that a constitutionally adequate education cannot be left to the discretion of voters to pass a TRE (*see* COL 33; RR15:52), the cost pressures described above and in Part I.C.1.b.i (FOF 233, *et seq.*) below have resulted in a dramatic increase in the number of districts taxing at the statutory \$1.17 cap – nearly a quarter of Texas school districts with more than 600,000 in ADA taxed at \$1.17 in 2012. Over 90% of districts, with almost 4.2 million in ADA, tax at or above \$1.04, which is the maximum rate level permitted without holding a TRE.

Figure F-17 M&O Tax Rates for Texas School Districts 2007-08 and 2012-13

M&O Tax Rate	# Districts 2007-08	% Districts	2007-08 ADA	% ADA	# Districts 2012-13	% Districts	2012-13 ADA	% ADA
<\$1.00	98	9.55	165,709	3.92	54	5.29	80,452	1.78
\$1.00 to <\$1.04	108	10.53	994,860	23.52	39	3.82	292,556	6.46
\$1.04	699	68.13	2,680,939	63.38	607	59.45	3,046,938	67.29
\$1.04 to <\$1.17	24	2.34	217,130	5.13	74	7.25	505,855	11.17
\$1.17 and Above	97	9.49	171,294	4.05	247	24.19	602,429	13.30
Total	1,026	100	4,229,933	100	1,021	100	4,528,231	100

Source: Moak, Casey & Associates data files (original source data from the State Comptroller of Public Accounts Self-Report Property Value File and TIA reports of student counts by district).

(RR54:117 (referencing Ex. 6618 at 14).)

FOF 214. Mr. Moak calculated the total revenue capacity in the school finance system as \$37.3 billion in 2013-14, an analysis which assumes that all districts taxed at the maximum \$1.17 tax rate. (RR54:118-19 (referencing Ex. 6618 at 15).) He also calculated that if all

districts taxed at the maximum \$1.04 rate accessible without a TRE, the system would generate \$34.4 billion in 2013-14. (RR54:118-19 (referencing Ex. 6618 at 15).)

- FOF 215. Mr. Moak demonstrated that cost-of-adequacy estimates adopted by the Court (*see infra* Part I.C.5.f (FOF 625, *et seq.*)) exceed the available revenue capacity in the school finance system, leaving districts without any meaningful discretion to provide enrichment. (RR54:118-20 (referencing Ex. 6618 at 15).) At the \$1.04 tax rate, which is the rate at which districts must be able to provide a general diffusion of knowledge, the current Foundation Program raises, on average, about \$750 less per WADA in 2013-14 than even the lowest of the three cost-of-adequacy estimates this Court has considered. (*See infra* FOF 632.) Even at the maximum \$1.17 tax rate, the Foundation Program raises on average about \$250 less per WADA in 2013-14 than the lowest of the three adequacy estimates. (*See id.*)
- FOF 216. Dr. Catherine Clark's analysis also demonstrates that districts are forced to tax above \$1.04 in order to provide a general diffusion of knowledge. Dr. Clark used \$6,818 – the amount of money the Texas Supreme Court found necessary to achieve a general diffusion of knowledge in *Edgewood IV*, adjusted for inflation and put in terms of 2013-14 dollars – as a proxy for the cost of adequacy. (*See* RR58:46-47 (referencing Ex. 6622 at 19); *see also infra* Part I.C.5.e (FOF 625, *et seq.*) and FOF 632.) Dr. Clark determined that only 98 districts, enrolling a mere 108,293 WADA, could raise \$6,818 in revenue per WADA with an M&O tax rate of \$1.04 or less. (Ex. 6622 at 19.) The remaining 923 districts, enrolling 5.9 million in WADA, are forced to tax above the rate allowable without a TRE. (*Id.*; RR58:48.) Even more troubling, her analysis demonstrates that even if these districts were able to successfully hold a TRE and raise their tax rate to the \$1.17 statutory cap, 875 of them (with 5.8 million in WADA) still could not raise \$6,818 per WADA. (RR58:48; Ex. 6622 at 19.) In other words, districts are being forced to raise their taxes above \$1.04 and yet the vast majority of districts, educating the vast majority of students, still cannot raise the amount of money the Supreme Court determined was necessary to achieve a general diffusion of knowledge under less rigorous academic standards. (Ex. 6622 at 19; *see also supra* Part I.B.3 (FOF 81, *et seq.*))
- FOF 217. Next school year, as inflation increases, the amount of money necessary to provide an adequate education will also increase, and the problem facing districts will worsen. In 2014-15, only 92 districts, enrolling less than 98,000 WADA, will be able to raise \$6,955 per WADA at \$1.04 or less. (Ex. 6622 at 20; RR58:49.) The remaining 929 districts, enrolling almost 6 million in WADA, would need to tax above \$1.04 to generate this amount. (Ex. 6622 at 20; RR58:49.) Even taxing at the \$1.17 cap, only 133 districts could raise this estimate of adequacy. (Ex. 6622 at 20; RR58:49-50.) This means that 888 districts, with 5.87 million in WADA could not raise the inflation-adjusted *Edgewood IV* estimate of adequacy in 2014-15 even if they taxed at the maximum \$1.17 rate. (Ex. 6622 at 20; RR58:49-50.)
- FOF 218. Furthermore, looking at the lowest adequacy estimate before this Court – Dr. Odden's \$6,176 estimate for the 2010-11 school year *prior to adjustment for inflation* – the State's

expert, Dr. Lisa Dawn-Fisher, acknowledged that only 124 districts, with approximately 144,000 in ADA, can raise that amount at \$1.04 tax rate or less, and that the other 896 districts, which educate more than 4.6 million in ADA, cannot do so. (RR63:45-47 (referencing Ex. 11440).)<sup>35</sup> Even if every district in the state were able to successfully pass a TRE and raise their rates to the \$1.17 cap, only 259 districts, educating 908,000 in ADA, could raise \$6,176, and the remaining 761 districts, educating almost 3.9 million in ADA, could not raise this lower estimate of the cost to achieve a general diffusion of knowledge. (RR63:48-50 (referencing Ex. 11440).)

- FOF 219. Furthermore, the amount of capacity to enrich the State's "basic program" – which neither this Court nor any expert who testified before it equates to a "general diffusion of knowledge" (see RR54:118-20; RR7:177-78) – is substantially less today than it was when HBI was enacted in 2006, even without considering the higher performance standards set by the State. (*Compare* Ex. 6618 at 15 with Ex. 6322, Moak Report, at 51.)
- FOF 220. Mr. Moak explained that HBI funded the basic program at the level of the districts' compressed tax rates, and therefore the system as enacted provided the possibility of enrichment funding equal to 12.5% of total revenue (that is, the revenue districts could raise above their compressed level). (Ex. 6322, Moak Report, at 51.) However, because of increasing costs and state requirements, districts have been forced to increase tax rates primarily to fund the basic program, rather than to provide enrichment. (*Id.* at 52.) Although the State provided some additional funding from 2006 to 2010, the State controlled how this funding was used in that (1) much of the funding simply offset the reduction in revenue caused by the State's decision to compress local tax rates and (2) the State required districts to fund mandatory teacher pay raises. (*Id.*; RR7:17-23, 32-34 (referencing Ex. 6349 at 65).) For example, the state mandated teacher salary increases costing \$802 million in 2006-07, \$140 million in 2007-08 and 2008-09, and \$616 million in 2009-10 and 2010-11, thus controlling how those additional formula funds were spent. (RR7:33-34 (referencing Ex. 6349 at 65).) When the State cut funding in 2011, it did *not* pass a salary decrease, even though it effectively eliminated all of the increased funding that had been provided from 2006 through 2010 that was not associated with replacing the dollars lost to the property tax compression. (Ex. 6322, Moak Report, at 52; RR7:23-25 (referencing Ex. 6349 at 65).)
- FOF 221. When the State cut education funding in 2011, it shifted the burden of funding the basic program more heavily to local districts. Then, in 2013, when the State replaced some of the FSP funding, it relied heavily on local property taxes to fund this partial restoration. (See RR54:151-52 (referencing Ex. 6618 at 28).) Of the \$5.6 billion increase in FSP funding associated with formula increases and enrollment growth, only about one-third, or \$1.63 billion, was provided through increased general revenue fund appropriations.

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<sup>35</sup> Exhibit 11440 is the State's original set of interrogatory answers. Exhibit 5746 is the State's amended interrogatory answers. The numbers described in this finding are the same whether looking at Exhibit 11440 or Exhibit 5746. Exhibit 11447 is a second amended version of the State's interrogatory answers containing updated information for 2015 only.

(RR54:93-95 (referencing Ex. 6618 at 4).) The remainder was directly associated with estimates of increased property value. (RR54:94-97.)

FOF 222. In light of these developments, Mr. Moak compared the funding levels available at the \$1.04 tax rates in 2010-11 (before the legislative cuts), which he called “basic program” level funding, and compared these funding levels to the total revenue capacity in the system. (RR54:118-19 (referencing Ex. 6618 at 15).) He demonstrated that the effective level of “enrichment” available (above what he called the “basic program”) was well below the 12.5% level available at compressed rates under HB1. (*Compare* Ex. 6618 at 15 *with* Ex. 6322, Moak Report, at 51.) Considering Dr. Clark’s and Dr. Dawn-Fisher’s testimony regarding the inability of districts to raise the amount necessary for a general diffusion of knowledge at \$1.04 – or even \$1.17 – the Court finds that the amount available for meaningful enrichment is even less than the number cited by Mr. Moak. (*See supra* FOF 216 – FOF 218.)

FOF 223. Under these analyses by Dr. Clark and Mr. Moak, which the Court finds credible, the Court finds that the current finance system no longer provides districts with the amount of “meaningful discretion” to provide local enrichment required by the Supreme Court in *WOC II*.

**ii. Districts lack capacity with respect to I&S tax rates.**

FOF 224. School districts pay for new facility construction and renovation of current facilities by issuing voter-approved bonds and levying interest and sinking fund (“I&S”) taxes to meet their annual debt service requirements. (Ex. 6318 at App. E, Part 14, p. 20; RR10:164-68; RR11:65-66, 73-77.)

FOF 225. Following the *Edgewood IV* decision, the State took a number of steps to address the Supreme Court’s warning that “the lack of a separate facilities component has the potential of rendering the school finance system unconstitutional in its entirety in the very near future.” *Edgewood IV*, 917 S.W.2d at 746. The structure of the current state facilities funding program was initiated in 1997 with the creation of the Instructional Facilities Allotment (“IFA”). (Ex. 1328, Casey Report, at 21.)

FOF 226. Like the State’s M&O funding, the IFA operates on a guaranteed yield system, but without recapture. (*Id.* at 21-22.) Eligible school districts initially received the equivalent of a tax yield guarantee of \$28 per penny per ADA to assist in meeting a district’s debt service needs. (*Id.*) In 1999, the yield was increased to \$35 per penny per ADA, and has not increased since then. (RR10:166-67 (referencing Ex. 6352 at 12); RR56:173-74 (referencing Ex. 6621 at 9).)

FOF 227. Unlike the State’s M&O funding, districts are not actually guaranteed funding based solely on having a tax yield that is less than the guaranteed yield. (Ex. 1328, Casey Report, at 22.) The IFA system requires districts to submit an application that details the proposed bond schedule and the educational facilities to be constructed. (*Id.*) In the event of a greater demand for IFA funds than the appropriation would support, districts

are ranked on the basis of their state property wealth per ADA – from lowest to highest – with the lowest-ranking districts the first to qualify for these funds. (*Id.*) Therefore, the number of districts whose applications are granted varies by the amount of the Legislative appropriation for new IFA awards. (*Id.*) The Legislature did not appropriate any money for new IFA awards during the 2011 or 2013 sessions. (RR56:174 (referencing Ex. 6621 at 8).)

- FOF 228. While the IFA helps districts that seek to enter into new debt, the Existing Debt Allotment (“EDA”) seeks to help districts pay back already existing debt. (Ex. 1328, Casey Report, at 23.) When the EDA was enacted in 1999, districts were guaranteed a yield of \$35 per student for each cent of tax effort, equivalent. As enacted, only twelve cents of I&S tax effort were eligible for EDA state support. (*Id.*) This cap was raised to twenty-nine cents in 2001. (*Id.* at 23; RR10:172.) The \$35 yield per student per cent of tax effort has not been increased since 1999. (Ex. 1328, Casey Report, at 23; Ex. 6352 at 12; RR32:198; RR56:173-74 (referencing Ex. 6621 at 9).)
- FOF 229. At the time the EDA program was initiated, 896 school districts enrolling 91.2% of all Texas schoolchildren were eligible for state support under either the EDA or IFA programs. (Ex. 1328, Casey Report, at 23.) For the 2013-14 school year, fewer than 56% of all Texas students attended school in districts that were eligible for EDA or IFA support. (Ex. 6621 at 9-10; *see also* RR56:174-75; RR10:168; Ex. 6352 at 12; RR32:198.) If the EDA and IFA yields had been pegged to the 91.2 percentile of wealth, it would have a yield of \$62.71 per penny today. (RR10:173; *see also* RR56:230-31.) If the \$35 yield had simply been adjusted for inflation over the last decade, the yield today would be \$54.77, with 84.8 percent of Texas students attending school in eligible districts. (RR10:174; *see also* RR56:230-31.)
- FOF 230. Because state aid for facilities has not kept pace with property value growth or the growing student population, districts have been forced to raise I&S rates to keep pace with facility needs. (*See* RR10:171-77, 180-83; Ex. 6352 at 17, 20-21; RR32:198-99; RR56:176-79; *see also infra* Parts I.C.1.a.ii (FOF 224, *et seq.*) and I.C.1.b.iv (FOF 263, *et seq.*.) Over the course of the last decade, more districts issued debt to finance their facility needs. The number of districts without an I&S tax levy decreased from 369 districts in 1999-2000 to 200 districts for the 2012-13 school year. The number of districts with I&S tax levies at or above 30 cents increased from 34 districts in 1999-2000 to 225 districts in the 2012-13 school year. (RR56:179-80 (referencing Ex. 6621 at 14).) In the 2011-12 school year, 810 Texas public school districts levied I&S taxes to service \$62.6 billion in outstanding school district debt (including both principal and interest). (*See* Ex. 1328, Casey Report, at 21; Ex. 6352 at 20-21; RR10:180.) The following table shows the count of school districts by I&S tax rate grouping from the 1999-2000 school year through the 2012-13 school year:

I&S Tax Rate	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
> \$0.50	1	0	1	0	0	0	0	0	0	0	1	3	6	6
\$0.50	0	1	1	1	0	1	1	0	1	5	12	19	24	27
\$0.40-\$0.50	6	7	3	5	4	7	7	14	47	62	61	61	65	61
\$0.30-\$0.40	27	30	32	32	41	43	52	63	101	108	115	129	127	131
\$0.20-\$0.30	104	103	108	132	142	168	149	152	168	187	190	186	187	195
\$0.10-\$0.20	253	271	288	306	292	276	267	276	274	249	252	242	238	230
\$0.00-\$0.10	261	257	264	243	242	232	258	250	195	183	172	169	162	171
\$0.00	369	352	324	302	300	294	287	266	235	227	218	212	212	200
Total	1,021	1,021	1,021	1,021	1,021	1,021	1,021	1,021	1,021	1,021	1,021	1,021	1,021	1,021

(Ex. 6621 at 14.)

FOF 231. From the 2007-08 to the 2011-12 school year, the Texas public school system grew by 330,306 students. (Ex. 1328. Casey Report. at 21.) More than 90% of this enrollment growth has occurred in approximately 100 school districts. (*Id.*; RR10:177.) Northside ISD, one of these “fast-growth” districts, has built and opened thirty-seven new schools in the last ten years. (RR25:84-85, 55-89.) A demographic study in Los Fresnos, another fast-growth district, found that the district would have to build one school each year for the next twenty-five years. (RR24:139.) While student population growth does result in some property value growth, officials from fast-growth districts testified that the property value growth is not enough to cover the costs of new facilities construction for these districts. (See RR11:61; RR24:212.) Some fast-growth districts have even been forced to pledge to use M&O tax revenue to pay back bonds, in order to meet the 50 cent debt test (required to obtain Attorney General approval to issue bonds). (See *infra* I.C.I.b.iv; RR10:189-90.)

FOF 232. The Court finds that these “fast-growth” districts are required to build more facilities, which means issuing more bonds and increasing their I&S tax rates more quickly. (RR10:177, 182; Ex. 6352 at 22-25; RR56:180-82 (referencing Ex. 6621 at 15).) As the Chief Financial Officer of Fort Bend ISD testified, when a district is forced to increase its I&S rate to make its bond payments, it is necessarily harder for that district to also raise its M&O rate because “it’s just one tax bill to [the district’s] constituents.” (RR11:84-85.) Similarly, several superintendents testified that their districts’ need to regularly seek voter approval for bond issuances to keep up with student growth (and the resulting increase in I&S tax rates) makes it difficult, if not impossible, to hold a successful TRE. (See, e.g., RR22:57; RR19:85-86; RR25:102; Ex. 4336. Cavazos Dep., at 18:-19.) For the reasons articulated by these witnesses, the Court finds that rising I&S rates have contributed to the loss of meaningful discretion over M&O tax rates for many fast-growth school districts.

**b. The State controls the levy of school district property taxes.**

**i. The State controls the levy of school district property taxes as a result of cost drivers and budget cuts.**

**(a) Standards have continued to increase since *WOC II*.**

- FOF 233. While college and career readiness was nominally the goal at the time of *WOC II*, in the years since that time, the Legislature has required TEA and the SBOE to hold districts responsible for meeting that goal. (*See supra* Part I.B.3.a (FOF 82, *et seq.*.) Specifically, the State adopted specific college and career-readiness expectations and standards and incorporated them into the TEKS, from high school all the way down to kindergarten. (*Id.*; RR28:120-23, 176-77; RR5:125-26.) *See also* TEX. EDUC. CODE §§ 28.001, 28.008.
- FOF 234. Further, beginning with the 2011-12 school year, the State implemented the STAAR testing system, the first state test designed to assess students' preparedness for college and career. (*See supra* Part I.B.3.b (FOF 93, *et seq.*.) State witnesses uniformly testified that the STAAR exams are significantly more rigorous than the prior TAKS exams. (*Id.*; RR28:21-22; RR27:35-36; Ex. 5624, Zyskowski Dep., at 36-37, 70, 106, 198-99, 248-49; Ex. 5620, Twing Dep., at 101-05, 125; Ex. 5630, Scott Dep., at 39.)
- FOF 235. In the 2012-13 school year, the State implemented a new accountability system that requires districts to be measured by their success at closing performance gaps and student performance growth. (*See supra* FOF 115.) Beginning with the 2013-14 school year, HB5 requires the accountability system to incorporate additional achievement indicators designed to measure districts based on the number and percentage of students who are graduating from high school college ready. (*See supra* FOF 91.)
- FOF 236. Beginning with the freshman class of 2007-08, high school students are required to complete twenty-six credits in order to graduate from high school on the default plan (whether the recommended plan or the foundation plan with an endorsement), compared to the twenty-two credits required for the default minimum graduation plan at the time of *WOC II*. (*See supra* Part I.B.3.c (FOF 103, *et seq.*); *see* Ex. 6618 at 21; Ex. 4336, Cavazos Dep., at 98:13-20.) In addition, beginning with the 2014-15 school year, entering high school students will be required to select one of five endorsement areas to pursue. (Ex. 6618 at 21; *see also supra* FOF 90 and FOF 106.)
- FOF 237. As Lynn Moak observed, these changes collectively "represent a quantum leap in standards for public education, and [were] driven by concerns that the previous system was not preparing students for the 21st century higher education and workforce systems." (Ex. 6322, Moak Report, at 66.)
- FOF 238. The State – or, at least, the State's witnesses – have acknowledged that as standards increase, costs increase. (RR29:105-07; Ex. 5630, Scott Dep., at 91-92; RR26:67.)

Similarly, an expert analysis performed for the Legislature and proffered by the State in the *WOC II* litigation found “a fundamental economic relationship among input prices, educational outcomes, and cost in Texas public schools. Other things being equal, the analyses suggest that it costs more to produce higher levels of educational outcomes.” (Ex. 5676 at 1.)

- FOF 239. Contrary to the State’s contention during the second phase of the trial, standards and costs continue to rise under HB5. Dr. Roberto Zamora examined the impact of HB5 on school district costs, paying particular attention to changes in graduation requirements, assessment requirements, and the accountability system standards.<sup>36</sup> (*See generally*, Ex. 20062A, Zamora Report, at 107-14, 116-17.)
- FOF 240. Changes in curriculum, assessment, and accountability created by HB5 will not save school districts money and if anything, they will create additional potential costs for districts. (RR55:157.) For example, all school districts are still required to offer Algebra II at every high school. (RR54:132; RR55:142; RR63:124, 141.) Districts must partner with at least one institution of higher education to develop and provide college preparatory courses in English Language Arts and Math on campus, as opposed to doing so through distance learning or online. (Ex. 20062A, Zamora Report, at 9; RR55:147-48.) HB5 will also require at least some districts to hire additional counselors, including bilingual counselors or translators, to meet with each and every ninth grader and his or her parent to create a personal graduation plan, and mandates that counselors counsel all students about the importance of post-secondary education. (Ex. 20062A, Zamora Report, at 10; RR55:149-50; Ex. 4336, Cavazos Dep., at 89-90.) New accountability requirements related to student and community engagement mandate that each district report to TEA and make available a self-evaluation related to community engagement, requiring those districts that do not have such a system in place to develop and implement one. (Ex. 20062A, Zamora Report, at 13; RR55:156-57.)
- FOF 241. Taking into consideration current student performance – particularly that of economically disadvantaged and ELL students – Dr. Zamora concluded that fully and properly implementing HB5 will require districts to: (1) add more rigorous coursework (and potentially add new teachers to teach the new coursework); (2) design additional curriculum, instruction, and assessment interventions for low-performing students; and (3) develop, implement, and evaluate indicators to measure community and student engagement. (Ex. 20062A, Zamora Report, at 8-14.)

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<sup>36</sup> The Court finds Dr. Zamora qualified to testify on these issues, based on his more than forty years’ experience in public education at the school district, regional, and state levels, including service as a principal, an assistant superintendent and superintendent, as well as his service for the State as the Executive Assistant to the Associate Commissioners for School Accreditation and Program Evaluation, Executive Assistant to the Commissioner of Education, and the Executive Director of the Region One Education Service Center in Edinburg, Texas. (*See* Ex. 20062A, Zamora Report, at 1; Ex. 20074; RR55:115-18.)

- FOF 242. The testimony of school district officials during the second-phase of the trial confirmed his analysis. (See Ex. 6557, Sconzo Dep. (Vol. II), at 22-42 (referencing Ex. 20256); Ex. 6558, Frost Dep. (Vol. II), at 32-39; Ex. 4336, Cavazos Dep., at 84-90, 93; RR55:115-16; Ex. 4337 at 11.) None of the State's witnesses could identify any cost savings for school districts resulting from the enactment of HB5. (See, e.g., RR63:119-20.)
- FOF 243. Dr. Zamora's ultimate conclusion is that the changes enacted by the 83rd Legislature cannot be expected to reduce costs for school districts or alleviate the challenges many public school students and school districts face. (RR55:157-59; see also Ex. 20256.)
- FOF 244. Because the State has not tied funding levels to these increased academic standards (see, e.g., *supra* Part I.B.4 (FOF 123, *et seq.*) and *infra* Part I.C.5.a (FOF 603, *et seq.*)), the cost of implementing them – including providing remediation for the hundreds of thousands of high school students who are off-track for graduation – has fallen on school districts and local taxpayers. (See Ex. 6618 at 23; RR54:144; Ex. 11366; Ex. 20313; see generally Ex. 5797; RR63: 80-81, 104, 111.)

**(b) The growing economically disadvantaged and ELL populations and inadequate weights have reduced meaningful discretion.**

- FOF 245. At the same time standards have risen, the state's student population has become more costly to educate. At the time of *WOC II*, 52.7% of the state's students were economically disadvantaged. By the 2012-13 school year, that percentage had grown to more than 60%. (See Ex. 11123 at 10; Ex. 4258 at 13.) The percentage of students who are economically disadvantaged is higher in the lower grades, indicating that the trend of a poorer student population is likely to continue. (See Ex. 11123 at 20; see also Ex. 3228 at 78; see also *supra* FOF 16.) Over that same time period, the percentage of the population with limited English proficiency grew from 14% to 17% and is also expected to continue to grow. (See Ex. 11123 at 10; Ex.4258 at 13; Ex. 3228 at 78; see also *supra* FOF 16.)
- FOF 246. The State's financing system explicitly recognizes, and defense witnesses acknowledge, that economically disadvantaged students and ELL students are more difficult and more expensive to educate. (See RR29:105-07; Ex. 5630, Scott Dep., at 91-92; RR26:67; see also *infra* FOF 467 and FOF 497.) This fact is reflected in large and persistent performance gaps, including the fact that, after three administrations of the first round of EOC exams, 47% of economically disadvantaged students still had not passed at least one examination and were off-track for graduation. (See *supra* FOF 139 and *infra* Parts I.C.2.a.iii (FOF 298, *et seq.*) and I.C.2.b.iii (FOF 349, *et seq.*)). Yet, despite the fact that school districts are now judged on their success in achieving student growth and closing those performance gaps, the funding weights for economically disadvantaged and ELL students have not been adjusted since 1984. (See Ex. 6322, Moak Report, at 58.) The evidence regarding the performance gaps for economically disadvantaged and ELL students and the substantial and increasing costs of quality programs aimed at closing that gap (discussed in detail below in Parts I.C.2.c (FOF 379, *et seq.*) and I.C.2.d.ii (FOF 466,

*et seq.*) – I.C.2.d.iii (FOF 480, *et seq.*) makes it clear that the weights are underfunded. As a result, the cost of educating these students and closing the performance gaps has likewise fallen on school districts and local taxpayers.

**(c) Budget cuts have forced districts to cut necessary programs, resources, and personnel.**

FOF 247. As a result of the state-level FSP budget cuts in 2011, which were only partially replaced in 2013, as well as the unrestored cuts to grant programs, Texas school districts were required to make significant budget cuts. This Court already has described the deleterious impact of those cuts above in Part I.B.2.e (FOF 52, *et seq.*) and further describes their impact on a district-by-district basis in Part I.C.7 (FOF 680, *et seq.*) below.

FOF 248. While superintendents uniformly testified that districts attempted to minimize the impact of the budget cuts on the classroom, the magnitude of the cuts made it impossible to completely protect the classroom and core instructional programs from the cuts. As detailed below, many districts were forced to eliminate full-day pre-K programs, despite the importance of such programs, particularly for ELL and economically disadvantaged students. (*See infra* Parts I.C.2.c.i (FOF 384, *et seq.*) and I.C.3.b (FOF 550, *et seq.*.) Districts were forced to make personnel cuts, including teachers and instructional support personnel, such as teacher aides, counselors, and librarians. (*See supra* FOF 59 – FOF 64.) Each of these cuts came at the same time the State implemented a new, more rigorous assessment regime that superintendents testified will require significant additional resources to prepare students. (*See supra* Part I.B.3.b (FOF 93, *et seq.*.)

**ii. The State controls the levy through tax compression and the tax cap.**

FOF 249. In response to *WOC II*'s ruling that the \$1.50 cap on property taxes had become a floor and constituted a *de facto* statewide property tax, the 79th Texas Legislature passed HB1 and HB3. (Ex. 6393; Ex. 6524.) However, while this legislation temporarily provided districts with additional taxing capacity, it ultimately resulted in a greater level of state control of school district property taxes. This result was anticipated by the 2006 Legislature, which was at least as motivated by a desire to provide a large property tax reduction as it was with providing school districts with control over local property tax rates. (Ex. 6396 at 1, 4-6; Ex. 6520; *see also supra* Part I.B.2.c (FOF 32, *et seq.*.)

FOF 250. In HB1, the Legislature forced school districts to “compress” property tax rates by one-third over the course of two years. The compressed rate serves as the State-established “floor” for school district taxes, because a district is required to tax at the compressed rate in order to receive the full Basic Allotment. TEX. EDUC. CODE § 42.252. In other words, districts that had lost meaningful discretion at the time of *WOC II* and had been forced to tax at the \$1.50 cap are now required to tax at \$1.00 just to receive the Basic Allotment.

FOF 251. The compression of local property taxes dramatically reduced the capacity of the overall school finance system to generate revenue needed to educate a growing population of students to higher state standards. The LBB estimated that the compression of local M&O tax rates by one-third would reduce property tax revenue for school districts by \$14.2 billion in the 2008-09 biennium. (Ex. 5657 at 194.)

FOF 252. At the same time, the Legislature lowered the statutory cap on property taxes to \$1.17, thus limiting the range of taxing “discretion” available to school districts to seventeen cents. The Legislature’s intent in compressing taxes and lowering the cap on property taxes was to provide property tax relief and limit the discretion of local school districts to raise taxes above the compressed floor – as tax increases at the local level were seen by the Legislature to reduce the size of the tax break it sought to give local taxpayers. (See Ex. 6396 at 4-6; Ex. 6520 (floor debate); see also *supra* Part I.B.2.c (FOF 32, *et seq.*.)

**iii. The State controls the levy through the combination of the TRE requirement and the yield structure.**

FOF 253. The Legislature further limited school district discretion by imposing the TRE requirement. As indicated above, districts cannot increase M&O tax rates above \$1.04 without obtaining approval from their voters through a TRE. (See *supra* FOF 28.) For districts that were compressed down to \$1.00, they could only access four additional pennies without an election. The TRE requirement is unique to school districts; no other local taxing unit is subject to this requirement when setting its tax rate. (See Ex. 20107, Clark Report, at 1.)

FOF 254. The explicit purpose of the TRE requirement is to make it harder for school districts to raise tax rates above \$1.04 – and thus to limit a school district’s discretion over its tax rate. (Ex. 6396 at 5 (“Without adjusting the rollback rate to reflect the reduction in school M&O tax rates, any property tax relief could quickly evaporate as school boards increased local property taxes year after year.”).)

FOF 255. As detailed above, the school finance system contains three-different yield levels. Tier I, for the compressed tax rate (\$1.00 for most districts), has a guaranteed yield of \$47.65 and a corresponding equalized wealth level of \$476,500 per WADA. (See *supra* FOF 40, FOF 42, and FOF 46.) Tier II-A (the first six pennies of tax effort above the compressed tax rate) has a higher guaranteed yield of \$59.97 and no recapture, and are thus known as the “golden” pennies. (See *supra* FOF 44 and FOF 46.) Tier II-B (the pennies accessing beyond six cents above the compressed rate, up to the tax cap of \$1.17) are known as “copper pennies” because they carry a much lower guaranteed yield of \$31.95 and a corresponding equalized wealth level of \$319,500. (See *supra* FOF 44 and FOF 47.)

FOF 256. While the golden pennies incentivize districts to raise their tax rates as high as allowed without a TRE (\$1.04) and have ensured that the vast majority of districts did just that (see RR54:116-17; Ex. 6618 at 14), the low yield of the copper pennies has kept districts from being able to access the full-range of taxing authority available to them beyond the

level that triggers a TRE – even when doing so is necessary to raise the resources required to achieve a general diffusion of knowledge. (Ex. 6618 at 14.)

- FOF 257. Chapter 42 districts are particularly constrained by the yield structure, as many high-funded districts can raise more at an M&O tax rate of \$1.04, without the need for a TRE, than lower-funded districts can raise at a rate of \$1.17. (Ex. 3187, Pierce Report, at 14; Ex. 3226, Kincannon Dep., at 148; Ex. 3198, Garza Dep., at 30-32.) The lower yield of Chapter 42 districts means they are “capped out” by the TRE at a lower revenue level, thus reducing their discretion that much sooner.
- FOF 258. Exacerbating the problem, Chapter 42 districts must then overcome significant obstacles to pass a TRE. Numerous Chapter 42 superintendents credibly testified that their districts would have difficulty passing a TRE because of the poverty of their districts and the low yield the copper pennies receive. (Ex. 3198, Garza Dep., at 30-32; Ex. 3204, Dupre, Dep., at 46-47; RR20:127; Ex. 3201, Witte Dep., at 19-21; Ex. 3202, Pfeiffer Dep., at 35-42, 46-48; RR15:197-99.) Some Chapter 42 districts were able to pass TREs only by simultaneously lowering their I&S rates, so that voters’ overall tax rates remained flat. (RR5:187-96; RR6:28; RR24:138-39.) These districts must pay their debt service from surplus, and will likely have to raise their I&S rate in short order. (RR5:187-96; RR6:28; RR24:140-41.)
- FOF 259. Chapter 41 districts also face great difficulty in accessing the “copper penny” tier of funding because of the combination of the TRE requirement and the Tier II-B funding structure. If a Chapter 41 district wishes to increase its M&O tax rate above \$1.04 and above the level of the golden pennies, it must ask voters to approve a tax increase in which part of the revenue collected will be recaptured and sent back to the state for other districts (*i.e.*, revenues in excess of \$31.95 per penny of tax effort are subject to recapture). (*See supra* FOF 44 and FOF 47.) Not only are copper pennies recaptured, but they are recaptured at the lowest equalized wealth level of \$319,500 per WADA rather than the Tier I level of \$476,500 per WADA. (Ex. 5384, Kallison Equity Report, at 7; RR21:87-88; *see also supra* FOF 46 and FOF 47.) Therefore, any Chapter 41 taxing more than six pennies above the compressed rate would be subject to recapture at a rate greater than the recapture rate under Tier I, making the passage of a TRE politically challenging. (Ex. 5384, Kallison Equity Report, at 7; RR21:86-88; *see also infra* FOF 844, FOF 863, FOF 877, and FOF 909.) These requirements effectively have denied many Chapter 41 districts meaningful discretion to set their M&O tax rates.
- FOF 260. The evidence showed that relatively few Chapter 41 districts have successfully obtained voter approval through a TRE to tax into the copper penny tier. (Ex. 5384, Kallison Equity Report, at 7; RR21:89-91 (referencing Ex. 5396 at 31).) In 2011-12, only 10.8% of Chapter 41 districts taxed at more than \$1.06 (the level at which it is assured that a district is both taxing in the copper penny tier and has conducted a successful TRE). (RR21:89-90 (referencing Ex. 5396 at 31).) The percentage is even lower for districts with wealth per WADA above \$599,700; only 3 of 113 such districts (or 2.65%) taxed above \$1.06 for the 2011-12 period. (RR21:90 (referencing Ex. 5396 at 31).)

FOF 261. As an example of this predicament for Chapter 41 districts, Dr. Kallison, who is the president of the Eanes ISD school board, testified that Eanes ISD is capped at an M&O tax rate of \$1.06 for all practical purposes. (RR21:88-89.) To raise Eanes ISD's tax rate above \$1.06, voters would have to approve a tax that would return seventy percent of the additional revenue to the state. (RR21:88.) Dr. Kallison testified that passing such a tax is not politically viable. (*Id.*)

FOF 262. The Court finds that the lower yield/higher recapture rate of the copper pennies and the TRE requirement are major contributors to the elimination of school districts' meaningful discretion to set their M&O tax rates.

**iv. The State controls the levy of I&S taxes through the 50 cent debt test, which acts as a *de facto* cap on I&S tax rates.**

FOF 263. Whether or not they receive EDA or IFA funding, before a school district may issue a bond, it is required to demonstrate to the Attorney General that the district has the ability to meet its principal and interest payments on bonds<sup>37</sup> from an I&S tax rate that does not exceed 50 cents per \$100 of taxable value. *See* TEX. EDUC. CODE § 45.0031. (*See also* Ex. 1328, Casey Report, at 26-27; RR10:187-90.)

FOF 264. The decline in EDA and IFA funding detailed above in Part I.C.1.a.ii (FOF 224, *et seq.*) has forced districts to increase their local I&S rates. (RR32:198-99 (referencing Ex. 6352 at 20).) In the 1999-2000 school year (the first year of full implementation of the EDA) only thirty-four school districts had I&S rates of 30 cents or higher. (RR56:177 (referencing Ex. 6621 at 13).) At the time of *WOC II*, forty-five school districts had I&S rates of 30 cents or higher. (Ex. 6621 at 14.) By 2012-13, 225 school districts had I&S rates above 30. (*Id.*; *cf.* RR32:198-99 (referencing Ex. 6352 at 20); *see also supra* Part I.C.1.a.ii (FOF 224, *et seq.*)) As districts raise their tax rates closer to the 50 cent level, they may be forced to either forgo issuing voter-approved debt or to issue bonds with longer maturities to meet the 50 cent debt test. (*Id.*; Ex. 6352 at 28-29; RR10:191-92; RR11:80-83 (referencing Ex. 665 at 12, 14-15); Ex. 6621 at 16.) Longer maturities result in local school districts and taxpayers paying tens to hundreds of millions in additional interest costs. (Ex. 1328, Casey Report, at 26-27; Ex. 6352 at 30; RR11:84 (referencing Ex. 665 at 14-15).)

FOF 265. Fast-growing school districts are particularly hard hit by the combination of the stagnant \$35 yield and the requirements of the 50 cent test. (RR56:180-81, 206, 237; Ex. 6621 at 15-16; Ex. 6352 at 26-27.) Fast-growth districts have greater facilities needs because they must build facilities just to keep up with enrollment growth. (*See, e.g.*, RR3:132 (Humble ISD added 900-1,000 students – the size of a typical middle school – per year since *WOC II* trial); RR11:60 (Fort Bend ISD had to build twenty schools over the past ten years due to enrollment growth); RR25:84-85 (Northside has grown by 25,000

<sup>37</sup> Excluding those bonds approved by voters on or before April 1, 1991 and issued prior to September 1, 1992.

students since *WOC II* and had to build and open 37 schools from 2002 to 2012 to keep pace with enrollment growth).) For the 2011-12 school year, fast-growth school districts have an average I&S tax rate of \$0.333 per \$100, compared with \$0.223 for districts that are not fast growth. (Ex. 1328, Casey Report. at 26.)

FOF 266. The Court finds that the 50 cent debt test functions as a *de facto* cap on I&S tax rates, and that as districts are forced to tax at or near that cap in order to meet their facilities needs, fast-growth districts have lost discretion over their I&S tax rates. Furthermore, because the same taxpayers are responsible for both I&S and M&O property taxes, increasing pressure on I&S taxes necessarily causes increasing pressure on M&O taxes, contributing to the violation of the constitutional prohibition against a statewide property tax.

v. **The State controls the levy by using local property value increases to finance enrollment growth and funding increases.**

FOF 267. The local property tax provides 55 percent of total FSP revenue. The State generally counts on increased revenue through growth in the property tax base to at least cover the cost of increased enrollment growth. In 2013, additional property tax revenue not only funded the cost of enrollment growth, but provided substantial funding for improvements made in the 2013 legislative session. (RR54:87-102 (referencing Ex. 6618 at 4).)

FOF 268. Of the \$5.7 billion increase associated with formula increases (\$3.5 billion) and enrollment growth (\$2.2 billion) in 2013, only about one-third, or \$1.9 billion, was provided through increased general revenue fund appropriations. The remainder was directly associated with estimates of increased property value, which averaged about four percent of value growth per year. These increases provided the opportunity for additional revenue growth without increased state appropriations. (*Id.*)

FOF 269. As a result of the reliance on local property value growth to fund the FSP formula increases and enrollment growth, the percent of FSP funding provided by the State has steadily decreased from its high of 50% in 2008 (just after tax compression) to 45% today. (RR54:98-99.)

FOF 270. Similarly, the State has relied on local property value growth and rising local I&S tax rates to fund facilities, rather than adjusting the yield for IFA and EDA programs. As a result, the state share of facilities funding decreased from 35% in 2001-02 school year to a mere 11% in the 2012-13 school year. (Ex. 6621 at 11.)

2. **Economically disadvantaged students and ELL students are being denied access to reasonable and meaningful opportunities to acquire a general diffusion of knowledge.**

FOF 271. The State did not accept the Supreme Court's invitation in *WOC II* to provide "increased funding, improved efficiencies, or better methods of education" so that all students would have reasonable and meaningful opportunities to acquire a general diffusion of

knowledge. *WOC II*, 176 S.W.3d at 790. Instead, the Legislature chose not to fund economically disadvantaged and ELL students at the level needed to provide reasonable access to essential educational opportunities (*see infra* Part I.C.2.d (FOF 456, *et seq.*)), and indeed the system is so designed that it cannot accomplish a general diffusion of knowledge for those students (*see infra* Parts I.C.2.c (FOF 379, *et seq.*) and I.C.2.e (FOF 520, *et seq.*)).

- FOF 272. As a result, under nearly every student performance metric, economically disadvantaged and ELL students chronically underperform. This is especially evident when comparing their performance to their non-economically disadvantaged and non-ELL classmates. In many cases, the achievement gaps have worsened since *WOC II*, at the same time the bar has been raised by the State. Those students, taken on average and as a whole, are not achieving the standards established by the State – much less their full potential. Many do not even graduate high school, and a large number of those who do are not graduating college and career ready. (*See id.*)
- FOF 273. If these rapidly growing populations are to meet the State’s heightened academic expectations, Texas must adequately address the obstacles these student populations face – including poor nutrition, lower parental resources and involvement, challenging home environments, high mobility rates, fewer “out of school” educational opportunities, and additional language barrier-related challenges for ELL students. (*See infra* FOF 276 and Part I.C.2.b.i (FOF 333, *et seq.*)). The unrefuted record demonstrates that these students can overcome these obstacles to learning and achieving in the classroom *if* presented with the kinds of quality programs and interventions discussed below. (*See infra* Part I.C.2.c (FOF 379, *et seq.*)).
- FOF 274. These interventions and programs are not cost-free, however. The record overwhelmingly establishes, and the Texas Supreme Court has acknowledged, that these students are more expensive to educate. (*See infra* Parts I.C.2.c (FOF 379, *et seq.*) and I.C.2.d.ii - I.C.2.d.iii (FOF 466, *et seq.*)). *See also WOC II*, 176 S.W.3d at 788, 796.
- FOF 275. School districts have been unable to keep up with the demands of these growing, high-need student populations because of the State’s failure to structure the public school system in a way that is responsive to actual student needs. For example, instead of increasing support and programs for economically disadvantaged students, the State eliminated almost \$1.3 billion for programs and initiatives meant to address the educational needs of students who are most at risk, such as quality early childhood programs, extended learning time (*e.g.*, tutoring and summer school), and smaller class sizes. (*See infra* Part I.C.2.d.i (FOF 456, *et seq.*)). At the same time, property tax compression left school districts without the ability to raise funds locally to fill the funding gaps left by the State. (*Id.*) The State still uses arbitrary, outdated weights in the funding formulas that have no real connection to actual student need or program costs. (*See infra* Parts I.C.2.d.ii – I.C.2.d.iii (FOF 466, *et seq.*)). The rapid growth of these student populations, combined with (1) the drastic reduction of programs meant to support them, (2) the districts’ inability to fill the holes left by the State’s cuts (*see supra* Part I.C.2.d.i (FOF 456, *et seq.*)) and (3) the arbitrary and insufficient weights for

compensatory and bilingual education, prevent the most at-risk students from getting the resources they need to stay in school and become college and career ready. The public education system has reached the point where significant improvement for these groups is impossible without adequate and suitable funding.

**a. The growing population of economically disadvantaged students faces significant educational challenges.**

FOF 276. The population of economically disadvantaged students has grown substantially over the past decade and accounts for the vast majority of student growth in Texas public schools, a trend that is expected to continue. (*See supra* Parts I.B.1 (FOF 11, *et seq.*) and I.C.2.a.ii (FOF 294, *et seq.*.) An increasing number of students in an increasing number of districts are impoverished and face obstacles to educational attainment, such as language deficits, greater mobility, less familial and social capital, and higher rates of abuse and neglect. (*See infra* Part I.C.2.a.i (FOF 277, *et seq.*.) The growth in the number and percentages of economically disadvantaged students magnifies the challenges for school districts, which must give them reasonable opportunities to meet the unprecedented rigor of the State's higher standards and expectations. (*See infra* Part I.C.2.a.iii (FOF 298, *et seq.*.)

**i. Economically disadvantaged students face myriad obstacles to educational attainment.**

FOF 277. Superintendents and experts testified about the many challenges facing economically disadvantaged students. Dr. Clive Belfield is a Professor of Economics at the City University of New York and has extensively studied economics in education. He testified that low-income students in Texas often lack the financial, family, and social capital needed to access educational opportunities, and the testimony of many superintendents in this case supports his findings. (RR15:18-24.) Low income students tend to come from one-parent families, leading to lower parental resources, such as fewer or weaker parent-child interactions related to language and literacy, less of a "school-like" home, and increased conflicts in the home. This lack of resources undermines and delays educational development. (RR15:18-24; RR4:72-73; RR22:155-58; Ex. 4224-S, Cervantes Dep., at 17; RR17:239-40; RR14:126; Ex. 3207, Salazar Dep., at 14-21.)

FOF 278. At-risk<sup>18</sup> and economically disadvantaged students are among the most challenging students to educate. They often start school with smaller vocabularies and without the same context for learning as students who are not at-risk and not economically disadvantaged. (*See, e.g.*, RR19:18-19; RR5:172-75, 182-83; RR20:100; Ex. 3202, Pfeifer Dep., at 15-17.) For example, Dr. Pfeifer testified that economically

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<sup>18</sup> An "at-risk" student is one who meets one or more of thirteen criteria – such as failing the STAAR exam, failing two or more secondary level foundation curriculum courses, having limited English proficiency, or being homeless – that the Legislature has determined increases the chances that a student will drop out of school. TEX. EDUC. CODE § 29.081(d). A significant majority of at-risk students are economically disadvantaged.

disadvantaged students do not often hear adult language and enriched vocabulary in the home, and typically only have a vocabulary of approximately 500 words by age three. (Ex. 3202, Pfeifer Dep., at 15-17.) Non-economically disadvantaged students have vocabularies of approximately 5,000 words by the same age. (*Id.*; see also Ex. 3206, French Dep., at 12-13 (Quinlan ISD superintendent noting that economically disadvantaged students have limited vocabulary because of limited interaction and communication with adults).)

- FOF 279. Economically disadvantaged students often enter school without knowing the alphabet or basic life skills, such as how to walk in a line or hang clothes on a hanger. (RR20:77; Ex. 3206, French Dep., at 12; RR19:78-79.) Dr. Gonzalo Salazar, the superintendent of Los Fresnos ISD, testified that students who have not been exposed to reading in the home often do not know how to turn the page of a book, or understand that one should read from left to right. (Ex. 3207, Salazar Dep., at 14-15.)
- FOF 280. Low-income families also have less access to important and necessary “out-of-school” educational opportunities, such as preschool programs, summer school, tutoring, after-school programs, and educational amenities like museum trips. (RR18:12-13; RR4:73-74, 86; Ex. 3207, Salazar Dep., at 14-21; Ex. 1102 at 23-25; RR19:18-20.) Dr. Pfeifer testified that because of the lack of educational opportunities outside of the home, four-year-old economically disadvantaged students begin preschool years behind their peers, have not formed the ability to follow instructions, are unable to communicate effectively with adults, and often do not even know their basic colors, numbers, and animals. (RR5:172-73, 181.) Some have never even been outside a several-block radius of their homes. (*Id.*) Dr. Salazar explained that the lack of educational amenities like museum trips and even family vacations creates a disadvantage for learning vocabulary. (Ex. 3207, Salazar Dep., at 15-17.)
- FOF 281. Low-income students often attend schools that have fewer learning resources, such as quality teachers, suitable facilities, libraries, and counseling. (*See generally* RR18:29-34; RR4:81; Ex. 4224-S, Cervantes Dep., at 30; RR22:155-57, 160, 162-64; Ex. 4237 at 11; Ex. 3207, Salazar Dep., at 53-54, 147-49, 283-85; RR5:244-45; RR20:78, 105-06; Ex. 1102 at 24.) Dr. Salazar elaborated that economically disadvantaged students are “technology-illiterate” because they often do not have computers at home, and may not even understand the function or purpose of a keyboard or mouse. (RR24:23-24.) Dr. Pfeifer testified that there is only one computer lab for 1,340 high school students in Everman, and a majority of these students do not have access to computers at home because of their economic status. (RR6:31-32.)
- FOF 282. Due to employment circumstances and lower educational attainment, low-income parents are less likely to be involved with their children’s school and schoolwork. (RR4:70-71; Ex. 4224-S, Cervantes Dep., at 173; RR17:239-40, 250-51; Ex. 6341, Frost Dep. (Vol. I) at 14-15.) The students themselves often have to work after school and on weekends just to help the family earn the money needed to meet basic needs such as rent or food. (Ex. 6341, Frost Dep. (Vol. I) at 35.) In Quinlan ISD, 69% of men in the district do not

have high school degrees and at best can only provide limited academic support to their children. (RR20:73-74.)

- FOF 283. Low-income parents are also less likely to be able to transport their children to school, making low income students more likely to rely on school-provided transportation, which, in turn, potentially limits opportunities to participate in after-hours tutoring and summer school learning programs. (RR20:33-34; *see also* Ex. 4040, Belfield Report, at 5-6; RR15:19; RR4:77-78.) Mr. Limon, the former superintendent of San Benito CISD, testified that the students who do not have access to transportation often do not receive much-needed tutoring. (RR4:77.)
- FOF 284. Low-income students also tend to have higher mobility rates, which interrupts their schooling and inhibits their educational attainment. (RR19:150-51; RR4:72; Ex. 4224-S, Cervantes Dep., at 196; RR22:140-42.) For example, attendance data from Austin ISD reveals that students who are residentially mobile are twice as likely to miss more than 10% of the school year. (RR19:153; Ex. 6356 at 8; *see also* Ex. 6335, Cain Dep., at 18-24.) In Alief ISD, economically disadvantaged students often move as much as two or three times a school year, forcing these more mobile students to refamiliarize themselves with new teachers and concepts multiple times a year and disrupting the students' learning time. (RR8:100-01.) In Edgewood ISD, the mobility rate is approximately 20%, and students frequently have to move in and out of the district during the same year due to housing evictions. (RR22:140.)
- FOF 285. Dr. Cervantes, the superintendent of Edgewood ISD testified that higher mobility rates also make it difficult for district administrators to identify where mobile students are in their academic achievement and to assess their corresponding educational needs. (RR22:141.) Increased professional development is needed to help teachers and administrators differentiate student needs and address the challenges presented by mobility. (RR19:153; Ex. 6356 at 8; *see also* Ex. 6335, Cain Dep., at 18-24.)
- FOF 286. Economically disadvantaged students have higher rates of homelessness, and often live in homes with only one caregiver. (*See, e.g.*, Ex. 3206, French Dep., at 12; Ex. 6356 at 6 (almost 2,000 homeless students in Austin ISD).) As explained by Dr. French, a caregiver is not always a parent, and instead may be a more far-removed relative or friend. (*See, e.g.*, Ex. 3206, French Dep., at 12.) Various superintendents such as Dr. French, Dr. Salazar, and Dr. Cervantes testified that physical and emotional abuse and incarceration often occur in low-income households. (*See, e.g.*, Ex. 3206, French Dep., at 12; RR24:126; RR22:138.) Economically disadvantaged students also often start school without coping skills or basic socialization and conflict resolution skills. (Ex. 3206, French Dep., at 61; RR19:18-19, 78-79.)
- FOF 287. At least 100,000 economically disadvantaged students in some of the rural parts of Texas near the U.S.-Mexico border come from colonias, or rural subdivisions, which are characterized by poor housing and inadequate physical infrastructure such as the lack of paved roads, heat, electricity and potable water. (Ex. 3207, Salazar Dep., at 27; Ex. 508; RR24:118-123; RR4:61-62.) Dr. Salazar testified that in Los Fresnos, many children live

in those conditions, and thousands live in standards barely above that. (Ex. 3207, Salazar Dep., at 27.)

- FOF 288. The Alief ISD and Abilene ISD superintendents testified that certain economically disadvantaged students, specifically refugees from war torn countries, come to class without basic skills necessary for succeeding in school – such as knowing how to sit at a desk or how to hold a pencil or turn work in on time. (RR8:98-99; RR19:41-44.) They may also suffer from the trauma of having experienced civil unrest, similar to the students from Mexico in Los Fresnos ISD, who observed and experienced violence and kidnappings in their home countries. (RR24:126-27.) School districts must address the trauma these students have suffered in order to help them focus on their studies. (*Id.*; Ex. 4224-L, Chambers Dep., at 83-84.)
- FOF 289. Economically disadvantaged students receive poorer nutrition. As described by Dr. French of Quinlan ISD, they often do not eat outside of school hours. (RR20:36; Ex. 6341, Frost Dep. (Vol. 1), at 14-15.) For example, many students in La Feria also go the weekends with barely anything to eat and churches have adopted schools to help feed the children. (RR18:35.) Economically disadvantaged students are also less likely to have access to health insurance. Nutritional deficits and lack of access to health care often lead to hunger and poor health, affecting students' ability to learn in school. (RR22:139; RR4:70; RR14:126; Ex. 3207, Salazar Dep., at 42; RR18:34-35; RR24:32.)
- FOF 290. In short, because of the social and familial obstacles they face, low-income students generally start school less prepared, and over time, fall further behind without intervention, creating greater challenges for their schools. (*See, e.g.*, RR11:178-79; RR4:72-73, 94-95, 175-76; Ex. 4224-S, Cervantes Dep., at 176-77; RR22:153-54; RR19:18-20.)
- FOF 291. As students progress through school, and achievement gaps widen between economically disadvantaged students and their more affluent peers, the economically disadvantaged student can become “an unwilling learner” – “a disenfranchised, disconnected student” who is difficult to engage in the learning process and more likely to drop out of school. (RR19:23-24.)
- FOF 292. For each student who fails to graduate, the State of Texas and its taxpayers can expect to bear the brunt of the failure. Dr. Belfield estimated the loss to state revenues to be between \$139,000 and \$158,000 for each high school dropout. (*See generally* RR15:7-102; Ex. 4040, Belfield Report, at 8-9.) He also described the social and economic impacts of uneducated students, such as their increased reliance on welfare, higher crime and incarceration rates, and higher likelihood of requiring costly remediation should they ever make it to college. (Ex. 4040, Belfield Report, at 3-5.)
- FOF 293. The obstacles facing economically disadvantaged students and their schools, while daunting, can be overcome. Former Commissioner Scott acknowledged that the achievement gaps between economically disadvantaged students (and ELL students) and non-economically disadvantaged students (and non-ELL students) can be narrowed with

the implementation of sound, effective educational programs, such as high quality early childhood programs, smaller class sizes, qualified, extended learning time, and well trained teachers, as described in Part I.C.2.c (FOF 379, *et seq.*) below. (Ex. 4243 at 6.) However, the current school finance system is not designed, structured, or funded to provide those opportunities to economically disadvantaged students.

**ii. The economically disadvantaged population has grown since *WOC II*, and the concentration of disadvantaged students in certain districts exacerbates the challenges in these districts.**

FOF 294. In the 2012-13 school year, there were 3,054,741 economically disadvantaged students enrolled in Texas public schools, comprising 60.4% of the total student population. (Ex. 4258 at 13.) Over the last ten years, the population of low income students in Texas public schools has grown by over 800,000 students, an increase of nearly 10 percentage points of the total student population. (*Compare id.* with Ex. 1087 at 6; *see also WOC II*, 176 S.W.3d at 755 (noting just over one-half of the Texas public school population was economically disadvantaged).)

FOF 295. The challenges created by the poorly structured, operated, and funded school finance system and the educational barriers facing economically disadvantaged students are even greater in school districts that enroll higher concentrations of low income students. Mr. Moak analyzed the relationship between the performance of districts and the percent of economically disadvantaged students. (RR54:147-48 (referencing Ex. 6618 at 27); Ex. 6620.) He found that as the percentage of economically disadvantaged students in a district increases, the percentage of students passing the STAAR EOC and STAAR 3-8 exams decreases. Notably, the pattern of lower performance appears for both the economically disadvantaged and non-economically disadvantaged student populations in schools with higher percentages of economically disadvantaged students.

STAAR EOC

Spring 2013

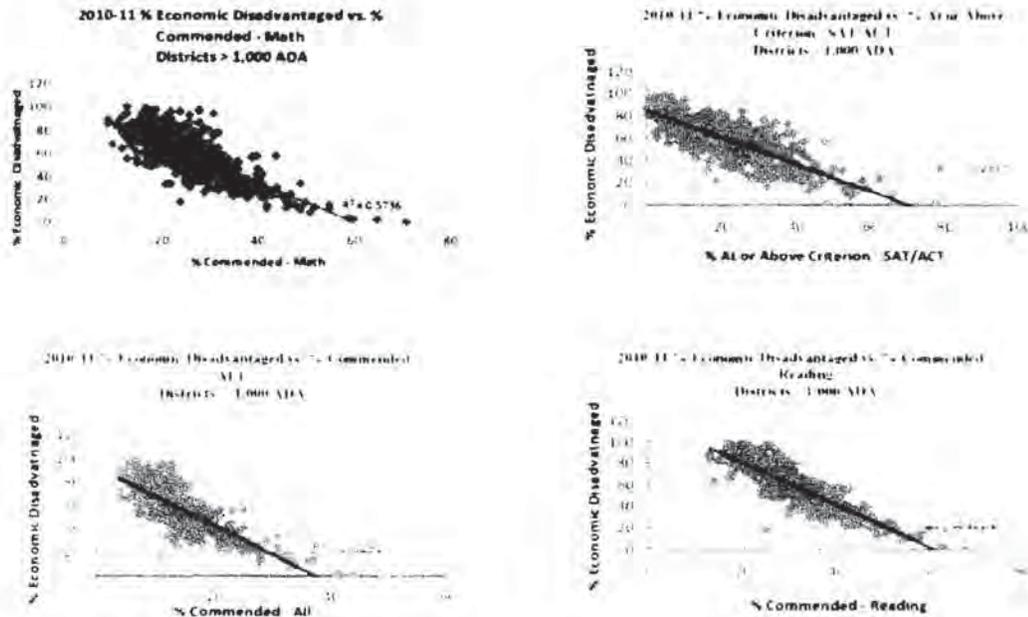
Economic Disadvantaged	# Districts	Graduation Tests at Level II Phase-In I Standard - Students			Graduation Tests at Level II Final Recommended Standard		
		ECON DIS % Met Level 2 at Phase-in I	NON-ECON DIS % Met Level 2 at Phase-in I	ALL STUD % Met Level 2 at Phase-in I	ECON DIS % Met Level 2 on ALL EOCs Taken, at Lvl II FINAL Recommend	NON-ECON DIS % Met Level 2 at FINAL Recommend	ALL STUD % Met Level 2 FINAL Recommend
Under 30%	77	49.6%	77.2%	71.7%	21.4%	49.0%	43.5%
30% to less than 50%	243	41.0%	66.9%	57.5%	15.1%	36.8%	29.0%
50% to less than 70%	449	35.9%	60.1%	47.2%	12.2%	30.4%	20.7%
70% to less than 90%	273	33.9%	54.1%	38.9%	11.8%	26.5%	15.4%
90% and Over	61	31.3%	47.7%	32.2%	11.7%	22.6%	12.4%
Unknown	8	32.3%	52.9%	40.6%	26.8%	31.2%	28.6%
Grand Total	1,111	36.1%	65.0%	49.5%	12.9%	35.9%	23.5%

STAAR 3-8  
Spring 2013

Economic Disadvantaged	# Districts	Grade 3-8 Tests at Level II Phase-In I Standard			Grade 3-8 Tests at Level II Final Recommended Standard		
		ECON DIS % Met Level 2 at Phase-in I	NON-ECON DIS % Met Level 2 at Phase-in I	ALL STUD % Met Level II Phase-In Standard	ECON DIS % Met Lvl II FINAL Recommend	NON-ECON DIS % Met Lvl II FINAL Recommend	ALL STUD % Met Level II Final Recommend
Under 30%	93	56.6%	84.0%	77.9%	17.3%	46.8%	40.3%
30% to less than 50%	257	53.0%	78.2%	67.7%	14.7%	37.9%	28.3%
50% to less than 70%	467	48.0%	72.2%	57.3%	12.5%	32.6%	20.2%
70% to less than 90%	291	46.3%	67.2%	50.2%	12.1%	28.8%	15.2%
90% and Over	81	42.6%	59.7%	43.5%	10.8%	23.3%	11.5%
Unknown	12	29.7%	58.0%	48.0%	6.2%	25.3%	18.6%
Grand Total	1,201	47.9%	76.2%	59.3%	12.7%	37.2%	22.5%

(Ex. 6620.)

FOF 296. Mr. Moak also found a strong negative correlation between the percentage of the students who are economically disadvantaged in a district and that district's SAT and ACT scores and performance at the commended level on TAKS exams. (Ex. 6322, Moak Report, at 60; RR6:222-25 (referencing Ex. 6349 at 49).) In other words, as the percentage of economically disadvantaged students increases in districts with more than 1,000 ADA, performance decreases. (Ex. 6322, Moak Report, at 59.)



(Ex. 6349 at 49.)

FOF 297. The State's expert, Dr. Podgursky, also acknowledged that the concentration of economically disadvantaged students within a district can have a significant negative impact on student learning. (RR29:105-07; *see also infra* FOF 642.)

iii. **Substantial and persistent performance gaps and low overall academic performance demonstrate that economically disadvantaged students are not acquiring a general diffusion of knowledge.**

FOF 298. The Texas Supreme Court in *WOC II* acknowledged wide performance gaps among student groups based on race and economic status. *WOC II*, 176 S.W.3d at 789. Today, nearly a decade later, these gaps have persisted and even increased (as the State raised the bar for students but failed to maintain and improve the State's funding structure). The result is that these children are being denied reasonable access and opportunity to a quality education.

(a) **College readiness and STAAR**

FOF 299. **STAAR.** As stated earlier, Texas holds all of its students (with few exceptions, such as certain special education students) to the same, rigorous academic and graduation standards. (*See supra* Part I.B.3 (FOF 81).) Yet, since the implementation of STAAR, the State has not provided funding sufficient to meet the needs of economically disadvantaged students. Instead, the State has drastically reduced essential compensatory

education programs for these students, while eliminating district capacity to make up the difference. (*See supra* Part I.C.1 (FOF 210, *et seq.*) and *infra* Part I.C.2.d.i (FOF 456, *et seq.*.) As a result of the unsuitable school finance system, the latest output data on the performance of economically disadvantaged students on the STAAR assessments shows that they are largely not meeting the minimum state standards (both as a disaggregated group and in comparison to non-economically disadvantaged students). (*Compare* Ex. 6322, Moak Report, at 29-30; Ex. 6324, Moak Supp. Report One, at 4; Ex. 6519 at 1 with Ex. 6618 at 25-26; Ex. 6620; Ex. 4528.)

FOF 300. Even at the lower Level II phase-in 1 standard (*see supra* FOF 96), for example, large achievement gaps exist between economically disadvantaged students and their non-economically disadvantaged peers on the Spring 2013 STAAR EOCs. The following chart shows the percentage of students who *failed to meet* this lower phase-in standard on the Spring 2013 EOCs.

<b>STAAR EOC Test Participants Achieving:</b>	<b>% of Students scoring below Level II Phase-in 1 Standard</b>
Eng. I Reading Econ. Disadvantaged*	46%
Eng. I Reading Non-econ. Disadvantaged*	20%
<b>Eng. I Writing Econ. Disadvantaged*</b>	<b>65%</b>
<b>Eng. I Writing Non-econ. Disadvantaged*</b>	<b>35%</b>
Biology Econ. Disadvantaged*	21%
Biology Non-econ. Disadvantaged*	7%
Algebra I Econ. Disadvantaged*	29%
Algebra I Non-econ. Disadvantaged*	13%
Eng. II Reading Econ. Disadvantaged*	31%
Eng. II Reading Non-econ. Disadvantaged*	12%
<b>Eng. II Writing Econ. Disadvantaged*</b>	<b>61%</b>
<b>Eng. II Writing Non-econ. Disadvantaged*</b>	<b>33%</b>
World History (Proxy) Econ. Disadvantaged*	41%
World History (Proxy) Non-econ. Disadvantaged*	19%
All Tests Taken. Econ. Disadvantaged – Graduation Tests Only^	64%
All Tests Taken. Non-econ. Disadvantaged – Graduation Tests Only^	35%

(Ex. 6618 at 25.) This chart reveals achievement gaps ranging from fourteen to thirty percentage points.

FOF 301. The gap between economically disadvantaged and non-economically disadvantaged students in these subjects actually *widened* from the 2012 school year to the 2013 school year on a number of the exams:

- English I Reading: Increased from 23 to 26 percentage points;
- English I Writing: Increased from 28 to 30 percentage points;
- Algebra I: Increased from 13 to 16 percentage points;
- U.S. History: Increased from 14 to 18 percentage points;

- World Geography: Increased from 16 to 21 percentage points;
- Biology: Increased from 11 to 14 percentage points.

(For English I Reading, *compare* Ex. 4114 *with* Ex. 4259 at 110; for English I Writing, *compare* Ex. 4115 at 1 *with* Ex. 4259 at 112; for Algebra I, *compare* Ex. 4131, Algebra I at 1 *with* Ex. 4259 at 104; for U.S. History, *compare* Ex. 4135 *with* Ex. 4259 at 124; for World Geography, *compare* Ex. 4135 *with* Ex. 4259 at 122; for Biology, *compare* Ex. 4133 *with* Ex. 429 at 107.)

- FOF 302. The performance in the chart above also reveals startlingly low academic achievement by economically disadvantaged students as a group, with only one out of three economically disadvantaged students reaching the lower Level II phase-in standard for English I Writing; only one out of two economically disadvantaged students reaching the same standard in English I Reading; and one out of every three economically disadvantaged students achieving the Level II phase-in standard on all tests. (Ex. 6618 at 25.)
- FOF 303. Moreover, the State’s own analyses of the STAAR 2013 Summer and December retests show that economically disadvantaged students are struggling mightily even after the opportunity to retest.
- FOF 304. Hundreds of thousands of economically disadvantaged students have failed multiple retests and remain off-track for graduation. Economically disadvantaged re-testers have fared worse than re-testers as a whole. The table below reflects the numbers and percentages of economically disadvantaged students who failed to pass all exams taken as of the Summer 2013 administration at the Level II phase-in standard, according to the State’s cohort analysis. (*See supra* FOF 146 – FOF 147 for an explanation of the State’s “cohort analysis.”) Roughly 94,822 students in the Class of 2015 Cohort still had not passed all required exams taken after the Summer 2013 administration, despite five testing opportunities. (*See* Ex. 5796, Zyskowski Dep. (Vol. II), at 9.) Approximately 113,865 economically disadvantaged students in the Class of 2016 Cohort still had not passed all tests taken after Summer 2013, even after two testing opportunities. (*See id.*)

	Number of <u>ED students</u> having failed to pass all exams taken	Percent of <u>ED students</u> having failed to pass all exams taken	Percent of <u>all students</u> having failed to pass all exams taken
Class of 2015 Cohort	94,822	55.6	42.3
Class of 2016 Cohort	113,865	58.6	44.8

(Ex. 5797 at 4; Ex. 11366 at 18, 20, 21, 23; calculated as explained on separate cohort charts in Ex. 5795, David Clark Dep., at 107-08, 109-10.) The percentage of economically disadvantaged students who failed to pass all exams taken was greater than

the percentage of “all students” re-testers who failed to pass all exams taken. (*See id.*) (The “all students” cohort includes economically disadvantaged students).

FOF 305. The State responded to these dismal results, not by providing a suitable education system, but instead by creating a “transition rule” which had the effect of allowing certain students to forgo a reading or writing retest even if they failed the test itself. Consequently, thousands of economically disadvantaged students who failed to achieve the lower Level II phase-in I standard on English I Reading or Writing and/or the English II Reading or Writing tests did not have to retake the exams. (*See supra* FOF 150 for further explanation of the State’s transition rule.) The following table shows the numbers and percentages of economically disadvantaged students in the State’s cohorts who still had not passed all exams taken after Summer 2013, even after the transition rule was applied.

	Number of ED students having failed to pass all exams taken (with transition rule)	Percent of ED students having failed to pass all exams taken (with transition rule)	Number of ED students not required to retest based on transition rule
Class of 2015 Cohort	81,496	48	13,159
Class of 2016 Cohort	104,973	54.7	8,624

(Ex. 5797 at 9; Ex. 11366 at 20, 23, 27, 30; calculated as explained in Ex. 5795, David Clark Dep., at 60-61, 108-09.) When comparing these figures with the table in FOF 151 above, economically disadvantaged students again failed to pass all exams at much higher rates than all students.

FOF 306. The State’s December 2013 class analysis also reveals significant numbers of economically disadvantaged students who have failed to pass all tests taken at the easier Level II phase-in standard before application of the Commissioner’s transition rule, as reflected in the table below. (*See supra* FOF 146 and FOF 148 for explanation of “class analysis.”)

	Number of ED students having failed to pass all exams taken	Percent of ED students having failed to pass all exams taken
Class of 2015	73,824	46.4
Class of 2016	93,616	51.6

(Ex. 5797 at 11; Ex. 20312 at 4, 6, 7, 9; calculated as explained in Ex. 5795, David Clark Dep., at 92-93, 112.) Again, the percentage of economically disadvantaged students who

failed to pass all tests taken at the Level II phase-in standard was higher – in this case, over ten percent higher – than the percentage of all students who failed to meet the same standard. (*See supra* FOF 152.)

FOF 307. Students in the Class of 2015 and Class of 2016 have now had, respectively, six and three testing opportunities to pass their end-of-course exams. (*See* Ex. 5796, Zyskowski Dep. (Vol. II), at 9.) Even after multiple testing opportunities and after application of the transition rule, nearly 135,000 economically disadvantaged students in both classes combined still have not passed all exams taken at the lower Level II phase-in standard, according to the State’s “class analysis” reflected below. This is true *after* more than 32,000 economically disadvantaged students in both classes combined were exempted, by virtue of the transition rule, from retaking a test they previously failed.

	Number of ED students having failed to pass all exams taken (with transition rule)	Percent of ED students having failed to pass all exams taken (with transition rule)	Number of ED students not required to retest based on transition rule
Class of 2015	54,755	34.4	19,069
Class of 2016	80,192	44.2	13,424

(Ex. 5797 at 12; Ex. 20312 at 4, 6, 7, 9; calculated as explained in Ex. 5795, David Clark Dep., at 93-94, 111-12.)

FOF 308. Regardless of which analysis is examined, the State’s data confirms that, even after multiple testing opportunities, hundreds of thousands of economically disadvantaged students still have not passed all exams taken, their performance is not appreciably improving, and they are not on track to graduate or become college and career ready. (*See supra* FOF 294.) The percentage of economically disadvantaged students who have failed to pass all exams taken is higher than the percentage of all students who have failed to pass all exams taken, after the transition rule is applied.

FOF 309. Districts now face the enormous burden of providing accelerated instruction to each of these hundreds of thousands of students. (*See* Ex. 5796, Zyskowski Dep., at 9.) In the 2015 and 2016 classes, schools are required to provide remediation to each of the nearly 135,000 economically disadvantaged students. This does not include remediation that must be provided to students who are also failing a course. (*See infra* FOF 420.) This burden will only increase given that the current passing standard is much lower than the final standard set to apply starting in the 2015-16 school year. (*See supra* FOF 96.) The final STAAR standards are substantially more rigorous than the TAKS final standards. (*See supra* footnote 29 (page 41).) As noted above, student performance on STAAR retests has been much worse than student performance on TAKS retests. (*See supra* FOF 102.)

FOF 310. The rate at which economically disadvantaged students still have not passed all required exams taken is directly relevant to the question of whether these students will graduate college or career ready for the reasons set forth in Parts I.B.3.a (FOF 82. *et seq.*) through I.B.3.c (FOF 103. *et seq.*) above. Under any analysis, hundreds of thousands of economically disadvantaged students still have not passed all required exams taken after numerous attempts and are nowhere near reaching college readiness on those exams. Although tens of thousands of economically disadvantaged students were not required to retest under the transition rules, they still were not able to meet the lower phase-in standard on their reading and writing exams and are not college ready. (*See Ex. 5795. David Clark Dep.. at 61-62.*)

FOF 311. The Court acknowledges that the State is free to phase in its standards of proficiency. When evaluating the percentages of students reaching proficiency at the various standards, however, the number and percentage of questions students need to answer correctly in order to meet the standards are low, particularly at the Level II phase-in standards. For example, as shown below, for the Algebra I and Biology Level II phase-in I standard, students need only answer 20 out of 54 questions correctly, or 37%.

		Phase- in 1, Lvl 2		Final Lvl 2		Final Level III	
Test	Items Tested	Raw Score	% Correct	Raw Score	% Correct	Raw Score	% Correct
Eng I Read	56	30	54%	36	64%	46	82%
Eng II Read	56	27	48%	33	59%	45	80%
Eng I Write	62	40	65%	45	73%	57	92%
Eng II Write	62	38	61%	43	69%	55	89%
Algebra I	54	20	37%	34	63%	42	78%
Biology	54	20	37%	33	61%	45	83%
U.S. History	68	28	41%	44	65%	55	81%

(Excerpted Summary of Spring 2012 STAAR EOC Raw Score Performance Standards\*, Ex. 44 at 9-10.) The fact that hundreds of thousands of economically disadvantaged students still have not passed all of the exams taken (even after multiple testing opportunities) is especially dismal given the relatively low number of questions students must answer correctly to “pass” any given subject. (*See supra* FOF 303 – FOF 308.)

FOF 312. As the State acknowledges, the STAAR exams are used to measure college readiness and mastery of the TEKS curriculum. (*See supra* Part I.B.3.b (FOF 93. *et seq.*); *see also* Ex. 44 at 9-10.) Accordingly, a review of performance data and achievement gaps under the final Level II and Level III standards is also in order.

FOF 313. The performance of economically disadvantaged students is even bleaker when judging against the Level II final standard, which is higher than the Level II phase-in standard. (*See supra* FOF 96 for a discussion of the final versus phase-in standards.) On all of the

EOC exams tested in the Spring of 2013 for graduation purposes, only 13% of economically disadvantaged students achieved the Level II final standard compared to 36% of non-economically disadvantaged students, a gap of 23 percentage points. (Ex. 6536 at 14.)

FOF 314. Below is a summary of the percentage of students *failing to meet* the Level II final standard for economically disadvantaged and non-economically disadvantaged students by test for the Spring of 2013:

<b>STAAR EOC Test Participants Achieving:</b>	<b>% of Students Scoring Below Level II Final Recommended Standard</b>
Eng. I Reading Econ. Disadvantaged*	70%
Eng. I Reading Non-econ. Disadvantaged*	39%
Eng. I Writing Econ. Disadvantaged*	82%
Eng. I Writing Non-econ. Disadvantaged*	54%
Biology Econ. Disadvantaged*	67%
Biology Non-econ. Disadvantaged*	37%
Algebra I Econ. Disadvantaged*	75%
Algebra I Non-econ. Disadvantaged*	50%
Eng. II Reading Econ. Disadvantaged*	49%
Eng. II Reading Non-econ. Disadvantaged*	23%
Eng. II Writing Econ. Disadvantaged*	82%
Eng. II Writing Non-econ. Disadvantaged*	58%
World History (Proxy) Econ. Disadvantaged*	77%
World History (Proxy) Non-econ. Disadvantaged*	52%
All Tests Taken. Econ. Disadvantaged – Graduation Tests Only^	87%
All Tests Taken. Non-econ. Disadvantaged – Graduation Tests Only^	64%

(*Id.*)

FOF 315. The stark achievement gaps between economically disadvantaged and non-economically disadvantaged students are also observed at the higher Level III standard, which the Court finds most reflective of college readiness. (*Id.*; *see also supra* FOF 108) In the Spring 2013 administration, only 4% of economically disadvantaged students passed English I Reading and only 1% passed English Writing at Level III. (Ex. 4259 at 110, 112.) On the other hand, non-economically disadvantaged students passed these subjects at rates at least four times higher at Level III. (*Id.*) On Algebra I, only 8% of economically disadvantaged students passed, compared to 26% of non-economically disadvantaged students. (*Id.* at 104.)

FOF 316. Similar performance gaps exist on the STAAR 3-8 exams, and the second year administration of the STAAR exams did not produce significant progress closing those gaps, as shown in the chart below.

Figure A-8. Comparison of 2012 and 2013 STAAR Results from Spring First Administration Only: Percent Passing by Economically Disadvantaged Status

STAAR Tests – Combined English and Spanish	% Passing at Level II Phase-In 1 Standard		
	Spring 2012	Spring 2013	Difference
First Administration Only – Spring 2012 and Spring 2013			
Grades 3 – 8 Reading Econ. Disadvantaged*	67%	66%	-1
Grades 3 – 8 Reading Non- Econ. Disadvantaged*	88%	88%	0
Grades 3 – 8 Mathematics Econ. Disadvantaged*	63%	62%	-1
Grades 3 – 8 Mathematics Non- Econ. Disadvantaged*	83%	83%	0
Grades 4 and 7 Writing Econ. Disadvantaged*	63%	61%	-2
Grades 4 and 7 Writing Non- Econ. Disadvantaged*	84%	83%	-1
Grades 5 and 8 Science Econ. Disadvantaged*	62%	65%	+3
Grades 5 and 8 Science Non- Econ. Disadvantaged*	85%	86%	+1
Grade 8 Social Studies Econ. Disadvantaged*	48%	52%	+4
Grade 8 Social Studies Non- Econ. Disadvantaged*	75%	78%	+3
Algebra I Econ. Disadvantaged†	72%	71%	-1
Algebra I Non-Econ. Disadvantaged†	85%	84%	-1
English I Reading Econ. Disadvantaged†	56%	59%	+3
English I Reading Non-Econ. Disadvantaged†	81%	83%	+2
English I Writing Econ. Disadvantaged†	41%	41%	0
English I Writing Non-Econ. Disadvantaged†	70%	70%	0
Biology Econ. Disadvantaged†	81%	83%	+2
Biology Non-Econ. Disadvantaged†	93%	94%	+1
World Geography Econ. Disadvantaged†	72%	72%	0
World Geography Non-Econ. Disadvantaged†	90%	90%	0

\*Source: Texas Education Agency – Pearson Texas Assessment Management System, First Administration Only, Statewide Spring 2013 STAAR Results, August 2013. Does not include “above grade-level testers”. Does not include students testing with STAAR-L, Modified or Alternate versions.

†First time 9<sup>th</sup> grade students only. MCA analysis of the TEA confidential student-level 2012 and 2013 data files via Linguicon Discovery. Does not include “above grade-level testers”. Does not include students testing with STAAR-L, Modified or Alternate versions.

(Ex. 6618 at 26.)

FOF 317. **AEIS/TAPR college-ready indicators.** College-Ready Graduate rates (as reported by TEA and discussed previously in FOF 165 above) for economically disadvantaged students also remain low. For the Class of 2012, only 44% of economically disadvantaged eleventh graders reached the College-Ready Graduates standard in both TAKS subjects (English Language Arts and Mathematics). At the same time, 57% of all students met the standard in grade eleven in both subjects. (Ex. 4258 at 11.) For the Class of 2011, the gap between the economically disadvantaged and “all students” groups was similar. (*Id.*)

- FOF 318. The all-student group includes both economically disadvantaged and ELL students; therefore, the performance gaps between the “non-economically disadvantaged students” and “economically disadvantaged students,” or between “non-ELL students” and “ELL students” would be much larger than these findings demonstrate using data from the “all students” group.
- FOF 319. Economically disadvantaged students fared just as poorly on other student performance measures. In 2012, only one out of every six (16.1%) economically disadvantaged students tested under the AP/IB program, and of those students tested, only one out of three (33%) achieved the college-ready criterion established by TEA. (*Id.*) Stated another way, approximately 5% of all economically disadvantaged students were identified as “college ready” under the AP/IB indicator. This compares to 21.9% of all students who tested under the AP/IB program and 50.8% of all students reaching the college-ready level on those exams. (*Id.*)
- FOF 320. For the Class of 2012, only 55.9% of economically disadvantaged students took the SAT or ACT college entrance exams, compared to 66.9% of all students. (*Id.*) Of those tested, 9.2% of economically disadvantaged students met the college-ready criterion set by TEA, compared to 24.9% of all students tested. (*Id.*) The State’s assertion that SAT and ACT scores are expected to drop because more minority and low-income students are testing under these exams is irrelevant to the question of whether all students are accessing a general diffusion of knowledge as mandated by the constitution.

**(b) TAKS**

- FOF 321. **TAKS met standard.** The “all tests” indicator in the State’s AEIS reports reflects how students are performing in all subjects tested on TAKS at each grade level. (*See, e.g., Ex. 3207, Salazar Dep., at 100.*) As noted above, TAKS has been phased out and replaced by STAAR. Nevertheless, the final years’ results on TAKS do not show a system in which economically disadvantaged students have “topped out” or even made significant forward progress; rather, it evidences stagnant scores reflecting the unmet educational needs of the economically disadvantaged population.
- FOF 322. By 2011, the overall performance of economically disadvantaged students remained dismal, with one out of every three students failing to achieve the low “met standard” on all TAKS tests taken. Between 2009 and 2011, the achievement gaps between economically disadvantaged and non-economically disadvantaged students remained substantial, at eighteen percentage points.

TAKS- All Tests Taken- Met Standard	2009	2011
Non-Econ Disad.	82%	86%
Econ Disad.	63%	68%
Gap	19%	18%

(See Ex. 6322, Moak Report, at 23.)

FOF 323. Even after eight years of teaching to the TAKS tests, the achievement gap closed only six percentage points – an average of less than 1% per year. (*Id.*) After ten years of testing under TAKS, economically disadvantaged students still passed at significantly lower percentages than their peers. For example, as shown in this chart, in 2012, 54% of economically disadvantaged 10th graders passed all tests taken compared to 75% of their non-economically disadvantaged peers – a 20-point difference.

Figure 23. Percentage of 10<sup>th</sup> and 11<sup>th</sup> Grade Students Reaching the Passing and Commended Standards 2011 and 2012 for All TAKS Tests Taken

All Tests Taken	Grade 10				Grade 11			
	2011 Pass	2012 Pass	2011 Com-mended.	2012 Com-mended	2011 Pass	2012 Pass.	2011 Com-mended	2012 Com-mended
All Students	65%	64%	6%	7%	84%	86%	10%	13%
Economically Disadvantaged	54%	54%	2%	3%	77%	80%	4%	6%
Not Economically Disadvantaged	76%	75%	9%	11%	91%	92%	15%	19%
Gap	22 pts	21 pts	7 pts	8 pts	14 pts	12 pts	11 pts	13 pts

Source: TEA Statewide Summary Reports

(Ex. 6322, Moak Report, at 22.)

FOF 324. Similarly, this chart that in 2012, there is a 19-point gap between economically disadvantaged students who passed math and non-economically disadvantaged students who reached the same level on the 9th Grade TAKS.

Figure 38. Comparison of 2011 9<sup>th</sup> Grade TAKS Results to 2012 9<sup>th</sup> Grade STAAR EOC Test Results, by Student Economically Disadvantaged Status

Student Group	Math Proficiency Level	2011 9 <sup>th</sup> Grade TAKS Math Proficiency Level	2012 9 <sup>th</sup> Grade STAAR Algebra I EOC Proficiency for Level Two at Phase-In Level 1 Standard	2012 9 <sup>th</sup> Grade STAAR Algebra I EOC Proficiency for Level Two at Final Recommended Standard
All Students	Passed	70 <sup>th</sup> %	77 <sup>th</sup> %	26 <sup>th</sup> %
	Failed	30 <sup>th</sup> %	23 <sup>th</sup> %	74 <sup>th</sup> %
Economically Disadvantaged Students	Passed	62 <sup>th</sup> %	72 <sup>th</sup> %	20 <sup>th</sup> %
	Failed	38 <sup>th</sup> %	28 <sup>th</sup> %	80 <sup>th</sup> %
Non-Economically Disadvantaged Students	Passed	81 <sup>th</sup> %	85 <sup>th</sup> %	35 <sup>th</sup> %
	Failed	19 <sup>th</sup> %	15 <sup>th</sup> %	65 <sup>th</sup> %
Student Group	Reading Proficiency Level	2011 9 <sup>th</sup> Grade TAKS Reading Proficiency Level	2012 9 <sup>th</sup> Grade STAAR English I Reading EOC Proficiency for Level Two at Phase-In Level 1 Standard	2012 9 <sup>th</sup> Grade STAAR English I Reading EOC Proficiency for Level Two at Final Recommended Standard
All Students	Passed	89 <sup>th</sup> %	68 <sup>th</sup> %	46 <sup>th</sup> %
	Failed	11 <sup>th</sup> %	32 <sup>th</sup> %	54 <sup>th</sup> %
Economically Disadvantaged Students	Passed	84 <sup>th</sup> %	56 <sup>th</sup> %	33 <sup>th</sup> %
	Failed	16 <sup>th</sup> %	44 <sup>th</sup> %	67 <sup>th</sup> %
Non-Economically Disadvantaged Students	Passed	94 <sup>th</sup> %	81 <sup>th</sup> %	61 <sup>th</sup> %
	Failed	6 <sup>th</sup> %	19 <sup>th</sup> %	39 <sup>th</sup> %

Source: MCA analysis of 2011 TAKS data from TEA Statewide Summary Report; 2012 STAAR from TEA Confidential Student Data Files received via Litigation Discovery.

(Ex. 6322, Moak Report, at 33; *see also*, e.g., Ex. 4232 at 7-8 (showing a 24-point gap between economically disadvantaged students and all students in La Feria ISD); RR18:66-70; Ex. 4237 at 12-14 (showing a 20-point gap between TAKS college ready economically disadvantaged students in Edgewood ISD and all students statewide); RR22:131-34.)

- FOF 325. These gaps between economically disadvantaged and non-economically disadvantaged students remain considerable and generally did not decline over the last three years of TAKS testing. (*See generally* Ex. 20.) By the last full year of TAKS implementation, an eighteen-point gap remained between economically disadvantaged and non-economically disadvantaged students' TAKS passing rates across all tests for grades three through eleven. (*See* Ex. 6322, Moak Report, at 22.)
- FOF 326. **TAKS commended standard.** The results at the TAKS commended level were even worse. The gap between economically disadvantaged and non-economically disadvantaged students on all tests for all grades nearly tripled from five percentage points in 2003 to thirteen points in 2012.

All Tests Taken	2003	2005	2007	2009	2011
All Students - Commended	5%	10%	12%	16%	16%
Economically Disadvantaged	2%	5%	7%	9%	10%
Non-Economically Disadvantaged	7%	15%	18%	23%	24%
Gap	5 points	10 points	11 points	14 points	14 points

(Ex. 6322 at 23.)

FOF 327. Economically disadvantaged students continued to lag behind non-economically disadvantaged students on the Spring 2013 TAKS Grade 11 Exit Exam in all subjects, particularly at the commended level. (See 2013 TAKS Summary Report, Group Performance, Grade 11, at 2, available at <http://www.tea.state.tx.us/student.assessment/taks/rpt/sum/yr13>.)

2013 Subject Tested	% ED Students Commended	% Non-ED Students Commended
English Language Arts	16	33
Mathematics	16	34
Science	12	29

(Id.)

### (c) Retention

FOF 328. Economically disadvantaged students also continued to be retained in their grade level (*i.e.*, held back a grade) at higher rates than non-economically disadvantaged students according to the latest data reported by the TEA. (Ex. 4268 at 28-35.) This was true for all grade levels, K-12. (Id.) For the 2011-12 school year, in secondary schools, economically disadvantaged students were retained at even higher rates, with 6.2% of economically disadvantaged students retained in grades 7-12 – more than twice the rate of non-economically disadvantaged students. (Id.)

### (d) Drop-out and graduation rates

FOF 329. **Dropout data.** For students in the Class of 2012 cohort, over a four-year period, nearly one out of twelve economically disadvantaged students (7.8%) dropped out of school and nearly one out of six (15%) failed to graduate within four years. (Ex. 4258 at 10.) The graduation and dropout gaps between economically disadvantaged students and all students slightly *increased* from the Class of 2011. (Id.)

- FOF 330. In sum, economically disadvantaged students struggle to achieve academically, as evident from several measures noted above. The outcomes are only worsening as the State has raised the rigor of the standards but has not provided schools with the resources needed to educate those students. Not surprising, similar low achievement results among economically disadvantaged students across the same academic indicia are found in each of the plaintiff school districts. (*See generally infra* Part I.C.7 (FOF 680, *et seq.*); *see also, e.g.* Ex. 20254 (Edgewood ISD); Ex. 4326 (La Feria ISD); Ex. 4316 (San Benito CISD); Ex. 4302 (McAllen ISD); Ex. 5708 (Calhoun County ISD); Ex. 6561 (Abilene ISD); Ex. 6567 (Amarillo ISD); Ex. 6582 (Humble ISD); Ex. 6570 (Austin ISD).)
- FOF 331. Critically, the record reflects that achievement gaps as identified above are not insurmountable and that the situation can be improved with sound, effective educational programs. (Ex. 4243 at 6; *see also infra* Part I.C.2.c (FOF 379, *et seq.*.)
- b. The growing population of ELL students faces unique educational challenges.**
- FOF 332. ELL students, also identified as students of limited English proficiency or LEP, are defined as “a student whose primary language is other than English and whose English language skills are such that the student has difficulty performing ordinary classwork in English.” TEX. EDUC. CODE § 29.052. In the 2012-13 school year, more than one out of every six Texas public school children was identified as an ELL student, comprising 863,974 total students. (Ex. 4258.)
- i. ELL students face myriad obstacles to educational attainment that are distinct from poverty-related educational needs.**
- FOF 333. Children from homes where English is not spoken well are more likely to be of lower socio-economic status than children in the general population. (RR14:126-27 (referencing Ex. 4231 at 4); Ex. 1104, Izquierdo Report, at 3.) Thus, these students suffer from many of the obstacles cited above. (*See supra* Part I.C.2.a.i (FOF 277, *et seq.*.)
- FOF 334. Although many ELL students have poverty-related needs, their language-related educational needs pose additional unique challenges. (RR34:173; RR17:152.) ELL students may have basic interpersonal communication skills, but they may not have those skills in the English language, and they lack the cognitive academic language that is needed for school readiness. (RR24:116-17.)
- FOF 335. The challenges ELL students face in Texas public schools, and in turn the school districts that educate them, cannot be overstated.
- FOF 336. Schools often have to help ELL students through anxiety issues resulting from the lack of self-assurance when learning around other students who possess the language skills they lack. (*Id.*) For example, when they arrive at school, ELL students often are afraid to raise their hand and ask questions in larger group settings. (RR22:156.)

- FOF 337. ELLs come to school with a wide range of characteristics and abilities related to their proficiency in English and their native language and related to their general educational background and content knowledge. Some ELL students were born in the United States, others are immigrants who have been in the United States for several years, and others have just arrived in the country. (RR15:169-71.) ELL students who arrive in the United States with limited literacy in their native language and an interrupted school experience need much higher levels of support than those who possess strong native-language literacy skills. (RR14:127 (referencing Ex. 4230 at 7).)
- FOF 338. Parents of ELL children not only often have low educational backgrounds tied to their economic status, but they also tend to have language barriers themselves. (RR4:86.) Parents of ELL children often do not feel as though they belong in the schools, further increasing the educational challenges for school district personnel in educating their children. (*Id.*)
- FOF 339. Some schools have experienced a significant influx of refugee students. These students – who are often ELLs – typically have no formal schooling and have experienced severe emotional and psychological trauma, which provides a barrier to education if it is not addressed. (RR19:42-45; Ex. 6343. Schroder Dep., at 14. 117-18.) Abilene ISD, for example, serves over 300 refugee students from Africa who speak thirty-five different languages. (RR19:42.) Amarillo ISD enrolls students from Vietnam, Burma, and Somalia, many of whom are not literate in their native languages. (RR22:120-23.) The refugee students often need help in understanding the American public school system and simple cultural norms such as appropriate hygiene, dress, and language. (RR19:43; RR22:122-23.) Dr. H.D. Chambers, the Alief ISD Superintendent, testified that certain refugees from war-torn countries come to class not knowing how to sit at a desk or hold a pencil. (RR8:98-99.)
- FOF 340. Despite these added challenges, ELL students are expected to meet the same college and career-readiness standards as non-ELLs. (Ex. 1104, Izquierdo Report, at 15-16.)
- FOF 341. Yet, as discussed in more detail below, the resources made available by the State for ELL students fall far short of the additional costs incurred by school districts in order to provide reasonable opportunities for all ELL students to achieve the state standards and achieve their full potential. (RR18:9-13, 47-48; RR22:145; Ex. 4224-S, Cervantes Dep., at 198; RR4:89-91; Ex. 4000, Cortez Report, at 33; RR8:101-04, 130-31; Ex. 3207, Salazar Dep., at 33-34, 38-39, 44-45, 57-58, 84-85, 103-04, 110-11; Ex. 4224-P, Kincannon Dep., at 20-21; Ex. 4224-G, Wallis Dep., at 73, 87-89; *see also infra* Part I.C.2.d.iii (FOF 480. *et seq.*))
- FOF 342. The rigor, depth and level of cognitive complexity of the new STAAR assessments present a challenge for students of all backgrounds, but especially for ELL students. (RR14:142 (referencing Ex. 4231 at 23); Ex. 1104, Izquierdo Report, at 3.)
- FOF 343. ELL students in the upper-elementary and middle school grades often face the challenge of learning core content with specialized vocabulary and basic English at the same time.

(RR14:145-48; Ex. 1104, Izquierdo Report, at 23.) ELL students who have been receiving services for over five years, also called long-term ELLs, are at great risk of dropping out and require intensive levels of attention. (RR14:25-26.)

FOF 344. Like economically disadvantaged students, these students are capable of performing far better, but they, too, lack the necessary quality programs and interventions to help them achieve their full potential and to meet the State's standards. As shown below, the performance of ELL students is far below acceptable levels and demonstrates the failure of the school finance system to enable school districts to provide the opportunities ELL students need to acquire English proficiency and the essential knowledge and skills set forth in the State's curriculum.

**ii. The growing ELL population and the increasing diversity of home languages spoken has magnified the challenges facing school districts.**

FOF 345. The population of ELL students in Texas public schools continues to rise. (*See supra* FOF 15 – FOF 16.) The 863,974 ELL students in 2012-13 represented an increase of over 25,000 students from the prior year alone. (*Compare* Ex. 4258 with Ex. 11213 at 2.) Looking back just ten years to the 2002-03 school year, Texas schools have experienced an increase of over 230,000 ELL students. (*See* Ex. 1087 at 6 (noting 630,148 ELL students).)

FOF 346. While the majority of ELL students (90%) speak Spanish as their native language, over 120 other languages are spoken in Texas public schools. (Ex. 1104, Izquierdo Report, at 5.) The increasing numbers of ELL students, coupled with the expanding number of native languages spoken by the students, brings even greater challenges for school districts. (RR4:225.)

FOF 347. School districts across Texas have experienced growth in their ELL populations and an increase in the number of languages spoken by these students. Today, one in every four students in Richardson ISD is identified as an ELL student. (RR4:224-25.) Since 2002-03, Austin ISD has experienced a growth of 8,000 ELL students, and its ELL population currently speaks sixty-four different languages. (RR19:145-48.) In some parts of Texas, close to one hundred languages are spoken in a single district. For example, in the Dallas area, ninety-three languages and dialects are spoken in Richardson ISD. (RR4:212.) In the Houston area, Alief ISD's ELL students speak eighty-two different languages. (RR8:96.) In west Texas, Abilene serves ELL students speaking thirty-five languages. (RR19:41-42.) In the panhandle, Amarillo ISD's ELL students speak over forty different languages. (RR22:121.)

FOF 348. The increasing diversity of the ELL population requires additional programming and resources. (*See* RR19:148.) For example, districts are required to provide each of these students with certain services in their home language. (*See infra* Part I.C.2.d.iii(a) (FOF 480, *et seq.*.) TEA, however, does not provide districts with TAKS or STAAR-based resources in the multitude of languages spoken by the state's students. (RR19:42-45.)

- iii. **Substantial and persistent performance gaps and low overall academic performance demonstrate that ELL students are not acquiring a general diffusion of knowledge.**

**(a) TELPAS**

- FOF 349. ELL student performance is measured based on students' academic content knowledge (in the same manner as non-ELL students, through measures such as STAAR assessments) and on their English proficiency. Texas has adopted the Texas English Language Proficiency Assessment System ("TELPAS") to measure the English proficiency of its ELL students. (Ex. 1104, Izquierdo Report, at 13-14.) TELPAS scores are reported at "beginning," "intermediate," "advanced" and "advanced high" levels of proficiency. The State's expectation is that ELL students will advance at least one level for each year of bilingual or ESL instruction. (*Id.* at 13; RR35:105-06.) Only at the advanced high level are students presumed to be able to pass TAKS standards, although advanced high level students may still need additional interventions to pass TAKS. (Ex. 4054 at 28; Ex. 4224-T, Givens Dep., at 148-50.)
- FOF 350. Although the State had aligned the proficiency levels on the TELPAS with the old "met standard" on TAKS, the State has not aligned the TELPAS levels with the new, higher STAAR standards. (RR35:87-89; Ex. 4224-T, Givens Dep., at 142.) Therefore, unlike in years past, the State has no method to determine how ELL students may perform on the STAAR based on their performance on the TELPAS. (*Id.*)
- FOF 351. TELPAS results are reported by the number of years ELL students at each grade have been in U.S. schools, beginning with year-one "immigrants" up to ELL students who have been in U.S. schools for six or more years. (Ex. 4180 at 27, 29.) The use of the term "immigrants" in the TELPAS report, however, is misleading because TEA does not collect data on the immigration status of students. (RR35:69-71.) Furthermore, TEA does not include the grade "kindergarten" or "pre-K" under its calculations of years in U.S. schools. (*Id.* at 89-91.) For example, first grade students reported as being in their first or second semester in U.S. schools may very well be in their second or third or even fourth year in U.S. schools because TEA did not count kindergarten or pre-K. (*Id.*) Consequently, the TELPAS reports likely undercount students in each category identified by the number of years in U.S. schools. (*Id.*)
- FOF 352. TELPAS measures the English proficiency of "current ELLs," *i.e.*, students who are in the process of becoming proficient in English with the expectation that they will attain English proficiency within four to five years. However, the TELPAS results show that a significant number of ELL students are not making progress in learning English. For grades three through twelve, 34% of ELL students in grades three through twelve (approximately 134,000 students) failed to progress even one level in learning English during 2012-13. (*Id.*) The rates of failure to progress were highest at the high school level where 33-41% of ELL students did not progress even one level in English during the year. (*Id.* at 20, 22, 24, 26.)

- FOF 353. Significant and growing numbers of ELL students are “long-term ELLs,” or are still classified as ELL after six or more years in U.S. schools. (Ex. 11010, Ayala Report, at 29.) In 2012, 126,375 ELL students in grades three through twelve had been in U.S. schools for six or more years. (Ex. 4189, at 30.) By the following year, that number had increased to 137,918. (Ex. 4262.) These long-term ELL students constituted nearly one out of every three (31%) ELLs in grades three through twelve. (*Id.*)
- FOF 354. According to 2012 TELPAS data, progress in learning English lags for these long-term ELLs: 36% in grades three through twelve failed to progress even one level in their English proficiency, with over 40% in grades ten through twelve showing no progress. (Ex. 4180 at 22, 24, 26, 30.) In 2013, that percentage rose to 41% making no progress. (Ex. 4262.)
- FOF 355. While it may be expected that students who are identified as “current ELLs” will not perform as well as other former ELL students who mastered English and exited the bilingual/ESL program, the high number of students who are not making progress in learning English, who are not achieving the advanced high level needed to pass even the less challenging TAKS met standard, and who are still in the bilingual/ESL program after six or more years, all tell a story of an unsuitable system that is producing insufficient results. (*See generally* Ex. 4180.)
- FOF 356. ELL students are also struggling to attain the advanced high level, which would indicate likely success on the TAKS tests. According to the Spring 2012 TELPAS Statewide Summary Report for all ELL students in grades three through twelve, nearly one-half (49%) failed to reach the advanced high level of English proficiency. (Ex. 4180 at 30.) That percentage was virtually the same the following year at 47%. (Ex. 4262.)
- FOF 357. According to the Spring 2012 TELPAS Statewide Summary Report, between 65-73% of ELL students in grades nine through twelve were not at the advanced high level of proficiency in writing, an area of particular concern given the new STAAR tests’ emphasis on writing at the secondary level. (*Id.* at 19, 21, 23, 29.) There was no improvement during the Spring 2013 administration, where between 64-72% of ELL students in grades nine through twelve were not at the advanced high level of proficiency in writing at the secondary level. (Ex. 4262.)
- FOF 358. These results are not attributable to a “new immigrant” population weighing down the scores. First, as mentioned previously, TEA does not collect information on the immigration status of students and therefore, TEA has no valid basis to conclude that poor ELL student performance is attributable to the influx of new immigrants. Even if one was to assume that students identified on the TELPAS as entering their first or second semester in grades three through twelve were “new immigrants,” only a small percentage of ELL students would be considered “new immigrants.” In 2012, for example, only 18,445, or 4%, of the 422,302 ELL students in grades three through twelve who were assessed in Listening on TELPAS were reported as new immigrants in their first or second semester in U.S. schools. (Ex. 4180 at 19, 21, 23, 25, 29.) The

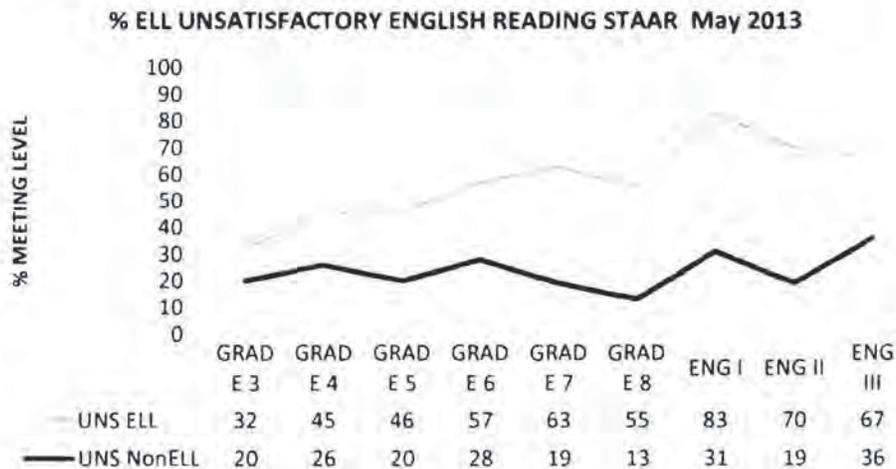
percentage of “new immigrant” ELLs identified in the 2013 TELPAS was 4.5%. (Ex. 4262.)

FOF 359. As detailed further below, ELL students are not progressing in their English proficiency, not because of a lack of effort or because the obstacles are insurmountable, but largely because of the lack of resources necessary to provide essential, quality language programs and services. These basic resources include the lack of certified and trained bilingual teachers, quality prekindergarten programs, extended day and tutorial programs, summer school programs, books and materials, smaller class sizes, and smaller learning communities needed to help students become proficient in English. (See *infra* Part I.C.2.c (FOF 379, *et seq.*))

(b) STAAR and college readiness

FOF 360. It is undisputed that, given the appropriate resources and opportunities in the classroom, ELL student performance can improve significantly and the achievement gaps between ELL and non-ELL can substantially close. (See, e.g., RR18:55, RR22:148-49, RR15:168-169.) However, the results of ELL students on the STAAR and other college-ready indicators, like the TELPAS results, reflect a system grossly underserving ELL students, depriving them of the opportunity to achieve their full potential and meet the state standards.

FOF 361. **STAAR.** On the Spring 2013 STAAR English Reading assessment, ELL students failed to achieve satisfactory scores at far greater rates than their non-ELL peers, with one out of every three third-grade ELL students failing to reach the lower Level II phase-in standard and nearly four out of every five ninth-grade ELL students failing to achieve the same standard on the English end-of-course exams.



(Ex. 20062-A at 19.)

FOF 362. On the Spring 2013 STAAR EOC assessments required for graduation, current ELLs continued to lag far behind non-ELL students. As noted in the chart immediately above, only 17% of ELL students met the satisfactory standard on the English I Reading EOC exam. Statewide, ELLs and non-ELLs failed to reach the lower Level II phase-in standard at the following rates:

2013 EOC	% ELL Students Unsatisfactory	% Non-ELL Students Unsatisfactory
English I Writing	91%	48%
Algebra I	49%	20%
Biology	45%	12%

(Ex. 4259 at 107, 110, and 112.)

FOF 363. Results on the Spring 2012 STAAR exams were similar, although ELL results were even worse in 2013. (*Compare id. with* RR14:29-30 (referencing Ex. 4230 at 8); Ex 1085, Pompa Report, at 3.)

2012 EOC	% ELL Students Unsatisfactory	% Non-ELL Students Unsatisfactory
English I Reading	82%	28%
English I Writing	92%	41%
Algebra I	40%	16%
Biology	42%	11%

(Ex. 4114 at 1; Ex. 4115 at 1; Ex. 4131 at 1, 3; Ex. 4133 at 1.)

FOF 364. Although the State debated whether ELL students may be expected to perform as well as non-ELL students, Susie Coultriss, the TEA State Director for Bilingual/ESL, Title III and Migrant Education, testified that the performance of ELL students on the 2012 STAAR exam was "dismal" and much lower than what it should be. (RR34:185-86; Ex. 4233-B, Coultriss Dep., at 178.)

FOF 365. For ELL students who were eligible to take the 2013 STAAR-L assessments (which are computer-based linguistically accommodated alternatives to the STAAR assessment taken by some ELL students) in Biology and Algebra I, the results were even worse and did not improve from the 2012 STAAR-L assessments.

STAAR EOC	% ELL Students Unsatisfactory (2013)	% ELL Students Unsatisfactory (2012)
Algebra I	61%	54%
Biology	60%	60%

(Ex. 4259 at 125, 128; Ex. 4132 at 1; Ex. 4134 at 1-3.)

FOF 366. All of these STAAR passing rates are for the current lower “phase in” standard. This standard will be raised in the next couple of years. (Ex. 1085, Pompa Report, at 3; Ex. 4132 at 1, 3; Ex. 4134 at 1-3.)

FOF 367. **AEIS college-ready indicators.** ELL students also showed significant, chronic gaps on various AEIS indicators. In 2010-11, “all students” were more than twice as likely (30.3%) to complete advanced course/dual enrollment classes compared to ELL students (14.1%). Although 24% of all students in 2011 were tested in the AP/IB program, there were so few ELL students that the state report indicated “n/a” for ELL students. For the Class of 2011, approximately one out of every six ELL students was identified as a “College-Ready Graduate” using the TAKS-performance standard, compared to 52% of all students. (Ex. 4258 at 11.)

FOF 368. In most of the Plaintiff districts, fewer than 1% of ELL students in the Class of 2010 were considered College-Ready Graduates in both English Language Arts and Mathematics. (See, e.g., RR22:132 (Edgewood ISD); Ex. 512, at Sec. I, p. 10 (Los Fresnos ISD); Ex. 925-W, at Sec. I (Richardson ISD); Ex. 543, at Sec. I, p. 10 (Abilene ISD).) Even in those Plaintiff districts where more than 1% of ELL students were considered College-Ready Graduates in both subjects, ELL students fared quite poorly, with all students being between five to nearly ten times more likely than ELL students to graduate as College-Ready Graduates using the TAKS performance standard. (See, e.g., Ex. 589 at Sec. I, p. 11 (McAllen ISD, 11% of ELL vs. 51% of all students); Ex. 252, at Sec. I, p. 10 (Pflugerville ISD: 8% of ELL students vs. 55% of all students); Ex. 474, at Sec. I, p. 11 (Humble ISD: 10% of ELL students vs. 55% of all students); Ex. 667, at Sec. I, p. 11 (Fort Bend ISD: 7% of ELL students vs. 65% of all students); Ex. 1723, at Sec. I, p. 11 (Austin ISD, 7% of ELL students vs. 53% of all students).)

(c) TAKS

- FOF 369. **TAKS met standard.** The outputs for the final two years of TAKS testing also demonstrated unacceptably low passage rates and large performance gaps. In 2011-12, only 24% of ELL tenth graders and 41% of ELL eleventh graders reached the TAKS met standard on all tests. (Ex. 11213.)
- FOF 370. On the Spring 2013 TAKS Exit tests, ELL students in both grades 11 and 12 struggled to achieve the minimum "met standard" on all tests taken. Consequently, thousands of ELL students in Texas face the prospect of not graduating.

TAKS Exit Level All-Tests (2013)	% ELL Students Met Standard	% Non-ELL Students Met Standard
Grade 11	44%	88%
Grade 12	24%	41%

(See 2013 TEA TAKS Summary Report, "Grade 11 Primary" and "Exit Level Retest – Grade 12 (March 2013)," available at <http://www.tea.state.tx.us/student.assessment/taks/rpt/sum/yr13/>.)

- FOF 371. **TAKS commended standard.** In 2010-11, only 7% of ELL students at all grades tested passed all tests at the commended performance standard, compared to 16% of all students who passed the same commended standard. (Ex. 1085, Pompa Report, at 3; Ex. 20.) The following year fewer than 1% of ELL tenth and eleventh grade students attained the commended level on All Tests taken, compared to 10% of non-ELL students. (Ex. 11213.)

(d) Retention

- FOF 372. ELL students were also retained in their grades at much higher rates than non-ELLs. (Ex. 1085, Pompa Report, at 3-4; Ex. 4268.)
- FOF 373. For the year 2010-11, ELL students in grades 7-12 were retained at a rate 244% greater than non-ELL students. (RR14:30-32 (referencing Ex. 4230 at 9); Ex. 1085, Pompa Report, at 3-4; Ex. 4268.) There has been little improvement in retention rates for ELL students since 2006-07. (Ex. 4152 at 41.)

(e) Dropouts and graduation rates

- FOF 374. Similarly, ELL students continue to drop out of school at significantly higher rates and graduate at much lower rates than non-ELL students. For the Class of 2012, ELL students in bilingual or FSL programs were more than three times as likely to drop out of school compared to the student population as a whole. (Ex. 4269 at 73.) ELL students

also graduated at far lower rates, with only 61.6% graduating in 2012 compared to 87.7% for all students. (*Id.*)

FOF 375. These data also show little to no progress in closing the gaps between ELL students and the all-student category. Virtually all of the superintendents who testified in this case testified of similar difficulties in closing the achievement gaps between ELL and non-ELL students. However, all unequivocally agreed that ELL students can achieve on par with non-ELL students if provided the necessary resources and opportunities. (RR3:49-50; RR5:175; RR19:141-42, 145, 149; RR22:66-67; RR25:91-92; Ex. 5617. Reedy Dep., at 68-69; Ex. 3207, Salazar Dep., at 93, 100; *see also* RR15:113, 116-17, 169.) As Dr. Pfeifer testified, “When they [ELL students] have the resources, when I can put the additional help in front of them, . . . they thrive. They can learn. They are so smart. It’s a matter of putting the academic pieces in front of them so they have access to it.” (RR5:175.)

**(f) The State’s ELL expert witness was not qualified under *Daubert* standards.**

FOF 376. Ms. Laura Ayala, the former director of ELL assessment, testified for the State Defendants regarding ELL student outcomes on state assessments and how the State tracks ELL student performance. While the witness clearly has served TEA ably, she does not have the qualifications to offer opinions about the drivers of ELL student performance, other than to report publicly available data on scores. She was not presented as an expert witness, nor would she qualify to be one under *Daubert* standards. The witness had no formal education in bilingual or ESL education. She has not published any peer-reviewed articles on ELL assessments or the performance of ELL students, and had not previously performed an analysis of ELL student performance similar to the one performed in this case. (RR35:64-66.)

FOF 377. This Court also questions the reliability of the State’s methodology. Its witness acknowledged errors in the data (for example, the inclusion of students identified as “former ELLs” who, in all likelihood, were “never ELLs”) and admitted that these errors would impact her analysis, although she was unsure to what degree. She also acknowledged the concept of under-identifying ELL students (whereby schools may not have identified students as ELL, but should have) but the State did not account for the effect that such under-identification would have on its analysis. The State’s retention-rate data also did not include the lowest grade levels, where there is significant grade retention. (RR35:76-80, 89-90, 97-98.)

FOF 378. The State’s TAKS data included only limited subject areas and excluded dropout rates, graduation rates, college-readiness indicators and the recent STAAR results. The analysis of ELL performance on TAKS did not control for the number of years students were in the ELL program or the knowledge of the English language that the various students brought with them into school. These factors likely would affect the performance of the former ELL student cohort. (RR35:66-67, 68-75.)

**c. Economically disadvantaged and ELL students do not have access to the intervention strategies necessary to provide them with a meaningful opportunity to achieve a general diffusion of knowledge.**

- FOF 379. The poor performance of economically disadvantaged and ELL students, the substantial achievement gaps, and the troubling dropout and graduation rates noted above are not inevitable. Supported by a strong research base and expert testimony, superintendents from across the State testified that these students' chances of success can be significantly improved with appropriate intervention and support programs, including access to quality pre-K programs, smaller class sizes in the lower grade levels, quality tutoring programs, and parent engagement programs, among others. (*See, e.g., infra* Parts I.C.2.c.i – I.C.2.c.iv (FOF 384, *et seq.*); RR4:73-80; RR20:78, 105-06; RR19:64-65; *see generally* Ex. 1101, Belfield Report.)
- FOF 380. The Court credits the extensive superintendent testimony that such services can be effective with their economically disadvantaged and ELL student populations, can reduce the dropout rate, and are necessary for districts to meet the needs of these students. (*See, e.g.* RR19:28-29 (referencing Ex. 6335 at 6).)
- FOF 381. Similarly, superintendents testified about the unique educational needs of ELL students. These needs include qualified, experienced teachers, quality professional development for ELL teachers, high-quality preschool and extended instructional time for ELLs in addition to the regular instructional day, quality parental programs to foster parental engagement for ELLs, bilingual paraprofessionals to assist bilingual/ELL classrooms, and supports for ELL newcomers who have very unique needs. (*See, e.g.,* Ex. 4237 at 9; RR18:15-37; RR4:89, 91-94.)
- FOF 382. Expert witnesses, including Ms. Pompa (who served as an expert witness in *WOC II* and *U.S. v. Texas*, No. 6:71-CV-5281 (E.D. Tex. 2010)) and Dr. Izquierdo, confirmed this superintendent testimony. (Ex. 1084; Ex. 1103.) Ms. Pompa and Dr. Izquierdo discussed research that establishes that these are essential elements of a quality bilingual/ESL education that ELL students need in order to achieve the more rigorous standards established by the State and to achieve their full potential. (RR14:12-21, 123-227.) The Court finds the testimony of Ms. Pompa and Dr. Izquierdo related to bilingual/ESL programs and ELL students to be credible and their opinions to be reliable. As Dr. Belfield explained, sound research also confirms that programs such as tutoring, summer school, parental outreach, and the creation of small learning communities in high school increase the high school graduation rate for economically disadvantaged students. (*See, e.g.,* Ex. 1101, Belfield Report. at 11-14; RR4:73-76; RR15:24; RR4:73-80.)
- FOF 383. The interventions referenced by these superintendents and experts (and described in greater detail below (*see infra* Parts I.C.2.c.i – I.C.2.c.iv (FOF 384, *et seq.*)), are not part of a "wish list"; rather, they are necessary interventions, without which these populations cannot achieve a general diffusion of knowledge. However, instead of bolstering support to help implement the necessary programs and interventions for economically

disadvantaged and ELL students, the State chose to cut funding for those programs, forcing districts to reduce, and in many cases eliminate, the support so desperately needed by their at-risk students.

**i. Economically disadvantaged and ELL students do not have access to high-quality pre-kindergarten programs to help them overcome the educational obstacles they face.**

- FOF 384. Access to quality preschool programs is critical for the success of economically disadvantaged and ELL students. (Ex. 1074 at 2-3; Ex. 15; Ex. 5630, Scott Dep., at 30-32, 42-44; RR11:186-88; Ex. 4224-S, Cervantes Dep., at 186; Ex. 1074, Barnett Report, at 14-15.) Superintendents, expert witnesses, and even the former Commissioner of Education all convincingly testified that these programs have been shown to increase test scores and graduation rates, and to reduce grade retention, behavioral problems, delinquency, and crime for ELL and economically disadvantaged students. (RR11:140; Ex. 1074 at 2-3; *see also, e.g.*, RR19:185; Ex. 5613, Youngblood Dep., at 23-24; RR5:172; RR8:103-04; RR20:50-56, 74-75; RR24:115-17, 195-96; Ex. 3208, Williams Dep., at 210-11.) The benefits of quality pre-K programs for all students are discussed in greater detail in Part I.C.3.b (FOF 550, *et seq.*) below.
- FOF 385. It is well established that low-income and ELL students begin school far behind their non-disadvantaged peers, in part because these students often do not receive basic educational experiences at home. (Ex. 1074 at 14; RR4:72-73; RR5:172-73; RR8:103-04; RR20:74-75; Ex. 3208, Williams Dep., at 210.) Many superintendents in this case emphasized that pre-K programs, particularly full-day pre-K, are necessary to address those deficits. (RR5:172; RR8:103-04; RR20:55-56, 74-75; Ex. 3208, Williams Dep., at 210; RR22:154-56; RR37:207-08.) They also emphasized that access to preschool for three-year olds is important to compensate for life experiences that low-income children do not have in the home but need in order to be school ready. (*See, e.g.*, RR3:142-43.)
- FOF 386. Fresno ISD Superintendent Dr. Salazar testified that the more educational experiences schools are able to offer at-risk students at the beginning of their academic years, the less remediation is needed in later years. (RR24:117-18.) The learning gap is smallest when children are in preschool, but without quality early childhood programs, the gaps continue to widen as students move through the “continuum of the school system” and fall farther behind their peers. (RR24:177-18; RR5:174; *cf.* RR19:23-24 and FOF 291 *supra.*)
- FOF 387. Full-day pre-K is especially important for low-income families, because some children in low-income working families are unable to participate in half-day programs when their families cannot manage the multiple arrangements required to accommodate parents’ work schedules. Instead these children are likely to attend poor quality child care, which does little to enhance, and may hinder, their development. (Ex. 1074, Barnett Report, at 11.) Superintendents agreed that a full-day program is needed to close the achievement gap for economically disadvantaged and ELL students. (RR5:43.)

- FOF 388. Expert testimony and research confirm the benefits of high quality pre-K for economically disadvantaged and ELL students. Dr. Steven Barnett, Director of the National Institute for Early Education Research, testified regarding the research base associated with the impact of quality preschool education. When children begin kindergarten, the achievement gap between low-income and ELL students and non-disadvantaged students is approximately one standard deviation. (RR11:143.) Research shows that disadvantaged children are often as much as eighteen months behind their peers in language development when they enter kindergarten. (RR11:141-42.) High-quality prekindergarten programs are a particularly important means to improve the developmental and educational outcomes for low-income and ELL students and to close the achievement gap. (RR11:141-43; Ex. 1074 at 3.) Such programs have been shown to improve cognitive development by half of a standard deviation – enough to cut in half the school readiness gap for children living in poverty. (Ex. 1074 at 2-3.)
- FOF 389. A study of New Jersey’s high-quality Abbott preschool program indicates that the achievement gap between disadvantaged and non-disadvantaged students closed by at least one-quarter in one year, and by 40% in two years of preschool through second grade. (Ex. 1074, Barnett Report, at 5-6.) Long-term gains from the most intensive preschool programs can close the achievement gap by as much as one-half for children living in poverty. (*Id.* at 3; RR11:139-40; *see also* Ex. 3201, Witte Dep., at 24-26.)
- FOF 390. Dr. Barnett testified that intensive, quality programs, like the kind discussed here, are essential to achieve the types of results reflected in the research and help at-risk children avoid the cycle of failure. (RR11:146-47; Ex. 1074 at 4-5, 17.) To be effective, early childhood education programs require well educated teachers and trained specialists to support, monitor, and coach teaching practices.
- FOF 391. Early intervention is also especially important for ELL students, because that is when they have the greatest capacity to acquire new language and literacy skills. (RR11:141-43; Ex. 1074 at 12-13.)
- FOF 392. Ordinary day care and even Head Start Programs do not provide the large, long-term substantive gains in cognitive and social development that high-quality pre-K programs do. (RR11:148-50; Ex. 1074, Barnett Report, at 5.) Effective preschool programs are part of the public school system and have more highly-educated, better-paid teachers than Head Start and child care. (RR11:149; Ex. 1074, Barnett Report at 8.)
- FOF 393. Former Commissioner Robert Scott reinforced expert opinions about the importance of quality, full-day pre-K programs for economically disadvantaged and ELL students, testifying that they were “critical programs that support student progress from pre-K through grade 12.” (Ex. 5630, Scott Dep., at 31-32, 43; Ex. 15.) No State witness could credibly dispute testimony regarding the deficiencies in Texas’s pre-K programming, or testify whether the amount allotted to districts is sufficient to provide an adequate pre-K program. (RR34:84-85, 88-89.)

- FOF 394. Intervenors' expert Dr. Eric Hanushek agreed that high-quality pre-K programs can provide low-income and ELL students an important educational jump start. (RR37:208.) Gina Day, the State's Director of Early Childhood Education, also agreed that high quality preschool programs help prepare ELL and low-income students to meet state standards. (RR34:84-85.)
- FOF 395. Despite the near-unanimous support for quality pre-K programming, the Legislature not only failed to make the necessary investments in these programs over the years, but it has eliminated millions of dollars for those programs. (Ex. 1074, Barnett Report, at 14; RR11:184-85; RR34:13.)
- FOF 396. Even though the State seemingly acknowledges the importance of pre-K for at-risk students by limiting its half-day pre-K funding to economically disadvantaged and ELL children, among others, it does not provide sufficient funding for quality pre-K for all economically disadvantaged and ELL children. (RR34:12-13, 93; RR11:186-87; Ex. 1074, Barnett Report, at 15; *see also infra* Part I.C.3.b (FOF 550, *et seq.*.) Even before the state budget cuts, in 2010-11, state funding per child already had fallen to \$3,761 per child, less than the inflation-adjusted funding in any of the three prior years. In 2010-11, Texas provided state funding to serve only 52% of the state's four-year-olds and 6% of its three-year-olds. (RR11:184.)
- FOF 397. Texas also has retreated from its previous commitment to fund a full-day program. (Ex. 1074, Barnett Report, at 14; RR11:184-85.) In 2011, the Pre-Kindergarten Early Start Grant, which had provided approximately \$100 million annually, was discontinued (and was not fully restored in 2013). (RR34:27-28, 92; RR63:108-10 (referencing Ex. 20216-A); *see also infra* I.C.2.d.i; Ex. 20216-A at lines 80-82, 112.) Today, Texas funds only half-day pre-K as part of public education despite the rising academic challenges. (Ex. 1074, Barnett Report, at 14.)
- FOF 398. Because funding was already limited even before the cuts, the 2011 budget cuts hit early childhood programs, and the students they serve, hard. In Aldine ISD, in order to maintain its commitment to provide full-day pre-K for its poorest students, the district had to raise the pre-K class-size to 24:1. (Ex. 6339, Bamberg Dep., at 61-62; Ex. 364 at 5.) Many districts were forced to reduce their full-day programs to half-day programs to avoid other harmful cuts, even though such programs are critical in closing achievement gaps and improving performance among economically disadvantaged children. (*See, e.g.*, RR5:43; RR22:154-56; Ex. 3201, Witte Dep., at 24-25; Ex. 5613, Youngblood Dep., at 23, 54-55; RR8:121-28, 131; Ex. 6341, Frost Dep., at 23-26 (referencing Ex. 368 at 9).) Van ISD, for example, was forced to reduce its full-day program to half-day in order to avoid cutting teacher positions in the district. (Ex. 3201, Witte Dep., at 24-25.) The Superintendent of Alief ISD testified that restoring full day pre-K would be the district's first priority if it had adequate funds. (RR8:121-28, 131.)
- FOF 399. Many other districts could not afford full-day pre-K even before the budget cuts. For example, Dr. Pfeifer testified that Everman ISD could not afford full-day pre-K because

it does not have sufficient classroom space or funds to hire additional teachers. (RR5:175-76.)

- FOF 400. The budget cuts forced districts to reduce access to pre-K for economically disadvantaged and ELL students in ways other than the reduction to half-day pre-K. For example, Edgewood ISD, which is over 90% economically disadvantaged, now has a waiting list of 165 students for full-day pre-K and lacks the approximately \$1.2 million dollars required to provide those seats. (Ex. 4237 at 11; RR22:152-53.) Alief ISD similarly has a wait list of qualified students. (RR8:103-04, 124.) Still other districts, such as Humble ISD and Weatherford ISD, had to eliminate their preschool program for eligible three-year olds. (RR4:13-14; Ex. 6337, Hanks Dep., at 35-38.)
- FOF 401. The budget cuts and overall inadequate funding have also negatively impacted the pre-K programs that still exist. Many pre-K programs now have higher class sizes than recommended, and a lack of resources to recruit and retain high quality teachers, and provide quality professional development, continual monitoring, and high quality materials. (See, e.g., RR4:73-74; Ex. 4237 at 9, 11; RR22:154-56; Ex. 1074, Barnett Report, at 10; RR11:161-62; RR8:103-04, 121-28.) In Everman ISD, for example, the class-size ratio went from 18:1 to 22:1 because the district had to cut classroom aides as a result of budget cuts. (RR5:185.) Adequately funding these essential elements of pre-K programs would help to increase student achievement, especially for low-income and ELL students. (See, e.g., RR4:73-74; Ex. 4237 at 9, 11; RR22:154-56.)
- ii. **Economically disadvantaged and ELL students do not have access to smaller class sizes and the individualized attention necessary to acquire a general diffusion of knowledge.**
- FOF 402. Smaller class sizes have been shown to produce significant benefits in student achievement, and are particularly important for closing the achievement gap for economically disadvantaged and ELL students. (See, e.g., Ex. 1101, Belfield Report, at 11-14; RR4:73-74.) Small class sizes increase student attentiveness and allow teachers to better tailor their lessons toward their students' specific needs, which improves student learning. (RR22:209-17; RR15:123-128.)
- FOF 403. The well-known Tennessee's Student Teacher Achievement Ratio ("STAR") experiment – discussed in greater detail in Part I.C.3.c (FOF 562, *et seq.*) below – is a large scale, randomized trial involving class size reduction in kindergarten through third grade. (Ex. 5520, Odden Report, at 4; RR17:197-98.) In this experiment, students and teachers in seventy-nine Tennessee elementary schools were randomly assigned to small or regular-sized classes from 1985 to 1989. (Ex. 1079, Schanzenbach Report, at 2.) Because the STAR experiment employed random assignment, any differences in outcomes can be attributed with great confidence to being assigned to a smaller class size. (*Id.*)
- FOF 404. The STAR experiment found that small classes in lower grades led to improved student performance for all students, but that the impact of small class size was greatest for

students from low-income and minority backgrounds.<sup>39</sup> (Ex. 5520, Odden Report, at 4; Ex. 1079, Schanzenbach Report, at 2.) Research also has shown that students who attend smaller class sizes at the elementary level graduate high school at higher rates than those assigned to larger classes, but the effects on minority and low-income children are even greater. (Ex. 1101, Belfield Report, at 11; RR15:33.)

- FOF 405. Even at the secondary level, smaller class sizes in high school are needed for economically disadvantaged and ELL students to get the students the essential individualized instruction and to help build the students' self-esteem. (RR22:158-159.) As Edgewood ISD Superintendent Jose Cervantes testified, in a regular classroom, "you have your special ed students, you have your bilingual students, you have your economically disadvantaged students, you have your dropouts that came back, you have your pregnancy – your pregnant students in there, and to try addressing 28 [students] is almost impossible." (RR22:160-61.)
- FOF 406. Experts for both the State Defendants and Intervenors agreed that class size has beneficial impacts on student learning for high need students such as economically disadvantaged and ELL students. (RR37:163-64; RR26:81.)
- FOF 407. Superintendents and teachers confirmed that small class sizes are particularly important for economically disadvantaged and ELL students, as well as special education and elementary school children, because these students need more one-on-one attention than other students. (See, e.g., RR4:258-60; Ex. 5618, Wiggins Dep., at 53-55; Ex. 5614, Patek Dep., at 33-37; Ex. 5613, Youngblood Dep., at 17-22, 34-35; RR4:73-74; RR19:50-52.) As San Benito CISD teacher Krishtel Aguilar-Diaz testified, having a smaller class size and a teacher's aide improves student engagement and accountability and allows students to benefit from more tailored lessons, individualized instruction, and additional monitoring, which is especially important when working with students with varying academic and linguistic levels. (See, e.g., RR22:209-17.) Richardson ISD Superintendent Dr. Kay Waggoner testified that economically disadvantaged students enter classrooms far behind in school readiness and that "there's a great deal of remediation [] and effort and strategies that goes into ensuring that all of our [students] are successful." (RR4:259.) She explained that smaller class sizes not only help to close achievement gaps but also promote student engagement, which is negatively impacted when you have more students in the classroom. (*Id.*)
- FOF 408. The State's own law governing its "Optional Extended Year Program" also acknowledges the importance of class size reduction for struggling students. TEX. EDUC. CODE § 29.082. Under this statute, for students enrolled in an extended year program in grades K-11 and identified as not likely to be promoted to the next grade level for the succeeding year or students in grade 12 who are not likely to graduate before the

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<sup>39</sup> Additional benefits of smaller class sizes for all students, and the research supporting such benefits, are discussed in greater detail in Part I.C.3.c (FOF 562, *et seq.*) below.

beginning of the succeeding. “[a] school district may not enroll more than 16 students in a class . . . .” *Id.*

FOF 409. Rather than invest in class size reductions, Texas has taken the opposite tack. As a result of the 2011 budget cuts, 30% of elementary schools across the state were forced to seek class size waivers from the State’s 22:1 mandate in kindergarten through grade four. (Ex. 5630, Scott Dep., at 394-95 (referencing Ex. 31 at 1).) In 2011-12, the TEA granted nearly 8,600 waivers. (Ex. 5630, Scott Dep., at 391-92 (referencing Ex. 30 at 3).) Many districts with high percentages of economically disadvantaged and ELL students were forced to seek large numbers of class size waivers. For example, Abilene ISD went from one discretionary class size waiver to over 100 forced waivers due to inadequate funding. (RR19:50 (adding that class sizes are “significantly too high” in grade 5 also); *see also* RR8:125-26, Ex. 6339, Bamberg Dep., at 61-62; Ex. 364 at 5.) Edgewood ISD, one of the poorest districts in the state, submitted 36 waivers. (RR22:158-59.) San Benito ISD requested approximately 35 class size waivers. (RR4:83.) Van ISD was forced to cut twenty-two teachers and raise its class sizes from 22 to 24 students in grades K-4, from 24 to 28 students in grades 5 and 6, and to 30 students in grades 7-12. (Ex. 3201, White Dep., at 23-24.) Richardson ISD, with an increasing ELL and economically disadvantaged student population, requested 291 waivers. (RR5:32-34.) In Alief ISD, pre-K class sizes for four year olds were increased to twenty-two, a choice the superintendent deemed “harmful” to these students. (RR8:123-25.) Alief ISD also had to seek waivers in grades K-4 and increased class sizes for all other grades. (RR8:125-26.)

FOF 410. Dr. Zamora recognized that class size reduction is a crucial strategy (in a broader comprehensive plan) to help low-income and ELL students “attain the learning expectations set by the state.” (Ex. 20062A, Zamora Report, at 25.) His study showed that the additional funds provided by the State under the compensatory and bilingual education weights would not cover the cost of reducing class sizes to the numbers necessary to improve student learning and close the achievement gaps under the prevailing research. (*Id.* at 25-31.)

FOF 411. The Court concludes that smaller class sizes are one important strategy for closing the achievement gap and getting low-income and ELL students on track to graduate college and career ready. Instead of providing resources to lower class sizes, however, the State decided to do the opposite. (*See infra* Part I.C.3.c.ii (FOF 572, *et seq.*.)

**iii. Economically disadvantaged and ELL students require other educational programs and additional forms of support to acquire a general diffusion of knowledge.**

FOF 412. Superintendents and experts alike testified that other high quality interventions are essential to both increase the academic performance of economically disadvantaged students and close the achievement gap. (*See infra* Parts I.C.2.c.iii(a) – I.C.2.c.iii(f) (FOF 414, *et seq.*.)

FOF 413. Trained teachers, extended learning time, small learning communities, counseling, dropout prevention programs, and parent engagement programs were all seen as necessary elements of a basic, adequate education for ELL and economically disadvantaged students.

**(a) Trained teachers**

FOF 414. Higher salaries can help schools recruit and retain teachers in high need settings. (Ex. 1122, Vigdor Report, at 21-26; Ex. 3188, Baker Report, at 105.) The types of students a district serves may influence the desirability of working in a district, and as a result, districts that serve students who present extra challenges will have to pay more to attract and retain high quality teachers. (Ex. 1122, Vigdor Report, at 21-26; Ex. 3188, Baker Report, at 10.) Schools serving predominantly low income and minority populations must pay a higher price to recruit and retain comparable numbers of teachers with comparable qualifications. (Ex. 1122, Vigdor Report, at 21-26; Ex. 3188, Baker Report, at 10, 49-50.) Many superintendents from such districts testified that they lose large numbers of teachers after the first or second year to neighboring districts that have the funding to pay higher salaries and that have an easier population of students to teach. (Ex. 3203, Knight Dep., at 24-25; RR20:83-85; RR24:205-06; Ex. 3200, Wallis Dep., at 32-36; Ex. 3199, R. Knight Dep., at 27-31; Ex. 3198, Garza Dep., at 49-51; Ex. 3204, Dupre Dep., at 31.)

FOF 415. More than half of Texas's ELL students are educated through bilingual programs. Effective bilingual programs require teachers who are highly competent in the subject matter they teach and are knowledgeable about bilingual children's language development. (Ex. 1085, Pompa Report, at 9.) Moreover, because ELLs (particularly those in secondary school) are often placed in regular classrooms, all teachers must possess the knowledge and skills to deliver instruction targeted at supporting the linguistic and academic achievement of ELLs. (Ex. 4233-B, Coultriss Dep., at 107; Ex. 4224-T, Givens Dep., at 146-47.)

FOF 416. High-quality professional development significantly aids in effectively instructing ELL students. Professional development allows teachers to (1) update their subject knowledge, (2) learn new teaching techniques, and (3) share expertise among teachers.

FOF 417. Coaches and mentor teachers provide important training and feedback to teachers who instruct ELL students. Coaching and mentoring each require additional time and resources. (Ex. 1085, Pompa Report, at 13; Ex. 1104, Izquierdo Expert Report, at 17-18; RR18:33.)

FOF 418. Districts expressed the need for professional development and training to properly implement second language acquisition and ESL/Sheltered Instruction Observation Protocol ("SIOP") strategies. (Ex. 1345 at 3, 6; RR22:148-50 (Edgewood ISD).)

FOF 419. Despite the importance of qualified, experienced teachers in high need settings, the State's budget cuts further limited districts' abilities to recruit and retain teachers, and

even forced some districts to significantly reduce their teaching staff. For example, Dr. Chambers of Alief ISD testified that the district had to reduce its teaching staff by 100. (RR8:121.) Mr. Witte, the superintendent of Van ISD, testified that the district had to reduce its teaching staff by 14%, or 22 teachers. (Ex. 3201, Witte Dep., at 22.)

**(b) Extended learning time**

- FOF 420. Texas school districts also need funding for summer school and after-school and extended-day programs to remediate economically disadvantaged students who have fallen behind in course work or failed the STAAR exam(s). (RR19:122-24, 153-54, 175-76; RR20:77-79; Ex. 3198, Garza Dep., at 13-14; Ex. 3206, French Dep., at 35, 58-59, 63-65; Ex. 6337, Hanks Dep., at 67.)
- FOF 421. The Humble ISD Superintendent, Dr. Sconzo, explained that economically disadvantaged students do not receive reinforcement of instruction at home, and need additional tutoring opportunities outside of normal school hours and other extended learning opportunities to succeed. (RR3:143.)
- FOF 422. Because the State substantially reduced SSI funding (and did not restore such funds in 2013), many school districts were forced to reduce or eliminate such programs. (Ex. 6342, Ray Dep., at 28-29; Ex. 6334, Sconzo Dep., 227-28; Ex. 6337, Hanks Dep., at 252-53; RR63:109-10 (referencing Ex. 20216-A).) Mr. Limon testified that as a result of the budget cuts his district was forced to make, approximately 10% of the students in San Benito CISD (who are predominantly economically disadvantaged) do not have access to the tutoring services they need to get them up to speed and reinforce the concepts they are learning in the classroom. (RR4:75-77.) Similarly, approximately 500 students need additional support through summer school but do not have access because the district lacks the funds to provide sufficient summer programs. (*Id.* at 78-79.) Edgewood ISD, which is approximately 98% economically disadvantaged, had to eliminate one of its summer school programs, and reduce the summer school week from five days to four. (RR22:143.) When Alief ISD lost its SSI funds, it had to reduce its after-school programs by 60-70%. This eliminated additional support for students who were struggling in various subjects, which was designed to prevent them from falling further behind. (Ex. 4224-L, Chambers Dep., at 33-34.) Likewise, Abilene ISD was forced to eliminate its Extended School Program, which provided students with individualized attention and targeted remediation needs. (RR19:26-30 (referencing Ex. 6355 at 4-6), 38-39 (referencing Ex. 6355 at 9), 30-33 (referencing Ex. 6355 at 7).)
- FOF 423. Other school districts have temporarily funded such programs with federal or private grant money, but once the grants expire, they will be unable to maintain the programs without increased state aid. (RR19:30-32; Ex. 6341, Frost Dep., at 41-42.)
- FOF 424. Additional time, in the form of tutoring sessions, after-school programs, and summer school with trained staff, are beneficial to supplement the existing instructional time for ELL students. These beneficial interventions require additional resources that often are not available. (Ex. 1104, Izquierdo Report, at 22; RR34:172-74; RR18:31-34, 79-80;

RR4:85-86, 89-90; Ex. 4237 at 8-9; RR22:142-43; Ex. 4224-L, Chambers Dep., at 16-17, 19; Ex. 3198, Garza Dep., at 118; RR24:146-49.) To the extent these schools offer any extended learning programs, many students are prevented from participating, because the schools do not have the resources to provide transportation to and from the programs. (See, e.g., Ex. 1345, Izquierdo Site Visits Report, at 4-5, 7-8; RR15:175; RR4:75-79; RR18:34-41.)

- FOF 425. ELLs who come to school with the highest risk factors (particularly those who come to the United States in later grades and those with interrupted schooling in their native country) (*see supra* Part I.C.2.b.i (FOF 333, *et seq.*)) require extended time for learning. Adding more weeks to the school year or more hours to the school day can capture this essential time English learners need to learn complex content and academic English language skills. (Ex. 1085, Pompa Report, at 13.)
- FOF 426. Special programs that develop college and career readiness for ELL students, such as the Quality Teaching for English Learners (“QTEL”) program in Austin, have demonstrated success. This program was funded through an \$8.4 million grant from a private foundation. (*Id.* at 7; RR19:197-99.)

**(c) Small learning communities and other interventions**

- FOF 427. Small learning communities in high school create needed personalization and monitoring, which low-income students may not otherwise receive at home. (RR15:37-38; RR19:27-28.) Technology and instructional software programs and alternative high schools are important tools to meet the individualized needs of at-risk students. (RR19:26-29 (referencing Ex. 6355 at 4-6); RR20:80-81, 100; RR18:154-55.)
- FOF 428. Dr. Sconzo explained that smaller environments are necessary to provide the type of attention and individualization that economically disadvantaged students do not receive at home but are necessary to prepare them academically. (RR3:142-43.)
- FOF 429. Districts also need tutors, academic coaches, reading specialists, and instructional aides to help students who are falling behind. (See, e.g., RR24:135; Ex. 5616, Waggoner Dep., at 12-13; Ex. 5615, Waddell Dep., at 62-64.) These types of educational support personnel can provide individualized attention to struggling and at-risk students, which helps students engage in the learning process and enables them to understand difficult concepts and catch up with their peers. (RR25:89-91, 108-11; Ex. 6345, Folks Dep., at 35-36; Ex. 6341, Frost Dep., at 25-28; Ex. 6335, Cain Dep., at 90-91; Ex. 6344, Carstarphen Dep., at 19-20, 83-85; Ex. 6343, Schroder Dep., at 17.)
- FOF 430. As described by Dr. Chambers, economically disadvantaged students often need social support in smaller settings, not just academic support, to be academically successful. (RR8:104.) The Superintendent of San Benito ISD, Mr. Limon, testified that one-on-one support allows teachers to better individualize their methods to focus on an individual student’s specific needs, and the one-on-one attention prevents struggling students from

giving up by lending much needed confidence. (RR4:75-76.) Similarly, Dr. Cervantes of Edgewood ISD noted that, because of their personal experiences, economically disadvantaged students often lack self-esteem which can be remediated and overcome with more individualized attention. (RR11:156-57.)

- FOF 431. The state budget cuts forced many districts to drastically reduce the size of their educational support staff. (See RR25:106-08; Ex. 6345, Folks Dep., at 35-36; Ex. 6341, Frost Dep., at 25-28; Ex. 6336, Burns Dep., at 35-36; RR19:48-50, 162; Ex. 6334, Sconzo Dep., at 48-49.) For example, of the approximately 100 teachers Alief ISD had to cut, many were response-to-intervention teachers, who spent a majority of time working with economically disadvantaged and other at-risk students. (RR8:28, 121-22.) Approximately 65% of the students in Alief ISD were no longer able to benefit from those programs following the budget cuts. (Ex. 4224-L, Chambers Dep., at 35-36.)
- FOF 432. Alief ISD also had to cut approximately 61 teaching aides and paraprofessionals, who were used to create smaller group settings for at-risk students. (RR8:28, 122.) Van ISD cut 14% of its teaching staff, or 22 teachers, and approximately 14 aides. (Ex. 3201, Witte Dep., at 22.) Van ISD's aide ratio went from almost one per classroom to one for every two classrooms. These cuts in Van ISD increased class sizes and prevented the differentiation of teaching instruction for at-risk students. (*Id.* at 23-24.) Many school districts are unable to provide the support and individualized attention that at-risk students need because they lack sufficient funding. (See, e.g., Ex. 6341, Frost Dep., at 39; Ex. 6335, Cain Dep., at 90-91.)

#### (d) Counseling

- FOF 433. ELL and economically disadvantaged students both need quality counseling services. For example, for economically disadvantaged students who have experienced physical abuse in their own homes or civil unrest in their native countries, Dr. Salazar explained that counselors are necessary to help students cope with their trauma before they "can focus on reading and math." (RR24:126-27.)
- FOF 434. Dr. Salazar also explained that most economically disadvantaged students come from families without college graduates, and do not have anyone to explain what postsecondary opportunities are available. (*Id.*) Counselors provide that awareness to keep students focused on long-term goals and prevent them from dropping out. (*Id.*)
- FOF 435. Counselors are also necessary to help schools identify and address any other difficult family circumstances inhibiting students' performance and school attendance. For example, during an unexpected freeze in Los Fresnos ISD, family engagement counselors investigated the reason for a sudden drop in attendance, and discovered that students were not coming to school because they did not have working water heaters at home. (*Id.*) Counselors then worked to find product and service donations to secure heat for the families and the continued attendance of the students. (*Id.*) Due to budget cuts, however, the district had to eliminate family engagement counselors. (RR24:133.)

- FOF 436. Counselors help determine which ELL students require more specialized services and provide long-term ELLs with the intensive language and academic supports they need to graduate college ready. Bilingual counselors help address the needs of ELL students and their parents. (Ex. 1085, Pompa Report, at 12; RR24:126-29, 132-34.)
- FOF 437. Counseling services and ongoing training for counselors in the area of ELL schooling, however, are absent or lacking in many districts due to lack of funding. (*See, e.g.*, Ex. 1345, Izquierdo Site Visits Report, at 4, 7.)
- FOF 438. Student-to-counselor ratios in many districts across the state have been increasing since 2009. (*See infra* FOF 579.) In Los Fresnos ISD, the district had to cut back from 2 counselors at each elementary school to 1, making the student-to-counselor ratio as high as 800 to 1. (RR24:133.) Edgewood ISD, which is over 95% economically disadvantaged, also had to cut counselors at the high school level. (RR22:156.)
- FOF 439. The reduced counseling services particularly impact economically disadvantaged students, who are more likely to face difficult family circumstances inhibiting their performance, are less likely to have parents with an active interest in their educational trajectory, and are more likely to need help from outside the family in applying for colleges and financial aid. (Ex. 1122, Vigdor Report, at 29; Ex. 3207, Salazar Dep., at 40-45; RR24:126-27.)

**(e) Drop-out prevention**

- FOF 440. Dropout prevention programs for ELL students have been shown to be effective and are necessary to address the high dropout rate of ELL students in Texas (RR14:69-70 (referencing Ex. 4230 at 29); Ex. 1085, Pompa Report, at 13), but these programs, like other interventions, require additional funding. These programs have been reported to cost in the range of \$1,200 to \$1,400 per student. (Ex. 4231 at 13.) Despite the need for such programs, many districts do not have the funds to establish or sustain effective dropout prevention programs. (*See, e.g.*, RR18:52-53.)
- FOF 441. Superintendents testified that budget cuts forced them to cut back on drop-out prevention efforts. Edgewood ISD, for example, had to eliminate all of its campus interventionists, whose role was to reach out to at-risk students, and provide support to keep them in school. (RR22:151-52; Ex. 4237 at 7.)

**(f) Parent engagement**

- FOF 442. Schools with a high percentage of economically disadvantaged students need outreach programs and parent liaisons to involve families in the education of their children. (RR20:75, 79-80; RR24:127-29.)
- FOF 443. In addition, parental involvement in ELL students' learning is important to the students' success, but engaging parents of ELLs in their children's education can be challenging for schools. Although parents of ELLs generally support their children's education, they

may not understand the U.S. school system. Furthermore, parents with limited English language skills often hesitate to communicate with teachers and administrators at schools in which no one speaks their language. Similarly, teachers and administrators may have no familiarity with the language, culture, and values of ELL students' families, and therefore often cannot effectively involve the parents. Effective parent engagement requires resources which are not currently available. (RR14:73-75 (referencing Ex. 4230 at 32, 33); Ex. 1085, Pompa Report, at 14; Ex. 4231, Pompa Report, at 30; RR4:86; Ex. 3206, French Dep., at 86-87; Ex. 3198, Garza Dep., at 119-21; RR24:127-29, 133-34.)

- FOF 444. To encourage effective parental engagement, districts require additional parent liaisons and parent programs to create awareness of current policies, conduct home visits and outreach, and foster parental support of student educational progress. (See, e.g., Ex. 1345, Izquierdo Site Visits Report, at 4, 7; RR22:152; RR14:155-56.)
- FOF 445. Los Fresnos ISD utilized family engagement counselors funded by grants as part of its dropout recovery efforts at the high school level beginning in ninth grade. These counselors acted as liaisons with identified families. They developed a relationship with a family and understood its needs. Los Fresnos ISD had this program for two years and saw excellent results, but the program had to be discontinued for lack of funding. (RR24:127-29.)

**iv. ELL students require additional forms of support to address their unique challenges.**

- FOF 446. ELL students have other unique needs. In addition to the interventions discussed above, appropriate and effective programs for ELL students also require at a minimum: (1) high-quality instructional materials and technologies; (2) adequately trained teachers and administrators who have access to ongoing, high-quality professional development; (3) extended time to learn, such as additional tutoring and high-quality after-school and summer school programs; (4) support services including counseling, dropout prevention, and programs for ELL students with disabilities; (5) high-quality pre-school programs geared toward ELLs; (6) curriculum aligned with state standards; and (7) parent engagement programs. (Ex. 4230 at 11; RR14:36, 133-34 (referencing Ex. 4231 at 12); Ex. 1104, Izquierdo Report, at 8-10, 18-20, 22-24; RR15:144-45, 172-73; RR34:163-64; Ex. 4233-B, Coultrass Dep., at 84-86, 106-08, 110, 181-82; Ex. 4224-P, Kincannon Dep., at 20-21.) These elements do not stand in isolation but, instead, are part of a comprehensive program to help ELL students succeed in the classroom and later on in life. (Ex. 4230 at 11; RR14:36, 133-34 (referencing Ex. 4231 at 12); Ex. 1104, Izquierdo Report, at 16; RR15:144-45, 172-73; RR34:163-64; Ex. 4233-B, Coultrass Dep., at 84-86, 106-08, 110, 181-82; Ex. 4224-P, Kincannon Dep., at 20-21.)
- FOF 447. Dr. Izquierdo conducted qualitative research interviews of seven to eight hours each in five of the Edgewood school districts to determine the extent to which the districts had in place all of the elements of an adequate bilingual program. (RR14:123-25,150; Ex. 1345, Ex. 4231 at 28.) Dr. Izquierdo's investigative research and the testimony from the Edgewood districts and other Plaintiff districts showed that the districts were not able to

implement many of the basic components of a quality bilingual program at an adequate level and these districts are struggling to meet the needs of ELLs.

FOF 448. The deficiencies included: (1) a lack of quality ongoing professional development; (2) a lack of materials such as incomplete sets of textbooks and technologies for ELLs; (3) a lack of resources needed to provide high quality preschool and extended instructional time for ELLs in addition to the regular instructional day; (4) a lack of quality parental programs for parents of ELLs; (5) a lack of bilingual paraprofessionals adequately assigned to bilingual/ELL classrooms; (6) a lack of bilingual/ELL teachers to support ELL newcomers who have very unique needs; and (7) the use/misuse of bilingual teachers in combined classrooms of regular English speaking students and ELLs who need instruction in their first language, thus creating a very difficult instructional and management situation for the teacher. (*See, e.g.*, RR14:151-56 (referencing Ex. 4231 at 30); Ex. 1345, Izquierdo Site Visits Report, at 2; *see also* Ex. 4224-S, Cervantes Dep., at 184-85; RR18:15-34; RR4:89-90, 95; *see also infra* Part I.C.7.d (FOF 1091. *et seq.*))

FOF 449. Two of these interventions for ELL students – materials and technology, and proper support for ELLs with disabilities – are discussed in greater detail below.

**(a) Sufficient materials and technology.**

FOF 450. High-quality materials in both English and the students' native language are essential to the academic success of ELLs and are often the key link between the student and the curriculum. (RR5:178-79.) For ELLs, these materials bridge the gap between languages and help them understand complex ideas. Important materials for ELLs include (1) visuals to learn new vocabulary, (2) bilingual dictionaries or picture dictionaries for younger students, and (3) leveled readers, charts, instructional games, and interactive digital technology. The lack of adequate instructional materials can have a devastating impact on ELL student achievement. (RR14:49-56 (referencing Ex. 4230 at 18); Ex. 1085, Pompa Report, at 7-8; RR18:12-13, 18-19, 21-26, 28.)

FOF 451. ELL student learning is greatly aided when libraries are equipped with books in the ELL students' home languages. Curriculum materials in these same languages are often necessary so that parents can provide additional support in the home language. (Ex. 1104, Izquierdo Report, at 23-24.)

FOF 452. In Texas, the majority of ELL children are also low-income and are thus less likely than other students to have computer and Internet access at home, making access at school even more important. Many schools do not have sufficient computers for ELL students, despite persuasive evidence that computer technologies, such as language recognition and response programs and interactive software, enhance ELL student learning. (Ex. 1085, Pompa Report, at 8; Ex. 1104, Izquierdo Report, at 24; RR15:157; RR18:11-12; RR14:38-39.)

FOF 453. Due to limited funding, some districts are unable to afford the ESL curriculum, and not all classrooms have textbooks in both English and Spanish, which are needed to

effectively implement state-mandated programs. (*See, e.g.*, Ex. 1345, Izquierdo Site Visits Report, at 3-9.) It can be even more difficult to find materials for ELL students whose home language is not Spanish. (Ex. 6336, Burns Dep., at 51-52; RR19:44.)

FOF 454. Dr. Izquierdo's analysis and the testimony of superintendents reveal serious deficiencies in the materials and technologies needed to serve ELL students in the Plaintiff districts. (*See, e.g.*, RR14:157-58 (referencing Ex. 4231 at 31); Ex. 1345, Izquierdo Site Visits Report, at 3-4; Ex. 4224-S, Cervantes Dep., at 185; RR14:162-63 (referencing Ex. 4231 at 37-38).)

**(b) Proper support for ELL students with disabilities.**

FOF 455. ELL students who also need special education face particular challenges. These students' need for special education often is not identified because it is confused with the need for language acquisition. Those students are therefore often not referred for special education services. When the need is identified, these students sometimes lose time participating in ESL instruction in order to participate in special education services. Districts must therefore recruit highly trained teams of special educators and ELL educators who can assess a special needs student's eligibility for bilingual or ESL services. (RR14:76-78 (referencing Ex. 4230 at 34, 35); Ex. 1085, Pompa Report, at 13-14; Ex. 4233-B, Coultriss Dep., at 166-67.)

**d. The arbitrary structure and funding of the school finance system prevent economically disadvantaged and ELL students from accessing the educational opportunities needed to accomplish a general diffusion of knowledge.**

**i. Harmful state budget cuts could not be remediated by local districts as a result of tax compression and the lack of tax capacity.**

FOF 456. Even though the numbers of economically disadvantaged and ELL students were growing significantly at the same time the State increased academic standards, the State did not offer corresponding resources for those children to succeed.

FOF 457. Instead of ensuring that the increasing needs of those student populations were met, the 82nd Legislature reduced FSP funding by \$4 billion and cut an additional \$1.3 billion from a number of specifically targeted programs meant to support economically disadvantaged and ELL students. (*See supra* Part I.B.2.e (FOF 52, *et seq.*); Ex. 16 at 30; Ex. 5630, Scott Dep., at 46, 70; RR6:205-06; Ex. 16 at 55; Ex. 17 at 18.) These included programs such as SSI for remedial instruction, full-day prekindergarten, teacher merit incentives, extended learning programs, and teacher training. These cuts are described in more detail below:

- A drastic reduction in the SSI grant program, which allowed districts to provide intensive tutoring, extended day programs, and summer school programs for at-risk students who were struggling on statewide examinations. This program was cut from over \$300 million in the 2010-11 biennium to \$41 million for the 2012-13 biennium. (Ex. 5630, Scott Dep., at 28-29, 44-45; Ex. 17 at III-19; RR6:204-05; Ex. 6322, Moak Report, at 49.)
- A \$19 million cut from the Limited English Proficient Student Success Initiative & Special Projects. (Ex. 10748.)
- The elimination of \$201 million in grants designed to assist districts with providing full-day pre-K services to approximately 56,000 at-risk students, since only a half-day program is funded by the FSP. (Ex. 6322, Moak Report, at 49; Ex. 5630, Scott Dep., at 30-34, 42-44.) This cut represented a complete elimination of state funding for full-day pre-K. (Ex. 5630, Scott Dep., at 42.)
- A reduction from \$21 million in each year of the 2010-11 biennium to \$12.5 million in each year of the current biennium to funding for Regional Service Centers, which provide professional development to teachers. (RR28:193-94; RR31:170.)
- Elimination of the FSP-Extended Year Programs (previously \$30.6 million), which provided support for students who were not meeting the state content standards and were at-risk of not being promoted. (Ex. 4000, Cortez Report, at 49-50; RR31:171-72; Ex. 10748.)
- Elimination of the Teacher Mentor Program (previously \$20 million) for teachers with less than two years of experience. (Ex. 4000, Cortez Report, at 49-50; RR31:171-72; Ex. 10748.)
- A \$14.6 million cut to the Texas Advanced Placement Incentive, which provided subsidies for test fees for low-income students. (Ex. 4000, Cortez Report, at 49-50; RR31:171-72; Ex. 10748.)
- Elimination of the Reading, Math, and Science Initiative (previously \$25 million), which funded diagnostic testing and research-based training and materials and was targeted at districts with lower student performance. (Ex. 4000, Cortez Report, at 49-50; RR31:171-72; Ex. 10748.)
- A reduction of \$110 million in funding for instructional materials. (Ex. 4000, Cortez Report, at 49-50; RR31:171-72; Ex. 10748.)

- Elimination of the Center for Improvement of Districts and Schools (previously \$4 million). (Ex. 4000, Cortez Report, at 49-50; RR31:171-72; Ex. 10748.)

FOF 458. The State never undertook any significant review to determine the actual impact of these cuts on the state's highest need children. (RR6:204-08.) The Legislature had the opportunity to restore the cuts to these programs in the 2013 legislative session, but instead left most of these cuts intact. (*See supra* FOF 68.)

FOF 459. As described throughout these findings, the budget cuts significantly harmed at-risk students, requiring districts to eliminate full-day pre-K programs or otherwise reduce the quality of the pre-K programs offered to economically disadvantaged and ELL students; increase class sizes; lay off necessary teachers; and eliminate summer school, tutoring, and other extended learning opportunities that low-income and ELL students so desperately needed. (*See supra* Part I.B.2.e (FOF 52, *et seq.*); *see infra* Part II.C.7 (FOF 680, *et seq.*.)

FOF 460. Everman ISD, for example, is almost 90% economically disadvantaged, and experienced a 20% increase in its low-income student population between 2005 and 2010. Yet the district still received cuts of over \$2 million in 2011, forcing the district to eliminate over 40 employees. (RR5:192-93.) Edgewood ISD, which is over 95% economically disadvantaged, suffered cuts of over \$4.1 million, forcing the district to eliminate campus interventionists who worked with at-risk students and to reduce its summer school program. (RR22:142.)

FOF 461. As one superintendent testified, "instead of culling out programs that are ineffective, you decide which of the effective programs you're going to cut back and streamline." (RR19:37 (referencing Ex. 6355 at 16).) Ultimately, the State's funding scheme forced school districts into "robbing Peter to pay Paul." (RR19:184; *see also* RR20:138-39; Ex. 3208, Williams Dep., at 210-11; Ex. 3198, Garza Dep., at 22-23.)

FOF 462. Many school districts across Texas do not have the taxing capacity under the current finance system to overcome these budget cuts. The lack of capacity results from a confluence of systemic factors previously discussed, including the State's compression of tax rates, the lowering of the statutory cap on property taxes to \$1.17, the requirement of a TRE to raise taxes above \$1.04, and the failure to adjust upward the overall revenue available in the system. (*See supra* Part I.C.1 (FOF 210, *et seq.*.)

FOF 463. Plaintiff school districts like Edgewood ISD, Everman ISD, San Benito CISD and Van ISD and others – which have significant at-risk student populations – are already at the \$1.17 M&O cap and have no means to fill the substantial void, leaving hundreds of thousands of economically disadvantaged and ELL students without the resources they need to overcome their educational obstacles. (Ex. 3201, Witte Dep., at 19; RR6 188-90.)

FOF 464. Statewide, in 2012-13, almost one in every four school districts taxed at or near the \$1.17 tax cap, an increase of over 150% from the 2007-08 school year. (*See supra* FOF 213.) Over 90% of districts, with almost 4.2 million in ADA, tax at or above \$1.04. (RR54:116-17 (referencing Ex. 6618 at 14).) Even if every district in the state passed a TRE to tax at the \$1.17 cap, only about one-quarter of those districts (which collectively educate approximately one-fifth of the state's ADA) could raise the estimated cost of an adequate education at \$6,176, leaving the remaining 769 districts and their 3.9 million in ADA without the resources necessary to achieve a general diffusion of knowledge. (RR63:45-58 (referencing Ex. 11440).)

FOF 465. Even districts that recently raised taxes through the passage of a TRE felt the brunt of the cuts. Alief ISD, for example, had just held a TRE in 2008 to raise its M&O tax rate by eight and a half cents producing approximately \$8.5 million for the district each year. (RR8:111-12.) However, the district incurred a \$22 million reduction as a result of the statewide budget cuts over the biennium, essentially neutralizing the district's TRE. (*Id.*) Humble ISD also lost more from the state budget cuts than it gained from its 2008 TRE. (RR3:169-70 (referencing Ex. 6346 at 10).)

**ii. The arbitrary and outdated compensatory education weight does not deliver sufficient funding for economically disadvantaged students.**

FOF 466. The costs of providing the effective interventions described further above (*see supra* Part I.C.2.c (FOF 379, *et seq.*)) and other educational resources for low-income students are substantial. (RR4:73-80; Ex. 4237 at 11; Ex. 1101, Belfield Report, at 13.) As shown below, the compensatory education weight has never been properly tied to the higher, increasing costs of educating economically disadvantaged students. (*See infra* FOF 467 – FOF 478.) As a result, the costs of funding programs necessary for economically disadvantaged students to acquire a general diffusion of knowledge far exceed the compensatory education allotment.

FOF 467. The FSP provides a compensatory education weight of 0.2, or 20%, of the adjusted basic allotment for students who are eligible for free or reduced-price lunches. (Ex. 1328. Casey Report, at 15; TEX. EDUC. CODE § 42.152(a), (b).) Compensatory education funds are intended to support supplemental programs and services designed to eliminate (not simply reduce) any disparity in student performance on the state's standardized tests and to eliminate disparities in high school completion rates.

FOF 468. The compensatory education weight has not been modified since 1984. (RR6:214-15, 217-18 (referencing Ex. 6349 at 48).) At that time, the School Finance Working Group, consisting of members of virtually every educational organization in Texas, recommended a weight for compensatory education of at least 0.4 in order to provide economically disadvantaged students with a minimum accredited education. (RR23:80-81.) Without any sound educational reason, the 0.4 recommendation was cut in half by the Legislature to 0.2. (Ex. 1328. Casey Report, at 15.)

- FOF 469. At the time it was enacted, the setting of the compensatory education weight was driven by resources available, rather than an assessment of the additional costs associated with educating economically disadvantaged students. (Ex. 5653 at 45-46; Ex. 6322, Moak Report, at 58; Ex. 1123, Cortez Report, at 36.) Since it was last adjusted, the compensatory education weight has not kept pace with changes such as student demographics, higher performance standards, and differences in financial resources facing schools. (Ex. 1328 at 1; *see also supra* Part I.B.2.d (FOF 39, *et seq.*) and *infra* Part I.C.4 (FOF 591, *et seq.*) for further discussion on weights.)
- FOF 470. Lynn Moak testified that his review of the research based on weights for economically disadvantaged students (both that which he conducted at the time the weight was enacted and his more recent research), combined with the significant achievement gap between economically disadvantaged and non-disadvantaged students, convinced him that the compensatory education weight should be at least doubled. (RR6:219-26 (referencing Ex. 6349 at 48-51).) Similarly, Dr. Albert Cortez who has performed research in the field for over four decades (*see* Ex. 1123, Cortez Report, at 2-3), surveyed recent research in Texas and across the country and determined that the weight should be at least at the rate of 0.4 as recommended in 1984. (Ex. 1123, Cortez Report, at 36.) Dr. Bruce Baker cites evidence that the cost to educate low-income children is 50% to 100% higher than the cost to educate the average child. (Ex. 3188, Baker Report, at 28-29; RR16:34-35.) The Court finds this testimony credible and, coupled with the extensive testimony from superintendents on the challenges they face educating economically disadvantaged students to today's academic standards, determines that the compensatory education weight is inadequate.
- FOF 471. Several superintendents testified regarding the costs of educating economically disadvantaged and at-risk students and that the compensatory education weight does not fully cover these additional costs. (*See, e.g.*, RR19:144-45.) As described above, districts do not have sufficient resources to meet the needs of economically disadvantaged students and provide them with the quality of education necessary to meet state standards. The increasing numbers of economically disadvantaged students, the introduction of more rigorous standards, and the expansion of achievement gaps in the STAAR regime magnify the harm to students and districts arising from the inadequate compensatory education weight.
- FOF 472. In 2009-10, a Joint Select Committee on Public School Finance Weights, Allotments, and Adjustments was appointed by the Legislature and composed of fifteen legislators and other public members. While the Committee did not issue a final report, the Committee issued a "Stakeholder Group" report which recommended an increase in the compensatory education weight from 0.2 to 0.4. This recommendation was not acted upon. (Ex. 1328, Casey Report, at 11-12.)
- FOF 473. Because the amount of funding has not been adjusted at least periodically to ensure that it is well aligned with state academic expectations, the State in effect is underfunding programs designed to support students most in need of additional academic support. The 0.2 weight bears no relationship to the standards imposed today on students and school

districts. (Ex. 6322, Moak Report, at 58-60; RR18:77-78; RR22:151-59; RR32:23 (Dr. Dawn-Fisher testifying that adequacy is not part of the policy discussion).)

- FOF 474. The recent budget cuts – including over one billion dollars that supported programs targeting economically disadvantaged students, such as intensive tutoring, extended day programs, summer school programs, and full-day preschool programs – were largely unrestored and have only exacerbated the problem by forcing school districts to reduce or eliminate programs serving economically disadvantaged students at a time when a new, more rigorous testing and curriculum program is being implemented. (See generally *infra* Part I.C.7 (FOF 680, *et seq.*) and *supra* Part I.C.2.c (FOF 379, *et seq.*); Ex. 6322, Moak Report, at 49; RR6:204-05; Ex. 5630, Scott Dep., at 28-29; RR6:205; Ex. 6322, Moak Report, at 49; Ex. 5630, Scott Dep., at 30-34, 42-44.)
- FOF 475. The Court finds that, by providing insufficient funds for economically disadvantaged students and cutting the very funds aimed at providing remediation for struggling students, the Legislature crippled the ability of all affected school districts to provide their economically disadvantaged students with a general diffusion of knowledge. This is especially true for those with higher concentrations of economically disadvantaged students. And although the program cuts heavily impacted school districts across all wealth levels (such as urban districts that are classified as property wealthy but have large populations of low-income students), an analysis of the special program cuts by property wealth showed that the districts in the lowest wealth decile lost an average of \$253 per WADA and accounted for 13% of all special program cuts, showing economically disadvantaged students living in the poorest districts bore a heavy burden resulting from the elimination of necessary support programs and interventions. (Ex. 4000 at 2, 48.)
- FOF 476. Furthermore, while the statutory school finance formulas reflect the Legislature's acknowledgement that economically disadvantaged students cost more to educate, the result of the funding system does not actually send more dollars to districts with higher concentrations of economically disadvantaged students. Mr. Moak analyzed the relationship between 2010-11 FSP revenue per ADA and per WADA and the percent of the district's students who are classified as economically disadvantaged for districts with more than 1,000 ADA. (Ex. 6322, Moak Report, at 59.) As the percentage of economically disadvantaged students increases, the FSP revenue decreases:

<b>% Economically Disadvantaged</b>	<b>ADA</b>	<b>WADA</b>	<b>FSP Revenue</b>	<b>Revenue per ADA</b>	<b>Revenue per WADA</b>
Under 10%	30,219	34,415	\$225,853,345	\$7,474	\$6,563
10% to under 30%	570,856	697,294	\$4,244,405,813	\$7,435	\$6,087
30% to under 50%	808,325	1,020,791	\$5,892,091,212	\$7,289	\$5,772
50% to under 70%	1,276,001	1,698,012	\$9,635,063,254	\$7,551	\$5,674
70% to under 90%	1,298,873	1,793,660	\$10,022,020,910	\$7,716	\$5,587
90% and over	221,735	316,250	\$1,755,071,075	\$7,915	\$5,550
<b>Grand Total</b>	<b>4,206,008</b>	<b>5,560,423</b>	<b>\$31,774,505,609</b>	<b>\$7,555</b>	<b>\$5,714</b>

(*Id.*)

- FOF 477. Not surprisingly, from 2009-10 to 2012-13, the number of compensatory education teachers dropped from 11,450, or 3.9% of teachers, to 9,490 teachers, or 2.9% of teachers. During this period, the economically disadvantaged student population grew from 2,848,067, or 59.0% of student enrollment, to 3,054,741, or 60.4% of student enrollment. In other words, there were nearly 2,000 fewer compensatory education teachers to serve an additional 207,000 economically disadvantaged students. (Ex. 10795, Section II at I and Ex. 4258 at 13, 17.)
- FOF 478. The legislative changes to funding enacted by the 83rd Legislature did not change the compensatory education weight. (*See generally* Ex. 20062A, Zamora Report at 16; RR56:127.)
- FOF 479. The temporary increase to the basic allotment for the 2013-14 school year yields only minimal increases for economically disadvantaged students. For example, using the average basic allotment, districts could expect to receive approximately \$46 more per economically disadvantaged student compared to the 2012-13 school year. (Ex. 11470 at Tab "formula history"; *see also* Ex. 20062A, Zamora Report, at 16 (calculating increases ranging from \$34 to \$41 for the Edgewood districts).) This small increase in funding for some of the state's most needy students falls woefully short of providing the educational opportunities essential to the success of economically disadvantaged students and remains arbitrary and unsuitable. (*See generally* Ex. 20062A, Zamora Report, at 5-32; RR55:157-68; RR56:56-72; RR56:112-115; Ex. 4337 at 7; Ex. 4336 at 43:19-49:22, 53:12-61:25.)

iii. **The arbitrary and outdated bilingual weight does not deliver adequate funding for ELL students.**

(a) **Significant, yet essential, state mandates related to language programs for ELL students place heavy burdens on school districts.**

- FOF 480. Through statutory and regulatory mandates governing bilingual and ESL programs, Texas has recognized the important role that quality, effective, and comprehensive language programs serve in allowing ELL students to learn, progress, and succeed in public schools. The Legislature has declared that every ELL student is entitled to a full opportunity to become competent in English through bilingual and special language programs that emphasize mastery of English, mathematics, science and social studies, as well as the opportunity to participate fairly in school. TEX. EDUC. CODE § 29.051; *see also* 19 TEX. ADMIN. CODE § 89.1201.
- FOF 481. The Legislature has further recognized that compliance with the bilingual/ESL statute (Chapter B, Subchapter 29 of the Education Code) is “an imperative public necessity.” TEX. EDUC. CODE § 29.062(a).
- FOF 482. These significant policy interests of the State impose significant additional costs on school districts. Some of these mandates are set forth in greater detail below. As the succeeding section lays out, schools lack sufficient resources to meet the State’s mandates and the basic educational needs of ELL students, including the recruitment and retention of certified bilingual and ESL teachers, and provision of quality prekindergarten programs and appropriate books and materials, among other things. (*See infra* Parts I.C.2.d.iii(b) – I.C.2.d.iii(c) (FOF 496, *et seq.*))
- FOF 483. **Program requirements.** Each district with an enrollment of twenty or more ELL students in the same grade level from kindergarten through twelfth grade is required to offer bilingual education in kindergarten through elementary grades; either bilingual education, ESL, or another transitional language instruction program in post-elementary grades through grade eight; and ESL in grades nine through twelve. TEX. EDUC. CODE § 29.053(d); 19 TEX. ADMIN. CODE §§ 89.1225(e), 89.1210.
- FOF 484. Bilingual and ESL programs are full-time programs of instruction designed to ensure that ELL students have a full opportunity to master the essential knowledge and skills of the required curriculum. 19 TEX. ADMIN. CODE § 89.1210(a)-(b).
- FOF 485. The SBOE adopted the English language proficiency standards (“ELPS”) in 2007, which are the English language acquisition standards that must be implemented for ELL students in conjunction with the state curriculum. *Id.* § 74.4. (Ex. 1104, Izquierdo Report, at 11.)
- FOF 486. Bilingual education programs must address the affective, linguistic, and cognitive needs of ELL students. These needs include, but are not limited to, instruction addressing the

- student's cultural heritage as well as the history and culture of the United States; listening, speaking, reading and writing in the home language and in English; instruction structured to ensure mastery of required essential knowledge and higher-order thinking skills in all subjects. 19 TEX. ADMIN. CODE § 89.1210(c).
- FOF 487. ESL programs are an integral part of the regular educational program and provide instruction in English in language arts, mathematics, science, and social studies using second language methods to ensure that students master the required essential knowledge and skills and higher-order thinking skills. ESL programs also must address the affective and linguistic needs of students. At the high school level students receive sheltered instruction, or the teaching method for delivering the content standards necessary for language acquisition, in all content areas. *Id.* § 89.1210(f)-(g). (RR14:157-58.)
- FOF 488. Although the State does not require native language instruction for every district, it recognizes that "public school classes in which instruction is given only in English are often inadequate for the education of those [ELL] students." TEX. EDUC. CODE § 29.051. Dual language programs show particular promise in helping raise ELL student achievement, and TEA has pointed to such programs as examples of "best practices." However, these programs entail additional costs to school districts, which can be a barrier to their implementation. (RR14:128-32 (referencing Ex. 4231 at 8-11); Ex. 1104. Izquierdo Report, at 6-7; RR18:8-9; Ex. 4233-A, Carstarphen Dep., at 89-91; Ex. 3206, French Dep., at 84; Ex. 3198, Garza Dep., at 95-96.)
- FOF 489. **Other requirements.** In those districts where ELL services are required, schools are required to meet a number of other requirements related to ELL education. For all students entering public school in Texas, schools must conduct home language surveys in both English and the home language to determine the language normally used in the student's home. TEX. EDUC. CODE § 29.056(1).
- FOF 490. If students are identified as possible ELL students, districts must administer English and primary-language oral and written proficiency tests by professionals or paraprofessionals with the language skills and training required by the test publishers. *Id.* § 29.056(1)((a)-(b)).
- FOF 491. School districts must then form a language proficiency assessment committee ("LPAC") to determine the language proficiency level of each potential ELL student, designate his or her level of academic achievement, classify such students and recommend their exit from a bilingual or ESL program when appropriate, and monitor the academic progress of any exited students for the first two years after program exit. 19 TEX. ADMIN. CODE § 89.1220(c)-(g), (k). LPACs must include a professional bilingual educator, a professional transitional language educator, a parent of an ELL student, and a campus administrator. TEX. EDUC. CODE § 29.063(a)-(b). School districts are required to establish and operate a sufficient number of LPACs to enable them to discharge their duties within twenty school days of the enrollment of ELL students. 19 TEX. ADMIN. CODE § 89.1220(e).

- FOF 492. Texas also requires teachers in bilingual or ESL programs to be certified in bilingual education or ESL. TEX. EDUC. CODE § 29.061. If a district obtains a waiver of this requirement, it must use at least 10% of its bilingual education allotment to fund a training program for its teachers. 19 TEX. ADMIN. CODE § 89.1207(a)(1)(D), (b)(1)(E).
- FOF 493. Additionally, each school district that is required to offer a bilingual education program must offer an eight-week summer preschool program for children eligible for admission to kindergarten or first grade at the beginning of the next school year. The preschool program must include 120 hours of intensive bilingual education or special language program and a student/teacher ratio of 18:1 or lower. TEX. EDUC. CODE § 29.060; 19 TEX. ADMIN. CODE § 89.1250.
- FOF 494. School districts must also implement assessment procedures that differentiate between language proficiency and special education needs. 19 TEX. ADMIN. CODE § 89.1230.
- FOF 495. School districts with bilingual education or ESL programs must conduct regular assessments to determine the program impact and student outcomes, and prepare annual reports detailing the progress of the ELL students. Each school principal at a campus with a program must develop, review, and revise the campus improvement plan annually. 19 TEX. ADMIN. CODE § 89.1265.

**(b) The additional costs of funding programs necessary for ELL students to acquire a general diffusion of knowledge far exceed the funding generated by the Bilingual/ESL allotment.**

- FOF 496. Despite the substantial programming and services that districts must provide for ELL students, the funds provided by the State to defray those expenditures have never been designed, structured, or funded to cover the actual costs and are unrelated to actual student need.
- FOF 497. **Background on the bilingual weight.** The State recognizes that school districts incur additional costs above the regular program in educating ELL students and provides funds to school districts to help meet the extra costs of programs for ELL students. See TEX. EDUC. CODE § 29.051. For each student in average daily attendance in a bilingual education or special language program, a district is entitled to an annual allotment equal to the adjusted basic allotment multiplied by 0.1 (commonly known as the “bilingual weight”). TEX. EDUC. CODE § 42.153(a).
- FOF 498. The 0.1 bilingual weight was first enacted by the Legislature in 1984 and, like the compensatory education weight, has never been adjusted. (Ex. 6322, Moak Report, at 58; RR6:215.) The current 0.1 bilingual weight was also never based on actual studies of the cost to educate bilingual students. (Ex. 6322, Moak Report, at 58.) In fact, it ignores studies indicating that a significantly higher weight was necessary.

- FOF 499. The 1984 school finance working group discussed above also recommended an add-on weight of 0.4, or 40 percent, based on the actual costs of providing programs for ELL students. (RR23:80-81; Ex. 4000, Cortez Report, at 12, 30.) The 2009-10 Legislative Stakeholder Group, also referenced above, recommended that the bilingual weight be increased from 0.1 to 0.6. Neither recommendation was acted upon. (Ex. 1328, Casey Report, at 11-12.)
- FOF 500. School districts cannot implement adequate programs for ELL students with the funding generated by the adjusted basic allotment multiplied by the 0.1 weight. (*See, e.g.*, Ex. 4000, Cortez Report, at 30-33; RR10:127-28; RR6:215, 217-19; Ex. 6322, Moak Report, at 58; RR18:77-78; Ex. 4224-S, Cervantes Dep., at 198; Ex. 3205, Chambers Dep., at 61-62; Ex. 3204, Dupre Dep., at 118; Ex. 3198, Garza Dep., at 116-24; RR24:141-42, 149-50, 167-69; RR20:55.) The lack of adequate resources makes it difficult for many school districts – including low and moderate-wealth school districts – to hire specialized teachers, provide the necessary supplementary materials, conduct required assessments, and comply with state mandates. (Ex. 4000, Cortez Report, at 33.)
- FOF 501. After discussing the many challenges facing ELL students, Lubbock ISD Superintendent Dr. Karen Garza stated: “given our current circumstances, what we’re currently provided is sorely inadequate to meet the challenges of our diverse population that we were just discussing, both our at-risk students, our economically disadvantaged students, and then our students who do not speak English. Our current funding system is sorely inadequate to meet those needs and I think it’s going to be exacerbated, significantly so, with this new testing program from the State of Texas and the new graduation requirements.” (Ex. 3198, Garza Dep., at 123-24.)
- FOF 502. Numerous superintendents testified to the outstanding basic educational needs of ELL students that they are unable to meet because of the inadequate bilingual allotment. For example, sheltered instruction and specialized teams of four or five teachers to help serve the ELL students of La Feria ISD would cost an additional \$250,000 above the current costs. (RR18:55.) In San Benito CISD, the bilingual allotment does not cover the additional costs for essential ELL programs and services such as extra tutoring, reducing class sizes, ESL curriculum, professional development training on the English language proficiency standards, hiring back teacher aides, and hiring additional teachers so the district can have separate bilingual classrooms to appropriately serve its ELL students. (RR4:88-94.) Without these necessary educational opportunities, the district does not expect to get the ELL students up to grade level, much less to help them achieve college and career readiness. (RR4:95.) Likewise, in Harlingen CISD, teachers are required to serve ELL students in mixed classrooms, which adversely affects student learning. (RR15:121-22.) Teachers also lack in their classrooms necessary ESL support textbooks, phonetics and reading activities, workbooks, and teacher aides. (RR15:129-31; 158-59.) The current bilingual allotment does not cover necessary programs for ELL students in Los Fresnos ISD, such as extended day programs for language development and college preparatory academies, reading specialists, and adequate language labs. (RR24:134-35.)

146-47.) In Edgewood ISD, the bilingual allotment only covered about one-fifth of the district's expenditures on ELL programs. (RR22:145-46.)

- FOF 503. Summer school not only helps those students struggling on standardized tests and failing classes, but it also provides a continuum for ELL students trying to achieve throughout the year and expands and reinforces those skills. (RR15:172-73; Ex. 3198, Garza Dep., at 118-119.) However, the bilingual allotment does not cover those expenses for La Feria ISD and cuts to summer school funding have drastically reduced or eliminated summer school for ELL students. (RR18:31-32.)
- FOF 504. As described in more detail in Part I.C.7.d (FOF 1091, *et seq.*) below, inadequate funding has led to deficiencies in teaching quality for ELL students caused by the lack of quality training and professional development for teachers and lack of sufficient program monitoring, among other things. (*See, e.g.*, RR14:157-58, 160-63, 165-66 (referencing Ex. 4231 at 31, 34-39); Ex. 1345, Izquierdo Site Visits Report, at 3-4, 7-9; RR15:121,138-39,173-74; RR18:17-18, 28.) The deficiencies, in turn, lead to "limited" and "weak" student learning and academic achievement for ELL students, preventing their progress both linguistically and academically. (RR14:166.)
- FOF 505. Austin ISD received a grant from a private foundation for necessary ELL professional development training in the amount of \$8,474,994. (Ex. 4041.) The district is not expected to fully sustain the program with the current level of ELL funding. (RR19:197-200.)
- FOF 506. School finance experts have conducted studies in several states of the incremental costs of providing bilingual programs. (RR23:82-86.) These studies show that Texas's funding of bilingual education falls significantly short. For example, a 2011 Colorado study by nationally known experts found that add-on resources would require a weight of between 0.47 for an ELL student in a large school district to 0.564 per ELL student in a small or rural district, compared to the average student. (RR23:84-86; Ex. 4000, Cortez Report, at 31-32.) A 2005 Arizona study conducted by the National Conference of State Legislatures found that the incremental costs of ELL student education ranged from \$1,026 to \$2,571 per student depending on the student's grade level. (Ex. 4000, Cortez Report, at 31.)
- FOF 507. The bilingual weight in Texas is not only insufficient for all grade levels but also fails to account at all for the difference in costs to educate bilingual students at different grade levels. (RR24:171-73.) As Los Fresnos ISD Superintendent Gonzalo Salazar testified, districts are further burdened by the inadequate bilingual weight in the higher grades, where the subject matter is more difficult, and yet districts receive less total funding from the weight because fewer students are identified as ELL. (RR24:171-73.)
- FOF 508. Moreover, the weight of 0.1 is substantially below many other states. (Ex. 6322, Moak Report, at 58, 61-62.) A 2008 national study of sixteen states that have bilingual add-on weights found Texas to be at the lowest end of what states have found necessary for ELL

students, a range that can run up to two times the cost of non-disadvantaged students. (RR6:218-20; Ex. 6322, Moak Report, at 58.)

- FOF 509. The 0.1 weight also bears no relationship to the standards imposed today on students and school districts. The weight pre-dated the successive eras of higher educational standards and assessments such as TEAMS, TAAS, TAKS, and now STAAR. (Ex. 4000, Cortez Report, at 30; *see also* RR18:77-78; RR4:114-23 (stating resources were not sufficient under TAKS and comparing results to increased rigor under STAAR).)
- FOF 510. Districts' actual expenditures on ELL programs also confirm the inadequacy of the bilingual weight. (*See, e.g.*, RR18:10-11; Ex. 10644 (the State allocated approximately \$400 additional dollars for each ELL student enrolled in La Feria ISD, but the district's expenditures amounted to approximately \$1,446 per ELL student); Ex. 10633; Ex. 4237 at 8 (the State allocated approximately \$430 for each ELL student enrolled in Edgewood ISD, but the district spent \$2,843 per ELL student, or nearly six times the bilingual allotment).) Many school districts' bilingual expenditures per student far exceeded the bilingual allotment, including: Abilene ISD's expenditures at \$2,130 per ELL student, Alief ISD at \$2,545, Amarillo ISD at \$2,496, Calhoun County ISD at \$2,653, Lewisville ISD at \$1,315, and Lubbock at \$1,304. (Ex. 10615; Ex. 10619; Ex. 10621; Ex. 10629; Ex. 10645; Ex. 10648.) These expenditures above the allotment include those elements necessary to support quality bilingual programs, including stipends for bilingual and ESL certified teachers to help with their retention, professional development, teacher and instructional aides, tutoring, and extended-day programming. (*See, e.g.*, RR18:9-13, 49; RR22:145-46, 148.)
- FOF 511. The bilingual allotment, even when combined with general revenue dollars for expenditures, falls far short of that needed to provide ELL students access to reasonable opportunities these students require to acquire a general diffusion of knowledge as established by the State. (RR22:145-46, 148.)
- FOF 512. The legislative changes to funding enacted by the 83rd Legislature did not change the bilingual weight, which remains at 0.1. (Ex. 20062A, Zamora Report, at 16; RR56:128.) The temporary increase to the basic allotment for the 2013-14 school year yields only minimal increases for ELL students. For example, using the average basic allotment as represented by Dr. Dawn-Fisher of the TEA, districts could expect to receive approximately \$23 more per ELL student compared to the 2012-13 school year. (Ex. 11470 at Tab "formula history.") This small increase in funding for some of the state's most needy students falls woefully short of being adequate and remains arbitrary and unsuitable. (RR55:157-68; RR56:56-72; RR56:112-15; Ex. 4337 at 7; Ex. 4336 at 43:19-49:22, 53:12-61:25.)
- FOF 513. **Decline in budget and expenditures for ELL programs.** Despite the growth of the ELL student population in recent years, the amounts of both budgeted and actual funds dedicated to bilingual/ESL programming have declined. In the three school years from 2009-10 to 2011-12, the amount budgeted for bilingual/ESL dropped from 4.34% of all program expenditures (or approximately \$1,493 per ELL student using the number of

ELL students reported in the 2009-10 State AEIS Report (Ex. 10795)) to 3.45% of all program expenditures (or approximately \$1,133 per ELL student using the 2011-12 State AEIS Report (Ex. 11213)) – which represents a 24.5% drop over this period. (Ex. 4074.) This amounted to a roughly \$270 million drop – from \$1,219,062,042 to \$949,388,965 at the same time that the statewide ELL population *increased* by roughly 22,000 students. (RR14:19 (referencing Ex. 4230 at 4); Ex. 4074; *compare* Ex. 10795 at Sec. II, p. 1 with Ex. 11213 at 2.) Actual financial data showed similar declines. (Ex. 4073; *see also* RR14:15; Ex. 4230 at 4.) For 2011-2012, TEA reported that actual expenditures for bilingual education dropped to \$917,244,578, or 3.45% of actual expenditures for that year. (*See* TEA, 2011-2012 Actual Financial data, available at <http://ritter.tea.state.tx.us/cgi/sas/broker?service=marykay&program=sfadhoc.actualreport2012.sas&service=appserv&debug=0&who box=&who list= STATE.>)

FOF 514. From 2002-03 to 2011-12, budgeted expenditures for bilingual/ESL instruction fell from 4.5% to 3.45% of all funds expenditures, even though the ELL student population grew from 14.9% to 17% of the total student population during that same period. (RR14:19 (referencing Ex. 4230 at 4); Ex. 1087 at Sec. II at 1; Ex. 11213 at 2.) In 2012-13, budgeted expenditures for bilingual education further dropped to 3.39% of program expenditures or \$ 192 per student. (*See* TEA, 2012-2013 Budgeted Financial Data, available at <http://ritter.tea.state.tx.us/cgi/sas/broker?service=marykay&program=sfadhoc.budgetreport2013.sas&service=appserv&debug=0&who box=&who list= STATE.>)

FOF 515. The budgeted and actual expenditures far exceed the amounts allocated to districts for bilingual education under the FSP. For example, when adding up the “Total FSP Bilingual Funding” for the 1,024 districts for the 2010-11 school year (Ex. 4226, Column U), the amount was a mere \$369,953,277, compared to \$1,150,211,353 in actual expenditures. (Ex. 4073 at 6.)

**(c) Districts must use a significant amount of their bilingual allotment to cover the cost of recruiting and retaining qualified bilingual/ESL teachers.**

FOF 516. Many school districts across Texas compete to recruit and retain qualified bilingual/ESL teachers by paying significant stipends to certified teachers, which in turn, uses up significant portions of the bilingual allotment. (*See, e.g.*, RR18:13; RR22:145-47; Ex. 4237 at 8; RR19:146-47.) According to TEA, Texas faced a shortage of bilingual and ESL teachers in the 2012-13 school year and faces a similar shortage in the 2013-14 school year. (Ex. 1085 at 8; Ex. 4274.) As stated earlier, the number of ELL students grew by over 230,000 students over the past ten years to 863,974 students in 2012-13. (*See supra* FOF 15.) But while ELLs now make up a greater percentage of the student population than in years past (17.1% in 2012-13 compared to 14.9% in 2002-03), bilingual/ESL teachers make up a smaller percentage of the total teacher population (8.1% in 2002-03 compared to 5.3% in 2012-13). (RR14:21; Ex. 4219; Ex. 1087 at Sec. II, p. 1; Ex. 4258 at 13, 17.)

FOF 517. TEA also reported that in 2010, many bilingual/ESL teachers were teaching with out-of-field credentials – 20% in early childhood education/kindergarten, 10% in elementary school, 37% in middle school, and 85% in high school. (RR14:21-23 (referencing Ex. 1085, Pompa Report, at 8); RR34:164.) Despite the importance of quality, trained teachers for ELL students, because of the shortage of certified bilingual and ESL teachers in Texas, some districts must seek waivers from TEA, leaving uncertified teachers to teach ELL students in bilingual or ESL classes. (RR34:165-66; RR6:32-33.) TEA reported that in 2011-12, 16.3% of bilingual/ESL teachers were teaching with out-of-field credentials in early childhood/kindergarten, 11.8% in elementary school, 28.2% in middle school and 92% in secondary grades 9-12. (See [www.tea.state.tx.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=25769804697&libID=25769804697](http://www.tea.state.tx.us/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=25769804697&libID=25769804697))

FOF 518. Districts also have responded to the teacher shortage by paying stipends in an effort to recruit trained and certified bilingual education and ESL teachers. (RR18:13; RR22:145-47; Ex. 4237 at 8.) In 2011-12, approximately 40% of school districts pay a bilingual stipend, according to a survey by the Texas Association of School Boards. (RR14:21-23 (referencing Ex. 4230 at 5 and TASB survey); Ex. 4219; RR6:103; Ex. 4224-P, Kincannon Dep., at 22.) Paying stipends to recruit and retain certified instructions requires additional resources. (Ex. 1085, Pompa Report, at 8 (according to a Texas Association of School Boards survey, in 2011-12, the average stipend for bilingual education teachers was \$2,483 and \$1,191 for ESL teachers).) In 2012-13, TASB found that 74% of school districts pay shortage stipends and that the average bilingual stipend had risen to \$2,495. (See 2013-13, TASB/TASA Teacher Report available at [http://www.tasb.org/services/hr\\_services/salary\\_surveys/documents/tchr\\_highlights\\_landing.pdf](http://www.tasb.org/services/hr_services/salary_surveys/documents/tchr_highlights_landing.pdf))

FOF 519. Based on the most recent research and the testimony and evidence before the Court, the Court finds that the current bilingual weight is not designed, structured, or funded to accomplish a general diffusion of knowledge for ELL students. (RR23:85; Ex. 4000, Cortez Report, at 33; RR6:218-20.)

**e. Economically disadvantaged and ELL students are being denied a meaningful opportunity to achieve a general diffusion of knowledge, which renders the system unconstitutional.**

FOF 520. Based on the output data described above in Parts I.C.2.a.iii (FOF 298, *et seq.*) and I.C.2.b.iii (FOF 349, *et seq.*), the Court finds that economically disadvantaged and ELL students are not achieving a general diffusion of knowledge. The inability of districts to offer the necessary interventions (*see supra* Part I.C.2.c (FOF 379, *et seq.*)) to help these populations overcome the educational obstacles they face (*see supra* Parts I.C.2.a.i (FOF 277, *et seq.*) and I.C.2.b.i (FOF 333, *et seq.*)) means that school districts are not able to provide these students with a meaningful opportunity to achieve a general diffusion of knowledge. Therefore, the Court finds that the education system is constitutionally inadequate as to economically disadvantaged and ELL students.

FOF 521. The Court further finds that the size of the economically disadvantaged population – 60% and growing (*see supra* FOF 13) – is so great that their failure to achieve a general diffusion of knowledge renders the entire system constitutionally inadequate. This finding is bolstered by the performance data for “all students” (detailed in Part I.B.5 above (FOF 126, *et seq.*)), which reveals that hundreds of thousands of Texas high school students are off-track for graduation (*see supra* FOF 146 – FOF 157), and that more than half of all students failed to achieve the final Level II score on all but one STAAR exam in Spring 2013. (*See supra* FOF 141 (STAAR EOC) and FOF 143 (STAAR 3-8).)

**3. If all Texas students are to have a reasonable and meaningful opportunity to acquire a general diffusion of knowledge, Texas schools must be given adequate and suitable funding to hire a quality workforce and implement quality programs.**

FOF 522. The performance data detailed above in Part I.B.5 (FOF 126, *et seq.*) demonstrates that Texas is far from meeting the legislatively defined standard for a general diffusion of knowledge: providing all students with a meaningful opportunity to graduate college and career ready. In both 2012 and 2013, less than half of high school students achieved the lower phase-in Level II standard on all tests taken. (Ex. 6322, Moak Report. at 26; RR54:141-42 (referencing Ex. 6618 at 23); *see also supra* FOF 140.) In Spring 2013, only 24% of all high school students achieved the final Level II standard (TEA’s current definition of college ready) on all tests taken. (Ex. 6618 at 23; *see also* FOF 141.) The percentage of ninth grade students achieving Level III, which is the level that was empirically linked to external measures of college readiness, ranges from a low of 2% on English I Writing to a “high” of 16% on Algebra I in 2013. (Ex. 5707 – Ex. 5711; *see also supra* FOF 142.)

FOF 523. To close the gap between Texas’s standards and student performance, school districts must hire and maintain a quality workforce, including both teachers and educational support staff, such as counselors and librarians; however, superintendents uniformly testified that they lack the resources to hire the personnel needed to achieve the necessary progress. (*See infra* Parts I.C.3.a (FOF 526, *et seq.*) and I.C.3.d (FOF 575, *et seq.*))

FOF 524. School districts also must be able to provide additional quality programs and interventions. Superintendent and expert testimony establishes that quality, full-day pre-K and reduced class sizes are among the most effective tools, yet districts currently lack the necessary funding to provide them. (*See infra* Parts I.C.3.b (FOF 550, *et seq.*) and I.C.3.c (FOF 562, *et seq.*))

FOF 525. Finally, school districts must meet the demands of a growing student population by building new facilities and repairing or replacing aging facilities. (*See infra* Part I.C.3.e (FOF 585, *et seq.*))

a. **Districts lack the necessary resources to replace, hire, and retain the quality teachers necessary to provide a general diffusion of knowledge.**

i. **Texas must hire substantially more teachers to account for student growth and to replace those near retirement.**

FOF 526. Texas employed the equivalent of 335,000 full-time teachers in its public schools, including charter schools, in 2011. (Ex. 1122, Vigdor Report, at 2.) Texas must fill 40,000 net teaching positions every year simply to replace the teachers leaving the workforce and to keep up with population growth. Over the last twelve years, 10% of teachers on average have left the workforce annually. (RR23:182-83; Ex. 1122, Vigdor Report, at 2.)

FOF 527. The challenge of teacher recruitment in Texas is exacerbated by the aging of the teacher workforce. Estimates from the Census Bureau indicate that the median age for primary and secondary schoolteachers in Texas increased from thirty-five to forty-two between 1980 and 2010. (Ex. 1122, Vigdor Report, at 2.) The percentage of teachers over fifty-five – and therefore at high risk of retirement over the coming decade – has doubled since 1990, to the point where they represent nearly 20% of the workforce – a proportion not seen in more than a generation. (*Id.*; RR23:183-84; Ex. 5412 at 4-5.)

FOF 528. Texas simply does not train enough new teachers to keep up with this demand. Indeed, in only one year has the production of newly certified teachers from in-state preparation programs exceeded 27,000 individuals, and historically many of those obtaining certification never choose to enter the teaching profession. Texas must “import” thousands of teachers each year. (Ex. 1122, Vigdor Report, at 3; RR23:184-85; Ex. 5412 at 6-7.) As the state’s population continues to grow, and as its sizable cohort of baby boom-era teachers retire over the next decade, its need to import teachers from outside of Texas – and to compete with other states for teaching talent – will only increase. (Ex. 5412 at 6-8.)

ii. **Texas faces significant challenges in ensuring the quality of its teacher labor force.**

FOF 529. Texas also needs to ensure that its teaching labor force is high quality. The consensus view among education policy researchers and superintendents alike is that teacher quality is a key determinant of student achievement. (RR23:209-10; Ex. 1122, Vigdor Report, at 18; Ex. 3188, Baker Report, at 103; *see also, e.g.*, RR3:143; RR4:80-81; RR8:46; RR25:122-23.) Yet, the evidence supports the conclusion that the absolute level of teacher quality in Texas has declined over time. (Ex. 1122, Vigdor Report, at 1.)

FOF 530. According to the research base, two credentials are strongly associated with improvements in student performance: teacher experience and certification in the field in which the teacher is teaching. (RR23:193; Ex. 1122, Vigdor Report, at 6-7.)

- FOF 531. Novice teachers have been found to be less effective than more experienced teachers. (Ex. 1122, Vigdor Report, at 6; RR23:193-94.) A substantial body of literature has found that concentrations of novice teachers can have significant negative effects on student outcomes. (Ex. 3188, Baker Report, at 111.) Teachers' competence increases rapidly within the first few years on the job, and their effectiveness continues to grow over time (albeit at a slower pace). (Ex. 1122, Vigdor Report, at 18-20; RR23:194 (referencing Ex. 5412 at 17-18).) Yet Texas schools are increasingly hiring novice teachers to fill the large number of vacancies that must be filled each year. (Ex. 1122, Vigdor Report, at 7; RR23:199.) The reliance on novice teachers is concentrated in districts that face persistently high turnover rates. In such districts, it is common for over 20% of the workforce to consist of beginning teachers. (RR23:200-01 (referencing Ex. 5412 at 21-22).) A teacher in a high poverty district is 26% more likely to be a novice teacher than a teacher in a low poverty district. (Ex. 3188, Baker Report, at 111.) Reliance on large numbers of inexperienced teachers is likely to negatively affect the average quality of teachers in Texas and to adversely affect student outcomes. (Ex. 1122, Vigdor Report, at 8; RR23:193-97 (referencing Ex. 5412 at 18); Ex. 3188, Baker Report, at 111.)
- FOF 532. Teacher quality is also correlated with in-field certification, and students perform more poorly in a subject when their teachers lack certification in the subject matter. (Ex. 1122, Vigdor Report, at 6-7.) Yet schools are increasingly relying upon teachers who lack traditional certification and/or certification in the subject matter they teach. (*Id.* at 10.)
- FOF 533. **Alternative certification programs.** A generation ago, about 80% of teachers in Texas possessed traditional certification, meaning that they had progressed through a traditional teacher education program as a postsecondary student. Today, that proportion stands at 45%. (*Id.*; RR23:204 (referencing Ex. 5412 at 25-26).) As traditional certification has waned, so-called "alternative" certification, a route pursued by less than 1% of teachers in the late 1980s, is now the route of choice for more than a quarter of the state's teachers. (Ex. 1122, Vigdor Report, at 10.) In some recent years, alternatively certified teachers have accounted for more than 40% of new entrants into the profession. (*Id.*; RR23:205 (referencing Ex. 5412 at 27).) Alternative certifications may be obtained from a range of public entities (school districts, community colleges, regional service centers, etc.) or private entities. (RR23:203, 205.)
- FOF 534. To a large extent, Texas has relied on private alternative certification programs ("ACPs") to meet the immense need for new teachers created by turnover within the profession and population growth. (Ex. 1122, Vigdor Report, at 11; RR23:205-06.) Private ACPs, in turn, meet this demand in part by circumventing certification requirements that would ordinarily apply to traditionally certified teachers. (Ex. 1122, Vigdor Report, at 11.)
- FOF 535. Teachers must pass a state certification exam to be fully certified as a teacher in Texas. (Ex. 1122, Vigdor Report, at 12.) The State's certification tests measure content knowledge in the subject a candidate intends to teach. (Ex. 1122, Vigdor Report, at 12.) Results on these tests raise doubt about the level of knowledge of teachers coming through the private ACPs in the areas they teach. (RR23:207 (referencing Ex. 5412 at 28).) Based on 2002-07 data, the odds of failing a Texas teacher certification test are

25% to 90% higher, depending on subject matter, for teachers trained in private ACPs, relative to teachers with traditional university-based training. (Ex. 1122, Vigdor Report, at 13; RR23:205-07 (referencing Ex. 5412 at 29).) On the elementary-level generalist certification exam, which is the most commonly taken exam, the odds of failure are as much as 90% higher for teachers trained by a private ACP. (Ex. 1122, Vigdor Report, at 12.)

- FOF 536. Teachers pursuing alternative certification are often working in the classroom while in the process of being certified. (RR23:207-08.) This means that a large number of the teachers encountering difficulty in demonstrating a minimum level of content knowledge on the certification exam are actually responsible for educating students. (Ex. 1122, Vigdor Report, at 12.)
- FOF 537. In part because of their difficulties in obtaining full certification, teachers trained in private ACPs have higher turnover rates than their traditionally-certified counterparts. (Ex. 1122, Vigdor Report, at 13; RR23:208 (referencing Ex. 5412 at 30).) Turnover causes a loss of institutional memory about specific students, state mandates, and similar issues. (Ex. 1122, Vigdor Report, at 8.)
- FOF 538. **Certification in field.** Studies show that students fare more poorly in a subject when their teacher lacks certification in field. (*Id.* at 6-7.) In Texas and nationwide, teacher shortages are acute in certain subject areas, which has caused schools to rely more heavily on less-qualified candidates in these fields. (*Id.* at 14.)
- FOF 539. Math and science teachers, for example, frequently possess credentials that are in demand in the private sector, and consequently have options to leave the profession at various points in their career. (*Id.*) This competition for skilled teachers forces the state to rely on less qualified candidates in these fields. (*Id.*) In 2011, 70% or fewer of Texas's high school science, high school computer science, middle school science, middle school English, and middle school computer science teachers were fully certified in their respective grades and subjects. (*Id.* at 15; RR23:202 (referencing Ex. 5412 at 23).) In the course of normal progress through middle school and high school, the average Texas public school student can expect to spend two years instructed by science teachers who lack certification to teach the subject, and an additional one or two years taught by a similarly uncertified math teacher. (Ex. 1122, Vigdor Report, at 14-15.)
- FOF 540. In addition, the percentage of high school teachers in Texas with an undergraduate major in their main assignment area decreased from 77.8% in 2003-04 to 71.9% in 2007-08. (*Id.* at 15; RR23:202-03.) Texas's ranking by this measure decreased from forty-fourth to forty-sixth over the four-year time period. (Ex. 1122, Vigdor Report, at 15.)

**iii. Teacher salaries affect the ability of districts to hire and retain quality teachers, which impacts student performance.**

- FOF 541. Economist Jacob Vigdor testified, based on experimental and quasi-experimental research that he and other researchers have performed, that higher salaries help schools attract and retain better quality teachers. (RR23:212-13 (referencing Ex. 5412 at 34).) This in turn results in improved student achievement. (RR23:212-13 (referencing Ex. 5412 at 34).) For example, evidence suggests that increasing teacher pay can lead to higher graduation rates. (RR15:30.)
- FOF 542. Dr. Baker corroborated Dr. Vigdor's analysis, testifying that teacher salaries affect the quality of entrants to the teaching profession and impact how long teachers remain in the profession and where they choose to work. (Ex. 3188, Baker Report, at 102-05; RR16:82-83, 151-52.)
- FOF 543. Superintendent testimony also confirms Dr. Baker's and Dr. Vigdor's conclusions that compensation affects the quality of teachers a school can hire and retain. (*See, e.g.*, RR3:143-44; RR19:125-26; RR4:253-54.) Numerous superintendents emphasized that districts compete with each other to hire new teachers and that salary plays an important role in teachers' decisions about where to work. (RR4:253-54; RR41:66; Ex. 3198, Garza Dep., at 49-50.) Even higher wealth districts have lost teachers to neighboring districts because their district's salaries are not competitive. (*See, e.g.*, RR20:84; RR4:254-55.) Numerous superintendents testified that they believe their ability to recruit and retain teachers will be adversely affected if they are forced to continue to reduce or freeze teacher salaries. (RR4:253-55; Ex. 5617, Reedy Dep., at 49; Ex. 5614, Patek Dep., at 42.)

**iv. Texas teacher salaries are not competitive.**

- FOF 544. Despite the importance of salaries to attracting and retaining quality teachers, Texas teacher salaries have declined significantly relative to the national average teacher salary. (Ex. 1122, Vigdor Report, at 4.) Twenty years ago, Texas teacher salaries were close to the national average, but today, age-adjusted salaries paid to teachers in Texas lag 7% to 10% below the national average. (*Id.*; RR23:185-86 (referencing Ex. 5412 at 10).) A State expert, Dr. Podgursky, conceded that it was appropriate to compare salaries across states on an age-adjusted basis (RR30:8), because it allows for a better measurement of a teacher's earning potential by eliminating any distortions caused by each state's differing distributions of teachers across experience levels. (RR23:186-87.)
- FOF 545. The most recent data from the NCES shows that the average teacher salary in Texas was \$47,311 in 2009-10 dollars, well below the national average of \$54,965 and lower than thirty-two other states. (RR23:192 (referencing Ex. 5412 at 15).) This data also shows that Texas is falling behind other states, including neighboring states.

- FOF 546. Since 1999-2000, Texas was one of only fifteen states where teacher salaries failed to keep pace with inflation. (RR23:192 (referencing Ex. 5412 at 15).) Since 1999-2000, forty-one states increased salaries at a faster rate than Texas. (RR23:192 (referencing Ex. 5412 at 15).) And Texas's four neighboring states posted much stronger inflation-adjusted growth in salaries than Texas, with Oklahoma at 20%, Louisiana at 14.8%, New Mexico at 10.4%, and Arkansas at 9.4%, with Texas bringing up the rear at -1.6%. (RR23:192-93 (referencing Ex. 5412 at 15).) Moreover, average Texas teacher salaries have fallen behind those of other states that are expected to be Texas's main source of competition for new teachers in the coming decade, including Arizona, Colorado, Florida, Georgia, Nevada, New Mexico, Utah, and Wyoming. (Ex. 1122, Vigdor Report, at 5; RR23:191 (referencing Ex. 5412 at 14).)
- FOF 547. Texas teacher wages are also low when compared to non-teachers with similar education levels who work similar amounts of time. (RR16:151-53; Ex. 3188, Baker Report, at 105-08.) In fact, teachers in Texas earn a weekly wage that is less than 70% of the wage of their similarly educated peers. (Ex. 3188, Baker Report, at 105; Ex. 1122, Vigdor Report, at 4.) Texas teacher wages fall into the bottom ten states in terms of their relative competitiveness with other career opportunities for individuals at the same education level. (Ex. 3188, Baker Report, at 105.) Teacher wages in Texas are particularly low in metropolitan areas like Houston, Dallas, and Austin, when compared to non-teacher wages in Texas for individuals working the same number of hours and weeks per year, and at the same age and education level. (*Id.* at 107.) It is reasonable to assume from this data that the quality of applicants to the teaching profession is lower than it would be if wages were more competitive. (*Id.* at 105.)
- FOF 548. It is also important to consider how teacher salaries have declined over time in assessing the competitiveness of teacher salaries compared to other fields. Over the past fifty years, opportunities for women in highly paid occupations – from medicine and law to engineering and business – have expanded tremendously. (Ex. 1122, Vigdor Report, at 16-17; RR24:27.) Elementary and secondary teaching, once one of the primary options available to highly educated women, is now only one of many such options. (Ex. 1122, Vigdor Report, at 16-17; RR24:27.) The decline in teacher salaries relative to other professions makes it much more difficult to attract teachers. (Ex. 1122, Vigdor Report, at 4, 16-17; RR23:187-88.) Evidence also supports the view that the declining relative attractiveness of teaching to women – evident not just in Texas, but throughout the country – has led highly qualified candidates to choose other professions. (Ex. 1122, Vigdor Report, at 17; RR23:189-90.)
- FOF 549. Dr. Vigdor opined that: (1) at the salaries currently in place, there is an insufficient number of well qualified teachers willing to work in Texas public schools; (2) Texas schools have had to compromise their standards for teacher quality; and (3) higher teacher salaries are needed to address these concerns. (RR23:180-81; RR24:43-44; Ex. 1122, Vigdor Report, at 13, 18.)

**b. Districts need funding for quality pre-K programming.**

- FOF 550. High-quality pre-K programs can significantly improve student performance and behavior and help districts achieve a general diffusion of knowledge, but Texas is not making the necessary investments on this front.
- FOF 551. Dr. Steven Barnett, Director of the National Institute for Early Education Research, testified regarding the research base associated with the impact of quality preschool education. High-quality preschool education has been shown to increase both test scores and graduation rates, and to reduce grade retention, behavioral problems, delinquency, and crime. (RR11:140.) In addition, the evidence indicates that starting earlier produces greater long-term gains: two years beginning at age three produces better results than one year beginning at age four, and starting prior to age three may produce even better results. (Ex. 1074, Barnett Report, at 9; RR11:175-76.)
- FOF 552. Research shows that the pre-K programs with the largest and longest-lasting effects are more educationally intensive and expensive. (RR11:139-41; Ex. 1074, Barnett Report, at 8.) The preschool programs identified as more effective have been part of the public education system and have had more highly-educated, better-paid teachers than Head Start and childcare. (RR11:149; Ex. 1074, Barnett Report, at 8.) Neither ordinary childcare nor Headstart programs are sufficient substitutes because they do not provide the large, long-term substantive gains in cognitive and social development that have been achieved with high quality pre-K programs. (RR11:148-50; Ex. 1074, Barnett Report, at 5.)
- FOF 553. Dr. Barnett's opinions about the importance of quality, full-day pre-K programs were bolstered by the testimony of former Commissioner Robert Scott. Mr. Scott has long championed improvement in the quality of pre-K programs and funding for full-day pre-K programs. (Ex. 5630, Scott Dep., at 31-32, 43.) He advocated for the state grant that provided funding for full-day pre-K in many districts. (*Id.* at 32, 43.) According to Mr. Scott, this grant was a "critical program[] that support[s] student progress from pre-K through grade 12." (Ex. 15.)
- FOF 554. Superintendents from across the state echoed the testimony of Dr. Barnett and Mr. Scott regarding the importance of a quality pre-K program, emphasizing the significant impact the program made in their districts before it was eliminated as a result of budget cuts. (*See, e.g.*, RR19:185; Ex. 5613, Youngblood Dep., at 23-24; RR5:172; RR8:103-04; RR20:50-56, 74-75; RR24:115-17, 195-96; Ex. 3208, Williams Dep., at 210-11.)
- FOF 555. Dr. Barnett noted a number of weaknesses in Texas's State-funded pre-K program, including the fact that the State places no limits on maximum class size or child-staff ratio in pre-K. (RR11:186; Ex. 1074, Barnett Report, at 15.) Texas is one of only three states that has no such limits. (Ex. 1074, Barnett Report, at 15.) In addition, assistant teachers in Texas are not required to have an education beyond a high school diploma so they are not required to have the specialized preparation that would enable them to be effective teaching partners. (*Id.*; RR11:187.)

- FOF 556. No state with a pre-K program has less state-level capacity (in terms of absolute numbers of staff) to monitor and oversee pre-K than does Texas – even states as small as Delaware. (Ex. 1074, Barnett Report, at 15; RR11:173-74.) Texas is currently without any statewide system to evaluate the quality of public preschool programs and determine what percentage of students exit the public preschool system kindergarten-ready. (RR34:61-63, 71.) In fact, the State only gathers information on approximately 30% of public preschool programs statewide. (RR34:66.) TEA does not collect data on what percentage of three and four-year olds in the state are preschool eligible, or what percentage of ELL and economically disadvantaged students in the state actually have access to preschool. (RR34:72-73.) Lack of state capacity for monitoring and oversight precludes a continuous improvement process that would ensure that programs actually use resources effectively and provide a high quality education. (Ex. 1074, Barnett Report, 14-16.)
- FOF 557. Although the State contends that there are twenty integration specialists that provide services for pre-K programs statewide, those individuals admittedly do not assess the effectiveness of state preschool programs. (RR34:56.) Moreover, the TEA's Director of Early Childhood Education, Gina Day, admitted that Texas has never gauged the effectiveness of any services provided by those specialists. (*Id.*)
- FOF 558. As noted in Part I.B.2.e (FOF 52, *et seq.*) above, Texas previously funded full-day pre-k programs, but currently funds only half-day pre-K, and only children who meet certain criteria are eligible for state-level pre-K funding. (Ex. 1074, Barnett Report, at 14; RR11:184-85; RR34:13.)
- FOF 559. Rather than provide resources to expand pre-K programs, Texas has significantly cut funding for these programs, which are critical for the academic success of at-risk students. (Ex. 5630, Scott Dep., at 30-32, 42-44; RR11:186-88; Ex. 4224-S, Cervantes Dep., at 186; Ex. 1074, Barnett Report, at 14-15.) In the 2010-11 school year, Texas provided state funding to serve only 52% of the state's four-year-olds and 6% of its three-year-olds. (RR11:184.) In 2010-11, prior to the budget cuts, state funding per child already had fallen to \$3,761 per child, which is lower than in any of the three prior years, adjusting for inflation. The low levels of available funding negatively affect the quality of teachers schools are able to recruit and retain, as well as materials and other essential elements of a high quality pre-K program. (Ex. 1074, Barnett Report, at 10; RR11:161-62.)
- FOF 560. No State witness was able to credibly dispute this testimony about the deficiencies in Texas's pre-K programming. Ms. Day admitted that she did not know whether the amount the State allots to districts is sufficient to provide an adequate preschool program. (RR34:84-85, 88-89.)
- FOF 561. This Court is persuaded by Dr. Barnett's testimony that Texas's current pre-K programs are not producing the outcomes proven possible with intensive, high quality preschool education. (RR11:190-91.)

**c. Districts need funding to keep class sizes manageable.**

**i. Smaller class sizes improve learning for all students.**

- FOF 562. Research and evidence from both the State and the plaintiff school districts show that the effect of lower class sizes on student achievement in the elementary grades is significant. Statutory limits on class size demonstrate the Legislature's recognition of the same.
- FOF 563. Extensive research on class size shows that reducing classes to approximately fifteen students in kindergarten through grade three has significant positive effects on graduation rates and student achievement in math and reading. (Ex. 5520, Odden Report, at 4; Ex. 1101, Belfield Report, at 11-14; RR4:73-74.) Small class sizes result in higher achievement because they provide higher levels of student engagement, increased time on task, and the ability for high quality teachers to better tailor their instruction to students in the class. (Ex. 1079, Schanzenbach Report, at 4.)
- FOF 564. As described earlier, the Tennessee's STAR experiment is a well-known, large scale, randomized trial involving class size reduction. (Ex. 5520, Odden Report, at 4.) This study showed that students assigned to classes of approximately fifteen students achieved at a significantly higher level than those assigned to classes of approximately twenty-two students. (Ex. 5520, Odden Report, at 4.) According to one credible interpretation of the STAR results, the study indicated that elementary students randomly assigned to small classes out-performed their classmates who were assigned to regular classes by about 0.22 standard deviations after four years. (RR26:112-13.)
- FOF 565. The State's expert, Dr. Russ Whitehurst, agreed that the STAR experiment is the most influential and credible study of class size reduction to date. (RR26:112.) He identified a number of studies related to class size reduction and agreed that STAR is the strongest study in terms of its ability to show causation. (RR26:76-77.)
- FOF 566. The STAR study involved class size reductions in kindergarten through third grade. (RR17:197-98.) In the opinions of Dr. Odden and Dr. Schanzenbach, the study is consistent with a finding that, other things being equal, smaller class sizes in these grades lead to improvements in student performance. (Ex. 1079, Schanzenbach Report, at 2-3; Ex. 5520, Odden Report, at 4.) In an article published by the Brookings Institution, Dr. Whitehurst agreed that the weight of the high-quality research literature supports the view that class size reductions in these grades are associated with improved performance. (Ex. 1195 at 1; RR26:76, 118, 122-27; Ex. 5678 at pp. 6-8 of PDF.) In addition, later studies utilizing the data gathered during the STAR study indicate that the experiment showed positive long-term impacts for exposure to small class sizes for more than two years, with the greatest impacts for students who spent the most time in smaller classrooms. (RR17:199-200; RR13:122.)
- FOF 567. Longitudinal research also shows impacts on college attendance fifteen years later for students who participated in the study. (RR26:77.) Dr. Whitehurst agreed that the proposition that significant class size reductions can have meaningful long-term effects

on student achievement is broadly consistent with the body of the most credible research on the subject. (RR26:112, 118; *see also* Ex. 1195.)

- FOF 568. Superintendents and teachers at Texas schools confirmed their belief that small class sizes improve learning because they allow teachers to provide individualized instruction to students, reduce disruptive behavioral problems, and devote more time to involving parents in their child's education. (*See, e.g.*, Ex. 5618, Wiggins Dep., at 53-55; Ex. 5617, Reedy Dep., at 34, 42; Ex. 3198, Garza Dep., at 45-48.) Superintendents also uniformly pointed out that AEIS data on class size averages across all classes – including those that must be kept small such as special education classes and behavioral programs – and therefore reports a lower number than one would see when walking into a typical regular program class. (*See, e.g.*, Ex.6337, Hanks Dep., at 232-33; Ex. 6339, Bamberg Dep., at 179-81; Ex. 6341, Frost Dep., at 84, 170-71; RR18:198-99; RR25:38-39.) This limits the usefulness of the AEIS data.
- FOF 569. While most of the evidence on class size reduction is based on studies of early grades, there is evidence that smaller class sizes in eighth grade also positively impact test scores and measures of student engagement. (Ex. 1079, Schanzenbach Report, at 4.) In any event, the ISD Plaintiffs' expert, Dr. Odden, calculated the cost of adequacy based on class sizes of fifteen only in kindergarten through third grade and larger class sizes of twenty-five in grades four through twelve. (Ex. 5520, Odden Report, at 4.)
- FOF 570. Dr. Diane Schanzenbach testified that she believes the effects of class size are linear. In other words, the benefits of small class sizes do not occur only when class sizes are reduced to around fifteen. (Ex. 1079, Schanzenbach Report, at 5.) In her view, the benefits also occur when class sizes decrease from sizes such as twenty-four or twenty-five to twenty-one or twenty-two. (*Id.*)
- FOF 571. The Court finds that the credible evidence establishes that decreasing class size promotes learning for all students and is an effective strategy for achieving a general diffusion of knowledge.

**ii. Districts have been forced to seek class size waivers in record numbers.**

- FOF 572. Texas has a maximum class size of twenty-two in kindergarten through fourth grade, with some exceptions. (Ex. 1079, Schanzenbach Report, at 6.) If a class becomes larger than twenty-two, the district must apply to the TEA for an exception, or a "waiver." (*Id.*) In 2011-12, the number of class size waivers requested in Texas spiked. (*Id.* at 7.) Typically, between 90 and 150 districts request waivers, but in 2011-12, more than 280 districts requested waivers. (*Id.*) Over 60% of these districts cited financial hardship as the reason for the waiver request. (*Id.*) Statewide, over 1,700 schools had at least one classroom waiver request, and the TEA granted approximately 8,600 class-size waivers in 2011-12. (*Id.*; Ex. 5630, Scott Dep., at 391-92 (referencing Ex. 30 at 3).)

FOF 573. In 2011-12, schools with class size waivers had higher percentages of ELL or bilingual students than schools without class size waivers. (Ex. 1079, Schanzenbach Report, at 7 (schools were on average 61% economically disadvantaged, 24% ELL, and 23% bilingual).)

FOF 574. Many superintendents testified that, even though their students learn better in smaller classes, their districts were forced to seek significantly more class size waivers than ever before as a result of the State's budget cuts. (See, e.g., RR4:257-59; RR3:171-72; Ex. 5617, Reedy Dep., at 40-42; RR6:30; Ex. 3200, Wallis Dep., at 23-24; Ex. 3198, Garza Dep., at 45-47; RR20:78-79; RR4:83-84.) Class size waivers continue to be necessary for many school districts in the 2013-14 school year. (See e.g., *infra* FOF 1104, FOF 1160, and FOF 1179.)

**d. Districts lack the funding necessary to provide a support network for learning.**

FOF 575. Districts also need funding to provide a variety of programs and supports that are either statutorily required or are necessary to support a general diffusion of knowledge.

FOF 576. In addition to the curriculum tested by the STAAR regime, the State requires districts to provide a full complement of courses that are not tested, including music, art, and physical education, each of which are included in the required enrichment curriculum set forth in Chapter 28 of the Education Code and in Title 19, Chapter 74, of the Administrative Code. The 83rd Legislature made only one change to the required curriculum, adding a separate requirement for a personal financial literacy course. (Ex. 4273, Martinez Dep., at 51:21-52:3.)

FOF 577. School districts must also provide educational support systems to support the general diffusion of knowledge – including counselors, librarians, school nurses, tutors, principals, assistant principals, and central administrators. (RR17:91-92, 94, 100; Ex. 5520, Odden Report, at 6, 8, 10, 14; RR7:49-51 (referencing Ex. 6349 at 77); Ex. 3207, Salazar Dep., at 40-45.) These support staff positions are critical to helping schools meet the statutory and constitutional requirements of a general diffusion of knowledge. (RR19:49-50.)

FOF 578. School districts must also provide professional development and planning and collaboration time to enable teachers to teach the TEKS and provide for a general diffusion of knowledge. (RR6:150; RR20:85; Ex. 3198, Garza Dep., at 17-18.) Anita Givens, who previously oversaw TEA's professional development efforts, testified that continual professional development is important, particularly in light of the state's changing curriculum. (RR28:194.) She sought an additional \$24 to \$36 million to be included in the agency's budget request for the 2014-15 biennium to help cover the cost of state-developed professional development. (*Id.*) Her efforts were unsuccessful. (RR28:195.)

- FOF 579. Counselors play critical roles in (1) identifying and intervening with high risk-children and lining up resources to help these students overcome challenges they face at home or in their neighborhoods, and (2) helping older children identify and choose among their post-secondary options. (RR23:218; RR24:126; Ex. 3206, French Dep., at 60-62.) Various studies associate a lower ratio of students to counselors with better student outcomes. (RR23:218; Ex. 1122, Vigdor Report, at 28.) While a consensus of organizations recommends a maximum student-counselor ratio of 250:1, in 2012, more than 90% of Texas schools had ratios greater than 350:1 and two-thirds of schools had ratios greater than 500:1. (RR23:219-20 (referencing Ex. 5412 at 38).) TEA data shows that counselors can provide only thirty-nine minutes of individual planning time for each student *per year* at a 500:1 ratio, and only fifty-six minutes at a 350:1 ratio. (RR23:219 (referencing Ex. 5412 at 37).) As a result of HB5, the need for counselors has increased, with schools required to have a counselor or administrator meet with each and every entering high school student and their parent or guardian to discuss their personal graduation plan and endorsement options, and counsel all students on the benefits of endorsements and the importance of post-secondary education. (See Ex. 20062-A, Zamora Report, at 10.)
- FOF 580. The TEA, along with the Texas State Library, produced a report in December 2008 (the "TEA Library Report") which found that school libraries are critical for student achievement, have an important role in teaching, are leading the way for technology use in schools, and inspire literacy (Ex. 744; RR28:181-82), but they must be staffed by qualified librarians to have these positive effects. (Ex. 744.) The TEA Library Report called for increases in state funding (for facilities, staffing, current materials, and technology) to enable the public school library programs to meet their educational goals. (Ex. 744 at 2, 10, 14, 16-17.) Former TEA Associate Commissioner Anita Givens participated in the preparation of the report and agreed with the conclusions and recommendations of the report. (RR28:180-81.) In the five years since the report issued, however, the Legislature has never provided the specific funding for libraries that was called for in the report. (RR28:182.) To the contrary, the percentage of elementary schools with full-time librarians has declined significantly between 2010 and 2012. (RR23:221 (referencing Ex. 5412 at 39).) The Court relies on the findings of the report.
- FOF 581. Abilene ISD's superintendent, Dr. Heath Burns, explained that librarians are certified teachers whose literacy expertise can be used to improve teacher and staff development and to foster a love of reading in students. (RR19:48-49.) He described the loss of twelve librarians in his district as one of the significant "casualties" of the 2011 budget cuts. (RR19:48.)
- FOF 582. School districts must also incur costs for operational support systems, such as transportation, plant facilities and upkeep, utilities, insurance premiums, and groundskeeping. (RR6:149-50; RR7:49-51 (referencing Ex. 6349 at 77); Ex. 5520, Odden Report, at 14.) Transportation is necessary to encourage student attendance, to prevent dropouts, and to support participation in after-school tutoring and summer school opportunities. (RR6:149; see also Ex. 5613, Youngblood Dep., at 88-89.) Transportation

costs are particularly high for large, geographically disperse districts. (See, e.g., RR24:124-25.) These costs are not only necessary, but superintendents testified that they are also increasing. (See, e.g., Ex. 5618, Wiggins Dep., at 35-36; Ex. 3200, Wallis Dep., at 310; Ex. 3227, Gilcrease Dep., at 150-51.)

FOF 583. Research shows that improved support networks – including better facilities and school leadership and the presence of educational aides – help schools to recruit and retain higher quality teachers. (Ex. 1122, Vigdor Report, at 25, 28, 30-31.) As discussed above, teacher quality affects student performance. (See *supra* FOF 529.)

FOF 584. Districts must also provide co-curricular and extra-curricular programs that: (1) help keep many students in school that might otherwise drop out; (2) teach students valuable social skills, including leadership and how to work as part of a team (a skill that is critical in the labor market); (3) ensure that students have access to a well-rounded education; and (4) help students gain admission into and succeed in college. (See, e.g., Ex. 3199, R. Knight Dep., at 38-39.) Superintendents testified that extracurriculars, athletics, and the arts are “high motivators” for students to come to school, to stay engaged in school, and to keep their grades up so they can participate in these activities. (RR3:196-97; RR8:137-39.) Other superintendents similarly testified that athletic programs prevent students from dropping out and motivate students to perform better academically so they can participate in athletic programs. (See, e.g., Ex. 5617, Reedy Dep., at 116; RR4:104-05, 261-62; RR3:196-97.) Athletic programs also foster important skills such as leadership and teamwork. (RR4:261-62.)

**c. Districts lack the funding necessary to provide adequate educational facilities.**

FOF 585. As the Texas Supreme Court has noted, “An efficient system of public education requires not only classroom instruction, but also the classrooms where that instruction is to take place. These components of an efficient system – instruction and facilities – are inseparable.” *Edgewood IV*, 917 S.W.2d at 726. Accordingly, the Court finds that adequate school facilities are necessary to the functioning of the Texas public school system. To provide an adequate education, districts must have adequate facilities, which requires access to sufficient funds to build new facilities and maintain and renovate current ones.

FOF 586. The conditions that must be addressed when considering whether a building is adequate or inadequate include health and safety, age of the building, human comfort, indoor air quality, lighting, acoustical control, and secondary science laboratories. (Ex. 3231 at 37-42; Ex. 3198, Garza Dep., at 35-36; RR18:164-77.)

FOF 587. The Texas Comptroller released a report in 2006 studying school facilities. According to the Comptroller’s report, roughly 40% of the high schools were considered in the categories of fair, poor, or needs replacing, with the average age of these facilities being 34.5 years old. (Ex. 3231 at 6; RR18:162-87.) Districts with an economically disadvantaged rate of less than 20% reported the highest percent of facilities in good or

excellent condition, whereas districts with an economically disadvantaged rate of 80% or higher reported the lowest percentage of facilities in good or excellent condition. (Ex. 3231 at 6; RR18:164-77.)

FOF 588. Superintendents from across the state testified about aging facilities that the district cannot afford to repair or replace. (Ex. 3200, Wallis Dep., at 49 and 56; Ex. 3203, Knight Dep., at 40-42; RR5:193-94, 224-28; RR20:86-88; Ex. 3198, Garza Dep., at 32-33.) These older facilities cost more to maintain and operate. (Ex. 3200, Wallis Dep., at 49 and 56.) Superintendents testified about having to educate students in buildings with damaged roofs and foundations with structural problems. (Ex. 3204, Dupre Dep., at 48-51; Ex. 3207, Salazar Dep., at 52-53; RR5:225-27; RR20:86-88; Ex. 3206, French Dep., at 52-53.) Oftentimes, unmaintained buildings can pose a safety hazard. (Ex. 3203, Knight Dep., at 40-42; Ex. 3200, Wallis Dep., at 49, 56.)

FOF 589. Other superintendents testified that the district cannot afford to construct buildings to keep pace with student growth. (RR5:193-94, 224-28.) As a result, campuses become overcrowded, with classes being held in auditoriums, libraries, and other common spaces instead of traditional classrooms. (RR5:193-94, 224-28.) These overcrowded campuses do not have sufficient restrooms or cafeteria space. (RR5:193-94, 224-28.) Other campuses do not have sufficient science facilities, which prevent districts from offering advanced science courses or meeting the requirements of TEKS. (RR5:225, 227; RR20:87-88; Ex. 3206, French Dep., at 18, 52-53.)

FOF 590. In light of the above findings—along with the Court’s findings regarding the Legislature’s failure to appropriate sufficient funds and increase the guaranteed yield for facilities funding to keep pace with inflation, construction costs, and fast growth (*see supra* Parts I.C.1.a.ii (FOF 224, *et seq.*) and I.C.1.b.iv (FOF 263, *et seq.*)) – this Court finds that overall funding for facilities is insufficient, and, in particular, that the guaranteed yield for facilities is inadequate. The insufficient funding for facilities has contributed to the inadequacy of the system as a whole.

**4. Outdated formulas contribute to inadequate and unsuitable funding because they do not reflect the increasing costs of education and were largely unsupported by research even when they were established.**

FOF 591. The Texas school funding formulas are designed to accommodate differences in cost due to factors beyond the control of local school districts. By statute, Texas school funding formulas address these factors: (1) costs arising from differing student characteristics, including the greater expense of educating economically disadvantaged, bilingual, and special needs students; (2) costs attributable to various programmatic variables, including career and technology programs; and (3) costs relating to certain uncontrollable school or community characteristics, such as competitive salary differentials, transportation costs, and district size and sparsity. (Ex. 6322, Moak Report, at 55, 61.) When the factors were established, they bore some relationship to the actual cost differences. The same cannot be said today.

FOF 592. Most of these adjustments are out-of-date and lack a research base. (*Id.* at 56; Ex. 1328, Casey Report, at 15-17.) Because these adjustments do not reflect the true costs to districts arising from the differing student, programmatic, and community characteristics or variables, they contribute significantly to the inadequacy and unsuitability of the school funding system. (RR24:148-49.)

FOF 593. As discussed below, the State has failed to meet its obligation under Section 42.007 of the Education Code to update these adjustments. (*See infra* Part I.C.5.a (FOF 603, *et seq.*.) The Court finds that the mechanism of Section 42.007 would, if enforced, help ensure that the school finance formulas were structured and funded so as to provide districts with adequate funding to enable school districts to provide a general diffusion of knowledge. The State's failure to comply with its own statutory requirements has contributed to the inadequacy and unsuitability of the system.

**a. Student and programmatic weights**

FOF 594. The compensatory education and bilingual weights affect a significant portion of Texas's student population, but the State has failed to update these weights in recent decades. (*See supra* Parts I.C.2.d.ii (FOF 466, *et seq.*) and I.C.2.d.iii (FOF 480, *et seq.*.) As discussed above, these outdated weights contribute to the inadequacy and unsuitability of the system.

FOF 595. Other student and programmatic weights are also out of date and contribute to the inadequacy and unsuitability of the system. For example, the special education allotments (which have not been modified since 1993) and the allotment for high school students (established in 2006) have not been studied to determine the actual cost of educating these students. (Ex. 6322, Moak Report, at 61-62; Ex. 1328, Casey Report, at 15-17 RR6:216-17.) Several superintendents and the only school district CFO to testify testified that special education costs in their districts are increasing and are a significant cost driver. (RR3:146-49; RR4:13-18; RR4:192-93; Ex. 6338, Hoke Dep., at 62-66 (referencing Ex. 664 at 25-26); RR24:132; RR25:158-60, 163-65.)

FOF 596. The career and technology weight, which is comparable to the funding structure first adopted in 1984, is intended to serve as a substantial financial incentive for districts to offer quality vocational programs. (Ex. 1328, Casey Report, at 16; Ex. 6322, Moak Report, at 62; RR6:216.) The overall effective weight of 0.35 (or 35% additional funding) also has not been examined in terms of actual costs or performance criteria in recent years. (Ex. 6322, Moak Report, at 62; Ex. 1328, Casey Report, at 16.)

**b. Cost of Education Index**

FOF 597. The Cost of Education Index ("CEI") is an adjustment designed to reflect the variation in known resource costs and costs of education beyond the control of school districts. (Ex. 6322, Moak Report, at 56-57; RR6:211-12.) The CEI is based on five school district characteristics that were measured in 1989-90 – district size, type, percentage of low income students, average beginning teacher salary in surrounding districts, and location

in a county with a population less than 40,000. (Ex. 6322, Moak Report, at 56; Ex. 5653 at 24.) These measures have become outdated as populations have shifted, the cost of housing has increased, and student populations have changed. (Ex. 6322, Moak Report, at 56; RR6:209-11; Ex. 3188, Baker Report, at 4, 27; RR16:26-29.)

FOF 598. The CEI has not been updated since 1990, which means that the annual distribution of approximately \$2.36 billion rests on teacher compensation patterns and school district characteristics dating from 1989-90. (Ex. 6322, Moak Report, at 56; Ex. 1328, Casey Report, at 8, 16; RR6:209-12.) Mr. Moak testified that an updated index should provide approximately \$1 billion more to school districts. (RR6:212-14 (referencing Ex. 6349 at 51).) Although the Legislature has twice commissioned updates (completed in 2000 and 2004), neither has been acted upon. (Ex. 1328, Casey Report, at 10-11.) Both studies concluded that costs had changed significantly since the 1990 index was adopted and recommended that the index be replaced. (*Id.*)

FOF 599. The second study was conducted by Lori Taylor of Texas A&M University at the request of the Joint Select Committee on Public School Finance. Dr. Taylor observed that Texas school districts are facing substantial and uncontrollable differences in labor costs that vary by over 30% from district to district, and that the geographic pattern of cost has shifted. (Ex. 6322, Moak Report, at 56-57.) She concluded that the existing CEI is badly outdated, and that a new index that is "accurately reflecting uncontrollable variations in the cost of education requires adoption of a new CEI." (*Id.* at 57.) The Legislature has ignored this recommendation. The Legislature's failure to update the CEI has particularly harmed central city and suburban school districts. (*Id.*)

#### **c. District size and sparsity adjustments**

FOF 600. Texas has long recognized the need to provide funding differentials to small and/or sparsely populated districts to account for diseconomies of scale and other unique costs these districts face. (*Id.* at 61.) The current system recognizes several types of districts, including districts with 1,600 to 5,000 students, districts with fewer than 1,600 students but more than 300 square miles, districts with fewer than 1,600 students but less than 300 square miles, and districts with fewer than 130 students. (*Id.*; Ex. 1328, Casey Report, at 14.) The adjustment for district size has not been updated since 1995, except for the addition of a mid-sized district adjustment. (Ex. 1328, Casey Report, at 16; RR6:226-28.) The sparsity adjustment has not been changed since 1984. (Ex. 1328, Casey Report, at 16.) Several factors suggest that the formulas are in need of modification under the current performance-oriented system. (Ex. 6322, Moak Report, at 61.) These factors include a lack of evidence that the 300 square mile variation is based on current cost differentials and the failure to adjust formulas for modifications in curriculum standards. (*Id.*)

#### **d. Transportation allotment**

FOF 601. The transportation allotment recognizes a legitimate cost variation in transportation costs among districts, but only finances a small portion of the actual cost. (*Id.*; RR6:217.) As

a result, districts are forced to fund this expense through the collective use of over \$900 million in funds intended for other programs in Tier I and II. (Ex. 6322, Moak Report, at 61; RR6:217; *see, e.g.* RR12:17.)

FOF 602. The Court finds that these outdated formulas are not designed, structured, or funded so as to enable school districts to achieve a general diffusion of knowledge and therefore contribute to the inadequacy and unsuitability of the system.

5. **The ISD Plaintiffs have demonstrated that the cost of providing an adequate education exceeds the available funding under the current school finance system as a result of the State's failure to suitably provide for the Texas public school system.**

a. **Despite statutory mandates, the State has made no attempt in the last decade to calculate the cost of adequacy or the costs of meeting its own performance standards.**

FOF 603. The State Defendants have not attempted to calculate the cost of adequacy in this case. In fact, the State of Texas (including the Legislature and TEA) has not conducted a study of the cost of an adequate education since 2003. (RR17:37; RR32:196, 202-05; RR56:170-72; Ex. 6621 at 4.) Moreover, the State's witnesses acknowledge that the State has made no effort to determine the cost of meeting the State's new and higher standards or the costs of HB5's changes to the graduation, assessment, or accountability requirements. (RR32:75-76, 132-33, 196, 202-05; RR33:26-27, 138-41; RR27:134-35, 147-48; RR28:172-74, 185-86; RR31:168-69, 174-75; RR34:85, 190-91; RR62:105-06; RR63:119-20, 136; Ex. 4273, Martinez Dep., at 40-41, 43-44, 53-54, 60, 73, 85-87, 102.) Further, TEA's CFO testified that the State does not attempt to factor increased costs to districts into TEA's biennial legislative appropriations request ("LAR") for the FSP, although the State does consider the cost to TEA of administering the laws and incorporates those estimates into TEA's LAR. (RR31:168-69.) The CFO further testified that none of the 2014-15 appropriated amounts for the FSP program, IFA and EDA programs, or the grant programs were based on any study or analysis of school district needs. (RR63:104-06.)

FOF 604. Section 42.007 of the Education Code creates a mechanism for keeping the important funding elements of the FSP up-to-date and consistent with the State's academic goals, as well as changing local demographic and financial conditions. (Ex. 1328, Casey Report, at 4-5.) Under this section, the LBB is directed to adopt rules that provide for "the calculation for each year of a biennium of the qualified funding elements" - including the cost per student for the regular program, as well as special population programs, and adjustments such as the CFI, the guaranteed yield level for enrichment, and funding for the school facilities programs - that are "necessary to achieve the state policy under Section 42.001." (*Id.* at 4; RR10:152-54 (referencing Ex. 6352 at 7-8).) *See also* TEX. EDUC. CODE § 42.001(a) ("It is the policy of this state that the provision of public education is a state responsibility and that a thorough and efficient system be provided and substantially financed through state revenue sources so that each student enrolled in

the public school system shall have access to programs and services that are appropriate to the student's educational needs . . .").

FOF 605. Daniel Casey (a former head of the Legislative Education Board, which is the former agency responsible for conducting such studies) testified that the LBB has failed to fulfill its statutory obligation to adopt rules and conduct studies regarding the cost of the State's requirements and goals. (RR10:154-55 (referencing Ex. 6352 at 9); RR56:170 (referencing Ex. 6621 at 4).) Mr. Casey further testified that, when the State has conducted studies, it has rarely taken action on them. (RR10:154-55 (referencing Ex. 6352 at 9); *see also* Ex. 1328, Casey Report, at 6-12.) Mr. Casey also testified that the House of Representatives added provisions to the 2013 appropriations bill that called for the studies required by Section 42.007 of the Texas Education Code, as well as more detailed studies of the weights and other cost-adjustments. (RR56:170-72; Ex. 6621 at 4-5.) However, these school finance study riders were removed in conference committee, despite the fact that the State was criticized during the first phase of the trial for its failure to study the cost of adequacy or the cost of meeting its own standards. (RR56:171-72; Ex. 6550; Ex. 6621 at 4-5.)

FOF 606. As discussed in greater detail in Parts I.C.2.d.ii (FOF 466, *et seq.*), I.C.2.d.iii (FOF 480, *et seq.*), and I.C.4 (FOF 591, *et seq.*) above, most of the "qualified funding elements" that should have been studied under this statutory requirement are out-of-date and lack a research base. (*See also* Ex. 6322, Moak Report, at 56-62.) Because these adjustments do not reflect the true costs to districts arising from the differing student, programmatic, and community characteristics or variables, they contribute significantly to the inadequacy and unsuitability of the school funding system. The Legislature's failure to enact formulas and allotments that bear some factual relationship to the costs of education is a structural defect in the school finance system that makes it impossible to accomplish a general diffusion of knowledge.

**b. Superintendent testimony establishes that school districts lack sufficient funding to meet state standards.**

FOF 607. Superintendents uniformly testified that their districts do not have sufficient funding to provide a general diffusion of knowledge. (*See generally infra* Part I.C.7 (FOF 680, *et seq.*.) As Austin ISD's superintendent testified, "we are up against the wall on the ever increasing state standards and there's an expectation that we deliver on all of that in short order . . . so it is unreasonable, in our minds, to believe that for any reason whatsoever, we would be able to do all of those things that are starting with the base required by the State with the resources we have today." (RR19:255; *see also* RR5:33; Ex. 3206, French Dep., at 37-38; Ex. 3226, Kincannon Dep., at 27, 142-43.)

FOF 608. Districts' needs are particularly acute in light of the transition to the STAAR assessment system. When the State implemented new assessment regimes in the past, it provided additional resources to help students meet the new standards. (*See supra* Part I.B.4 (FOF 123, *et seq.*.) The additional resources that were available to school districts under prior assessment transitions, such as the transition from TAAS to TAKS, are not available for

the current transition from TAKS to STAAR. (Ex. 6322, Moak Report, at 35.) All witnesses who addressed the subject uniformly testified that the STAAR exam is far more rigorous than TAKS, and superintendents testified uniformly that districts will need additional resources to prepare students to pass the exams. (See, e.g., Ex. 5618, Wiggins Dep., at 58-60; Ex. 5617, Reedy Dep., at 59; Ex. 5615, Waddell Dep., at 45-46; Ex. 5614, Patek Dep., at 53-56, 55-56; Ex. 5613, Youngblood Dep., at 164-65; see also Ex. 6322, Moak Report, at 30.) The evidence leaves little doubt that inadequate funding for these kinds of interventions will impair districts' ability to effectively prepare students to pass the STAAR exam or achieve the level of performance that reflects the Legislature's standard for the general diffusion of knowledge. Further, when all funds must go to accomplishing an adequate education, districts are stripped of their discretion to provide enrichment. (Ex. 6322, Moak Report, at 30, 35; Ex. 5617, Reedy Dep., at 62.)

FOF 609. Superintendents uniformly testified that the HB5's changes to the graduation requirements and EOC testing regime did not result in significant cost savings for districts. (See Ex. 6557, Sconzo Dep. (Vol. II), at 30-42 (referencing Ex. 20256) (estimating costs of implementing HB5 graduation plans), 49-59 (referencing Ex. 20255) (comparing remediation costs under HB5 to remediation costs under TAKS); Ex. 6558, Frost Dep. (Vol. II), at 29-32, 35-37, 39-40; Ex. 4336, Cavazos Dep., at 94:12-14, 98:1-12.)

**c. The "evidence-based" model presented to the Court credibly estimates adequacy costs substantially in excess of current spending levels.**

FOF 610. Allan Odden, of the University of Wisconsin at Madison, estimated the cost of adequate school funding levels for Texas school districts using a cost estimate model known as the "evidence-based" approach. (See generally Ex. 5520, Odden Report, at 1.) Dr. Odden's education, training, and experience are summarized in his curriculum vitae. (See Ex. 1300.) In collaboration with Lawrence Picus of the University of Southern California, Dr. Odden has previously performed cost estimates in other states at the request of state legislative or governors' commissions and state education agencies. (RR17:41-44 (referencing Ex. 5665 at 3).) In several of these states, their estimates have been adopted as the basis for state school finance systems. (RR17:44 (referencing Ex. 5665 at 5).) The Court finds that Dr. Odden is qualified to opine on the cost of adequate education based on his knowledge, skill, experience, training, and education.

FOF 611. Dr. Odden applied the model to estimate the per-pupil cost of an adequate education for each school district in Texas and for the state as a whole. (Ex. 5520, Odden Report, at 1.) Dr. Odden estimated the level of funding that is necessary to meet the Texas constitutional requirements for education, which in the present context requires both meeting applicable statutory requirements and providing a system in which students are placed on a trajectory of significant positive improvement in core academic subjects. (*Id.*) His estimates do not include any amount that is used for enrichment purposes. (*Id.*)

FOF 612. The evidence-based approach uses current research findings to specify the resources needed in prototypical elementary, middle, and high schools. (*Id.* at 2.) That research includes experimental design studies, other peer reviewed publications, and analysis of best practices from schools and districts that have significantly improved student performance over a four to six-year time period. (*Id.*) The approach also relies on professional standards, as well as Texas legal requirements, for elements such as guidance counselors and nurses, as well as maintenance, custodial, and groundskeeper personnel. (*Id.*)

FOF 613. To estimate the cost of the evidence-based model for each district, which is then aggregated to a total state cost, Dr. Odden followed these steps:

- Described in detail a prototypical school district designed for high student performance, including resources at each school (elementary, middle, and high schools, separately) (*see id.* at 4-26);
- Estimated the core per-pupil resources needed for each prototypical school;
- Determined the additional per-pupil resources necessary to meet the needs of special needs students (economically disadvantaged, bilingual/ESL, special education, and career and technical education);
- Computed the per-pupil costs of the central office and maintenance and operations;
- Determined the per-pupil costs of a comprehensive pre-K program, serving the same number of pre-K students currently served in Texas pre-K; and
- Estimated the additional costs required due to the diseconomies of small school districts.

(*Id.* at 2.)

FOF 614. These per pupil cost estimates are then applied to the ADA of each district such that a total estimated cost per ADA – based on the characteristics of the students in that district – can be determined for each school district in the state. (*Id.* at 3.) This figure is then adjusted by a Cost of Education Index that accounts for differences in the cost of providing educational services in different regions of Texas. (*Id.* at 2; *see also supra* 4.b.)

FOF 615. Some of the key strategies recommended by Dr. Odden’s evidence-based approach include (1) core teachers for class sizes of fifteen in kindergarten through third grade and of twenty-five in grades four through twelve, (2) full-day kindergarten, (3) specialist teachers at 20% of core teachers at elementary and middle schools and 33% at high

school, and (4) instructional coaches to provide professional development, including classroom observation and feedback for teachers. (Ex. 5520, Odden Report, at 4-6.) Dr. Odden's evidence-based model provides additional resources, including tutors and summer school, which are targeted toward struggling students. (*Id.* at 10-11.) These strategies are supported by the evidence as "best practices" and are credible factors for determining the cost of education. Dr. Odden testified that Texas is unlikely to substantially improve student performance without implementing the core interventions recommended by his evidence-based model. (RR17:147.)

- FOF 616. The benefits of Dr. Odden's strategies are supported by a substantial body of credible research, including randomized trials and meta-analyses (which determine average effect sizes across a large number of studies). (RR17:67-78; Ex. 5520, Odden Report, at 4-6, 20.)
- FOF 617. For example, the Tennessee STAR study, which is a large-scale randomized trial, supports Dr. Odden's recommendation to reduce class sizes at the elementary level. (RR17:76-77; Ex. 5520, Odden Report, at 4; *see also supra* FOF 564 – FOF 567.) Randomized trials also support Dr. Odden's recommendations for full-day kindergarten (which Texas has partially funded through grants in the past), instructional coaches, tutors, summer school, and pre-K. (RR17:76-77, 86-87.) Dr. Odden reasonably determined that the strategies included in his model are likely to result in substantial increases in student outcomes.
- FOF 618. The Court finds that Dr. Odden's model is conservative in several respects. For example, Dr. Odden based his calculation of teacher salaries on average salaries in Texas (RR17:100-02), despite evidence from Dr. Vigdor and others that salaries in Texas have not kept pace with overall wage levels in the economy, or even with salaries in surrounding states. (*See supra* Part I.C.3.a (FOF 526, *et seq.*.) He also did not assume any expansion over current levels in the population served by pre-K. (RR17:87.) And he assumed core class sizes of twenty-five students in grades four through twelve – a number that many have criticized as being too high. (RR17:84-85.) His model also does not reflect all of the costs needed to provide ELL students with a basic, adequate education, including the costs of stipends that are needed to recruit and retain certified bilingual/ESL instructors, textbooks in two languages, materials and professional development geared toward the language programs, and tutoring and remediation costs to address ELL needs.
- FOF 619. Dr. Odden's model yielded an estimate of \$43,016,784,418 for necessary educational spending in Texas in 2010-11. (RR17:120 (referencing Ex. 5665 at 23).) This calculation excludes the costs for special education for children with severe and profound disabilities, as well as the costs of transportation, food services, and security. (RR17:108, 120-21.) To make an apples-to-apples comparison of Dr. Odden's estimate of adequate spending to the total operating expenditures in 2010-11, Lynn Moak added in the excluded costs of transportation, food services, and security. (Ex. 6325, Moak Supp. Report Three, at 1; RR17:137.) He determined that Dr. Odden's adequacy calculation needs to be increased by \$3,749,767,519 to account for these excluded costs. (Ex. 6325,

Moak Supp. Report Three, at 1.) Adding these costs to Dr. Odden's calculation produces an adjusted adequacy estimate of \$46,766,551,937. (RR17:137-39; RR54:120-21 (referencing Ex. 6618 at 17).) This adjusted adequacy estimate is \$3.66 billion more than the amount spent on education in Texas in 2010-11 – before the 2011 budget cuts. (RR17:139; Ex. 6618 at 17.) Adding the \$2.5 billion in budget cuts to this adjusted adequacy calculation indicates that Texas schools were underfunded by approximately \$6.16 billion annually in the 2012-13 biennium. (RR17:140-41.) This amount does not include the additional funding required to provide districts with meaningful local enrichment opportunities. (RR17:141.) Incorporating Mr. Moak's estimate of the amount of dollars that would ordinarily be considered "enrichment" in an adequately funded system, Texas schools were underfunded in the 2012-13 biennium by \$7.76 billion. (RR17:141-42.)

FOF 620. The Court finds Dr. Odden's conclusion to be a reasonable estimate of the cost of an adequate education in Texas.

**d. Lynn Moak's expert testimony supports a finding that school funding is currently inadequate.**

FOF 621. Lynn Moak testified that he believes Texas cannot close the educational gap or achieve college and career readiness without additional funding. (RR6:241-42.) He explained that approximately \$1,000 of additional funding per weighted student above 2010-11 spending levels is necessary to correct outdated weights and adjustments and to allow schools to meet increased state standards. (RR6:241-43; Ex. 6325, Moak Supp. Report Three, at 1.) This Court finds Mr. Moak's estimate to be a reasonable approximation of the level of resources necessary for Texas students to meet these heightened requirements. (See RR6:242-43.)

**e. Updated calculations of previous costs estimates for educational adequacy demonstrate that the current system falls short.**

FOF 622. Nearly twenty years ago – at a time when Texas school districts faced very different student populations and outcome standards, the Texas Supreme Court noted, "[b]ased on the evidence at trial, the district court found that meeting the accreditation standards, which is the legislatively defined level of efficiency that achieves a general diffusion of knowledge, requires about \$3,500 per weighted student." *Edgewood IV*, 917 S.W.2d at 755, n.10. Applying the average rate of growth of education costs from the NCES Education Comparable Wage Index for Texas, Dr. Baker determined that this \$3,500 figure is equivalent to \$6,576 in 2011. (RR16:23-26 (referencing Ex. 3230 at 5); Ex. 3189-B.) The evidence showed that only 130 out of 1,024 school districts could generate \$6,576 in M&O revenue by taxing at \$1.04 or less in 2011-12. (RR9:159-60 (referencing Ex. 3098).) Only 233 districts could raise this amount by taxing at \$1.17 or less. (RR9:123-24 (referencing Ex. 3098).)

FOF 623. Although Dr. Baker's \$6.576 per-WADA calculation (using old law WADA without the RPAF that effectively reduced WADA in the 2012-13 biennium) accounts for inflation through 2011, it does not account for the increased costs districts face as a result of the State's heightened expectations. (Ex. 3188, Baker Report, at 25.) Yet, the costs to provide a general diffusion of knowledge have increased since *Edgewood IV*. (RR9:123-24; *see also supra* Parts I.B.1 (FOF 11, *et seq.*) and I.B.3 (FOF 81, *et seq.*.) In addition, this analysis assumes that districts could fund an adequate education using revenue from Tier I and Tier II, but revenue from Tier II was intended solely to provide local enrichment. (Ex. 5630, Scott Dep., at 341, 343; *see also supra* FOF 40 – FOF 44.) As a result, even if districts could raise their M&O tax rates to \$1.17, less than one-quarter of districts in 2011-12 could obtain enough revenue to generate the inflation-adjusted per WADA revenue that was necessary to provide an adequate education in 1994, much less to generate enough revenue to provide an adequate education under today's heightened standards or to provide local enrichment.

FOF 624. The Court recognizes that the \$3,500 per student cost of adequacy found in *Edgewood IV* is a rough approximation and outdated, but this finding and the analysis above further support Dr. Odden's opinion, Mr. Moak's opinion, and the testimony of every superintendent to address the subject before the Court that current school funding is inadequate.

**f. The State has failed to assess the cost of suitably providing for its own standards and did not present evidence to controvert the school districts' proof that they lack adequate funding to provide a general diffusion of knowledge.**

FOF 625. The State has a responsibility under Article VII, Section 1 to make a reasonable effort to determine what it will cost to suitably provide for its own standards and meet its own definition of general diffusion of knowledge. The State effectively has recognized and accepted this constitutional responsibility by enacting Section 42.007 of the Texas Education Code, which requires rule making and the conduct of specific studies on a biennial basis to determine the cost of meeting state performance requirements. (*See supra* FOF 604.)

FOF 626. The State has failed to perform this constitutional and statutory responsibility for the past decade. (*See supra* Part I.C.5.a (FOF 603, *et seq.*.) In particular, there is no evidence that the State made any effort in 2011 to determine the cost of its own performance requirements, or what effect the \$5.3 billion in cuts, including implementation of the RPAF, would have on the ability of schools and students to meet the higher performance standards that the State began to implement in the 2011-12 school year. (*See, e.g.*, RR32:201-04, 130-31, 196; RR33:27, 189-191; RR27:134-35; RR28:172-74, 184-86; RR31:168-71; RR34:89, 195-96.) It likewise failed to evaluate the costs of implementing HB5 or to base its appropriations for the 2014-15 biennium on any analysis of school district needs. (RR63:104-06, 119, 136; RR62:105-06; Ex. 4273, Martinez Dep., at 40-41, 43-44, 53-54, 60, 73, 85-87, 102.)

FOF 627. While the State has failed to fulfill its constitutional and statutory responsibility to determine the cost of its own performance standards, the plaintiffs have submitted extensive evidence relating to these costs in the form of testimony from superintendents and experts. (*See supra* Parts I.C.5.b – I.C.5.e (FOF 607, *et seq.*.) To determine if the current system has sufficient funding to meet current performance standards, the Court must consider this evidence.

FOF 628. At least five significant considerations drive the Court’s assessment of the level of funding required to accomplish the constitutionally-mandated general diffusion of knowledge. These are: (1) the well-documented increase in performance standards for students and districts described in Part I.B.3 (FOF 81, *et seq.*) above; (2) the cost estimates provided by experts during the trial; (3) the amount of spending the courts have found necessary to achieve the general diffusion of knowledge in the past; (4) the effects of recent budget cuts on school districts, as established principally in the testimony of superintendents; and (5) the amount of local taxing discretion that the system must provide to avoid violating the prohibition against a state property tax.

FOF 629. The table below summarizes the cost estimates provided by plaintiffs’ experts Allen Odden and Lynn Moak, compared to actual levels of operating expenditures in the 2010-11 school year. The 2010-11 expenditures in this table include federal funding and state special grant program funding. Mr. Moak stated generally that his estimate represented an increase of \$1,000 per WADA over 2010-11 funding levels. Mr. Moak also adjusted Dr. Odden’s original adequacy estimate to account for expenditures on food, transportation, and security, which were not included in Dr. Odden’s original model. It is therefore reasonable to compare Dr. Odden’s estimates (with Mr. Moak’s adjustment) to 2010-11 “all funds” operating expenditures, which include these categories.

**Adequacy Cost Estimates**

	Total	Per 2010-11 ADA	Per 2010-11 WADA	Differential Between Actual and Estimates per 2010-11 ADA	Differential Between Actual and Estimates per 2010-11 WADA
2010-11 Actual Operating Expenditures (All Funds)	\$43,110,208.183	\$9,712	\$7,241		
Odden Estimate with Moak Adjustment	\$46,766,551.937	\$10,536	\$7,855	\$824	\$614
Moak Estimate (\$1,000 per WADA increase)	\$49,065,900.357	\$11,054	\$8,241	\$1,342	\$1,000

Ex. 6618 at 17 (citing Ex. 6326 (2010-11 actual operating expenditures); RR17:137-39 (Odden estimate); RR6:241-43 (Moak estimate); Ex. 11323 (ADA and WADA; uses 2011 spreadsheet with ADA and WADA for ISDs only (cells F-1225 and I-1225)).)

FOF 630. The following table summarizes the inflation-adjusted cost of achieving the general diffusion of knowledge provided by the Supreme Court in *Edgewood IV*, as calculated by

Dr. Baker, compared to actual levels of FSP funding in the 2010-11 school year. The updated *Edgewood IV* calculation is best compared to 2010-11 FSP funding, as the original \$3,500 per WADA identified in *Edgewood II* referred to the formula system and not to funding sources outside the FSP.

#### Updated *Edgewood IV* Calculation

	Total in Billions	Per 2010-11 ADA	Per 2010-11 WADA	Differential Between Actual and Updated E4 per 2010-11 ADA	Differential Between Actual and Updated E4 per 2010-11 WADA
2010-11 Actual FSP M&O Revenue (net of recapture)	\$33.112	\$7.460	\$5,562		
Updated <i>Edgewood IV</i> Calculation	\$39.153	\$8.821	\$6,576	\$1,361	\$1,014

Ex. 6618 at 18 (citing Ex. 11323 (2010-11 actual FSP M&O revenue: uses 2011 spreadsheet with total M&O revenue for ISDs only (cell CD-1225)); RR16:23-26 (referencing Ex. 3230 at 5) (*Edgewood II* calculation); Ex. 11323 (ADA and WADA; uses 2011 spreadsheet with ADA and WADA for ISDs only (cells F-1225 and I-1225)).)

FOF 631. While Dr. Odden's estimate compares to "all funds" operating expenditures, and the updated *Edgewood IV* calculation compares to FSP funding, the amounts by which the various estimates find the current system to be underfunded fall within a relatively consistent range. The next table below provides the per-WADA FSP spending that would result from each expert's proposed addition of funds.

#### Required FSP Spending Under Adequacy Cost Estimates

	Additional Spending Needed per 2010-11 WADA	Total FSP Spending Needed per 2010-11 WADA
Odden Estimates with Moak Adjustment	\$614	\$6,176
Moak Estimate (\$1,000 per WADA increase)	\$1,000	\$6,562
Updated <i>Edgewood IV</i> Calculation	\$1,014	\$6,576
Foundation Program Cost Estimate for 2010-11	\$0	\$5,562

Ex. 6618 at 18 (citing RR17:137-39 (Odden estimate); RR6:241-43 (Moak estimate); RR16:23-26 (referencing Ex. 3230 at 5) (*Edgewood II* calculation); Ex. 11323 (2010-11 actual FSP M&O revenue: uses 2011 spreadsheet with total M&O revenue for ISDs only (cell CD-1225)); Ex. 11323 (ADA and WADA; uses 2011 spreadsheet with ADA and WADA for ISDs only (cells F-1225 and I-1225)).)

FOF 632. The 2010-11 cost estimates require adjustment for inflation since the original year. Based on the state and local price deflator used by the Legislative Budget Board and Mr. Moak's estimates for the 2013-14 and 2014-15 school years, an overall adjustment factor of 3.69 percent for 2013-14 and 5.77 percent for 2014-15 is required. (RR54:124-25 (referencing Ex. 6618 at 19).) The results are shown below.

Estimate	2010-11 Estimate Per WADA	Adjusted Estimate for 2013-14 per WADA	Adjusted Estimate for 2014-15 per WADA
Odden Estimates with Moak Adjustment	\$6,176	\$6,404	\$6,532
Moak Estimate (\$1,000 per WADA increase)	\$6,562	\$6,804	\$6,941
Updated <i>Edgewood IV</i> Calculation (Baker)	\$6,576	\$6,818	\$6,955
Foundation Program Cost Estimate for Indicated Years at \$1.04 Tax Rate	\$5,702	\$5,658	\$5,743
Foundation Program Cost Estimate for Indicated Years at \$1.17 Tax Rate	\$6,183	\$6,143	\$6,232
Foundation Program Cost Estimate for Indicated Years at 2012 Tax Rate	\$5,778	\$5,737	\$5,832

(Ex. 6618 at 19.)

FOF 633. At \$1.04 tax rate (which is the most prevalent rate and the rate at which districts must be able to provide a general diffusion of knowledge) the current Foundation Program raises about \$800 less per WADA in 2014-15 than even the lowest of the three adequacy estimates. (*Id.*) Even at \$1.17, an adequacy level which would leave no room for enrichment, the lowest of the adequacy estimates is \$300 more than what the current Foundation program supports on average in 2014-15. (*Id.*)

FOF 634. The Court acknowledges the difficulty of selecting any single number to represent the cost of educational adequacy in Texas, but the Court does not agree with the State's position that there are no judicially manageable approaches to estimating a reasonable range of costs consistent with the State's performance expectations. The Court finds that the analyses of Dr. Odden and Mr. Moak and the updated *Edgewood IV* calculation provided by Dr. Baker provide reasonable, credible, and relatively consistent estimates of the cost of achieving the general diffusion of knowledge. As noted previously, Dr. Odden's calculations are conservative in many respects. (*See supra* FOF 618.) The *Edgewood IV* calculation represents an amount acknowledged by the Supreme Court as necessary to satisfy constitutional requirements under much less rigorous 1994 standards. The Court also notes that the adequacy estimates are very near the \$6,474 average per WADA spending level of districts that achieved exemplary status under the prior standards. (*See infra* FOF 644.) In the Court's view, there can be little doubt that a comparable amount of funding, properly adjusted for inflation, is minimally necessary to meet significantly more rigorous standards today. (*See* RR9:123-24.)

FOF 635. For these reasons, the Court finds that achieving a level of funding adequate to meet the State's performance standards requires, at a minimum, the \$6,404 per WADA in FSP funding dollars that was estimated by Dr. Odden and adjusted by Mr. Moak (and put in 2013-14 dollars), which is the lowest supplied to the Court. Dr. Odden's estimate, as adjusted by Mr. Moak, would require on average an additional \$614 per WADA above 2010-11 all funds spending levels, even before adjusting for inflation. (*See* RR54:123-24)

(referencing Ex. 6618 at 18.) If one assumes that adequacy must be met at \$1.04 (as discussed below), this would result in additional spending of approximately \$800 per WADA (on average) over 2014-15 levels.

- FOF 636. The Court does not find any of the proposed methods of estimating the cost of education to be definitive, but they do provide a credible range that definitively establishes that the State has failed to make suitable provision of funds for an adequate education.
- FOF 637. HB1 was designed with the intent that districts be able to provide an adequate education by taxing at no higher than \$1.00, as evidenced by testimony from Robert Scott and the structure of the system implemented by HB1. (Ex. 5630, Scott Dep., at 339-41, 343-45.) Tier I was intended to provide funding necessary to meet basic program requirements – in other words, the performance expectations implicit in the Constitution and in statute. (*Id.* at 341, 343-45.) For most school districts, Tier I applies to funding up to \$1.00 of M&O tax effort. (*Id.* at 339-40.) Tier II was intended to provide meaningful local enrichment discretion above this level. (*Id.* at 341, 343-45.)
- FOF 638. The Court finds that, at a very minimum, all districts must be able to provide a general diffusion of knowledge under the current statutory structure by taxing at \$1.04. This is the level beyond which a TRE is required and a level that still leaves thirteen cents for enrichment at the voters' discretion. The Court agrees with the ISD Plaintiffs that the question of whether to achieve adequate funding cannot be made subject to a vote. Requiring districts to tax above \$1.04 to achieve adequacy would leave districts with insufficient local discretion to tax for enrichment purposes, considering the current yield per penny in that tier.
- FOF 639. The Court emphasizes that in the discussion of funding in this section, the Court is focusing on overall levels of funding in the system, not funding levels for specific districts. Findings related to the distribution of funding between districts are discussed separately in Part I.D (FOF 1204, *et seq.*) below pertaining to the financial efficiency claims. Similarly, the Court addresses findings relating to the outdated weights and formula adjustments separately in Parts I.C.2.d.ii (FOF 466, *et seq.*), I.C.2.d.iii (FOF 480, *et seq.*), and I.C.4 (FOF 591, *et seq.*) above.
- FOF 640. There is no evidence from the State of the cost of an adequate education. The only evidence is the three credible estimates offered by the ISD Plaintiffs that the cost of an adequate education is greater than what most districts can raise at an M&O tax rate of \$1.04. Only 259 of the 1021 districts have the capacity to raise Dr. Odden's \$6,176 estimate for the 2010-11 school year – the lowest estimate of the cost of an adequate education *prior to adjusting for inflation*. The Court finds that the State's failure to calculate the cost of providing a general diffusion of knowledge, and the systematic underfunding of districts at levels well below any credible estimate of the cost of providing an adequate education, reflect a system that is arbitrary and decidedly *not* structured, operated, or funded so as to achieve its purpose thereby violating the suitability clause of Article VII, Section 1.

6. **The State's arguments do not disprove the ISD Plaintiffs' claims.**
  - a. **The evidence shows that money, if spent well, improves educational outcomes.**
    - i. **Both the State and the Texas Supreme Court have recognized a relationship between funding and student performance.**

FOF 641. The State previously has acknowledged a positive relationship between money and student performance. In the *West Orange-Cove* litigation, the State proffered a cost function study whose authors stated, “[t]here appears to be a fundamental economic relationship among input prices, educational outcomes, and cost in Texas public schools. Other things being equal, the analyses suggest that it costs more to produce higher levels of educational outcomes.” (Ex. 5676 at 1.)

FOF 642. In the current litigation, while the State has appeared at times to question the relationship between money and student performance, the State’s witnesses have continued to acknowledge that funding is a crucial element in achieving positive student performance. The State’s expert, Dr. Michael Podgursky, testified that: (1) resources are required to provide a quality education to students; (2) poverty has a significant impact on learning, and low-income students are more costly to educate; and (3) additional resources may be required as the State increases its expectations for students. (RR29:105-07.) The former Commissioner of Education, Robert Scott, recognized that additional resources will be needed to meet the challenges faced during the implementation of the STAAR/EOC regime. (Ex. 5630, Scott Dep., at 91-92.) In addition, the State’s expert, Dr. Whitehurst, testified, “[i]f you want to close gaps, you need to provide services to the children who need those services.” (RR26:67.) Logic dictates that resources are necessary to provide services. (See *supra* FOF 394, FOF 553; see *infra* FOF 653.)

FOF 643. The Texas Supreme Court has also recognized the linkage between money well spent and student performance. See, e.g., *Edgewood Indep. Sch. Dist. v. Kirby*, 777 S.W.2d 391, 393 (Tex. 1989) (“The amount of money spent on a student’s education has a real and meaningful impact on the educational opportunity offered that student.”) (“*Edgewood I*”); *WOC II*, 176 S.W.3d at 788 (“While the end-product of public education is related to the resources available for its use, the relationship is neither simple nor direct; public education can and often does improve with greater resources, just as it struggles when resources are withheld, but more money does not guarantee better schools or more educated students.”).

FOF 644. The Supreme Court’s statements comport with common sense and some of the most basic data about the Texas school finance system. Districts with higher revenue per WADA perform better across many different performance measures, including (1) districts’ accountability ratings for 2011, (2) the percent of students scoring at the commended level on TAKS reading tests, mathematics tests, and all tests, (3) the percent of students scoring at or above the criterion level set by the TEA on college entrance examinations

(ACT/SAT), and (4) the percent of students passing five STAAR exams at the Level II, Phase I standard. (Ex. 6322, Moak Report, at 63; RR6:232-43 (referencing Ex. 6349 at 59).) The table below reflects several of these indicators as examples of this pattern.

	# Districts	# ADA	# WADA	WADA Ratio	Revenue per WADA
<b>District Rating</b>					
Unacceptable	15	35,360	51,067	1.4442	\$5,495
Acceptable	271	2,509,239	3,367,847	1.3422	\$5,645
Recognized	182	1,582,587	2,050,021	1.2954	\$5,801
Exemplary	10	78,823	91,488	1.1607	\$6,474
<b>% Commended Math</b>					
< 20%	97	353,153	500,365	1.4169	\$5,596
20% to < 30%	257	2,296,522	3,111,911	1.3551	\$5,593
30% to < 40%	83	966,646	1,229,553	1.2720	\$5,835
40% and Greater	41	589,687	718,594	1.2186	\$6,115
<b>% Satisfactory on 2012 STAAR five tests</b>					
< 40%	198	1,740,074	2,399,798	1.3791	\$5,592
41% to 52%	133	1,023,584	1,361,689	1.3303	\$5,693
53% to 64%	102	988,226	1,250,037	1.2649	\$5,757
65% and Greater	45	454,125	548,898	1.2087	\$6,207
STATE TOTALS	478	4,206,008	5,560,423	1.3220	\$5,714

(Ex. 6322, Moak Report, at 63.)

- FOF 645. Moreover, a substantial body of credible research – including the use of randomized experiments – confirms the effectiveness of educational strategies such as reduced class sizes, instructional coaches, full-day pre-K, tutoring, summer school, and competitive teacher salaries. (RR17:76-77; Ex. 3188, Baker Report, at 15-19; RR16:15-17; RR23:103-04; *see supra* Part I.C.3 (FOF 522, *et seq.*.) Each of these strategies costs money.
- FOF 646. Research shows not only that “money spent well matters,” but also that productive investment in education “easily repays the initial outlay.” (Ex. 4040, Belfield Report, at 2; *see generally id.* at 3-16; RR15:41-42.) Compared to high school graduates, dropouts are less likely to be employed, are less productive workers when they are employed, are more likely to commit crimes, and are more likely to require greater health care costs and welfare benefits. (*See* RR15:44-52; Ex. 4040, Belfield Report, at 3-5.) Other research studies, using a variety of methodological approaches, empirically establish a causal link between education levels and these outcomes. (RR15:50-52, 48-49; Ex. 4040, Belfield Report, at 5; RR16:14-17; Ex. 3189-E.)
- FOF 647. Economist Clive Belfield examined the cost-benefit ratio of several types of interventions aimed at increasing the high school graduation rate, and found that “[a]veraging across all interventions, the benefits to the taxpayer were 3.05 times the cost of the interventions.”

(Ex. 4040, Belfield Report, at 13 and Table 2; RR15:46-47.) The Court finds Dr. Belfield's testimony in this case to be credible and reliable.

**ii. The State's and Intervenors' expert testimony does not demonstrate that funding does not matter or that funding cuts do not harm student performance.**

- FOF 648. The State and Intervenors offered "cross-sectional" and "time-series" evidence purporting to question the relationship between funding and student achievement. Cross-sectional evidence examines data from schools or districts at a single point in time. (RR24:31-32; RR29:114.) Time-series evidence examines data at varying points in time. (RR24:24.) The Court is not persuaded by either category of evidence presented.
- FOF 649. **Cross-sectional evidence.** Both the State's expert, Dr. Podgursky, and the Intervenors' expert, Dr. Hanushek, presented numerous charts and graphs purporting to illustrate the absence of a relationship between spending and student performance by comparing districts that use differing amounts of resources in a common time period. (Ex. 1128. Podgursky Supp. Report, at 7-35, 83-178; Ex. 11244 at 2-7; RR29:114-17; Ex. 1001. Hanushek Report, at 6-14; Ex. 8001. Hanushek Supp. Report, at 26-32.) Dr. Podgursky acknowledged that he could not determine whether spending has a causal impact on performance based on his analysis. (RR29-133.)
- FOF 650. Both Dr. Podgursky's and Dr. Hanushek's analyses fail to account adequately for the complex and multi-faceted variables that impact student performance. Dr. Podgursky acknowledged that a whole host of student and school characteristics impact student learning, such as economic disadvantage, proficiency in English, need for special education services, and racial or ethnic background. (RR29:105-06.) Importantly, he also agreed that the concentration of these characteristics within a school or school district can have a significant impact on student learning. (RR29:106-07.) Yet Dr. Podgursky's and Dr. Hanushek's plots and graphs each fail to consider any concentration-related variables and do not include or account for any variables other than the straightforward demographic statistics captured in the TEA databases. (RR29:124-26.) Plaintiffs' witness Dr. Jacob Vigdor credibly explained how this failure can bias both Dr. Podgursky and Dr. Hanushek's statistical analyses. (RR24:34-36.)
- FOF 651. Further, all of Dr. Hanushek's analyses and most of Dr. Podgursky's analyses involved only a single year of spending and performance data – commonly referred to as a "snapshot" or "cross section." (RR29:104-05.) Dr. Podgursky agreed that a "value-added" approach (one that considers changes in student test scores and spending over a number of years) is a superior and more reliable way to determine whether there is a causal relationship between resources and outcomes. (RR29:116.) Both Dr. Podgursky and Dr. Hanushek agreed that their analyses cannot answer the question of what effect increases or decreases in spending will have on student performance. (RR29:132-33; RR37:157.)

FOF 652. **Time-series evidence.** Dr. Hanushek also provided charts showing increases in national per student educational expenditures from 1960 to 2009, juxtaposed with relatively flat NAEP scores from 1971 to 2008, purporting to show that increases in expenditures have not resulted in student performance gains. This Court does not find Dr. Hanushek's evidence persuasive for the following reasons:

- a. First, Dr. Hanushek acknowledged that, as a consequence of federal and state legislation, a significant portion of the spending increases related to increase in the costs of special education and the numbers of special education students in the system. (RR37:133.) Specifically, Dr. Hanushek's own previous research demonstrated that about one-third of the decline in pupil-teacher ratio and 18% of the spending increases that occurred in the 1980s were attributable to the rise in special education costs. (RR37:135, 184-85.) And while the absence of clear data prevented precise calculations for the 1970s, Dr. Hanushek acknowledged that the growth in special education expenditures in that decade was even larger. (RR37:185.)
- b. Second, Dr. Hanushek implicitly assumes that adjustment for inflation is the only correction necessary for changes over time in prices of the resources schools purchase, but he admitted that the price of one of the most important components of education – the cost of college-educated female labor – has risen much faster than the average rate of inflation from 1960 to today because of the decline of gender discrimination and the opening up of opportunities for women in other fields and industries. (RR24:26-27; RR37:143-47; *see also supra* FOF 547 – FOF 549.)
- c. Third, Dr. Hanushek presented NAEP scores only for seventeen-year-olds (RR24:27-28, 67; RR37:149), but the NAEP program can only test students who appear in schools. (RR24:27-28, 67; Ex. 5412 at 47-48; Ex. 5400, Vigdor Supp. Report, at 1.) Because of changes in compulsory schooling laws, more seventeen-year-olds – and particularly, more seventeen-year-olds with a limited attachment to school – are tested now relative to a generation ago. (RR24:27-28, 67; Ex. 5412 at 47-48; Ex. 5400, Vigdor Supp. Report, at 1.) As of 1980, twelve states had compulsory schooling until age seventeen or higher. (RR24:27-28, 67; Ex. 5412 at 47-48; Ex. 5400, Vigdor Supp. Report, at 1.) In 2009, there were twenty-nine states with such laws. (RR24:27-28, 67; Ex. 5412 at 47-48; Ex. 5400, Vigdor Supp. Report, at 1.) Comparisons of test outcomes for students at a younger age show much more substantial improvements since the 1980s. (RR24:28; RR37:149-50; Ex. 5412 at 48.)
- d. Fourth, Dr. Hanushek made no effort to control for the changing ethnic and economic composition of the student population over the last four decades. (RR37:151-53.)
- e. Fifth, Dr. Hanushek looked only at national data and made no effort to analyze spending or achievement patterns in Texas. (RR37:148.)

FOF 653. A number of State and Intervenor experts have acknowledged that increased funding can have a positive impact in the right circumstances, although they are unable to identify those circumstances precisely. (RR37:38, 208; RR29:105-07; Ex. 5630, Scott Dep., at 91-92; *see also supra* FOF 394 and FOF 642.) It is telling, moreover, that both Dr. Hanushek and Dr. Podgursky believe that additional funding should be provided for low-income students on the ground that bringing such students (compared to other students) to satisfactory performance levels is more costly than it is for other students. (RR37:198; RR29:107.) If levels of funding and student performance were truly unrelated, it would be difficult to justify this opinion.

FOF 654. The Court also notes that State witnesses and Intervenor experts laud Texas's system of accountability and the decision-making abilities of local school districts. (*See, e.g.*, RR37:122-23; RR30:82-101.) Having found no credible evidence of large inefficiencies in Texas schools (*see infra* Part I.C.6.b (FOF 655, *et seq.*)), and having heard many superintendents testify concerning specific efforts needed to improve performance on STAAR exams, the Court is persuaded that school districts are incentivized to use additional funding in ways that are productive of better academic performance. Whether to further constrain districts' use of funds, or whether instead to trust that local districts know best how to use the money they receive, is a question that must be left to the Legislature. The Court's function is merely to ensure that resources are adequate to allow school districts to fulfill the State's constitutional mission.

**b. There is no credible evidence that the ISD Plaintiffs are systemically misallocating the resources they have now.**

**i. The State's contention that districts' budgets reflect meaningful discretion is no different than that rejected by the Supreme Court in *WOC II*.**

FOF 655. The State and Intervenors failed to demonstrate significant or systemic wasteful spending by Texas school districts sufficient to refute the showing of the need for additional resources to meet the State's higher performance standards. (*See supra* Parts I.C.2.d (FOF 456, *et seq.*) and I.C.5 (FOF 603, *et seq.*)) The State and Intervenors also have failed to demonstrate inefficient or inequitable allocation of resources by school district plaintiffs.

FOF 656. The State's Financial Integrity Rating System of Texas ("FIRST") is designed to ensure that school districts and open-enrollment charter schools are held accountable for the quality of their financial management practices and achieve improved performance in the management of their financial resources. 19 TEX. ADMIN. CODE § 109.1001. The system is designed to encourage Texas public schools to manage their financial resources better in order to provide the maximum allocation possible for direct instructional purposes. *Id.* Each of the TTSCF Plaintiffs' focus districts, Fort Bend ISD Plaintiffs' focus districts, and Calhoun County ISD Plaintiffs received a "Superior Achievement" FIRST rating (the

highest possible rating) in 2012-13, the most recent year for which a rating is available.<sup>40</sup> (Ex. 11359.)

FOF 657. The Court also finds that the districts' fund balances do not provide a source of meaningful discretion. Fund balances are used for cash flow purposes. (RR3:177-80 (referencing Ex. 6346 at 12); RR19:240-41; Ex. 6338, Hoke Dep., at 44-46 (referencing Ex. 664 at 16); RR22:89, 97-98; Ex. 5614, Patek Dep., at 50-52; Ex. 5616, Waggoner Dep., at 52; Ex. 5613, Youngblood Dep., at 48-49; Ex. 5618, Wiggins Dep., at 67-68.) Revenue from the state and local taxpayers do not come in at regular intervals, and therefore, many districts must use their fund balances to cover the shortfall in months where expenses exceed revenues. (RR19:240-41; Ex. 6338, Hoke Dep., at 44-46 (referencing Ex. 664 at 16); Ex. 6335, Cain Dep., at 31-32; Ex. 6343, Schroder Dep., at 50-51; RR5:200-01; Ex. 3201, Witte Dep., at 26-27.) Chapter 41 districts receive most of their revenue in December and January when taxes are paid, and fund balances are necessary to sustain these districts through months of negative cash flow. (*See, e.g.*, RR5:35; Ex. 5614, Patek Dep., at 50-51; Ex. 5618, Wiggins Dep., at 67.)

FOF 658. While some districts have used their fund balance to cover a deficit budget as a result of the cuts, such procedures are not a solution to school district funding cuts. (RR22:97-98 (referencing Ex. 6358 at 12); RR19:253-55.) Districts rely on their fund balances to cover unexpected one-time costs. (*See, e.g.*, Ex. 6338, Hoke Dep., at 45-46; RR22:88-89.) For example, some districts use their fund balances to cover the deductible on their property insurance in case of a catastrophic loss or to insulate against fluctuating local property values and tax revenues. (Ex. 5618, Wiggins Dep., at 67-68; Ex. 5614, Patek Dep., at 50-51; Ex. 5613, Youngblood Dep., at 48-49.)

FOF 659. The Government Financial Officers Association recommends that school districts maintain three months' worth of operating expenditures in their fund balances. (Ex. 6338, Hoke Dep., at 45-46.) Bond rating agencies look at fund balances when establishing a district's bond rating. (*Id.* at 46; RR5:35.) Under FIRST, a district loses points for reducing its fund balance by more than 20% and gains points for increasing its fund balance. 19 TEX. ADMIN. CODE §109.1002(g).

FOF 660. As a result of the foregoing, school districts cannot and should not be expected to spend down their fund balances entirely to negate the impact of funding cuts. (Ex. 5616, Waggoner Dep., at 51-52; Ex. 5618, Wiggins Dep., at 68; Ex. 5614, Patek Dep., at 50-51; Ex. 6338, Hoke Dep., at 44-46.)

**ii. There is no persuasive evidence that districts are systematically misallocating resources among their campuses.**

FOF 661. Dozens of school superintendents and other school district officials testified live at trial or provided testimony by deposition admitted into evidence. The State questioned many

<sup>40</sup> The record does not contain FIRST ratings for the Edgewood ISD Plaintiffs.

of these superintendents regarding different levels of per student funding allegedly allocated to campuses within the same school district.

FOF 662. Broadly speaking, the testimony of these superintendents consistently demonstrated that school districts do not allocate specific dollar amounts on a per-pupil basis to individual campuses as part of the budgeting process. (RR4:28-29; RR20:14; RR20:15, 20-21; RR25:165-67; RR5:231-38; Ex. 6337, Hanks Dep., at 280; Ex. 6338, Hoke Dep., at 172-73.) Rather, school districts generally allocate staffing levels to individual campuses based on the enrollment level of each campus, special programs housed at some campuses, and level of need of the students at each campus as reflected by demographic information such as level of economic disadvantage, percentage of special education, percentage of ELL students, and other criteria. (RR4:28-29; RR20:14; RR24:199-200; RR20:15, 20-21; RR25:165-67; RR5:231-38; RR19:110-11; RR4:193; Ex. 6337, Hanks Dep., at 279-85.) Because the vast majority of costs in a district or at a campus are due to personnel and salary, these staffing allocations drive the per pupil cost and may result in different expenditures per student at different campuses. These practices result in a reasonable allocation of resources at the local level and support the need for local discretion for how money is spent to best promote the general diffusion of knowledge.

FOF 663. Dr. Podgursky's analyses using campus level spending data to show intra-district misallocation of resources is flawed because he fails to control for variables that explain much of the differences in per pupil spending at the school level. For example, Dr. Podgursky acknowledged that some campuses house special programs, such as special education programs (often serving the most severely disabled students), refugee and homeless student programs, and discipline programs that result in higher spending levels at those schools. (RR29:135-36.) Dr. Podgursky also agreed that size differences between campuses could explain some of the per student spending level differences in those campuses. (RR29:129.) Dr. Podgursky did not attempt to investigate or control for these or any other variables that tend to explain spending differences at the campus level. (RR29:130.)

**iii. There is no persuasive evidence that districts could substantially improve performance at current resource levels by adopting a merit pay compensation scheme.**

FOF 664. The Intervenors and the State have argued that school districts could boost performance by abandoning the traditional teacher salary schedule in favor of merit pay. Indeed, when asked to name concrete examples of inefficient spending, the Intervenors' expert, Dr. Hanushek, could identify only the teacher compensation system. (RR37:129-30, 196-97.)

FOF 665. Under some versions of merit pay, including that advocated by Dr. Hanushek, a component of teacher compensation would be tied to the test scores of students, typically on a "value added" basis. (RR37:114, 175-76.)

FOF 666. As even Dr. Hanushek conceded, however, there is no strong empirical evidence that merit pay for teachers improves student performance. (RR37:176-80, 182-83; *see also*

RR24:11, 15.) Dr. Hanushek also acknowledged that there was little empirical evidence about how to structure any merit pay system or what the effects may be. (RR37:183.) Indeed, recent studies suggest that performance pay may have little impact in educational settings. (RR17:133-34; RR37:176-80.) Dr. Hanushek also noted that a merit pay system would likely require considerably higher salaries for many teachers and “might well” require more money than the present salary system. (RR37:201-02.)

- FOF 667. Several superintendents testified that an individualized pay-for-performance scheme could negatively impact teacher collaboration and morale, particularly where there is a limited amount of money available to pay for the merit-based compensation. (RR41:67-72; RR24:11-13; RR6:46-47.) Dr. Hanushek agreed that a merit pay scheme raises valid concerns about destructive competition among teachers. (RR37:242.) The vast majority of Texas school districts do not have the capability to design and implement a complex pay-for-performance compensation system without state guidance and leadership. (RR24:16.) Dr. Hanushek acknowledged the implementation difficulties associated with a merit pay regime (RR37:180-83, 212-22, 242-43), and admitted that he had never personally assisted a state or school district with the design of such a system. (RR37:243.)
- FOF 668. In answer to an interrogatory, the State acknowledged that its only effort to encourage or promote a merit-based compensation system over the last decade was through the DATE Grants, which provided bonuses for teachers and principals who improved student performance. (Ex. 5649 at 15.) However, the Legislature dramatically reduced funding for the DATE program in 2011. (*See supra* FOF 56.)
- FOF 669. A district that implemented such a compensation scheme in isolation, and without significantly higher salaries, would likely lose many of its experienced teachers to its neighboring districts. (RR24:16-17.)
- FOF 670. In addition, measuring the performance of teachers via test scores requires standardized tests, and the majority of teachers teach classes in which standardized tests are not administered. (RR24:17-19; Ex. 5400, Vigdor Supp. Report, at 5; RR41:71-72.)
- FOF 671. Further, teacher value-added cannot be observed until after a teacher has taught. Research suggests that at least three years’ worth of data must be used to overcome statistical unreliability. (RR24:18-19; Ex. 5400, Vigdor Supp. Report, at 5.) Thus, a district could not reliably calculate “value added” for novice teachers or teachers not in the state for the prior three years. (RR24:18-19.)
- FOF 672. In short, even the advocates of teacher merit pay concede that it is a proposal that currently lacks an empirical research base and that it might cost more money than the present system. Many superintendents and teachers believe such a system would be unworkable and counterproductive. While the State is free to pursue such proposals through legislative change if it so desires, this Court cannot conclude that the unwillingness, to date, of either the State or school districts to commit to a large-scale transition to a merit pay system is a significant source of inefficiency in the public

schools. The current stepladder system for teacher compensation reflects a policy decision by the Legislature and does not render the system qualitatively inefficient.

**iv. There is no persuasive evidence that districts could substantially improve performance at current resource levels solely by firing the allegedly “lowest-performing” teachers.**

- FOF 673. The Intervenors, through their expert Dr. Hanushek, have argued that student performance could be improved at little cost simply by removing the worst-performing 5 to 8% of teachers and replacing them with “average” teachers, *i.e.*, teachers drawn randomly from the distribution of teacher quality. While the parties appear to agree that ineffective teachers should either be improved through professional development or removed from the classroom, the weight of the evidence does not suggest that Dr. Hanushek’s proposal can be straightforwardly implemented or that it would replace the need for other improvements and interventions.
- FOF 674. To the extent the proposal would depend to any significant degree upon standardized test results (which Dr. Hanushek advocates), several problems present themselves. First, districts cannot calculate value-added for: (1) teachers whose students do not take standardized tests; (2) novice teachers or teachers for which the districts have insufficient number of years of data; or (3) teachers who teach subjects not aligned with the prior year subject in the same field. (RR24:18; *see also supra* FOF 671 – FOF 672.) Dr. Hanushek conceded that districts might be able to generate value-added scores for only about 20% to 25% of their teacher workforce. (RR37:182.)
- FOF 675. Second, the proposal would require the recruitment of at least 15,000 additional teachers, a large expansion that might well require the State to relax its already diminishing standards or offer salary increases substantial enough to attract more promising candidates into the profession. (RR24:22.)
- FOF 676. Third, the proposal would make the teaching profession riskier, other things being equal, and therefore might discourage many qualified candidates from entering the field. (RR24:11-12.)
- FOF 677. Fourth, the proposal necessarily would heighten competition among teachers in public schools – in the form of competition to avoid being fired. (RR24:23-24; Ex. 5400, Vigdor Supp. Report, at 6.) Teachers who do not wish to lose their jobs might reasonably have new incentives to avoid sharing information with their colleagues, or to lobby administrators for assignments to easier-to-teach students. Such a degree of competition could, again, be harmful to the education process. (RR24:23-24.)
- FOF 678. Fifth, Dr. Hanushek’s proposal is entirely theoretical. He did not point to a single district or state that has implemented the proposal and therefore could not say whether his predictions of the positive impact of such a proposal have been validated by actual evidence.

FOF 679. The Court cannot conclude that a failure to implement this specific proposal is a significant source of inefficiency in public schools..

**7. The district-specific evidence shows that the ISD Plaintiff focus districts do not have access to sufficient funding to provide an adequate education and lack meaningful discretion to set their M&O tax rates.**

FOF 680. The “focus”/plaintiff districts discussed below: (1) hail from nearly every geographic region of the state (Ex. 6349 at 71); (2) include both property-wealthy and property-poor districts; (3) include urban, suburban, and rural districts; and (4) include fast-growing districts, stable districts, and districts in which the student population is declining. (*See generally infra* Part I.C.7 (FOF 680, *et seq.*.) Moreover, when these districts are aggregated together, they are very close to the state averages in many key statistics, including wealth per WADA, average M&O rate, revenue available in Tier I, percentage of ASATR, and percent of students who are economically disadvantaged. (Ex. 6349 at 76; RR7:49.) These thirty-six districts also have approximately 737,856 students in ADA, which represents 16.5% of the total statewide ADA. (Ex. 6349 at 76 (20,496 average ADA for focus districts times thirty-six districts; 4,369 statewide average ADA times 1,024 total districts.) For these reasons, this Court concludes that these thirty-six districts are sufficiently representative of the system as a whole to provide meaningful evidence as to the effect of the system structure on districts’ discretion over tax rates.

FOF 681. The findings set forth in this Part are derived primarily from testimony from school district officials proffered during the initial trial, in which they described the circumstances in their districts through the 2012-13 school year. While these findings do not reflect the 2013 legislation (except where otherwise indicated), the Court is confident that the findings accurately depict the challenges that these districts face today, given the magnitude of these challenges and the relatively modest impact of the 2013 legislation.

**a. Fort Bend ISD Plaintiff focus districts**

**i. Abilene ISD**

FOF 682. Abilene ISD is a Chapter 42 district located in Taylor County in west Texas, approximately 150 miles west of Fort Worth. (Ex. 11323.) Surrounded by smaller rural towns and school districts, Abilene serves as an urban center for that region of west Texas. (Ex. 6336, Burns Dep., at 10-11.)

FOF 683. Abilene ISD has slightly more than 17,000 students. (RR19:17; Ex. 6355 at 3.) Historically, Abilene ISD’s enrollment has fluctuated significantly, with enrollment growth and decline triggered by variations in the local economy. (Ex. 6336, Burns Dep., at 11-12 (referencing Ex. 539 at 2).)

FOF 684. Abilene ISD has a student population that is at least 65% economically disadvantaged. (RR19:17; Ex. 6355 at 3.) Even at Abilene’s “most affluent” campus, almost 40% of its

students are on free and reduced lunch. (Ex. 6336, Burns Dep., at 16; Ex. 539 at 46.) The economically disadvantaged population is likely even larger than the official count represents, as students often fail to self-identify in middle school and high school. (RR19:17.) The large economically disadvantaged population “come[s] to school without the same context, without the same background and foundation that their more affluent counterparts come to school with,” making it “a challenging population to reach and to teach.” (RR19:18.)

- FOF 685. Abilene has steadily growing minority populations, and in 2011-12 was 12% Black, 40% Hispanic, and 6% “other” – a group that included 277 refugee students speaking thirty-six different languages. (Ex. 6355 at 10; Ex. 6336, Burns Dep., at 17-18 (referencing Ex. 539 at 7).) This refugee student population makes up about half of the district’s ELL population and faces unique challenges above and beyond those of Abilene ISD’s other economically disadvantaged and ELL students. (RR19:41-42 (referencing Ex. 6355 at 10); Ex. 539 at 7.)
- FOF 686. Over the course of the 2011-12 to 2012-13 biennium, Abilene ISD suffered a budget cut of \$8.1 million in its FSP funds, or \$162 per WADA. (RR19:103, 127 (referencing Ex. 6355 at 14).) In addition, Abilene suffered an additional \$2.6 million in cuts to its grant programs, many of which were aimed at closing the achievement gap and improving the performance of at-risk students. (Ex. 6355 at 15.) While Abilene ISD worked hard to insulate its student population from the impact of these cuts, they were just too large to be able to do so entirely. (Ex. 6336, Burns Dep., at 37-38.) Even with an infusion of federal money, Abilene had to cut approximately 125 teaching positions and thirty-six teacher’s aides. (Ex. 6366, Burns Dep., at 35-36; Ex. 539 at 20-23; RR19:50-51, 60.) As a result of the cuts, “Abilene ISD has been compelled to cut programs and weed down programs that have been proven to be successful in closing gap and growing students.” (RR19:60-61.) Also a result of the cuts, Abilene went from seeking five class-size waivers in one grade at one exemplary-rated campus, to having to seek 102 class-size waivers at sixteen campuses, and was no longer able to confine the waivers to its highest performing campuses. (RR19:50 (referencing Ex. 6355 at 12); Ex. 6336, Burns Dep., at 38-40; Ex. 539 at 25-27.)
- FOF 687. If Abilene ISD’s funding was increased, it would use the additional funds to restore programs aimed at its at-risk and disadvantaged populations, such as the Woodson Center for Excellence (its alternative high school for at-risk students) and its Extended School Program (which provides students with individualized attention and targeted remediation), and AVID (a program aimed at creating first generation college students.) (RR19:26-30 (referencing Ex. 6355 at 4-6), 38-39 (referencing Ex. 6355 at 9), 30-33 (referencing Ex. 6355 at 7).) It would also invest more in innovative elementary-level curriculum programs such as Reasoning Mind, a program proven to help prepare students for Algebra, and Read 180, which helps struggling readers. (RR19:33-37 (referencing Ex. 6355 at 8).) In addition, Abilene would restore some of its personnel cuts, hire additional translators to serve its refugee population and return to its former practice of

strategically requesting class size waivers at only its highest-performing campuses. (RR19:44-47 (referencing Ex. 6355 at 10), 50-51 (referencing Ex. 6355 at 12).)

- FOF 688. At the time of the *WOC II* decision in 2005, Abilene ISD was taxing at the then maximum M&O tax rate of \$1.50. (RR19:56; Ex. 539 at 12.) Abilene ISD is a formula-funded district. (RR19:56.) Tax compression pushed Abilene ISD's tax rate down to \$1.00, but the district immediately had to raise its current rate of \$1.04 in order to provide an adequate education. (Ex. 6336, Burns Dep., at 26.) Abilene ISD cannot increase its tax rate further without holding a TRE; but, because Abilene has several impending facilities needs, it cannot hold a TRE without jeopardizing the chances of being able to pass a bond election. (*Id.* at 122-23.) Currently, any revenue raised from such an election would go toward a general diffusion of knowledge only, and not towards enrichment. (RR19:58-59.)
- FOF 689. While Abilene ISD was able to use targeted interventions to make some improvement in the percentage of students achieving the met-standard score on TAKS, there remained a troubling and persistent achievement gap and the district never had more than 23% of its students reach the commended level for any grade or subject level. (Ex. 6336, Burns Dep., at 45-49 (referencing Ex. 539 at 33-35).)
- FOF 690. After the first administration of the STAAR-EOC exams, 567 (53%) of Abilene ISD's ninth graders failed to achieve the Level II phase-in on at least one of the STAAR-EOC exams. (Ex. 6324, Moak Supp. Report One, at 21.) Two hundred and seventy-seven students failed multiple tests. (Ex. 539 at 45.) Looking at the Level II final standard, only 33% of Abilene ISD students reached the standard in Algebra I, 37% in Biology, 35% in English I Writing, and 42% in English I Reading. (*Id.* at 36.) After the summer retest, 513 students had failed 1,164 tests and were off track for graduation and required remediation. (Ex. 6324, Moak Supp. Report One, at 21, 41.)
- FOF 691. Abilene ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 1,115 (55.1%) of Abilene ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5.<sup>41</sup> (Ex. 6548 at 7.) Six-hundred and thirty-six students failed multiple tests. (*Id.*) As in the first year, the results at the final Level II standard reveal how significantly district performance must improve: just 32% met the final Level II standard in Algebra I, 45% in Biology, 41% in English I Reading, 27% in English I Writing, 24% in English II Writing, and 34% in World History. (Ex. 6560-A at 40-44.) Only 19.7% of Abilene's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 5.)
- FOF 692. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Abilene ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The

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<sup>41</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

## ii. Aldine ISD

- FOF 693. Aldine ISD is a Chapter 42 district that covers approximately 110 square miles of northern Harris County. (Ex. 6339, Bamberg Dep., at 12; Ex. 11323.) It is primarily urban in nature, with almost 85% of its students classified as economically disadvantaged. (Ex. 6339, Bamberg Dep., at 11; Ex. 364 at 1, 2.)
- FOF 694. In 2011-2012 Aldine ISD enrolled 65,613 students, making it the twelfth largest school district in Texas. (Ex. 6339, Bamberg Dep., at 12; Ex. 364 at 1.) From 2007 through 2012 the district's enrollment increased by about 11.5%, or just over 1,300 students per year, on average. (Ex. 6339, Bamberg Dep., at 16; Ex. 364 at 1.) The district educates these students at seventy-five different campuses. (Ex. 6339, Bamberg Dep., at 12.)
- FOF 695. Aldine ISD's student body is almost 85% economically disadvantaged, up from 72% in 2000 and 38% in 1990. (*Id.* at 13; Ex. 364 at 1-2.) The district's students also have a very high mobility rate – almost 25% of Aldine students district-wide change campuses or move in or out of the district during any particular school year. (Ex. 6339, Bamberg Dep., at 23.) At some campuses, the mobility rate is as high as 35%. (*Id.*)
- FOF 696. The high poverty level and mobility rate have had a significant impact on the services Aldine ISD must provide in order provide a quality education to its students. (*Id.* at 22.) Many of Aldine's students lack the background experiences, resources at homes such as books and technology, and stable family environment to give them a realistic opportunity to be successful at school, unless the district can provide resources to address those deficiencies. (*Id.* at 43-44.)
- FOF 697. Aldine ISD has also experienced a dramatic change in student ethnicity over that last two decades. In 1990, Aldine ISD had a majority white student population, a Hispanic population of less than 10%, and an African American population of approximately 35%. (Ex. 6339, Bamberg Dep., at 20; Ex. 364 at 1.) In 2011, the Hispanic student population had grown to almost 70%, while the White student population had fallen to 2.2% and the African American population declined to 25.8%. (Ex. 6339, Bamberg Dep., at 13, 20; Ex. 364 at 1.)
- FOF 698. Along with these changes has come a dramatic increase in the number of ELL students served by Aldine ISD such that today, more than 31% of Aldine ISD students have limited proficiency in English. (Ex. 6339, Bamberg Dep., at 31; Ex. 364 at 2.) This has created further need for resources to properly serve these students. At the lower grade levels at many elementary schools, more than one-half of the programs offered are bilingual programs. (Ex. 6339, Bamberg Dep., at 33-34.) The district has struggled to obtain and provide the specialized teachers, materials, training, and curriculum necessary to serve these students. (*Id.*)

- FOF 699. Prior to tax rate compression, Aldine ISD had an M&O tax rate of \$1.64. (*Id.* at 46; Ex. 364 at 3.) Aldine was one of a few school districts that had the ability to levy an M&O tax rate that exceeded the \$1.50 cap then in effect. (Ex. 6339, Bamberg Dep., at 46-47.) Despite taxing higher than the \$1.50 cap, after tax compression Aldine ISD received a target revenue funding level that was lower than state average. (*Id.* at 48-49.) Because of its lower than average funding level, Aldine ISD held a TRE in 2010, but it was unsuccessful. (*Id.* at 50-52.) As such, Aldine has been locked into a static, and then reduced funding level. (*Id.*)
- FOF 700. Aldine ISD's expenditures have been decreasing since 2008-09. (*Id.* at 53; Ex. 364 at 3.) The biggest decreases came after reductions in state formula funding of \$14 million in 2011-12 and \$8 million in 2012-13, in addition to the elimination of or reduction in state grant funds of more than \$25 million for the current legislative biennium. (Ex. 6339, Bamberg Dep., at 55-59; Ex. 364 at 4.) These cuts have negatively impacted programs that are aimed at helping Aldine ISD's most needy students. For example, in order to continue to provide full-day pre-K for Aldine's poorest students, the district has had to increase class sizes in a manner that is not in the best interest of those students. (Ex. 6339, Bamberg Dep., at 61-62; Ex. 364 at 5.) The district also increased class sizes at all other grade levels, eliminated performance pay incentives for teachers, eliminated magnet programs, and made other reductions that have negatively impacted the district's ability to provide all of its students an opportunity to graduate college or career ready. (Ex. 6339, Bamberg Dep., at 61-70; Ex. 364 at 4-5.)
- FOF 701. While the district had been making progress on the met standard level of the TAKS exam, this is not a strong indication of how well prepared Aldine ISD students were under the new college and career-ready standards. (Ex. 6339, Bamberg Dep., at 71-72.) The percentage of the district's students meeting the commended level (a better indication of college or career ready) remained troublingly low, with only 10% of Aldine ISD students meeting that standard on all tests. (*Id.* at 72-73; Ex. 366 at 4.)
- FOF 702. After the first administration of the STAAR-EOC exams, 2,747 (65%) of Aldine ISD's ninth graders failed to achieve the Level II phase-in standard on at least one of the STAAR-EOC exams. (Ex. 6324, Moak Supp. Report One, at 13.) Looking at the Level II final standard, only 35% of Aldine ISD students reached the standard in Algebra I, 31% in Biology, 20% in English I Writing and 34% in English I Reading. (Ex. 364 at 5.) After the July retests, Aldine ISD still had 2,537 ninth graders, 60% of the class of 2015, who failed 5,458 tests and were off track for graduation. (Ex. 6324, Moak Supp. Report One, at 13, 32.)
- FOF 703. Aldine ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, at the lower phase-in I standard, 5,136 (64.8%) of Aldine ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams required for graduation under HB5.<sup>42</sup> (Ex. 6548 at 5.) 2,914 students failed

<sup>42</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

multiple tests. (*Id.*) As in the first year, the results at the final Level II standard reveal how significantly district performance must improve: just 28% met the final Level II standard in Algebra I, 40% in Biology, 30% in English I Reading, 15% in English I Writing, 15% in English II Writing, and 27% in World History. (Ex. 6563-A at 41-45.) Only 11.7% of Aldine's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 3.)

FOF 704. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Aldine ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

### iii. Amarillo ISD

FOF 705. Amarillo ISD is a seventy square mile Chapter 42 district that covers portions of Randall and Potter Counties in the Texas Panhandle. (Ex. 11323.)

FOF 706. The district enrolls approximately 33,000 students and has experienced moderate but steady enrollment growth since 2007-08. (Ex. 6358 at 2.) Over that same time period, the district's Hispanic population has grown to 14,476 or 44.7%, while its African-American and non-Hispanic White populations have decreased. (*Id.*; Ex. 6343, Schroder Dep., at 12-13 (referencing Ex. 919-S at 1).) Almost 67% of the Amarillo ISD student population is economically disadvantaged. (Ex. 6358 at 2.)

FOF 707. Amarillo ISD had 4,611 ELL students in 2011-12. Within that population, the number and percentage of students speaking languages other than Spanish has almost tripled, going from 586 (18.8% of the ELL population) in 2006-07 to 1,695 (36.8% of the ELL population) in 2011-12. (*Id.*) This growth is largely due to the placement of refugee populations in Amarillo by the State Department. (Ex. 6343, Schroder Dep., at 13-14.) These refugee students often un-schooled and not literate in their own language. (*Id.* at 15-17.) The growth in this population and in other economically disadvantaged and E.L.L. populations have caused increased financial pressure on the district. (*Id.*)

FOF 708. Amarillo ISD was steadily reducing its budget for several years prior to the state funding cuts. (Ex. 6358 at 9.) After the state funding cuts, the district reduced its budget by another \$6.3 million. (*Id.*; Ex. 6343, Schroder Dep., at 38-39 (referencing Ex. 919-S at 10-11).) To do so, the district reduced its administrative and educational support staff; reduced health insurance contribution by 10%, shifting costs to its employees; reduced each campus's budget 5%, resulting in cuts to instructional materials, professional development, and field trips. (Ex. 6343, Schroder Dep., at 40-41 (referencing Ex. 919-S at 11).) In 2012-13, the district eliminated its art program at elementary schools, and operated at half-staffing levels for nurses, counselors, and librarians. (Ex. 6343, Schroder Dep., at 46.)

FOF 709. At the same time, Amarillo's required, "fixed" costs – for things such as utilities and health insurance, and workers compensation insurance – are rising. (RR22:59

(referencing Ex. 6358 at 11.) Thus, despite the budget reductions, Amarillo ISD operated on a deficit budget in 2012-13, and predicted that it would need to do so for the next biennium. (RR22:59-60 (referencing Ex. 6358 at 12).) The district does not have room in its projected budget to hire additional teachers even as its enrollment is projected to increase. (Ex. 6343, Schroder Dep., at 53.)

FOF 710. Prior to tax compression, Amarillo ISD was taxing at the \$1.50 cap. (Ex. 6358 at 6.) Upon being compressed to \$1.00, Amarillo ISD immediately accessed its first four “golden pennies.” (*Id.*) The next year, Amarillo ISD held a tax ratification election to raise its rate to \$1.08. (RR22:56-57 (referencing Ex. 6358 at 6).) Therefore, Amarillo ISD has no more “golden pennies” available to it. The money raised from the TRE went for basic operations. (RR22:56-57.) Because Amarillo ISD has facilities needs that require a bond issuance, it cannot at this time pursue another TRE. If it were to do so and raise its tax rate to the \$1.17 cap, the resulting additional state and local revenue would almost cover the lost revenue due to state funding cuts, and would not be enough to cover the district’s projected deficit over the upcoming biennium. (RR22:57-58, 60-61.) Indeed, it would take two of those nine cents to simply cover the district’s increased health insurance costs. (Ex. 6343, Schroder Dep., at 45 (referencing Ex. 919-S at 12).)

FOF 711. After the first administration of the STAAR-EOC exams, 1,288 (60%) of Amarillo ISD’s ninth graders failed to achieve the Level II phase-in on at least one of the STAAR-EOC exams. (RR22:115-16 (referencing Ex. 6358 at 18).) Of those, 595 three or more exams. (RR22:115-16 (referencing Ex. 6358 at 18).) Looking at the Level II final standard, only 39% of Amarillo ISD students reached the standard in Algebra I, 36% in Biology, 39% in English I reading, and 29% in English I Reading. (Ex. 6358 at 13-17.) For each of these tests, the achievement gap between white students and economically disadvantaged students was significantly greater at the final level. (*Id.*)

FOF 712. After the summer retest, 1,152 students (52%) from the Class of 2015 failed 2,376 tests are still off track for graduation and require remediation. (Ex. 6324, Moak Supp. Report One, at 19, 39.) Projecting forward, after the December retests and the May 2013 tests for the class of 2016 Amarillo ISD expects to be remediating students for 4,202 freshman level EOC tests – without taking into consideration additional remediation that the class of 2015 will need for its sophomore level EOC tests. (RR22:64-65 (referencing Ex. 6358 at 19).)

FOF 713. Amarillo ISD’s student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, at the lower phase-in I standard, 2,277 (55.8%) of Amarillo ISD’s 9th and 10th graders failed at least one of the STAAR-EOC exams required for graduation under HB5.<sup>43</sup> (Ex. 6548 at 5.) 1,257 students failed multiple tests. (*Id.*) As in the first year, the results at the final Level II standard reveal how significantly district performance must improve: just 38% met the

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<sup>43</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

final Level II standard in Algebra I, 43% in Biology, 39% in English I Reading, 22% in English I Writing, 25% in English II Writing, and 36% in World History. (Ex. 6566-A at 42-46.) Only 19.3% of Amarillo's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 3.)

- FOF 714. Superintendent Rod Schroder's analysis of remediation needs found that, in order to fund remediation programs for these students, Amarillo ISD needs an additional \$1,200 per student in need of remediation. (RR22:65.) To improve its programs and avoid future remediation, Amarillo ISD needs an additional \$1,000 per student across the board. (*Id.*)
- FOF 715. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Amarillo ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

#### iv. Austin ISD

- FOF 716. Austin ISD is a Chapter 41 district that serves the city of Austin, as well as certain unincorporated areas of Travis County. (Ex. 11323.) The district operated 124 schools, including eighty-one elementary schools, eighteen middle schools, and sixteen high schools, in 2011-12.
- FOF 717. In 2011-12, Austin ISD enrolled 86,124 students, and grew by approximately 8,000 students over the past decade. (RR19:138 (referencing Ex. 6356 at 2).) Because population growth is not uniform across the city, the district faces challenges in terms of over-crowding in certain schools, as well as pockets of disadvantage. (RR19:138-39.)
- FOF 718. Austin ISD is a diverse district, with a majority Hispanic population. Its Hispanic population grew from 51.5% in 2003 to 60.55% in 2012. (RR19:139-40.) Over that same time period, the non-Hispanic White population decreased from 31.2% to 24.5% and the African-American population decreased from 14.4% to 9.1%. (*Id.*)
- FOF 719. Concurrent with the Hispanic population growth, the population of ELL students has grown from 16,191 (20.7%) in 2003 to 24,000 (27.9%) in 2012. (RR19:145-46 (referencing Ex. 6356 at 5).) While the majority of the ELL population is Spanish-speaking, Austin ISD students speak sixty-four languages. (RR19:147.) This population of students often enters Austin ISD and the Texas public school system at higher grades, and without the same preparation to meet the high standards of the Texas public school system as the students who have grown up in the system. (RR19:140-41, 148.) Sometimes, the students have previously undiagnosed educational needs and challenges that the district must assess and address. (RR19:146-47.) Austin's biggest challenge in educating its ELL population is recruiting, training, and compensating qualified bilingual teachers. (*Id.*)
- FOF 720. As the Austin ISD population has grown more diverse, it has also become more impoverished. As of 2012, Austin ISD had 55,318 students (64.2%) classified as

economically disadvantaged, up from 41,397 (53%) in 2003. (RR19:142-43; Ex. 6356 at 4.) This economically disadvantaged student population tends to be more mobile – moving both within and between districts (RR19:144, 149-51, (referencing Ex. 6356 at 7-8).) Austin ISD students who are residentially mobile are twice as likely to miss more than 10% of the school year, and students who move campuses are three times as likely to miss more than 10% of the school year. (RR19:153.) As a result, the district must spend more money on transportation, remediation, and other support services for these students – expenses which are not accounted for under the current school finance system. (RR19:153-54.) Economically disadvantaged students often come to school with unmet basic needs, requiring the district to provide what superintendent Dr. Meria Carstarphen described as “wrap-around services.” (RR19:144.) Included in this economically disadvantaged population are 1,975 homeless students. (Ex. 6356 at 6.) The district’s homeless population has needs above and beyond those of the rest of the economically disadvantaged population, which are not taken into account in the State’s funding system. (RR19:150.)

FOF 721. As Austin ISD’s student population was becoming poorer, more diverse, and more challenging and expensive to educate, it lost \$35.6 million in state funds during the 2011-12 school year, and an additional \$25.1 million the next year, for a total of \$60.7 million over the biennium. (RR19:160-61 (referencing Ex. 6356 at 12).) As a result of the first year’s cuts, its inflation adjusted expenditures per student decreased \$400 compared to the 2009-10 school year, and were roughly equivalent to what they were during the 2002-03 school year. (RR19:155-56 (referencing Ex. 6356 at 9).) In addition to the state cuts, Austin ISD lost more than \$60 million in Federal ARRA funding. (Ex. 6356 at 12.) Furthermore, as ASATR funding is phased out, Austin ISD will lose an additional \$150 million. (*Id.*)

FOF 722. As a result of stagnant and then decreasing state revenues, Austin ISD experienced three-years of budget cuts and austerity planning. (*Id.* at 16.) As part of this process, Austin ISD cut \$66 million from the budget and eliminated eighteen central office positions in 2009-10 and another 117 central office positions in 2010-11. (*Id.* at 17.) The district also restructured its employee health insurance program and did what it could to reduce operational costs such as electricity costs. (RR19:170.) While the district took these measures first to postpone impacting classrooms “for as long as possible,” it eventually had to; in 2011-12 it implemented a reduction in force that cut 1,153 positions in 2011-12. (*Id.* (referencing Ex. 6356 at 17).) In Fall of 2010, Austin ISD requested class size waivers at just two campuses; in the Fall of 2011, as a result of the state budget cuts and the reduction in force, it had to request waivers at sixteen campuses. (Ex. 6103.)

FOF 723. At the time of *WOC II*, Austin ISD was taxing at the \$1.50 cap. (Ex. 6356 at 11.) In 2007-08, when its compressed rate under HBI was \$1.00, it immediately accessed the first four golden pennies. (RR19:158 (referencing Ex. 6356 at 11).) Austin ISD then held a TRE and raised its rate to \$1.079 starting with the 2008-09 school year. (RR19:158 (referencing Ex. 6356 at 11).)

- FOF 724. In 2011-12, \$135.2 million of Austin ISD's local tax revenue (or almost 20%) was recaptured. (RR19:163 (referencing Ex. 6356 at 13).) The "copper pennies" above \$1.06 are recaptured at nearly 45%. (Ex. 6356 at 13.) While the district is considering holding another TRE, Dr. Carstarphen testified that as a growing district, Austin ISD must frequently go to the voters to pass a bond election and that this, combined with the higher recapture rate on the additional pennies factor into the district's calculation of whether the district's taxpayers will support a TRE. (RR19:159-60.) If the district were to hold a TRE and raise its rate to the \$1.17 cap, it would not generate enough additional revenue to make up for the district's \$60M state funding cut. (RR19:161.)
- FOF 725. In addition, Austin ISD is one of fewer than forty-eight districts that is locked into contributing to the Social Security system. (RR19:165-66 (referencing Ex. 6356 at 15).) This costs the district approximately \$33 million a year, or \$380 per student – an expense which is completely unaccounted for in the State's funding system. (RR19:166 (referencing Ex. 6356 at 15).) In fact, because of recapture, in order to make its \$33 million in Social Security payments, the district must raise \$45 million in local tax revenue. (RR19:166.)
- FOF 726. After the first administration of the STAAR-EOC exams, 2,689 (52%) of Austin ISD's ninth graders failed to achieve the Level II phase-in on at least one of the STAAR-EOC exams. (Ex. 6324, Moak Supp. Report One, at 22.) Looking at the Level II final standard, only 42% of Austin ISD students reached the standard in Algebra I, 41% in Biology, 50% in English I Reading, and 37% in English I Writing. (Ex. 6356 at 21.)
- FOF 727. Comparing the economically disadvantaged students to the non-economically disadvantaged students reveals a large and troubling achievement gap. At the initial phase-in standard, the gap between the percentage of economically disadvantaged students achieving the phase-in standard and the percentage of non-economically disadvantaged students achieving the phase-in standard ranged from eighteen points in Algebra I to thirty-six points in English I Writing. (*Id.* at 23-27.) The gaps grow at the higher final standard. Only 25% of economically disadvantaged students met the final standard on Algebra I, compared to 64% of non-economically disadvantaged students. (*Id.* at 23.) On the Biology EOC, only 20% of economically disadvantaged students achieved the final standard compared to 66% of non-economically disadvantaged students. (*Id.* at 24.) Turning to English I, only 18% of economically disadvantaged students achieved the final standard in Writing and 31% in reading, compared to 64% and 74% respectively for non-economically disadvantaged students. (*Id.* at 26-27.)
- FOF 728. After the July 2012 retests, Austin ISD still had 2,454 ninth graders, 47% of the class of 2015, who failed 5,633 tests and are off track for graduation. (Ex. 6324, Moak Supp. Report One, at 22, 41.)
- FOF 729. Austin ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, at the lower phase-in I standard, 4,756 (48.1%) of Austin ISD's 9th and 10th graders failed at least one of the STAAR-

EOC exams required for graduation under HB5.<sup>44</sup> (Ex. 6548 at 5.) 2,781 students failed multiple tests. (*Id.*) As in the first year, the results at the final Level II standard reveal how significantly district performance must improve: just 41% met the final Level II standard in Algebra I, 50% in Biology, 47% in English I Reading, 33% in English I Writing, 5% in English II Writing, and 41% in World History. (Ex. 6569-A at 43-47.) Only 28.9% of Austin's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 3.)

FOF 730. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Austin ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

#### v. Corsicana ISD

FOF 731. Corsicana ISD is a Chapter 42 district located about fifty miles south of Dallas in Corsicana, the county seat of Navarro County. (Ex. 11323.) Corsicana is a small, mostly low income community. (Ex. 6341, Frost Dep., at 11.) The district is the largest employer in the county. (*Id.* at 14.)

FOF 732. In 2013-14, Corsicana ISD enrolled 5,996 students. (Ex. 20001 at 2.) The district grows, on average, by about sixty students a year, but because it serves a small community, its enrollment can be strongly impacted by the closing of just one business. (Ex. 6341, Frost Dep., at 11-13 (referencing Ex. 368 at 2).)

FOF 733. Corsicana ISD's student body is approximately 75% economically disadvantaged, up from 57% in 2006-07. (Ex. 6341, Frost Dep., at 13-14 (referencing Ex. 368 at 3); Ex. 20001 at 3.) Because the community is so impoverished, the district often has to help the students with basic needs, such as food and clothing. (Ex. 6341, Frost Dep., at 15-16.)

FOF 734. Like Texas, Corsicana is majority-minority – approximately 48% Hispanic, 29% Anglo, and 18% African-American – with a steadily growing Hispanic population and a steadily shrinking Anglo population. (Ex. 20001 at 3.) About 18% of the student body is classified as ELL. (Ex. 368 at 4.)

FOF 735. In 2011-12, Corsicana ISD's budget was cut by over \$2 million dollars, from \$38.6 million to \$36.4 million – or by about \$450 per student. (*Id.* at 8-9.) In order to absorb the cuts, Corsicana had to cut twenty-two elementary teachers and fourteen secondary teachers – resulting in larger class sizes across the board – plus eight aides, and several other support staff. (Ex. 6341, Frost Dep., at 25, 27 (referencing Ex. 368 at 9).) The cuts inevitably also touched the district's most needy and challenging populations – including cutting its pre-K program from full day to half day, reduction in teachers for disciplinary alternative program and the credit recovery program for the students it serves, larger

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<sup>44</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

caseloads for teachers working with students with disabilities, and elimination of a position aimed at assisting the district's low-income students in obtaining college scholarships and other financial aid. (Ex. 6341, Frost Dep., at 23-26 (referencing Ex. 368 at 9).)

- FOF 736. Prior to tax compression, Corsicana ISD was taxing at \$1.41. (Ex. 368 at 6.) Its compressed rate was \$0.98, but Corsicana immediately accessed all six golden pennies in and has been taxing at \$1.04 since the 2007-08 school year. (Ex. 6341, Frost Dep., at 19 (referencing Ex. 368 at 6).) Corsicana is cannot raise its tax rate further without a TRE. (Ex. 6341, Frost Dep., at 6.) Corsicana is "out" of golden pennies, so therefore any additional taxes it did raise through a TRE would only raise the lower, "copper yield." (*Id.* at 19-20.) Further, Corsicana's I&S rate is already at 24.3 cents and it has several aging buildings – including ones built in 1923 and 1924 – that need updated wirings to support today's educational technology. (*Id.* at 20-21.) The combination of the lower yield, the higher I&S tax rate, the pending facility needs, and the poverty of the district's community has prevented the district from holding a TRE. (*Id.* at 19-20, 174-75.)
- FOF 737. While the district had been making progress on the met standard level of the TAKS exam, much like the rest of the state, the district's scores were flat or declining in the last two years. (Ex. 6341, Frost Dep., at 28-29 (referencing Ex. 368 at 10-11).) Further, the percentage of the district's students meeting the commended level remained troublingly low, especially for the 75% of the students who are economically disadvantaged and the district's African-American population. (Ex. 368 at 12-14.)
- FOF 738. After the first administration of the STAAR-EOC exams, 255 (68%) of Corsicana ISD's ninth graders failed to achieve the Level II phase-in on at least one of the STAAR-EOC exams. (Ex. 6324, Moak Supp. Report One, at 18.) Looking at the Level II final standard, only 20% of Corsicana ISD students reached the standard in Algebra I, 21% in Biology, 28% in World Geography, 38% in English I Writing and 40% in English I Reading. (Ex. 368 at 15-20.) The results at the Level II final standard are even more disturbing for the district's economically disadvantaged students, only 11% of whom that standard in Algebra I, 17% in Biology, 21%, and 35% in English I Writing and English I Reading. (Ex. 6341, Frost Dep., at 29-31 (referencing Ex. 361 at 15-20).)
- FOF 739. After the July retests, Corsicana ISD still had 215 ninth graders, 57% of the class of 2015, who failed 517 tests and were off track for graduation. (Ex. 6324, Moak Supp. Report One, at 18, 38.) Superintendent Dr. Diane Frost described that the challenge that these numbers represent is "not a hill or a bump in the road, it's a mountain that as a district we're going to have to climb." (Ex. 6341, Frost Dep., at 34.) The district was able to offer summer school remediation in 2012 only because of non-recurring federal funds and needs more resources for extended day programs and summer school and other remediation and intervention efforts. (*Id.* at 34-35, 39-43.)
- FOF 740. Corsicana ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, at the lower phase-in 1 standard, 440 (59.3%) of Corsicana ISD's 9th and 10th graders failed at least one of the

STAAR-EOC exams required for graduation under HB5.<sup>45</sup> (Ex. 6548 at 11.) Two hundred seventy-six students failed multiple tests. (*Id.*) As in the first year, the results at the final Level II standard reveal how significantly district performance must improve: just 28% met the final Level II standard in Algebra I, 40% in Biology, 34% in English I Reading, 26% in English I Writing, 49% in English II Reading, 16% in English II Writing, and 20% in World History. (Ex. 6572-A at 40-44.) Only 14.4% of Corsicana's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 9.)

- FOF 741. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Corsicana ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

#### vi. Duncanville ISD

- FOF 742. Duncanville ISD is a Chapter 42, "mid-urban" district, approximately 56% of which is in southern Dallas and 44% of which is in the City of Duncanville. (Ex. 6342, Ray Dep., at 9-10; Ex. 11323.)
- FOF 743. Duncanville is a steadily growing district, and has gained 3,000 students since 2006-07. (Ex. 1703 at 2.) Duncanville enrolls slightly more than 13,300 students in nine elementary schools, three intermediate schools, three middle schools, one traditional comprehensive middle school, and two alternative schools. (*Id.*; Ex. 6342, Ray Dep., at 3.)
- FOF 744. The demographics of the Duncanville ISD student body have changed drastically over the past twenty-five years, going from 25.9% minority in the 1988-89 school year to 92.96% minority in 2011-12. (Ex. 1703 at 4.) It is currently about 48% Hispanic, 42% African-American, and 7% non-Hispanic White. (*Id.* at 6; Ex. 6342, Ray Dep., at 9-10.) Approximately 13% of the district's population is F.I.L., many of whom are first generation Americans. (Ex. 6342, Ray Dep., at 14 (referencing Ex. 1703 at 5).)
- FOF 745. The district has also become poorer, and is now 75% economically disadvantaged. (Ex. 6342, Ray Dep., at 10, 12-13 (referencing Ex. 1703 at 3).) To meet the challenges of educating this population of students, the district needs quality pre-K programs, smaller class sizes, one-on-one tutoring, after-school and extended day programs, and summer school. (Ex. 6342, Ray Dep., at 13-14, 28-29.) The challenges – and the need for intervention services – are even greater for the economically disadvantaged students whose first language is not English. (*Id.* at 15-16.)
- FOF 746. Despite the challenges facing its students, the expectation of Duncanville ISD for *all* of its students to be prepared for college or career by becoming "21st Century Learners" –

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<sup>45</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

citizens who are “not just competent academically in the hard subjects, but also has skills beyond that in the leadership, communication, technological fluency, [and] multi-fluencies in other . . . cultures [and] languages.” (Ex. 6342, Rey Dep., at 16-18, 41-42 (referencing Ex. 23-25).)

- FOF 747. Duncanville ISD’s budget was cut by almost \$5 million in 2011-12, and by “only” \$1.1 million in 2012-13. (Ex. 6342, Ray Dep., at 25-26.) Because the district had several campuses that were overcrowded or needed remodeling, the district withdrew \$2 million from its fund balance to make ends meet in 2011-12 and adopted a deficit budget in 2012-13. (*Id.* at 24-25 (referencing Ex. 1703 at 9-10), 59-60.) Despite withdrawing this money, in order to deal with the budget cuts the district had to implement a salary freeze, make significant personnel cuts – including administrative, teaching, and support staff – reduce the number of days on its staff contracts, increase the number of class-size waivers, reduce stipends for extra assignments taken on by teachers, and adjust its busing schedule (and school start times, accordingly). (Ex. 6342, Ray Dep., at 26-28 (referencing Ex. 1703 at 11).) The district also had to reduce its remedial summer school program to just the grades five and eight – the grades for at which students must pass the standardized test to be promoted to the next grade – thus reducing the amount of quality of intervention the district can provide students who are falling behind and at-risk of failing. (Ex. 6342, Ray Dep., at 28-30 (referencing Ex. 1703 at 12).)
- FOF 748. Prior to tax compression, Duncanville ISD was taxing at the \$1.50 cap for M&O. (Ex. 6342, Ray Dep., at 20 (referencing Ex. 1703 at 8).) Despite that, its target revenue was well below the state average; therefore, after compression, the district immediately accessed the first four golden pennies and raised its rate to \$1.04, where it remains today. (Ex. 6342, Ray Dep., at 20-21.) The district held an unsuccessful TRE in 2008 – just a few weeks after an explosion in gas prices. (*Id.* at 22-23.)
- FOF 749. The district’s I&S tax rate is at 39 cents, making it one of 225 districts in the state that levies an I&S tax above 30 cents. (*Id.* at 36; Ex. 6621 at 13.) The district’s last successful bond election was in 2001, and it has several unmet facility needs, including twelve schools that are at or over capacity, and five science labs and 115 elementary classes that do not meet the minimum TEA square footage requirement. (Ex. 6342, Ray Dep., at 37-39 (referencing Ex. 1703 at 13).) The school board is discussing its need for a TRE to address unmet operational needs *and* a bond election to address unmet facilities needs, but must weigh the needs against each other because “[m]ost taxpayers look at the entire school tax rate, the M&O plus I&S as one number.” (Ex. 6342, Ray Dep., at 39-40.)
- FOF 750. After the first administration of the STAAR-EOC exams, 662 (62%) of Duncanville ISD’s ninth graders failed to achieve the Level II phase-in on at least one of the STAAR-EOC exams. (Ex. 6324, Moak Supp. Report One, at 9.) Looking at the Level II final standard, only 33.4% of Duncanville ISD ninth graders reached the standard in Algebra I, 56.1% in Biology, 45.7% in English I Writing and 59.4% in English I Reading. (Ex. 1703 at 15-22.) After the July retests, Duncanville ISD still had 579 ninth graders, 54%

of the class of 2015, who failed 1,355 tests and were off track for graduation. (Ex. 6324, Moak Supp. Report One, at 9, 29.)

- FOF 751. The results are worse for the 75% of the population who is economically disadvantaged, and Duncanville ISD Superintendent Dr. Alfred Ray testified that it was going to take additional resources directed at targeted interventions to improve these scores. (Ex. 6342, Ray Dep., at 53.) With current resources, Dr. Ray testified, "We may be able to provide better test scores for some kids for a short period of time, but if you want that to be all kids and sustain it, not with the current resources – I don't think that could happen." (*Id.* at 59.)
- FOF 752. Duncanville ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, at the lower phase-in 1 standard, 1348 (64.9%) of Duncanville ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams required for graduation under HB5.<sup>46</sup> (Ex. 6548 at 7.) Seven-hundred eighty-one students failed multiple tests. (*Id.*) As in the first year, the results at the final Level II standard reveal how significantly district performance must improve: just 21% met the final Level II standard in Algebra I, 31% in Biology, 32% in English I Reading, 18% in English I Writing, 22% in English II Writing, and 41% in World History. (Ex. 6575-A at 40-44.) Only 11.2% of Duncanville's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 5.)
- FOF 753. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Duncanville ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

#### **vii. Fort Bend ISD**

- FOF 754. Fort Bend ISD is a Chapter 42 district that covers almost 200 square miles and includes most of Sugar Land and portions of southwest Houston, Missouri City, Pearland, Mission Bend, southwest Houston, and unincorporated areas of Fort Bend County. (Ex. 11323.) It is a growing, residential community. Seventy-eight percent of the district's property wealth is residential. (RR11:63 (referencing Ex. 6353 at 6).)
- FOF 755. It has approximately 69,500 students, an increase of 10,200 students since 2003. (Ex. 6353 at 3.) Fort Bend ISD grew by almost 1,000 students per year between 2003 and 2009, before the economic downturn slowed development in the area. (RR11:59 (referencing Ex. 6353 at 3).) The district built twenty schools over the past ten years, including thirteen elementary schools, three high schools, three middle schools, and an alternative school. (RR11:60.) Fort Bend's Chief Financial Officer, Dr. Tracy Hoke, testified that growth is projected to pick back up as housing developments are completed. (Ex. 6338, Hoke Dep., at 17-18.)

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<sup>46</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

- FOF 756. Fort Bend ISD is a diverse district, with 29.5% African-American students, 26.2% Hispanic students, 21.7% Asian/Pacific Islander students, and 19.5% non-Hispanic White students. (Ex. 6353 at 4.) The district has pockets of wealth and pockets of poverty, with the average home value in Fort Bend ISD neighborhoods ranging from \$68,750 in Arcola Heights to \$794,551 in Sweetwater. (RR11:63 (referencing Ex. 6353 at 5).) Twenty-four percent of Fort Bend ISD residents lack basic literacy skills, and 36% of its households speak a language other than English. (RR11:58 (referencing Ex. 6353 at 2); Ex. 664 at 6.)
- FOF 757. In 2011-12, Fort Bend ISD enrolled 26,267 economically disadvantaged students and 516 homeless students. (Ex. 664 at 5, 8.) That same year, 9,669 of Fort Bend ISD's students were classified as ELL. (*Id.* at 6.) District students speak 100 different languages and dialects. (RR11:58.) The district has taken many steps to meet the resulting need for bilingual teachers, including having its regular education teachers get certified in ESL and even recruiting teachers from overseas and sponsoring them for VISAs, but has still not been able to fill all of its openings for bilingual teachers. (Ex. 6338, Hoke Dep., at 25-27.)
- FOF 758. The student population of Fort Bend ISD is extremely mobile. On any given day of the school year, the district population has a turnover of 300 students. (*Id.* at 19-20.) At some campuses, the population shifts by up to 25% each year. (*Id.* at 20.) The student turnover rate makes it hard for the district to assess and meet the students' needs. (*Id.*)
- FOF 759. Fort Bend ISD was forced to cut its budget by \$23 million in 2010-11, in order to make up for a budget deficit and to find room in the budget to open three new schools. (*Id.* at 49-50.) Then, in 2011-12, the district lost another \$22 million because of the state budget cuts. (*Id.* at 51.)
- FOF 760. Because 87% of the district's budget is in salaries and benefits – including the seven legislatively-mandated salary and benefit increases since 1999 – the district could not absorb the cuts without making personnel cuts. (*Id.* at 39-41 (referencing Ex. 664 at 13-14).) The majority of the district's personnel cuts implemented in Summer 2010 were campus administrators, paraprofessionals and other support staff, “helping teachers,” and secondary teachers. (Ex. 6338, Hoke Dep., at 50-53 (referencing Ex. 664 at 19), 59-61; Ex. 664 at 21-23.) The district was able to implement the cuts so as to maintain its teacher-to-student ratios at the elementary level and in secondary math and science classes. (Ex. 6338, Hoke Dep., at 52-53.) The next year, the district was forced to cut even more secondary teachers and to raise its elementary school class size to 24:1. (*Id.* at 53-54.) The district filed more than 100 class size waivers as a result. (*Id.* at 54.)
- FOF 761. Special education has been a cost-driver for Fort Bend ISD. While the number of special education students in the district is declining, the severity of disability and cost of serving the students has been increasing. (*Id.* at 65-71; Ex. 664 at 26-32.) Special education expenditures regularly outpace the amount of money the district receives for those services. (Ex. 6338, Hoke Dep., at 64-65; Ex. 664 at 25.)

- FOF 762. Projecting forward, Fort Bend ISD does not have room in its budget to increase its staffing to keep pace with enrollment growth, to cover rising health care costs, or to pay for salary increases. (Ex. 6338, Hoke Dep., at 71-73 (referencing Ex. 664 at 33).) Fort Bend ISD's teacher salaries are lower than those of its surrounding districts, and the district regularly has a hard time filling math, science, bilingual, and special education positions. (Ex. 6338, Hoke Dep., at 73-74.)
- FOF 763. The escalating pressure on the district's operating budget has forced the district to issue bonds to pay for its technology and maintenance needs. (RR11:70-71 (referencing Ex. 6353, at 13); Ex. 6338, Hoke Dep., at 74-76.)
- FOF 764. At the time of *WOC II*, and up until tax compression, Fort Bend ISD was taxing at the \$1.50 cap. (RR11:64; Ex. 6353 at 8.) The district accessed the first four "golden pennies" in 2008. (Ex. 6353 at 8.) Fort Bend cannot raise its M&O tax rate any further without holding a TRE. The district has not held a TRE because enrollment growth in the district and the resulting facilities needs (and the maintenance and technology needs discussed *supra*) has forced the district to steadily raise its I&S tax rate, which has increased by eleven cents since 2006. (Ex. 6338, Hoke Dep., at 35-38 (referencing Ex. 664 at 10); Ex. 6353 at 8.) The district has additional bond needs that will cause it to issue more bonds in the near future, and its I&S rate will continue to increase as a result. (RR11:71 (referencing Ex. 6353 at 13).)
- FOF 765. After the first administration of the STAAR-EOC exams, 2,360 (41%) of Fort Bend ISD's ninth graders failed to achieve the Level II phase-in on at least one of the STAAR-EOC exams. (Ex. 6324, Moak Supp. Report One, at 11.) Of those, 1,198 students did not even achieve the minimum score necessary to have their English I Writing score count towards their cumulative score. (Ex. 664 at 36.) Looking at the Level II final standard, only 49% of Fort Bend ISD students reached the standard in Algebra I. Only 29% of economically disadvantaged students and 24% of ELL students reached that benchmark, compared to 60% of non-economically disadvantaged students. (*Id.* at 37.) A similar pattern exists for each of the other subject areas, with non-economically disadvantaged students persistently achieving the Level II final standard at approximately twice the rate of economically disadvantaged students. (*Id.* at 37-41.) After the summer retest, 2,165 (38%) of Fort Bend ISD's Class of 2015 still needed remediation on 4,321 tests and were off-track for graduation. (Ex. 6324, Moak Supp. Report One, at 11, 31.)
- FOF 766. Fort Bend ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, at the lower phase-in I standard, 4,239 (39.4%) of Fort Bend ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams required for graduation under HB5.<sup>17</sup> (Ex. 6548 at 5.) One thousand two hundred twenty-three students failed multiple tests. (*Id.*) As in the first year, the results at the final Level II standard reveal how significantly district

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<sup>17</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

performance must improve: only 34% of Fort Bend's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 3.)

- FOF 767. Under the last five years of the TAKS system, Fort Bend ISD never had more than 1,571 test failures. (Ex. 664 at 42.) The state financing system does not provide funding for the increased remediation efforts and Fort Bend ISD does not have capacity in its budget to pay for such unprecedented levels of remediation. (Ex. 6338, Hock. Dep., at 72, 93-94 (referencing Ex. 664 at 43).)
- FOF 768. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Fort Bend ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

#### viii. Humble ISD

- FOF 769. Humble ISD is a Chapter 42 district located in northeast Harris County and includes the City of Humble and a portion of the City of Houston. (RR3:122; Ex. 11323.) The district has approximately 37,000 students and is considered a fast-growing school district. (RR3:122.) Humble ISD has added about 900 to 1,000 students (about the size of a typical middle school) per year since the *WOC* trial. (RR3:132 (referencing Ex. 6346 at 2).) This continued growth has increased costs each year for the district, just to provide the same level of services. The growth in the number of students requires more teachers, equipment, books and technology, and facilities – sometimes necessitating the construction of new schools. (RR3:132, 137-39, 168.) Since 2004, Humble ISD has opened seven new elementary schools, one new middle school, and three new high schools. (RR3:137.) Voters in Humble ISD have approved three separate bond programs since 2002 to construct these schools.
- FOF 770. Humble ISD, once considered an outer-ring suburban district, has continued to become much more diverse, with increasing urban characteristics. At the time of the *WOC* trial, Humble ISD's student population was 35% minority and 21% low income. (RR3:140 (referencing Ex. 6346 at 3).) In the 2010-2011 school year, for the first time, the minority student population exceeded 50% of the total student population in the district. (RR3:140 (referencing Ex. 6346 at 3).) Moreover, since 2006-07, the economically disadvantaged student population has increased by 36%, and these students now make up more than one-third of the student population in the district. (RR3:141 (referencing Ex. 6346 at 4).)
- FOF 771. At the time of the *WOC II* decision in 2005, Humble ISD was taxing at the then maximum M&O tax rate of \$1.50. (RR3:150 (referencing Ex. 6346 at 6).) After HB1, Humble ISD's tax rate was compressed to \$1.33. (Ex. 6347 at 6.) Despite taxing at the maximum rate prior to compression, Humble ISD's target revenue was set at \$5,400 per WADA, which was below average for the state and below that of several districts in its area. (Ex. 6334, Sconzo Dep., at 30-35; RR3:151-52.) In order to keep up with the costs of growth and competition in the area, Humble ISD Superintendent Dr. Guy Sconzo

testified that the district had no choice but to immediately access the four “golden pennies,” resulting in a tax rate of \$1.37 in 2006-07. Humble ISD’s tax rate was further compressed to \$1.04 in 2007-08. (RR3:151.)

FOF 772. In 2008, Humble ISD held a TRE seeking voter approval to tax at the new maximum tax rate of \$1.17. (RR3:154-55.) Superintendent Sconzo testified that the district had no choice but to seek to tax at the maximum rate in order to keep up with growth, rising costs, and increased state requirements. (RR3:155-56; 166-67.)

FOF 773. By accessing the seventeen cents above its compressed M&O rate of \$1.00 between 2006-07 and 2008-09, Humble ISD was able to generate additional revenue during this time period. (RR3:162 (referencing Ex. 6346 at 7).) Despite these increased revenues, however, because of increased costs and growth, the district was nonetheless forced to begin making cuts during the 2007-08 (\$6.01 million), 2008-09 (\$8.76 million), and 2009-10 (\$4.3 million) school years. (RR3:167-69 (referencing Ex. 6346 at 9).) Finally, in 2011-2012, Humble ISD was forced to make budgetary cuts of \$24.20 million in response to the 2011 legislative cuts of more than \$5 billion statewide. (RR3:169-70.) This single year of cuts exceeded the \$17.9 million raised by Humble ISD through its 2008 TRE. (RR3:169-70 (referencing Ex. 6346 at 10).)

FOF 774. Because Humble ISD had already been making cuts prior to 2011-12, the district could not absorb the \$24.2 million in cuts without impacting classrooms and students. (RR3:170-75.) This included the reduction of more than 170 teachers and resulted in increased class sizes in the district, as well as other reductions that impacted the quality of education the district could provide its students. (*Id.*)

FOF 775. During the years that Humble ISD was able to increase expenditures per student (through 2009-10), it also experienced increases in the performance of its students on the TAKS basic proficiency standard (*i.e.* passing). (RR3:179-80 (referencing Ex. 6346 at 13-16).) However, student performance on passing TAKS leveled off just as the district’s funding levels declined. (RR3:179-80 (referencing Ex. 6346 at 13-16).) More concerning, the district’s performance on reaching the TAKS commended standard, already at a much lower level than its performance on the proficiency standard, has also leveled off. (RR3:180-83 (referencing Ex. 6346 at 14-16).) In 2011, only 38% of Humble ISD’s students met the commended standard on the ELA/Reading exam, while only 32% met that standard on the Math exam. (Ex. 6346 at 15.) Moreover, although only 45% of Humble ISD’s non-economically disadvantaged students scored at the commended level on the ELA/Reading exam, about one-half that percentage, or 23% of the district’s economically disadvantaged students met the standard. (*Id.*) Likewise, only 19% of Humble ISD’s economically disadvantaged students met the commended level on the Math test, while 36% of its non-economically disadvantaged students scored at that level. (*Id.*)

FOF 776. The results from the first year of the new EOC exams, designed to more accurately reflect college and career readiness, reveal a crisis consistent with that demonstrated by the district’s TAKS commended scores. Even at the initial lower phase-in standard, more

than 1,144 Humble ISD students (out of 2,755 students who tested) failed a total of 2,159 tests on the first EOC administration. (*Id.* at 24.)

- FOF 777. Unfortunately, the first round of remediation efforts and first retest opportunity in July barely made a dent in the number of students who now are not on-track toward graduation. After the July retest opportunity, 1,050 students have still failed 1,930 tests. (*Id.* at 25.) Thus, the first round of remediation and retesting has reduced the number of students who are “off track” by less than 10%. (*Id.*) The district must continue to provide remediation to all these students to ensure they pass all of these tests, and must also prepare them for an additional ten EOC exams that they and all other students must pass prior to graduation. (RR3:190-95.) As Dr. Sconzo testified, there is no additional funding available for such remediation efforts. (RR3:195-99.)
- FOF 778. Humble ISD’s student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, at the lower phase-in I standard, 2,164 (39.8%) of Humble ISD’s 9th and 10th graders failed at least one of the STAAR-EOC exams required for graduation under HB5.<sup>48</sup> (Ex. 6548 at 5.) Nine-hundred ninety-one students failed multiple tests. (*Id.*) As in the first year, the results at the final Level II standard reveal how significantly district performance must improve: just 45% met the final Level II standard in Algebra I, 39% in English I Writing, 38% in English II Writing, and 47% in World History. (Ex. 6581-A at 43-47.) Only 32.1% of Humble’s 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 9.)
- FOF 779. This level of crisis is unlike anything experienced by Humble ISD or its students in prior testing programs, including the TAKS test. (RR3:124-127 (referencing Ex. 6346 at 26).) Since 2008, Humble ISD has never had more than 527 students fail more than 900 exit level exams, and the district typically experienced success rates on retests of about 50%. (Ex. 6346 at 26.)
- FOF 780. Dr. Sconzo testified that without required resources to provide effective remediation, more individualized instruction, more tutoring, more instructional time, and other support for these students, there is little hope that they will be able to achieve the standards that now confront all Texas students. (RR3:124-27, 190-99.)
- FOF 781. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Humble ISD lacks sufficient funds to provide a general diffusion of knowledge to its students at its current \$1.17 M&O tax rate. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

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<sup>48</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

### ix. Northside ISD

- FOF 782. Northside ISD is a Chapter 42 district located in northwest San Antonio in Bexar County, and extends out to Bandera and Medina Counties. (RR25:84-85; Ex. 11323.) It covers 354 square miles, and includes urban, suburban, and rural areas. (RR25:84-85.)
- FOF 783. Northside ISD is the fourth largest district in the state, enrolling almost 100,000 students. (Ex. 6438 at 2; Ex. 6345, Folks Dep., at 8-9.) Northside ISD has grown by 25,000 students since *WOC II* and is considered a fast-growth district. (Ex. 6438 at 2; 1RR25:84-85; Ex. 6345, Folks Dep., at 10-11.) As a result of that growth, Northside ISD had to build and open thirty-seven schools from 2002 to 2012, and has had to pass a bond issue approximately every three years. (RR25:84-85, 88-89.) Approximately 60% of the area within Northside's geographic boundaries is developed, leaving room for significant additional growth. (RR25:85.)
- FOF 784. As the population of Northside ISD has grown, it has also become more challenging to educate. (RR25:89-91.) Northside's economically disadvantaged population has grown from 38,091 (46.1%) in 2006-07 to 52,438 (53.4%) in 2011-12. (Ex. 6438 at 3.) The ELL population in Northside ISD, while small, is growing. (*Id.* at 4.) In order to properly serve its changing population of students, Northside ISD has needed to provide additional professional development and technology, and concentrate more teachers and tutors on the campuses with higher percentages of economically disadvantaged students. (RR25:89-92; Ex. 6345, Folks Dep., at 13-15.)
- FOF 785. At the same time that Northside ISD's student population was becoming more challenging and expensive to educate, Northside's revenue was being held to basically its 2006 levels via the target revenue system. (RR25:98.) Northside ISD's revenue was then cut by approximately \$38 million in 2011-12 and by \$47 million in the second year – or an average of \$42.5 million a year. (RR25:103; Ex. 6345, Folks Dep., at 32.) Even before the cuts, Northside ISD was a four-star district under the Comptroller's FAST analysis, having scored in the highest percentile in terms of academic progress with average spending levels. (Ex. 8073.)
- FOF 786. As a result of these cuts, Northside ISD cut each campus's supply budget by 5%, cut each departmental budget by 5%, cut twenty counselors and reduced central office staff by forty-five positions, cut fifty computer instructional technologists, ninety-nine library assistants, and eighteen athletic coaches in an attempt to minimize the number of classroom teachers that were cut. (RR25:105-08; Ex. 6345, Folks Dep., at 34.) However, Northside ISD was still forced to cut 238 teaching positions – eighty-eight elementary teachers, eighty-six middle school teachers, and sixty-four high school teachers. (Ex. 6345, Folks Dep., at 34.) At the same time, Northside grew by more than 2,500 students. (RR25:111 (referencing Ex. 6438 at 8).)
- FOF 787. As a result of the budget and personnel cuts, the district had to increase class sizes and ask for waivers from the 22:1 ratio – a practice it had previously been able to avoid. (RR25:111-12; Ex. 6345, Folks Dep., at 35.) The district also was unable to put extra

teachers and academic coaches into classrooms to act as an academic coach for struggling learners and at-risk students – the very practices that had led to the district’s academic success with its low-income and other challenging student populations. (RR25:108, 109-11; Ex. 6345, Folks Dep., at 35-36.)

FOF 788. Prior to tax compression, Northside ISD was taxing at the \$1.50 cap. (RR25:94 (referencing Ex. 6438 at 5).) The district accessed the first four “golden pennies” in 2008-09. (RR25:94 (referencing Ex. 6438 at 5).) Northside cannot raise its M&O tax rate any further without holding a TRE. The district has not held a TRE because enrollment grown in the district and the continuing bond and facilities needs that result. (RR25:102.) The facilities needs, combined with the loss of state facilities aid, has forced the district to steadily raise its I&S tax rate, which has increased by ten cents since 2008-09. (RR25:94 (referencing Ex. 6438 at 5).)

FOF 789. After the first administration of the STAAR-EOC exams, 3,124 (44%) of Northside ISD’s ninth graders failed to achieve the Level II phase-in on at least one of the STAAR-EOC exams. (Ex. 6324, Moak Supp. Report One, at 6.) Looking at the Level II final standard, only 47% of Northside ISD students reached the standard in Algebra I. (Ex. 6438 at 11.) Only 35% of economically disadvantaged students and 17% of at-risk students reached that benchmark. (*Id.*) In Biology and English I Writing, only 40% of Northside ISD students reached the Level II final standard. (*Id.* at 12, 14.)

FOF 790. After the summer retest, 2,552 (36%) students in Northside ISD’s Class of 2015 were off track for graduation and still needed remediation on 4,916 tests (Ex. 6324, Moak Supp. Report One, at 6, 26.) Under the last seven years of the TAKS system, Northside ISD never had more than 985 students fail 1,600 tests. (Ex. 6438 at 16.)

FOF 791. Northside ISD’s student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, at the lower phase-in I standard, 6,002 (43.8%) of Northside ISD’s 9th and 10th graders failed at least one of the STAAR-EOC exams required for graduation under HB5.<sup>49</sup> (Ex. 6548 at 5.) Two thousand eight hundred forty-five students failed multiple tests. (*Id.*) As in the first year, the results at the final Level II standard reveal how significantly district performance must improve: just 41% met the final Level II standard in Algebra I, 54% in English I Reading, 35% in English I Writing and English II Writing, and 46% in World History. (Ex. 6572-A at 41-45.) Only 27.7% of Northside’s 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 3.)

FOF 792. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Northside ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

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<sup>49</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

x. Waco ISD

- FOF 793. Waco ISD is a Chapter 42 district located in central Texas and serves the city of Waco, the county seat of McLennan County. (Ex. 11323.) Waco maintains a steady enrollment of around 15,300 students. (Ex. 6335, Cain Dep., at 12-13 (referencing Ex. 530 at 2).)
- FOF 794. Waco ISD's student population is almost 88% economically disadvantaged and 89% minority. (Ex. 6335, Cain Dep., at 13-16 (referencing Ex. 530 at 3-4).) The district's Hispanic population is growing, while its non-Hispanic White and African American populations are declining. (Ex. 6335, Cain Dep., at 17-18 (referencing Ex. 530 at 5).) The percentage of students who are ELL is increasing slowly but steadily, up three percentage points in five years to 17.2%. (Ex. 530 at 5.)
- FOF 795. Approximately 30% of Waco ISD's student population is mobile – that is, during the school year, the student moves in and out of the district and/or between attendance zones within the district. (Ex. 6335, Cain Dep., at 18-19 (referencing Ex. 530 at 5).) This population of students is often also living in poverty and, as Waco's superintendent, Dr. Bonny Cain aptly observed, "When you're worried about where your next meal's coming from, are you going to go home and all your stuff's been moved, are you going to go home and all your stuff's been taken, you're not as able to focus on learning as you are whenever your life is very stable and you're confident that you're going to get that next meal." (Ex. 6335, Cain Dep., at 21.) The "only ticket out" of the cycle of poverty for these students is public education, yet the instability of the student's residency translates into instability in their education and lower attendance rates, making it that much harder for the district to intervene in order to reach a struggling student. (*Id.* at 18-24 (referencing Ex. 530 at 6).) Lower attendance rates lead to lower levels of state funding for the district, since FSP funding is based on average daily attendance, further inhibiting the district's ability to reach these students and give them a meaningful opportunity to graduate college or career ready. (Ex. 6335, Cain Dep., at 24.)
- FOF 796. Despite an infusion of federal stimulus funds in 2009-10 and 2010-11, Waco ISD has had to steadily decrease its current services budget since the 2009-10 school year. (*Id.* at 33-34 (referencing Ex. 530 at 11).) The district lost \$3 million in state funds in 2011-12 and \$3.4 million 2012-13. (Ex. 6335, Cain Dep., at 29-30.) This translated into \$230 less per ADA. (*Id.* at 32 (referencing Ex. 530 at 10).) Even before the cuts, Waco had a below state average target revenue, and at the same time that its revenue was declining, Waco ISD's needs were increasing due to rising state standards. (Ex. 6335, Cain Dep., at 33, 38-39.)
- FOF 797. To absorb the cuts, Waco ISD has had to correspondingly steadily reduce its number of teachers. (*Id.* at 47 (referencing Ex. 530 at 14).) In response to the 2011-12 cuts, the district reduced its contribution to employee health insurance, cut stipends for extra duties, cut classroom supplies and materials, postponed vehicle replacements, and reduced travel budgets, and consolidated eight campuses in 2011-12 – all in an attempt to minimize the number of teacher layoffs. (Ex. 6335, Cain Dep., at 35-36 (referencing Ex. 530 at 12), 41-46.) However, in the end, the district still had to make \$1.8 million in staff

reductions, cutting fifty teachers, eleven custodial staff, four central office staff, four campus administrators, two librarians, and one maintenance staff. (Ex. 6335, Cain Dep., at 36-38 (referencing Ex. 530 at 12-13).)

- FOF 798. As a result of the teaching staff cuts, Waco ISD class-sizes rose, thus reducing the amount of individualized attention and communication with parents – strategies that are especially important for the districts largely impoverished student population. (Ex. 6335, Cain Dep., at 47-49.)
- FOF 799. Prior to tax compression, Waco was taxing at \$1.45. (*Id.* at 27 (referencing Ex. 530 at 8).) Upon compression, Waco immediately accessed all six golden pennies and has been taxing at \$1.04 since the 2007-08. (Ex. 6335, Cain Dep., at 27 (referencing Ex. 530 at 8).) Waco cannot raise its tax rate further without a TRE. (Ex. 6335, Cain Dep., at 27-28.) Any money raised from one would be used to help a district that is struggling to meet state standards, and not for enrichment. (*Id.* at 28-29.)
- FOF 800. After the first administration of the STAAR-EOC exams, 753 (78%) of Waco ISD's ninth graders failed to achieve the Level II phase-in on at least one of the STAAR-EOC exams. (Ex. 6324, Moak Supp. Report One, at 17.) On no test did more than 68% of the ninth graders meet the Level I phase-in. (Ex. 530 at 18-20, 22-23.) Looking at the Level II final standard, only the highest score was 23% of all ninth graders meeting Level II final on English I Reading. (*Id.* at 19.) In the other subjects, 11.47% met Level II final in English I Writing, 6.83% in Algebra I, and 12.44% in Biology. (*Id.* at 18, 20, 22-23.) After the summer 2012 retest, 724 (75%) students in Waco ISD's Class of 2015 were off track for graduation and still needed remediation on 1,900 tests. (Ex. 6324, Moak Supp. Report One, at 17, 37.)
- FOF 801. Waco ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, at the lower phase-in I standard, 1,286 (76.5%) of Waco ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams required for graduation under HB5.<sup>50</sup> (Ex. 6548 at 7.) Eight hundred ninety-nine students failed multiple tests. (*Id.*) As in the first year, the results at the final Level II standard reveal how significantly district performance must improve: just 11% met the final Level II standard in Algebra I, 17% in Biology, 20% in English I Reading, 9% in English I Writing, 38% in English II Reading, 11% in English II Writing, and 24% in World History. (Ex. 6587-A at 41-45.) Only 7.1% of Waco's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 9.)
- FOF 802. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Waco ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

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<sup>50</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

**xi. Weatherford ISD**

- FOF 803. Weatherford ISD is a Chapter 41 district that covers more than 200 square miles of Parker County, just west of the Dallas-Fort Worth Metroplex. (Ex. 6337, Hanks Dep., at 11-12; Ex. 641 at 2; Ex. 11323.)
- FOF 804. In 2011-2012 Weatherford ISD enrolled 7,608 students. (Ex. 641 at 3.) From 2006-07 through 2011-12 the district's enrollment increased by about 5%. (Ex. 6337, Hanks Dep., at 12-13; Ex. 641 at 3.) Over the last decade, the rate of growth in student enrollment has been higher than 10%. (Ex. 6337, Hanks Dep., at 13.)
- FOF 805. As has happened throughout Texas, Weatherford ISD has seen significant change in the ethnic and economic background of its students. Minority students now make up more than 27% of the student population. (*Id.* at 15; Ex. 641 at 4, 7.) In addition, economically disadvantaged students now make up almost 45% of the total student body – an increase of more than 20%, or almost 900 students, since 2006. (Ex. 6337, Hanks Dep., at 15-16, 25; Ex. 641 at 5.)
- FOF 806. Because economically disadvantaged students often come to school without the experiences and family support structure of more advantaged peers, Weatherford ISD has seen an increase in the need for resources to help these students be successful at school. This includes, for example, the need for more individualized teaching, which requires smaller class sizes and more teachers and paraprofessionals. (Ex. 6337, Hanks Dep., at 16-18.)
- FOF 807. Weatherford is classified as a property-wealthy district that is subject to recapture payments to the state. (*Id.* at 31.) For the last couple of years, Weatherford has made annual recapture payments of between \$500,000 and \$600,000. (*Id.*) Despite its status as a property-wealthy district, Weatherford ISD's target revenue level after tax rate compression was close to the state average and lower than the target revenue level of many of its peer districts. (*Id.* at 31-32.)
- FOF 808. Prior to tax rate compression, Weatherford ISD had an M&O tax rate of \$1.50, the maximum rate allowed by law at the time. (*Id.* at 27; Ex. 641 at 8.) In 2010, the district held a successful TRE to increase its M&O rate to the \$1.17 cap. (Ex. 6337, Hanks Dep., at 29; Ex. 641 at 8.) The TRE was necessary because of a reduction in state funding and because the district had been forced to use money from its fund balance for construction projects and some operating expenses. (Ex. 6337, Hanks Dep., at 29.) Prior to the TRE, the district had less than two weeks operating expenses in its fund balance. (*Id.* at 29-30.) The TRE raised about \$4 million in annual revenue – approximately the same amount as the state funding cut experienced by Weatherford ISD for each year of the current biennium. (*Id.*) As a "property-wealthy" district, most of Weatherford ISD's revenue is generated locally, so it no longer has any ability to increase revenue through its local M&O tax. (*Id.* at 47-48.)

- FOF 809. Weatherford ISD's per pupil expenditures have been decreasing since 2008-09. (*Id.* at 34; Ex. 641 at 10.) Since 2003, Weatherford ISD has had an increase in student enrollment of 10.9%, yet has decreased personnel by 1.65% because of these reductions. (Ex. 6337, Hanks Dep. at 48; Ex. 641 at 12.)
- FOF 810. Because the reduced spending has required the reduction of personnel, the district has had to eliminate its pre-K program for three-year-olds and increase class sizes at all grade levels, including elementary school, and for programs such as bilingual classes. (Ex. 6337, Hanks Dep., at 35-38.) The district has also had to eliminate several teacher aide positions as well as teacher coaches. (*Id.* at 38-39, 43.) It has had to increase the number of classes taught by teachers and as a result eliminate collaboration time during which teachers used to plan with and learn from one another. (*Id.* at 40-41.) The district has also eliminated ESL teachers who were specifically assigned to provide services to ESL students only; now the homeroom teacher must instruct both ESL and non-ESL students in the general classroom. (*Id.* at 44.) These changes have negatively impacted the ability of teachers in Weatherford ISD to provide support for students, particularly for those who are economically disadvantaged or not proficient in English. (*Id.* at 37-39, 41, 43-45.)
- FOF 811. While the district had been making progress on the met standard level of the TAKS exam, this is not a strong indication of how well-prepared Weatherford ISD students were under the new college and career-ready standards. (*Id.* at 54.) The percentage of the district's students meeting the commended level (a better indication of college or career ready) remained troublingly low, with only 18% of Weatherford ISD students meeting that standard on all tests. (Ex. 643 at 4.)
- FOF 812. After the first administration of the STAAR-EOC exams, 286 (48%) of Weatherford ISD's ninth graders failed to achieve the Level II phase-in standard on at least one of the STAAR EOC exams. (Ex. 6324, Moak Supp. Report One, at 19.) Looking at the Level II final standard, only 30% of Weatherford ISD students reached the standard in Algebra I, 51% in Biology, 35% in English I Writing and 47% in English I Reading. (Ex. 641 at 23.) The results at the Level II final standard are even more disturbing for the district's economically disadvantaged students, only 18% of whom met that standard in Algebra I, 35% in Biology, 22% in English I Writing, and 33% in English I Reading. (*Id.*)
- FOF 813. After the July 2012 retests, Weatherford ISD still had 256 ninth graders, 43% of the class of 2015, who failed 542 tests and were off track for graduation. (Ex. 6324, Moak Supp. Report One, at 19, 38.)
- FOF 814. Weatherford ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, at the lower phase-in I standard, 467 (43.4%) of Weatherford ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams required for graduation under HB5.<sup>51</sup> (Ex. 6548 at 9.) Two hundred sixty-one students failed multiple tests. (*Id.*) As in the first year, the results at

<sup>51</sup> This analysis uses passing rates on sophomore-level World History as a proxy for junior-level United States History.

the final Level II standard reveal how significantly district performance must improve: just 29% met the final Level II standard in Algebra I, 51% in English I Reading, 36% in English I Writing, 37% in English II Writing, and 41% in World History. (Ex. 6572-A at 32-36.) Only 28.1% of Weatherford's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 7.)

FOF 815. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Weatherford ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

**b. Calhoun County ISD Plaintiff districts**

**i. Richardson ISD**

FOF 816. Richardson ISD is a Chapter 41 district that is located primarily in Dallas, but the district also covers portions of the cities of Richardson and Garland. (RR4:210-11 (referencing Ex. 5343 at 2); Ex. 11323 (2012 spreadsheet).)

FOF 817. Richardson ISD serves approximately 38,000 students. (RR4:212.) The district has rapidly grown in recent years, adding about 1,000 new students in both 2011-12 and 2012-13. (Ex. 5616, Waggoner Dep., at 9; Ex. 892-W at p. 2 of PDF.)

FOF 818. Hispanic students represent the largest ethnic group in Richardson ISD, comprising about 39% of the district's student population. (Ex. 5616, Waggoner Dep., at 10-11 (referencing Ex. 892-W at 2).) African American students comprise 23% of the student population, and White students comprise only 28%. (Ex. 5616, Waggoner Dep., at 11 (referencing Ex. 892-W at 2).)

FOF 819. The percentage of economically disadvantaged students in Richardson ISD has steadily increased over time. (RR4:222-23 (referencing Ex. 5343 at 14).) From 2004-05 to 2011-12, the district's economically disadvantaged student population increased from 45% to 57%. (RR4:222-23 (referencing Ex. 5343 at 14).)

FOF 820. The percentage of ELL students in Richardson ISD has also grown each year from 2004-05 to 2011-12. (RR4:224-25 (referencing Ex. 5343 at 16).) In 2011-12, almost one-fourth of Richardson ISD's student population was ELL. (RR4:224-25 (referencing Ex. 5343 at 16).) Ninety-three languages and dialects are spoken in Richardson ISD. (RR4:212.)

FOF 821. From 2010-11 to 2011-12, Richardson ISD's budgeted operating fund revenues dropped from \$255.7 million to \$246.5 million. (Ex. 5616, Waggoner Dep., at 23 (referencing Ex. 901-W).) Richardson ISD also lost funding from other federal, state, and local grant programs outside the operating fund. (Ex. 5616, Waggoner Dep., at 24 (referencing Ex. 901-W).) For example, in 2011-12, the State eliminated the district's SSI grants and

reduced Richardson ISD's DATE grants by \$1.7 million from the previous year. (Ex. 5616, Waggoner Dep., at 50-51 (referencing Ex. 917-W).)

- FOF 822. Richardson ISD's budgeted operating fund revenues per ADA and operating fund revenues per WADA were lower in 2011-12 and 2012-13 than in any of the five preceding years, even before adjusting for inflation. (RR5:15-16 (referencing Ex. 5343 at 36).)
- FOF 823. Adjusting for inflation, Richardson ISD's operating fund revenues per ADA dropped from \$7,438 in 2006-07 to \$6,110 in 2012-13. (RR5:17-18 (referencing Ex. 5343 at 37).) The district's inflation-adjusted operating fund revenues per WADA decreased during this same time period from \$5,661 to \$4,632. (RR5:17-18 (referencing Ex. 5343 at 37).)
- FOF 824. Similar to its revenues, Richardson ISD's budgeted Operating Fund appropriations per ADA and per WADA were lower in 2011-12 and 2012-13 than in any year from 2006-07 through 2010-11, even without adjusting for inflation. (Ex. 5616, Waggoner Dep., at 30 (referencing Ex. 909-W).)
- FOF 825. State funding to Richardson ISD decreased by a total of \$21.7 million in 2011-12 and 2012-13 compared to what would have been received under previous law. (RR4:247.)
- FOF 826. In 2011-12, Richardson ISD slashed \$5.6 million from its budget in response to the State's budget cuts. (Ex. 5616, Waggoner Dep., at 35 (referencing Ex. 914-W).) Richardson ISD reduced expenditures associated with Saturday school, professional development, and secondary summer school. (Ex. 5616, Waggoner Dep., at 37-38.) The district also reduced its number of instructional specialists, who offer remediation in reading and math. (*Id.* at 38.) Each department was also required to reduce its budget. (*Id.* at 38-39.) Richardson ISD's superintendent, Dr. Kay Waggoner, testified that these cuts adversely affected the district's ability to provide quality instruction. (*Id.* at 37-39.)
- FOF 827. In 2011-12, Richardson ISD froze the salaries of every employee in the district and reduced starting salaries for teachers. (RR4:252.) The district kept its total number of teachers flat in 2011-12, and added only twenty-four teaching positions in 2012-13, even though the student population grew by 1,000 during each of these two years. (RR4:255-56.)
- FOF 828. The cuts described above occurred at the same time that Richardson ISD was facing rapid student growth, increasing percentages of economically disadvantaged and ELL student populations, and the first administration of the STAAR exam under high stakes conditions. (Ex. 5616, Waggoner Dep., at 28-29.)
- FOF 829. Because the district did not hire new teachers to keep up with enrollment growth, average class sizes increased at both the elementary and secondary levels. (RR4:256.) In 2011-12, Richardson ISD requested 268 class size waivers, and in 2012-13 it requested 291 class size waivers – significantly more than it had requested at any time during the past decade. (RR4:257-58 (referencing Ex. 5343 at 34).) The overwhelming majority of the

district's class size waivers were for financial hardship. (RR4:258.) Dr. Waggoner testified that she believes the district had no realistic alternative than to request these class size waivers. (RR4:261.)

- FOF 830. According to Dr. Waggoner's testimony, possible uses of additional funds would be to hire more teachers, reduce class sizes, provide cost of living salary adjustments for teachers and staff, implement a full-day pre-K program to address the needs of low-income and ELL students, offer additional remediation and interventions to address deficiencies in student performance, add support programs at early ages for students, and use funds to target the career and college-readiness standards. (Ex. 5616. Waggoner Dep., at 63-65; RR4:232-34; RR5:30-33, 42-43.)
- FOF 831. Richardson ISD's M&O tax rate is currently \$1.04. (Ex. 5616. Waggoner Dep., at 52.) If Richardson ISD raised its M&O tax rate to \$1.06, the additional two pennies would not be subject to recapture, but would raise only \$3 million in revenue, compared to the \$21.7 million that the district lost in state funding. (*Id.* at 53.) Any additional taxation above \$1.06 would be subject to recapture at a 20% rate. (*Id.* at 52, 56.) Dr. Waggoner testified that she believes the voters of Richardson ISD are unlikely to approve a TRE to increase the M&O tax rate in the near future. (*Id.* at 52, 53-54, 56; RR5:36-38.) Even if voters were to approve an increase to \$1.17, the additional revenue generated would barely be sufficient to restore the district to its pre-budget cut levels. (RR5:41-42.)
- FOF 832. After the first administration of the STAAR exam, 47% of Richardson ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (RR4:237; Ex. 6324, Moak Supp. Report One, at 9.) Scores were particularly low on the English I Writing and English I Reading EOCs. Only 40% of ninth-graders achieved the Level II final standard on English I Writing, and only 52% did so on English I Reading. (RR4:231-32 (referencing Ex. 5343 at 24.)) Only 5% of students achieved Level III on English I Writing and 10% did so on English I Reading. (RR4:235 (referencing Ex. 5343 at 25.)) After the 2012 summer retake, 37% of ninth graders – which represents 966 students – still had not passed at least one EOC exam at the initial phase-in level and were not on track to graduate. (RR4:237-38; Ex. 6324, Moak Supp. Report One, at 9.)
- FOF 833. Richardson ISD students did not fare better on the STAAR EOC exams in 2013. (*Compare* Ex. 5301 with Ex. 5718.) In fact, a lower percentage of students achieved the Level II final standard on Algebra I, English I Writing, and World Geography in Spring 2013 compared to Spring 2012. (*Compare* Ex. 5301 at pgs. 24, 29-30 of PDF with Ex. 5724 at pgs. 42, 45-46 of PDF.)
- FOF 834. Richardson faces greater challenges today than it has in the past – including the more rigorous STAAR EOC assessment system – even as its financial resources are diminishing. (RR4:221-28.) Richardson ISD has been required to increase class sizes, and consequently to seek class size waivers. (*See supra* FOF 829.) It must attempt to prepare students to pass the more rigorous STAAR program. During this time, the district's economically disadvantaged and ELL student populations have been growing.

(Ex. 5616, Waggoner Dep., at 45.) Richardson ISD has no immediate means to generate significant additional revenue to meet these challenges.

- FOF 835. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Richardson ISD lacks sufficient funds to provide a general diffusion of knowledge to its students at its current \$1.04 M&O tax rate and would remain inadequately funded even if it raised its tax rate to \$1.17. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

**ii. Calhoun County ISD**

- FOF 836. Calhoun County ISD is a chapter 41 district located along the coast of the Gulf of Mexico, just east of Victoria. (Ex. 11323 (2012 spreadsheet); RR12:10-11.) Calhoun County ISD's classification as a Chapter 41 district results from the industrial facilities in the district, and not from residential property values. (RR12:12.) In other words, the district is "industry rich," but "rooftop poor." (*Id.*)
- FOF 837. Calhoun County ISD currently serves about 4,250 students. (RR12:12-13.) Sixty percent of Calhoun County ISD's student population is Hispanic. (RR12:13 (referencing Ex. 5143 at 4).)
- FOF 838. The percentage of economically disadvantaged students in Calhoun County ISD increased from 56% in 2006-07 to 64% in 2010-11, and has increased further since then. (Ex. 5618, Wiggins Dep., at 13 (referencing Ex. 692).)
- FOF 839. Calhoun County ISD's budgeted operating fund revenues decreased from \$33.1 million in 2010-11 to \$32.4 million in 2012-13. When other federal, state, and local grants are included, the district's total available revenues dropped even further. (Ex. 5618, Wiggins Dep., at 27-28 (referencing Ex. 703).) Calhoun County ISD's budgeted operating fund revenues per ADA and per WADA have decreased continually from 2009-10 to 2012-13. (Ex. 5618, Wiggins Dep., at 27 (referencing Ex. 702).)
- FOF 840. Adjusting for inflation, Calhoun County ISD's budgeted operating fund revenues per WADA have decreased every year since 2006-07, with the exception of 2007-08. (Ex. 5618, Wiggins Dep., at 28-30; (referencing Ex. 704).) In 2006-07, the district's inflation-adjusted operating fund revenues per WADA were \$6,062, compared to \$5,554 in 2011-12 and \$5,380 in 2012-13. (Ex. 5618, Wiggins Dep., at 28 (referencing Ex. 704).)
- FOF 841. State funding to Calhoun County ISD decreased approximately \$4 million in 2011-12 compared to what would have been received under previous law. (Ex. 5618, Wiggins Dep., at 24.) In addition, the district received State Fiscal Stabilization Funds in 2009-10 and 2010-11, and ARRA stimulus funds in 2009-10, but did not receive these funds in later years. (*Id.* at 22-24.) The district was able to partially offset this lost revenue through increased local revenues, but was still required to cut about \$2 million from its budget from 2010-11 to 2011-12. (*Id.* at 24-25.)

- FOF 842. Calhoun County ISD achieved \$2 million in budget cuts from 2010-11 to 2011-12 by, among other things: (1) closing an elementary school, which caused student-teacher ratios at other elementary schools to increase, (2) eliminating various programs at the high school level, including career training programs such as auto tech and cosmetology, (3) eliminating a middle school remediation program, (4) eliminating a junior high band program, and (5) eliminating twenty-five auxiliary positions. (*Id.* at 43-48 (referencing Ex. 712); RR12:13-15.) Calhoun County ISD also effectively froze salaries in 2011-12 and 2012-13. (Ex. 5618, Wiggins Dep., at 50-51.) Calhoun County ISD's superintendent, William Wiggins, testified that these cuts negatively impacted the district's ability to educate its students. (*Id.* at 48-49.)
- FOF 843. Calhoun County ISD also reduced its number of teachers by about twenty-four from 2010-11 to 2012-13, which caused class sizes to increase. (*Id.* at 51-52 (referencing Ex. 713).) As of the time of Mr. Wiggins's deposition, the district anticipated needing class size waivers for its elementary schools in 2012-13. (Ex. 5618, Wiggins Dep., at 53.)
- FOF 844. Calhoun County ISD's M&O tax rate is \$1.04. (*Id.* at 68.) If Calhoun County ISD raised its M&O tax rate above \$1.04, it would owe approximately half of the additional revenue to the state in the form of recapture. (RR12:20 (referencing Ex. 5143 at 7).) For example, if the district raised its M&O tax rate to \$1.17, it would retain an additional \$2.2 million in revenue, but would owe an additional \$1.9 million to the state in recapture. (RR12:20 (referencing Ex. 5143 at 7).) Mr. Wiggins testified that he believes it would be impossible to pass a TRF, in large part because of the additional recapture that would be owed. (Ex. 5618, Wiggins Dep., at 68-73; RR12:21-22.)
- FOF 845. Mr. Wiggins testified that Calhoun County ISD has no means to obtain additional revenue, except through additional state funding. (Ex. 5618, Wiggins Dep., 76.) The district's M&O tax rate of \$1.04 is currently both a floor and a ceiling, in that the district cannot lower its M&O tax rates, but also cannot pass a TRE to raise the tax rate. (RR12:23.)
- FOF 846. After the first administration of the STAAR exam, forty-seven percent of Calhoun County ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 7.) Only 48% of students achieved the Level II final standard on English I Reading, 41% did so on English I Writing, and 47% did so on World Geography. (RR12:24 (referencing Ex. 5143 at 9).) Only 7% met the Level III standard on English I Reading and 4% achieved Level III on English I Writing. (RR12:24 (referencing Ex. 5143 at 10).) After the 2012 summer retake, 40% of ninth graders still had not passed at least one EOC exam at the initial phase-in level and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 7.)
- FOF 847. Student performance on STAAR significantly decreased from Spring 2012 to Spring 2013 in Calhoun County ISD. During this period, the percentage of students reaching the Level II final standard decreased on all five of the exams required for graduation (with World Geography as a proxy for U.S. History). (*Compare* Ex. 714 at pgs. 1-5 of PDF *with* Ex. 5715 at pgs. 39-43 of PDF.) For example, the percentage of students achieving

the Level II final standard dropped by eleven percentage points on English I Reading and by eleven percentage points on English I Writing from Spring 2012 to Spring 2013. (*Compare* Ex. 714 at pgs. 3, 5 of PDF with Ex. 5715 at pg. 41-42 of PDF.)

- FOF 848. Calhoun County ISD's passing rates on the Spring 2012 STAAR EOC exams at the Level II final standard are significantly lower than the district's passing rates have historically been on TAKS. (Ex. 5618, Wiggins Dep., at 57, 66-67.)
- FOF 849. Like other districts, Calhoun County ISD's funding decreased at the same time the State imposed the more rigorous STAAR examinations. (*Id.* at 60-61.) Mr. Wiggins testified that additional funding is essential for Calhoun County ISD to reach the new expectations of the STAAR system. (*Id.* at 67.) Calhoun County ISD will require significantly more resources to train teachers and administrators so they can prepare students for the STAAR EOC exams. (*Id.* at 59-60; RR12:28-29.) The district also requires resources to remediate students who fail the exams. (Ex. 5618, Wiggins Dep., at 65.) During the Summer of 2012, the district provided a STAAR remediation program for sixty students, which it was required to fund from its local budget. (*Id.* at 61-62.)
- FOF 850. In addition to preparing students for STAAR, the district faces a number of other significant challenges. During the 2007 school year, approximately 100 Burmese refugees moved into Calhoun County ISD. (*Id.* at 32-33.) These students did not speak any English, and required significant additional resources to educate. (*Id.* at 32-34.) Many Burmese refugee students remain in the district and still present a great challenge to educate. (*Id.* at 34.)
- FOF 851. Other challenges arise as a result of Calhoun County ISD's location along the coast. Because of its location, the district must pay for windstorm and flood insurance, which raises its insurance costs above those of similarly sized districts. (RR12:16-17.) The district's costs to maintain buildings are also higher as a result of its coastal climate. (RR12:17.) The State does not provide any additional assistance to the district to help with these costs. (RR12:17-18.)
- FOF 852. Calhoun County ISD covers more than 1,000 square miles and is one of the largest districts in Texas geographically. (RR12:11.) As a result, its transportation costs are higher than those of other districts. (RR12:17.) The district spends approximately \$2 million per year on transportation, but receives only \$300,000 from the state to assist with transportation costs. (*Id.*)
- FOF 853. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Calhoun County ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

### iii. Lewisville ISD

- FOF 854. Lewisville ISD is a Chapter 41 district located in a suburb of Dallas. (Ex. 5615, Waddell Dep., at 69; Ex. 11323 (2012 spreadsheet).) There are sixty-three schools in Lewisville ISD. (Ex. 5615, Waddell Dep., at 10.)
- FOF 855. Lewisville ISD currently educates approximately 52,000 students. (*Id.*) Lewisville ISD's student population has grown at a rapid rate. The district's student population increased by about 700 in 2011-12 and by 1,000 in 2012-13. (*Id.*)
- FOF 856. Lewisville ISD's budgeted operating fund revenues decreased by approximately \$20 million from 2010-11 to 2011-12, and by an additional \$3 million in 2012-13. (Ex. 5615, Waddell Dep., at 15-16 (referencing Ex. 756).) This represents nearly a 6% decrease from 2010-11 to 2012-13. The percent decrease in Lewisville ISD's operating fund revenues, combined with its revenues from federal, state, and local grants, was even greater. (Ex. 5615, Waddell Dep., at 16 (referencing Ex. 757).)
- FOF 857. Lewisville ISD's budgeted operating fund revenues per ADA and per WADA sharply declined in 2011-12, and then further declined in 2012-13. (Ex. 759.) The same per-ADA and per-WADA trends result when federal, state, and local grants are added to the district's budgeted operating fund revenues. (Ex. 5615, Waddell Dep., at 19 (referencing Ex. 760).)
- FOF 858. Adjusting for inflation, Lewisville ISD's operating fund revenues per ADA and per WADA are lower in 2011-12 and 2012-13 than in any year from 2006-07 through 2010-11. (Ex. 5615, Waddell Dep., at 20 (referencing Ex. 761).) The district's inflation-adjusted budgeted operating fund revenues per ADA were \$7,187 in 2006-07; \$6,808 in 2011-12; and \$6,585 in 2012-13. (Ex. 761.) Lewisville ISD's budgeted per-ADA and per-WADA revenues from the operating fund – combined with other federal, state, and local grants – show a similar pattern. (Ex. 5615, Waddell Dep., at 22 (referencing Ex. 763).)
- FOF 859. Similarly, the district's inflation-adjusted, budgeted operating fund appropriations are lower in 2011-12 and 2012-13 on a per-ADA and per-WADA basis than in any of the preceding five years. (Ex. 5615, Waddell Dep., at 23 (referencing Ex. 765).)
- FOF 860. Lewisville ISD reduced its general operating budget by about \$18 million from 2010-11 to 2011-12. (Ex. 5615, Waddell Dep., at 27-28 (referencing Ex. 768 at 1).) Among other things, Lewisville ISD (1) reduced its number of teachers by about sixty at the same time its ADA increased by nearly 350, (2) provided an incentive for teachers to retire or resign, (3) increased class sizes to an average of twenty-two students in kindergarten through fourth grade, which required the district to obtain twenty-seven class size waivers, and (4) cut support services such as a reading recovery program that provided reading intervention for early childhood. (Ex. 5615, Waddell Dep., at 24-25 (referencing Ex. 767), 31-34.) The district's superintendent, Dr. Stephen Waddell, testified that Lewisville ISD had no realistic choice but to make these cuts, and that they have

negatively affected teaching and learning in the district. (Ex. 5615, Waddell Dep., at 31, 34-35.)

- FOF 861. Lewisville ISD has budgeted a deficit for the last several years. (*Id.* at 37.) In 2012-13, the district budgeted a \$22 million deficit, despite having cut \$18 million from its budget the previous year. (*Id.* at 37-38.)
- FOF 862. Lewisville ISD pays its teachers the salaries that are necessary to be competitive with other districts in the area. (*Id.* at 151.)
- FOF 863. Lewisville ISD's M&O tax rate is \$1.04. (*Id.* at 35.) The district held a TRE in September 2010 in an effort to raise the M&O tax rate from \$1.04 to \$1.06. (*Id.* at 36-37.) The TRE failed by a margin of two-to-one. (*Id.* (referencing Ex. 769).) Considering the widespread opposition to this TRE, the district cannot expect to raise its M&O tax rate above \$1.04 at any time in the near future. (Ex. 5615, Waddell Dep., at 36-37, 81.)
- FOF 864. One-third of Lewisville ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam after the first administration of the exams. (Ex. 6324, Moak Supp. Report One, at 9.) Passage rates at the Level II final standard ranged from 53% to 64% on each of the EOC exams on the first administration. (Ex. 770 at 25, 27, 29-31.) Only 12% of students met the Level III standard on English I Reading and 6% of students did so on English I Writing. (*Id.* at 9, 15.) After the second administration of the exam, 30% of ninth graders still had not passed at least one EOC exam at the initial phase-in standard. (Ex. 6324, Moak Supp. Report One, at 9.)
- FOF 865. Lewisville ISD students made little, if any, progress on the STAAR exams in 2013 compared to 2012. A lower percentage of students achieved the Level II final standard on Algebra I and English I Writing in Spring 2013 than in Spring 2012. (*Compare* Ex. 770 at pgs. 25, 30 of PDF *with* Ex. 5717 at pgs. 43, 46 of PDF.) The percentage of students reaching this level on the other exams required for graduation (with World Geography as a proxy for U.S. History) did not improve in any meaningful way from Spring 2012 to Spring 2013. In Spring 2013, only about two-thirds of students reached the Level II final standard on the remaining three exams required for graduation. (*Compare* Ex. 770 at pgs. 27, 29, 31 of PDF *with* Ex. 5717 at pgs. 44-47 of PDF.)
- FOF 866. Lewisville ISD students' passing rates on the STAAR EOC exams at the Level II final standard in the Spring of 2012 are lower than they have been on the TAKS exam in recent years. (Ex. 5615, Waddell Dep., at 44.)
- FOF 867. Dr. Waddell testified that Lewisville ISD's costs will significantly increase under the new STAAR regime. (*Id.* at 46-47.) The district anticipates that the number of students in summer school will double as a result of STAAR, and its costs to remediate students who fail to meet the necessary standards on the STAAR exams will also double. (*Id.* at 47-48.) These costs are in addition to the costs needed to improve regular classroom education designed to help students pass the exams in the first place. (*Id.* at 48.) Dr.

Waddell testified that the State is now requiring more of students, teachers, and administrators than before, and the resources provided to Lewisville ISD have not kept pace with these increased demands. (*Id.* at 49-50.)

- FOF 868. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Lewisville ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

#### iv. Aransas County ISD

- FOF 869. Aransas County ISD is a Chapter 41 district located along the Gulf of Mexico, near Corpus Christi. (Ex. 11323 (2012 spreadsheet); Ex. 5669 at 24.) There are five campuses in Aransas County ISD. (Ex. 5614, Patek Dep., at 10.)
- FOF 870. Aransas County ISD currently educates about 3,150 students. (*Id.* at 11.) The population of economically disadvantaged students in Aransas County ISD has grown from approximately 48% in 2001 to about 65% in 2011. (*Id.* at 11-12 (referencing Ex. 300).)
- FOF 871. Aransas County ISD's budgeted operating fund revenues have decreased more than \$800,000, or nearly 3%, from 2006-07 to 2012-13, before adjusting for inflation. (Ex. 304.)
- FOF 872. The district's budgeted operating fund revenues per ADA are approximately the same in 2012-13 as they were in 2006-07, even without accounting for inflation. (Ex. 306.) Adjusting for inflation, the district's budgeted operating fund revenues per ADA have decreased from \$9,669 in 2006-07, to \$8,662 in 2011-12, and to \$8,511 in 2012-13. (Ex. 307.) The district suffered this loss at the same time the percentage of economically disadvantaged students in the district was growing. (Ex. 5614, Patek Dep., at 26-27.)
- FOF 873. In 2011-12, Aransas County ISD was required to cut \$2.3 million from its operating fund budget as a result of the State's budget cuts. (*Id.* at 28-30.) Among other things, the district (1) cut various teaching positions, (2) discontinued extended class periods for middle school Math and English-Language Arts students, (3) discontinued its middle school intervention program, and (4) cut teaching and aide positions in its special education inclusion program. (*Id.* at 31-39 (referencing Ex. 309).) In addition to these cuts, Aransas County ISD also cut campus and department operating budgets by at least 15% and froze salaries and wages for all employees. (Ex. 5614, Patek Dep., at 31-32 (referencing Ex. 309), 37-38.)
- FOF 874. As a result of these cuts, Aransas County ISD reduced its full time equivalent count by a total of twenty-five. (Ex. 5614, Patek Dep., at 39.) Aransas County ISD's elementary school classes are all at or near the limit of twenty-two students. (*Id.* at 58-59.) Some of Aransas County ISD's middle school and high school classes have up to thirty-eight students. (*Id.* at 58.)

- FOF 875. Aransas County ISD pays its teachers salaries that are often lower than – but at most competitive with – surrounding districts and districts with which it competes for teachers. (*Id.* at 41-42.)
- FOF 876. According to Mr. Patek, potential uses of additional funds, if they were available, would include replacing previously cut teacher positions, instituting a full-day pre-K program, and applying funds toward career and technology programs to help students prepare for employment immediately after high school. (*Id.* at 56, 58-59.)
- FOF 877. Aransas County ISD is unable to raise additional revenue without a TRE. (*Id.* at 44.) Aransas County ISD's M&O tax rate is currently \$1.04. (*Id.*) Mr. Patek testified that voters would be unlikely to approve an M&O tax rate above \$1.04, because approximately 50% of the additional revenue would be subject to recapture. (Ex. 5614, Patek Dep., at 45, 198-99.) As a practical matter, Aransas County ISD cannot raise its M&O tax rate above \$1.04 to generate additional local revenue. (Ex. 5614, Patek Dep., at 50.)
- FOF 878. Even if Aransas County ISD could raise its M&O tax rate to \$1.17, it would only generate approximately \$1.2 to \$1.3 million in revenues, compared to the \$2.3 million it was required to cut from its budget. (*Id.* at 80–81.) As a result, if Aransas County ISD could raise its M&O tax rate to \$1.17, the additional revenue would not be used to provide local enrichment, but would only be used to restore some of the items previously cut from its budget. (*Id.* at 81.)
- FOF 879. From the 2006-07 to 2010-11 school years, performance on the TAKS exam by Aransas County ISD students has, at best, remained stagnant. (*Id.* at 1317 (referencing Ex. 301, Ex. 302).) Moreover, the ratings of Aransas County ISD's schools have declined in recent years. In the last year that a rating was given, the district's ratings declined from two exemplary and two recognized campus ratings to two recognized and two acceptable campus ratings. (Ex. 5614, Patek Dep., at 17.) For the last couple of years, Aransas County ISD has failed to meet the adequate yearly progress required by the No Child Left Behind Act. (*Id.* at 20.) Considering the district's performance on TAKS and the AYP, Mr. Patek testified that student performance improved somewhat from 2007 through 2010, but then started to decline, particularly in reading and writing. (*Id.* at 20-21.)
- FOF 880. After the first administration of the STAAR exam, 61% of Aransas County ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 5.) Only 12% of Aransas County ISD's ninth graders met the Algebra I Level II final standard. (Ex. 5614, Patek Dep., at 54-55 (referencing Ex. 312).) Only 0.4% of ninth graders (*i.e.*, one student) met the Level III standard for English I Writing and 3% did so for English I Reading. (Ex. 5614, Patek Dep., at 54-55.) After the summer retake, 48% of ninth graders still had not passed at least one EOC exam at the initial phase-in standard and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 5.)

- FOF 881. Performance on STAAR remained unacceptably low in 2013. Only about one-quarter of students reached the Level II final standard on Algebra I and English I Writing, just over one-third reached this level on World Geography, and only about one-half of students reached this level on English I Reading and Biology. (Ex. 5714 at pgs. 30-34 of PDF.)
- FOF 882. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Aransas County ISD lacks sufficient funds to provide a general diffusion of knowledge to its students at its current \$1.04 M&O tax rate or at the statutory maximum of \$1.17. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

**v. Abernathy ISD**

- FOF 883. Abernathy ISD is located eighteen miles north of Lubbock. (Ex. 5613, Youngblood Dep., at 8.) Abernathy ISD became a Chapter 41 district in 2009. (*Id.* at 7-8; Ex. 11323 (2012 spreadsheet).)
- FOF 884. There are three campuses in Abernathy ISD – one elementary school, one middle school, and one high school. (Ex. 5613, Youngblood Dep., at 9.)
- FOF 885. Abernathy ISD educates approximately 750 students. (*Id.*) About 60% of Abernathy ISD's students are economically disadvantaged, 57% are Hispanic, and 40% are at-risk. (*Id.* at 9-10.) The percentage of economically disadvantaged and Hispanic students in Abernathy ISD has increased over time. (*Id.* at 10; Ex. 5669 at 18.)
- FOF 886. Adjusted for inflation, Abernathy ISD's budgeted operating fund revenues per ADA dropped from \$9,704 in 2010-11 to \$9,216 in 2011-12, which represents about a 5% decrease. (Ex. 877.) Its inflation-adjusted budgeted operating fund revenues per WADA fell from \$6,161 in 2010-11 to \$5,894 in 2011-12, which represents a 4.3% reduction. (Ex. 5613, Youngblood Dep., at 41-42 (referencing Ex. 877).) The decrease in funding is even greater when operating fund revenues are considered together with other federal, state, and local grants. (Ex. 5613, Youngblood Dep., at 43 (referencing Ex. 878).)
- FOF 887. Abernathy ISD responded to the State's 2011 budget cuts by, among other things, (1) reducing its full-day pre-K program to a half-day program, (2) cutting about \$400,000 in capital outlay expenses, (3) not replacing an elementary teacher and a fine arts teacher, and (4) cutting central administration. (Ex. 5613, Youngblood Dep., at 23, 54-55.)
- FOF 888. Abernathy ISD's superintendent, Mr. Youngblood, testified that if Abernathy ISD were forced to make additional cuts, it would be required to cut staff and elementary teachers, which would impair the district's ability to prepare students for middle school and high school. (*Id.* at 55-56.)
- FOF 889. Abernathy ISD staffs its schools and central office leanly. One employee of Abernathy ISD serves as the curriculum director, district testing coordinator, and head of the GT program, ESL program, dual college credit program, and high school summer school

program. (*Id.* at 15-16 (referencing Ex. 871).) Another individual currently functions as secretary to the superintendent, federal programs clerk, and PEIMS coordinator. (Ex. 5613, Youngblood Dep., at 14.) When this individual planned to retire at the end of 2012, the district planned to spread her duties among current employees, instead of hiring a new employee to fulfill her responsibilities. (*Id.* at 14-15.) Abernathy ISD's elementary school assistant principal also serves as the cafeteria manager, custodian supervisor, and federal programs coordinator. (*Id.* at 21.)

- FOF 890. Abernathy ISD pays its teachers only \$2,000 above the state minimum salary. (*Id.* at 19.) This salary is significantly lower than the salary paid in nearby Lubbock and is on target with the salaries paid by other districts of similar size to Abernathy ISD. (*Id.*)
- FOF 891. Potential uses of additional funding, according to Mr. Youngblood, include reinstating the district's full-day pre-K program, which primarily serves low socioeconomic, special education, ELL, and migrant students; and hiring a math specialist at the middle school, which recently failed to meet AYP based on its math scores. (*Id.* at 23, 56-57.)
- FOF 892. In the Fall of 2005, Abernathy ISD passed a TRE to rate its M&O tax rate to \$1.17. (*Id.* at 10-11.) When the voters of Abernathy ISD approved the TRE, the district was not yet paying recapture. (*Id.* at 12.) In 2012-13, approximately one-third of Abernathy ISD's tax revenue from \$1.04 to \$1.17 will be recaptured by the State. (*Id.*)
- FOF 893. After the budget cuts, the district attempted to balance its budget in a way that would not require it to use the full \$1.17 of taxation, but it was unable to do so. (*Id.* at 12-13.)
- FOF 894. After the first administration of STAAR, 47% of Abernathy ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 12.) At the Level II final recommended standard, only 22% of students passed World Geography and 41% passed English I Writing and Biology. (Ex. 881 at 12-13, 15-16.) Only 4% of students met the Level III standard for Biology, 6% did so on English I Writing, and no students met the standard on World Geography. (*Id.* at 4, 8, 10.) After the summer retake, 44% of ninth graders still had not passed at least one EOC exam at the initial phase-in level and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 12.)
- FOF 895. Abernathy ISD students continued to struggle on the STAAR exams in 2013. The percentage of students reaching the Level II final standard on English I Writing dropped by a remarkable twenty-two percentage points from Spring 2012 to Spring 2013 (with only 19% of students reaching this level in Spring 2013 compared to 41% percent during the previous year). (*Compare* Ex. 881 at pg. 15 of PDF *with* Ex. 5713 at pg. 32 of PDF.) The percentage of students reaching the Level II final standard dropped by twelve percentage points on English I Reading during this time period. (*Compare* Ex. 881 at pg. 14 of PDF *with* Ex. 5713 at pg. 31 of PDF.)
- FOF 896. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Abernathy ISD lacks sufficient funds to provide a general diffusion of knowledge to its students.

The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

**vi. Frisco ISD**

- FOF 897. Frisco ISD is a chapter 41 district located in a northern suburb of Dallas. (Ex. 11323 (2012 spreadsheet); RR41:60-61.)
- FOF 898. Over the past twenty years, Frisco ISD has been the fastest growing school district in the nation on a percentage basis. (RR41:61-62.) Frisco ISD's ADA and WADA have nearly doubled from 2006-07 to 2012-13. (Ex. 5617, Reedy Dep., at 21 (referencing Ex. 332).) In 2011-12, Frisco ISD served more than 40,000 students. (RR41:61 at 51 (referencing Ex. 323 at 1).) Frisco ISD's enrollment increased by nearly 3,000 students in 2012-13. (*Id.* at 52.)
- FOF 899. About 9% of Frisco ISD's students are special education students. (Ex. 5617, Reedy Dep., at 10 (referencing Ex. 323 at 1).) Frisco ISD serves students who speak fifty-nine different languages. (RR41:61 at 51 (referencing Ex. 323 at 1).)
- FOF 900. Frisco ISD's revenues have not kept pace with its rapid growth. The district's budgeted operating fund revenues per ADA decreased from \$8,120 in 2010-11 to \$7,708 in 2011-12 and \$7,856 in 2012-13. (Ex. 5617, Reedy Dep., at 22 (referencing Ex. 333).) During these same years, Frisco ISD's budgeted operating fund revenues per WADA decreased from \$7,048 to \$6,682 and \$6,742, respectively. (Ex. 5617, Reedy Dep., at 22-23 (referencing Ex. 333).)
- FOF 901. Adjusted for inflation, Frisco ISD's budgeted operating fund revenues per ADA and per WADA decreased slightly from 2006-07 to 2010-11. (Ex. 5617, Reedy Dep., at 26 (referencing Ex. 335).) Thereafter, its inflation-adjusted, budgeted operating fund revenues per ADA dropped from \$7,507 in 2010-11, to \$6,908 in 2011-12, to \$6,901 in 2012-13. (Ex. 5617, Reedy Dep., at 26-27 (referencing Ex. 335).) The inflation-adjusted budgeted operating fund revenues per WADA dropped from \$6,516 in 2010-11, to \$5,988 in 2011-12, and finally to \$5,923 in 2012-13. (Ex. 5617, Reedy Dep., at 26-27 (referencing Ex. 335).)
- FOF 902. Frisco ISD's budgeted operating fund revenues, together with revenues from federal, state, and local grants, were lower on a per-WADA basis in 2011-12 and 2012-13 than in any of the preceding five years. (Ex. 5617, Reedy Dep., at 24 (referencing Ex. 334).) On a per-ADA basis, the same category of funds was lower in 2011-12 and 2012-13 than in any year since 2007-08. (Ex. 334.)
- FOF 903. In 2011-12, Frisco ISD received approximately \$14 million less in funding than it would have under previous law. (Ex. 5617, Reedy Dep., at 27-28 (referencing Ex. 336).) In 2012-13, Frisco ISD received \$17.4 million less than it would have under previous law. (Ex. 5617, Reedy Dep., at 28-29 (referencing Ex. 336).)

- FOF 904. In 2011-12, Frisco ISD reduced its budgeted expenditures by approximately \$6 million by not hiring new personnel that it normally would have hired based on student growth. (Ex. 5617, Reedy Dep., at 34.) The district ordinarily would have added about 200 teachers to keep up with student growth, but it only added sixty to eighty new teachers. (*Id.* at 32-33.) As a result, class sizes have increased. (*Id.* at 34, 37-39, 40-42.)
- FOF 905. From 2010-11 to 2011-12, Frisco ISD's average class size for kindergarten to fourth grade increased by 1.1 students, middle school class sizes increased by 0.5 students, and high school class sizes increased an average of almost five students. (*Id.* at 37-38 (referencing Ex. 339).) Frisco ISD requested class size waivers for 110 classrooms in 2011-12. (Ex. 5617, Reedy Dep., at 40-41 (referencing Ex. 340).) The district's superintendent, Dr. Richard Reedy, testified that Frisco ISD had no real choice but to increase class sizes and seek class size waivers. (Ex. 5617, Reedy Dep., at 39, 41.) The district sought its class size waivers as a result of financial hardship. (*Id.* at 41 (referencing Ex. 340).)
- FOF 906. In addition to the personnel costs of \$6 million that caused the district to increase class sizes, Frisco ISD reduced its budget by another \$8 million in 2011-12 by, among other things (1) reducing enhancement funds for after-school tutoring and related costs by 50%, (2) reducing the per pupil allotment for materials and supplies, (3) suspending the purchase of new library books, (4) suspending the use of substitutes for absences due to school business, (5) reducing custodial contracted services, (6) initiating triple routing for buses, and (7) suspending its 401(a) matching recruiting/retention incentive plan. (Ex. 5617, Reedy Dep., at 29-30 (referencing Ex. 337).) Dr. Reedy testified that these cuts will detrimentally affect the operations of Frisco ISD. (Ex. 5617, Reedy Dep., at 31.)
- FOF 907. Frisco ISD also froze salaries for teachers and other personnel in 2011-12. (*Id.* at 33.) The district pays its teachers mid-range salaries in comparison to other school districts in the Dallas/Fort Worth area. (*Id.* at 48-49.) Dr. Reedy testified that Frisco ISD must pay the salaries that it currently pays to remain competitive in the region. (*Id.* at 49.)
- FOF 908. Frisco ISD raised its M&O tax rate from \$1.00 to \$1.04 for the 2012-13 year. (*Id.* at 11.) Despite raising its tax rate, Frisco ISD's total operating fund budget increased only 6.7% from the previous year, while its student population increased 7.3%. (Ex. 5617, Reedy Dep., at 45 (referencing Ex. 336).)
- FOF 909. Each penny of tax effort above \$1.04 would be subject to recapture at a rate of approximately 10%. (Ex. 5617, Reedy Dep., at 50.) Dr. Reedy testified that it would be "difficult" and a "tough sell" to get voters to approve an increase in M&O taxes above \$1.04, especially considering that the additional pennies of taxation would be subject to recapture. (*Id.* at 50-53.)
- FOF 910. Frisco ISD receives a substantial portion of its funding in the form of ASATR. (*Id.* at 54.) If the State reduces or eliminates ASATR and no additional funding is offered in its place, Frisco ISD will have no way to compensate for the loss of funding. (*Id.* at 54-55.)

- FOF 911. Frisco ISD's revenues per student have decreased at the same time the State introduced the STAAR EOC accountability standard. (*Id.* at 55.)
- FOF 912. After the first administration of the STAAR exam, approximately one-fourth of Frisco ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 8.) Only 63% of students met the Level II final standard for English I Writing. (Ex. 5151 at 26.) Only 17% of students met the Level III English I Reading standard and 6% met the English I Writing standard. (*Id.* at 9, 13.)
- FOF 913. Student performance did not improve significantly on STAAR from 2012 to 2013, and performance remained low. (*Compare* Ex. 5151 with Ex. 5716.)
- FOF 914. Frisco ISD's passing rates on the STAAR EOC exam at the Level II final standard are considerably lower than the district's passage rates have historically been on the TAKS exam. (Ex. 5617, Reedy Dep., at 59-60.)
- FOF 915. Frisco ISD's unique challenges include its rapid rate of growth over the past twenty years, which has created particular challenges in educating students. (*Id.* at 13-14; *see supra* FOF 898.) One challenge involves providing sufficient facilities and programs to the growing student population. (Ex. 5617, Reedy Dep., at 13-14.) In addition, students who move into Frisco ISD from outside Texas are unfamiliar with the State's standardized tests and require remediation efforts to be successful. (*Id.* at 14.) Frisco ISD's rapidly growing student population has required the district to hire a large number of first-year teachers. (*Id.* at 14-15.) Providing professional development to each of the new teachers is a significant challenge. (*Id.*) Frisco ISD must now help its fast-growing student body to meet the new demands set out by the state with less funding than it has had in the past.
- FOF 916. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Frisco ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

**c. TTSFC Plaintiff focus districts**

**i. Alief ISD**

- FOF 917. Alief ISD is a property-poor Chapter 42 district located in the western portion of Harris County. Alief ISD currently educates about 46,000 students on forty-nine campuses. (RR8:94; Ex. 11323; Ex. 3205, Chambers Dep., at 110.)
- FOF 918. Eighty-three percent of Alief's students are economically disadvantaged. A little over 36% of the students are ELL. The district is 50% Hispanic and 32% African American. There is about 40% mobility within the student body in a year. In 2011-12 the student body spoke eighty-two languages as their primary language. The district has a large

number of Burmese refugee students who, in addition to learning English, must learn cultural skills. Alief ISD has changed in the last twenty years from a suburban district to an urban district with a highly mobile population. (RR8:94-96.)

- FOF 919. In 2010-11, Alief ISD received a "gold circle" recognition from the Comptroller for transparency, effectiveness, and efficiency. (RR8:96.)
- FOF 920. Alief was forced to make \$22 million in budget cuts because of the Legislature's failure to fund the public school system to previous levels in 2011. They achieved these cuts by eliminating 100 teachers including "response to intervention" teachers. Alief also eliminated sixty paraprofessionals, made across-the-board cuts to instructional materials and supplies, and cut technology expenditures. The budget cuts forced Alief to raise its class sizes in pre-K and only offer a half-day program. Alief also increased class size in grades five through twelve. (RR8:121-28.)
- FOF 921. Alief ISD's superintendent testified that if Alief had additional funds, his priorities would include a full-day pre-K, more and more meaningful career work force development, and more teachers to reduce class sizes. (RR8:131-32.)
- FOF 922. Alief ISD's M&O tax rate is \$1.125. If the district held a TRE to raise its tax rate to the maximum \$1.17, that would only raise \$4.5 million. There is nothing Alief ISD can do to make up for the Legislature's failure to fully fund education. (Ex. 3229 at 1; RR8:112, 121, 129.)
- FOF 923. After the first administration of the STAAR exam, 59% of Alief ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 13.) Scores were particularly low on the Algebra, Biology, English I Writing, and World Geography EOCs. At the Level II final standard, only 33% of students passed Algebra, only 37% passed Biology, only 27% passed English I Writing, and only 34% passed World Geography. (*Id.*) At Level III, only 10% of students passed Algebra, 5% passed Biology, 6% passed English I Reading, 1% passed English I Writing, and 8% passed World Geography. (Ex. 439 at 1.) After the summer retake, 53% of ninth graders – which represents 1599 students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 13.)
- FOF 924. Over 900 ninth graders in Alief ISD had to retake one of the end of course exams after the Spring administration in 2012. The district has students who are in sophomore level courses who must still pass freshman tests. There has to be a cumulative score to graduate which means those ninth graders are already off track to graduate. This failure rate puts more pressure on Alief ISD's resources because it requires Alief ISD to offer remediation classes while still offering the regular curriculum. (RR8:117-20.)
- FOF 925. Alief ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 3,087 (55.4%) of Alief ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 5.) One-thousand six-hundred

and sixty-six students failed multiple tests. (*Id.*) Only 19.6% of Alief's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 3.)

- FOF 926. In 2008, according to the State's AEIS Report, 44% of Alief's students were college ready in Math, 48% were college ready in English Language Arts, and 32% were college ready in both subjects. In 2009, 53% of Alief's students were college ready in Math, 59% were college ready in English Language Arts, and 40% were college ready in both subjects. In 2010, 61% of Alief's students were college ready in Math, 56% were college ready in English Language Arts, and 43% were college ready in both subjects. (Ex. 451; Ex. 458.)
- FOF 927. Because of a lack of funding, Alief cannot offer all the courses for the distinguished curriculum, or offer innovative programs. (Ex. 3205, Chambers Dep., at 57.)
- FOF 928. During 2010-11 and 2011-12, Alief studied how students who participated in co-curricular and extra-curricular activities performed on TAKS tests. Those students that participated did three percentage points to seven percentage points better than those who did not. The graduation rate for these students was also several percentage points higher than those who did not participate. These programs keep children in school and keep them engaged in school. Alief ISD spends about 1% of its budget on extra-curricular and co-curricular activities. (RR8:137-39.)
- FOF 929. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Alief ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

## ii. Lubbock ISD

- FOF 930. Lubbock ISD is a property-poor Chapter 42 district in the panhandle of west Texas. Lubbock ISD educates 29,000 students on fifty-two campuses. (Ex. 3198, Garza Dep., at 10; Ex. 11323.)
- FOF 931. Sixty-five percent of Lubbock ISD's students live in poverty, 55% are Hispanic, 13% are African American, and 12% are special education students. (Ex. 3198, Garza Dep., at 10.)
- FOF 932. Lubbock ISD's budget for 2012-13 is \$186 million, only slightly higher than its 2007-08 budget of \$185 million, despite the fact that in that timeframe it grew by 800 students and state standards became more rigorous. (*Id.* at 53.)
- FOF 933. As a result of the State's budget cuts, Lubbock ISD closed or consolidated eleven schools in the last three years. The district eliminated eighty-five positions in its central office, fourteen of which were in core curriculum areas. Lubbock's superintendent, Karen Garza, testified that every one of these people provided meaningful resources to students and losing them decreased Lubbock's ability to educate its students. Additionally,

Lubbock ISD eliminated 424 campus positions. 189 of which were classroom teachers. The majority of the other positions were classroom aide positions. (*Id.* at 39, 41-44.)

- FOF 934. Because of budget cuts Lubbock ISD asked for forty-seven class size waivers in 2010-11 and twenty-one waivers in 2011-12. Some of Lubbock ISD's kindergarten through fourth grade classes have twenty-five students in them. Elementary grades above grade four routinely have twenty-five students in them while the goal for middle school and high school classes is twenty-seven students. (*Id.* at 46-47.)
- FOF 935. Lubbock ISD's superintendent testified that if Lubbock ISD had an additional \$3,000 per WADA it would expand its career technology programs to include pathways in logistics and healthcare, which would lead to jobs in the area, and ensure that more of its students are in advanced programming and dual credit courses. Additionally, Lubbock ISD would lower its class sizes, and make teacher salaries more competitive to attract quality teachers. It would provide more interventions and classroom support for students having difficulty learning. (*Id.* at 77-79.)
- FOF 936. Lubbock ISD's M&O tax rate is \$1.04. The district has not pursued a TRE because of the poverty of its population. (*Id.* at 29-30.) The success of a TRE is doubtful because its voters are aware that even if Lubbock ISD taxed at \$1.17, it could not raise what its neighbors, Friendship ISD and Lubbock-Cooper ISD, raise at \$1.04. (*Id.* at 29-32.)
- FOF 937. After the first administration of the STAAR exam, 56% of Lubbock ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 17.) Scores were particularly low on the Algebra, Biology, English I Writing, and World Geography EOCs. At the Level II final standard, only 26% of students passed Algebra, only 35% passed Biology, only 33% passed English I Writing, and only 38% passed World Geography. (Ex. 439 at 1.) At Level III, only 12% of students passed Algebra, 7% passed Biology, 10% passed English I Reading, 3% passed English I Writing, and 14% passed World Geography. (*Id.* at 1.) After the summer retake, 47% of ninth graders – which represents 952 students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 17.)
- FOF 938. Lubbock's ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 2001 (53.9%) of Lubbock ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 5.) One-thousand one-hundred and eighty-one students failed multiple tests. (*Id.*) Only 20.6% of Lubbock's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 3.)
- FOF 939. In 2008, according to the State's AEIS Report, 54% of Lubbock's students were college ready in Math, 58% were college ready in English Language Arts, and 41% were college ready in both subjects. In 2009, 55% of Lubbock's students were college ready in Math, 59% were college ready in English Language Arts, and 43% were college ready in both

subjects. In 2010, 58% of Lubbock's students were college ready in Math, 59% were college ready in English Language Arts, and 45% were college ready in both subjects. (Ex. 94; Ex. 101.)

- FOF 940. In the Fall of 2009, Lubbock ISD commissioned a comprehensive facilities study of every building in the district. The study found that Lubbock ISD had over \$150 million of infrastructure needs in terms of capital improvements and deferred maintenance. Lubbock, after a bond election in 2010, was able to address \$44.5 million of those needs, but has over \$100 million of unmet needs. This district lacks the funding to deal with these problems. (Ex. 3198, Garza Dep., at 32-33.)
- FOF 941. Lubbock ISD has to compete with districts that have up-to-date technology and, in many cases, one-on-one technology. Lubbock ISD cannot afford one-on-one technology and does not have the money to keep its computers in its labs updated. Computers are important to allow teachers to differentiate learning based upon individual student needs. Lubbock ISD students are unable to compete with students from other districts because of the inadequacy of Lubbock's technology. (*Id.* at 36-38.)
- FOF 942. Lubbock ISD offers career tech programs, but it needs to expand those programs to include pathways in logistics, health careers, and pre-engineering. Lubbock ISD does not have sufficient funds to meet these needs. (*Id.* at 59-62.)
- FOF 943. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Lubbock ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

### iii. Pflugerville ISD

- FOF 944. Pflugerville ISD is a property-poor Chapter 42 district located in Central Texas, northeast of Austin. Pflugerville ISD serves over 21,000 students. (RR24:186; Ex. 11323; Ex. 3238; Ex. 3204, Dupre Dep., at 13.)
- FOF 945. About 52% of the students at Pflugerville ISD are eligible for the federal free and reduced lunch program. Forty-three percent of the students are Hispanic, of which 18% are ELL. Pflugerville ISD's student population is 20% African American and 10% Asian. Students at Pflugerville ISD speak over sixty-five different languages. The student population has changed dramatically in the last twenty years. (Ex. 3238; RR24:186, 189.)
- FOF 946. Pflugerville ISD has been cutting its budget since 2007 because of the inadequacy of state funding. After the budget cuts of the 82nd Legislature, Pflugerville ISD had to cut an additional \$8.5 million from its budget. It eliminated twenty-five high school teachers and twenty-five middle school teachers. It cut twenty-two positions from its administration and support staff. As a result of these staff reductions, Pflugerville ISD increased its class sizes. At the middle school level, Pflugerville ISD had to reduce its

school day from seven periods to six periods and end school one hour earlier. Pflugerville ISD was also forced to cut its transportation budget. (RR24:190-95.)

- FOF 947. Because of the lack of funding in 2011-12, Pflugerville ISD cut instructional technology support. The primary responsibility of this type of support was to work with teachers in classrooms to ensure that they were incorporating technology based tools in the delivery of instruction. (RR24:201-02.)
- FOF 948. Pflugerville ISD's M&O tax rate is \$1.04. It would have a difficult time raising that rate because of poverty in the district, the rates in neighboring districts and pressure from the business community to keep rates low to attract business. (Ex. 3238; RR24:196-97; Ex. 3204, Dupre Dep., at 46-47.)
- FOF 949. Pflugerville ISD's I&S rate is 44 cents. Its last bond election was in 2007. With that money the district built a middle school and several elementary schools. It also upgraded technology, replaced HVAC systems, and fixed roofs. The new buildings were necessary because of growth and some of them opened at capacity. Pflugerville has deferred maintenance on HVAC systems and has leaking roofs. Because of growth it will have another bond election in 2013. (Ex. 3204, Dupre Dep., at 48-51.)
- FOF 950. After the first administration of the STAAR exam, 48% of Pflugerville ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 22.) At Level III, only 21% of students passed Algebra, 9% passed Biology, 12% passed English I Reading, 5% passed English I Writing, and 17% passed World Geography. (Ex. 3204 at 1.) After the summer retake, 36% of ninth graders – which represents 601 students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 22.)
- FOF 951. Approximately 800 students failed one or more EOC exams in the Spring of 2012 requiring Pflugerville ISD to find roughly \$800,000 in its budget for remediation which substantially changed its usual summer school program. (RR24:198-99.)
- FOF 952. Pflugerville ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 1,503 (46.4%) of Pflugerville ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 7.) Eight-hundred and twenty-nine students failed multiple tests. (*Id.*) Only 26.3% of Pflugerville's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 5.)
- FOF 953. In 2008, according to the State's AEIS Report, 66% of Pflugerville's students were college ready in Math, 66% were college ready in English Language Arts, and 51% were college ready in both subjects. In 2009, 64% of Pflugerville's students were college ready in Math, 58% were college ready in English Language Arts, and 47% were college ready in both subjects. In 2010, 69% of Pflugerville's students were college ready in Math,

67% were college ready in English Language Arts, and 55% were college ready in both subjects. (Ex. 3238 at 2.)

- FOF 954. The shortening of the middle school day in Pflugerville ISD meant the elimination of the period used by teachers for meeting and collaborating and discussing trends in student performance and behaviors to decide on appropriate interventions. (RR24:192; Ex. 3204, Dupre Dep., at 17.)
- FOF 955. Reducing the number of class periods in Pflugerville ISD impacted students who needed to be in full-time intervention classes because those students did not get to participate in any elective classes or activities. (RR24:192-93.)
- FOF 956. Pflugerville ISD is a growing district having added nine campuses in the last ten years. Beyond the need for facilities, this growth is challenging because it requires more teachers and more materials and supplies. (RR24:186, 189.)
- FOF 957. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Pflugerville ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

#### **iv. Los Fresnos ISD**

- FOF 958. Los Fresnos ISD is a property-poor Chapter 42 district located in Cameron County about twenty miles north of the Mexican border. Los Fresnos ISD educates 9,502 students. (RR24:112-13; Ex. 11323; Ex. 3237 at 1.)
- FOF 959. Seventy-seven percent of Los Fresnos ISD's student population is economically disadvantaged ranging from the stark poverty of La Colonias to those just at the poverty level. Ninety-six percent of the student population is Hispanic, of which 22% are ELL. (RR24:113, 124.)
- FOF 960. When the 82nd Legislature failed to fully fund the public school system Los Fresnos lost \$6,000,000 over the biennium. Included in that loss was grant money for pre-K, the Student Success Initiative, and the pilot program to reduce the number of dropouts. (Ex. 3207, Salazar Dep., at 57.)
- FOF 961. Los Fresnos ISD has been in a continuous state of budget cutting since 2008 because of low target revenue funding. The district put in a hiring freeze and cut staff through attrition. The district cut pre-K to half day; cut LVN's and reduced the number of counselors; and cut teacher aides and replaced the certified teachers in their computer labs with aides. The district also cut clerical staff. (RR24:117, 131-36.)
- FOF 962. Los Fresnos ISD's M&O tax rate is \$1.17. (RR24:138.)
- FOF 963. After the first administration of the STAAR exam, 57% of Los Fresnos ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex.

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6324, Moak Supp. Report One, at 7.) Scores were particularly low on the Biology, English I Writing, and World Geography EOCs. At the Level II final standard, only 36% passed Biology, only 33% passed English I Writing, and only 34% passed World Geography. (Ex. 3207 at 1.) At Level III, only 28% of students passed Algebra, 7% passed Biology, 7% passed English I Reading, 2% passed English I Writing, and 7% passed World Geography. (*Id.* at 1.) After the summer retake, 52% of ninth graders – which represents 364 students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 7.)

- FOF 964. Los Fresnos ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 660 (48.4%) of Los Fresnos ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in 1 standard required for graduation under HB5. (Ex. 6548 at 9.) Three-hundred and seventy-nine students failed multiple tests. (*Id.*) Only 25.8% of Los Fresnos 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 7.)
- FOF 965. In 2008, according to the State's AEIS Report, 61% of Los Fresnos' students were college ready in Math, 41% were college ready in English Language Arts, and 36% were college ready in both subjects. In 2009, 58% of Los Fresnos' students were college ready in Math, 47% were college ready in English Language Arts, and 35% were college ready in both subjects. In 2010, 72% of Los Fresnos' students were college ready in Math, 52% were college ready in English Language Arts, and 45% were college ready in both subjects. (Ex. 1025; Ex. 10254.)
- FOF 966. Los Fresnos ISD does not have the funds necessary to keep up with their maintenance needs. Los Fresnos has facilities with roof and HVAC issues, for which the maintenance has to be deferred because of a lack of funding. (Ex. 3207, Salazar Dep., at 52-53.)
- FOF 967. Counselors are important in schools. Aside from everything counselors do in other schools, the counselors in Los Fresnos have to help students through the emotional violence they have seen and experienced in Mexico. They cannot deal with academics without dealing with these issues. Students from economically disadvantaged homes need a lot of counseling to envision the possibility of college or career and to negotiate towards those goals. There is a shortage of counselors in Los Fresnos ISD because of a lack of funds. (RR24:126-33.)
- FOF 968. Los Fresnos ISD utilized family engagement counselors funded by grants as part of its dropout recovery efforts at the high school level beginning in ninth grade. These counselors were liaisons with identified families. They developed a relationship with a family and understood its needs. Los Fresnos ISD had this program for two years and saw excellent results. It had to be discontinued for lack of funding. (RR24:127-29.)
- FOF 969. Los Fresnos ISD has a College and Career Technology Academy where dropouts can return to school without stigma. These students are exposed to classes at Texas State Technical College in Harlingen to build a bridge between high school and college. The first two years of this program were funded by TEA grants, which have been

discontinued. Los Fresnos ISD is currently funding this program with its state Compensatory Education funds, which are insufficient for the program's needs. The higher standards imposed by STAAR will increase the dropout rate exponentially, increasing the need for this program. (RR24:129-31.)

- FOF 970. Los Fresnos ISD cannot afford the number of nurses they need for their schools. (RR24:131-32.)
- FOF 971. Los Fresnos ISD encompasses 540 square miles. The district has ninety-one buses, fifteen of which are older than eleven years old with 200,000 miles on them, and fifteen non-operational buses. (RR24:124-25.)
- FOF 972. Los Fresnos ISD has some computer labs which can be used by twenty-five students at a time. This is not adequate computer technology to keep up with curriculum needs and experiences for functioning in today's world. They do not have the funding to provide necessary technology or the infra-structure to support it. The population of students at Los Fresnos ISD does not have access to computers at home. (Ex. 3207, Salazar Dep., at 34-37.)
- FOF 973. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Los Fresnos ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

**v. Lufkin ISD**

- FOF 974. Lufkin ISD is a property-poor Chapter 42 district in Angelina County about 100 miles north of Houston. Lufkin ISD educates over 7,800 students. (Ex. 3199, R. Knight Dep., at 9-10; Ex. 11323.)
- FOF 975. Seventy-five percent of Lufkin ISD's student population qualifies for federal free and reduced lunches. Thirty percent of the students at Lufkin ISD are Hispanic and 30% are African American. There are 583 students in ESL and about 1,200 bilingual education students. (Ex. 3199, R. Knight Dep., at 9-10.)
- FOF 976. As a result of the budget cuts, Lufkin ISD increased class size, reduced staff, eliminated or cut back programs like art, German, French and debate. Lufkin offered early resignation incentives for staff even though it resulted in the loss of years of valuable teaching experience. Lufkin ISD currently only hires novice teachers. Lufkin ISD has also deferred maintenance including HVAC and roofing repairs. Lufkin ISD froze all salaries. Even with these budget cuts the district is running a budget deficit. (*Id.* at 14-16, 21, 25 and 31.)
- FOF 977. Lufkin ISD's M&O tax rate is \$1.04. (*Id.* at 10.)

- FOF 978. After the first administration of the STAAR exam, 56% of Lufkin ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 5.) Scores were particularly low on the English I Writing, and World Geography EOCs. At the Level II final standard, only 32% passed English I Writing, and only 19% passed World Geography. (Ex. 110 at 1.) At Level III, only 24% of students passed Algebra, 20% passed Biology, 10% passed English I Reading, 1% passed English I Writing, and 6% passed World Geography. (*Id.*) After the summer retake, 42% of ninth graders – which represents 226 students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 5.)
- FOF 979. Lufkin ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 520 (50.6%) of Lufkin ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 9.) Two-hundred and sixty-seven students failed multiple tests. (*Id.*) Only 26.5% of Lufkin's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 7.)
- FOF 980. In 2008, according to the State's AEIS Report, 60% of Lufkin's students were college ready in Math, 55% were college ready in English Language Arts, and 43% were college ready in both subjects. In 2009, 60% of Lufkin's students were college ready in Math, 56% were college ready in English Language Arts, and 45% were college ready in both subjects. In 2010, 62% of Lufkin's students were college ready in Math, 58% were college ready in English Language Arts, and 50% were college ready in both subjects. (Ex. 109; Ex. 111.)
- FOF 981. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Lufkin ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

**vi. Brownwood ISD**

- FOF 982. Brownwood ISD is a property-poor Chapter 42 district located in the western part of the Hill Country. Brownwood ISD has an ADA of approximately 3,300 students. (RR18:145; Ex. 11323.)
- FOF 983. Sixty-six percent of Brownwood ISD's student population is economically disadvantaged with one campus at a 90% level. (RR18:146-47; Ex. 3231.)
- FOF 984. Brownwood ISD began making budget cuts before the 82nd Legislature's failure to fully fund the public school system. For the 2010-11 and 2011-12 fiscal years it made 10% across the board budget cuts throughout the district. That meant eliminating teaching positions and administrative staff. The district also cut the number of teacher aides. The district deferred maintenance including delaying HVAC repairs. (Ex. 3209, Blincoe Dep., at 252.)

- FOF 985. In order to keep some classes small at the high school, Brownwood ISD put up to forty students in its speech classes, its language classes and its health classes (which are not areas tested on the standardized tests.) The district did this to keep some of their other class sizes smaller. They had to make this choice because of limited resources. (RR18:198-99.)
- FOF 986. Brownwood ISD's M&O tax rate is \$1.04. (Ex. 3231.)
- FOF 987. After the first administration of the STAAR exam, 64% of Brownwood ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 7.) Scores were particularly low on the Algebra, Biology, English I Reading, English I Writing, and World Geography EOCs. At the Level II final standard, only 24% of students passed Algebra, only 23% passed Biology, only 39% passed English I Reading, only 28% passed English I Writing, and only 23% passed World Geography. (*Id.*) At Level III, only 8% of students passed Algebra, 4% passed Biology, 4% passed English I Reading, 1% passed English I Writing, and 6% passed World Geography. (Ex. 1061 at 1.) After the summer retake, 61% of ninth graders – which represents 159 students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 7.)
- FOF 988. Brownwood ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 224 (50.8%) of Brownwood ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 15.) One-hundred and forty-five students failed multiple tests. (*Id.*) Only 16.6% of Brownwood's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 13.)
- FOF 989. In 2008, according to the State's AEIS Report, 60% of Brownwood's students were college ready in Math, 47% were college ready in English Language Arts, and 34% were college ready in both subjects. In 2009, 70% of Brownwood's students were college ready in Math, 61% were college ready in English Language Arts, and 51% were college ready in both subjects. In 2010, 75% of Brownwood's students were college ready in Math, 74% were college ready in English Language Arts, and 63% were college ready in both subjects. (Ex. 1047, 1048.)
- FOF 990. Brownwood ISD has been aggressive in providing technology to its students through grant programs. Brownwood ISD does not have sufficient funding to continue its investment in technology. (RR18:154-58.)
- FOF 991. Brownwood ISD needs career courses in digital media, digital art creation, and it needs to strengthen its auto technology, building trades and ag-science courses. Brownwood ISD does not have sufficient funds to meet these needs. These career pathways would lead to jobs in the community. (RR18:195-196.)

FOF 992. Only about 50% of the students from Brownwood ISD go on to a two year or four year college, and many of them have to take remedial classes as freshman. In 2010 only about 20% of the Brownwood students who took the SAT/ACT exams scored at or above criteria. (Ex. 3209, Blincoe Dep., at 241.)

FOF 993. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Brownwood ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

#### **vii. Anton ISD**

FOF 994. Anton ISD is located twenty miles northwest of Lubbock. Anton currently educates 250 students. (Ex. 3203, J. Knight Dep., at 10-11, 46-49.)

FOF 995. Approximately 86% of Anton ISD's students qualify for the federal free and reduced lunch programs. (*Id.* at 11.)

FOF 996. As a result of the State's budget cuts, Anton's budget was cut by \$130,000. Anton ISD cut five staff members and seven teachers, going from fifty-two to thirty-nine employees, merged maintenance and transportation, merged educational positions, and merged bus routes. It had to reduce their nurse to three days a week. It lost technology and their TAKS coordinator. It had to raise their class sizes and lost aides. Salaries have been frozen for two years, and the district already had the lowest salaries in their region. (*Id.* at 15-21.)

FOF 997. Anton ISD's superintendent testified that if the district had \$2,000 more per WADA the district could hire reading interventionists to assist its economically disadvantaged students and hire more aides to enable the district to have small group instruction. (*Id.* at 54-55.)

FOF 998. Anton ISD's M&O tax rate is \$1.17. (*Id.* at 11-12.)

FOF 999. After the first administration of the STAAR exam, 47% of Anton ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 14.) Scores were particularly low on the Algebra, Biology, English I Writing, and World Geography EOCs. At the Level II final standard, only 15% of students passed Algebra, only 17% passed Biology, only 38% passed English I Writing, and only 15% passed World Geography. (Ex. 7586 at 1.) At Level III, 0% of students passed Algebra, 0% passed Biology, 0% passed English I Reading, 0% passed English I Writing, and 0% passed World Geography. (*Id.*) After the summer retake, 20% of ninth graders – which represents three students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 14.)

FOF 1000. Anton ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 20 (66.7%) of Anton ISD's 9th and

10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 43.) Nine students failed multiple tests. (*Id.*) Only 6.7% of Anton's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 41.)

- FOF 1001. In 2008, according to the State's AEIS Report, 50% of Anton's students were college ready in Math, 40% were college ready in English Language Arts, and 25% were college ready in both subjects. In 2009, 38% of Anton's students were college ready in Math, 54% were college ready in English Language Arts, and 31% were college ready in both subjects. In 2010, 67% of Anton's students were college ready in Math, 67% were college ready in English Language Arts, and 42% were college ready in both subjects. (Ex. 237, 238.)
- FOF 1002. Anton ISD does not have the funds to offer its students the courses necessary for the Distinguished Curriculum degree. (Ex. 3203, Knight Dep., at 46.)
- FOF 1003. The elementary campus in Anton ISD was built in the 1940s and is in disrepair and the classroom facilities are poor. In 2010-11, Anton ISD's elementary school was cited for safety issues because it had doors that would not shut. The elementary school in Anton ISD needs new flooring and asbestos removal. The high school was built in the 1970s and needs repairs. Anton ISD does not have the funds to make these repairs. (*Id.* at 40-42.)
- FOF 1004. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Anton ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

#### **viii. Van ISD**

- FOF 1005. Van ISD is a property-poor Chapter 42 district located in east Texas about one hour east of Dallas. Van ISD educates approximately 2,300 students. (Ex. 3201, Witte Dep., at 18; Ex. 11323.)
- FOF 1006. Seventeen percent of Van ISD's student population is Hispanic and 3% are African American. (Ex. 3201, Witte Dep., at 18.)
- FOF 1007. State funding to Van ISD decreased by \$1.4 million in 2011-12. (*Id.*)
- FOF 1008. As a result of the State's budget cuts, Van ISD was forced to cut three administrative positions and 22% of the administrative staff. Superintendent Witte reduced his paid days by ten and reduced administrative staff paid days by six. All salaries were frozen. Van ISD also cut twenty-nine staff including twenty-two teachers. Van ISD increased class sizes and ended its full-day pre-K program. (*Id.* at 21-25.)

- FOF 1009. The cuts that Van ISD was forced to make negatively affected its ability to give differentiated instruction in the classroom. (*Id.* at 24.)
- FOF 1010. Van ISD's superintendent testified that if the district had \$2,000 more per WADA it would reduce the student to teacher ratio in all classes and particularly try to keep the student-teacher ratio at 15:1 in pre-K to fourth grade. It would reinstitute full-day pre-K, and it would add aides on a ratio of one per classroom. The district would make salaries more competitive. The district would add the infrastructure for a broader use of technology. It would strengthen its career/technology program. (*Id.* at 39-42.)
- FOF 1011. Van ISD's M&O rate is \$1.17. (Ex. 3006.)
- FOF 1012. Superintendent Witte testified that, because, since 2008, Van ISD taxed at the statutory maximum, it had no means to generate additional revenue in response to the State's 2011 budget cuts. As a result, Van ISD had no choice but to reduce staff, raise class sizes, and cut pre-K to half-day programs. (Ex. 3201, Witte Dep., at 19-27.)
- FOF 1013. After the first administration of the STAAR exam, 52% of Van ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 23.) Scores were particularly low on the Algebra, Biology, English I Writing, and World Geography EOCs. At the Level II final standard, only 39% of students passed Algebra, only 31% passed Biology, only 35% passed English I Writing, and only 27% passed World Geography. (Ex. 194 at 1.) At Level III, only 14% of students passed Algebra, 1% passed Biology, 8% passed English I Reading, 0% passed English I Writing, and 0% passed World Geography. (*Id.*) After the summer retake, 41% of ninth graders – which represents seventy-two students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 23.)
- FOF 1014. Van ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 169 (48%) of Van ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 17.) Ninety-two students failed multiple tests. (*Id.*) Only 26.4% of Van's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 15.)
- FOF 1015. In 2008, according to the State's AEIS Report, 56% of Van's students were college ready in Math, 63% were college ready in English Language Arts, and 42% were college ready in both subjects. In 2009, 54% of Van's students were college ready in Math, 65% were college ready in English Language Arts, and 40% were college ready in both subjects. In 2010, 72% of Van's students were college ready in Math, 74% were college ready in English Language Arts, and 62% were college ready in both subjects. (Ex. 165; Ex. 181; Ex. 195.)

- FOF 1016. Because of a lack of funding, Van ISD cannot offer all of the courses set forth in the Education Code for the distinguished graduation program. It is unable to offer advanced courses for pre-AP or AP classes. (Ex. 3201, Witte Dep., at 51 and 58.)
- FOF 1017. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Van ISD lacks sufficient funding to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment to its students.

**ix. Everman ISD**

- FOF 1018. Everman ISD is a property-poor Chapter 42 district in the southwest corner of Tarrant County. Everman ISD educates 5,400 students. (RR5:167-68; Ex. 11323.)
- FOF 1019. Since 2005, Everman ISD's poverty rate has climbed from 60% to 88.5%. 51.6% percent of Everman ISD's students are Hispanic and 40.5% are African-American. (Ex. 3541, Pfeifer Dep. (Vol. II), at 9.)
- FOF 1020. In 2005, Everman was in the lowest quartile of wealth and their revenue was frozen at a target revenue of \$4,634, which necessitated budget cuts in 2005. The district cut teachers and paraprofessionals and increased class size; it deferred maintenance; it cut coaching stipends, reduced all employee sick leave by three days, and gave no raises. Everman ISD ended its optional homestead exemption. Everman ISD cut administrative positions, cut substitute days, and eliminated capital purchases, travel and conference fees. Everman ISD reduced its bus routes. It replaced registered nurses and librarians with paraprofessionals. (RR5:168-69, 184-86; Ex.3202, Pfeiffer Dep., at 37-41.)
- FOF 1021. As a result of the 2011 budget cuts, Everman ISD's funding was cut by \$2.1 million. The district was forced to declare financial exigency and terminated forty-one employees, obtained class size waivers and increased the class sizes in grades K through four to twenty-four to one. Class sizes in higher grades also went up. (RR 5:184-86, Ex. 3202, Pfeifer Dep., at 37-42.) Everman ISD's class sizes are still large and were not able to be reduced as a result of the new appropriations by the 83rd Legislature. (Ex. 3541, Pfeifer Dep. (Vol. II), at 18.)
- FOF 1022. Everman ISD's superintendent testified that if the district had \$3,000 more per student it would hire more teachers to get class sizes lower so that ELS students and economically disadvantaged students could get more individualized attention. It would enrich its curriculum including adding AP preparation classes and more AP classes. The district would make repairs to its roofs and its HVAC systems and make sure its buildings were safe. Everman ISD would wire its classrooms for technology and buy more computers. It would go to full-day pre-K and add more summer school classes. (RR 6:33, Ex. 3202, Pfeifer Dep., at 87-89.)
- FOF 1023. Everman ISD increased its M&O tax rate to \$1.17 in 2012, and this additional tax effort did not make up for the \$2.1 million shortfall in state funding. (Ex. 3202, Pfeiffer Dep.,

- at 38-42, 46-48.) Everman ISD's M&O tax rate remains at \$1.17 today. (Ex. 3541, Pfeifer Dep. (Vol. II), at 6.)
- FOF 1024. After the first administration of the STAAR exam, 72% of Everman ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 21.) Scores were particularly low on the Algebra, Biology, English I Reading, English I Writing, and World Geography EOCs. At the Level II final standard, only 28% of students passed Algebra, only 19% passed Biology, only 27% passed English I Reading, only 19% passed English I Writing, and only 23% passed World Geography. (Ex. 3221, 3222 at 1.) At Level III, only 8% of students passed Algebra, 1% passed Biology, 3% passed English I Reading, 0% passed English I Writing, and 6% passed World Geography. (Ex. 3221; Ex. 3222 at 1.) After the summer retake, 60% of ninth graders – which represents 217 students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 21.)
- FOF 1025. Three hundred and seven ninth graders at Everman took the EOC exams in 2012 and 208 of them had to attend summer school remediation classes. In order to fund the remediation, Everman ISD had to defer maintenance. (Ex. 3202, Pfeifer Dep., at 81.)
- FOF 1026. Everman ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 432 (65.6%) of Everman ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 11.) Two-hundred and fifty-five students failed multiple tests. (*Id.*) Only 12.3% of Everman's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 9.)
- FOF 1027. In 2008, according to the State's AEIS Report, 42% of Everman's students were college ready in Math, 47% were college ready in English Language Arts, and 30% were college ready in both subjects. In 2009, 37% of Everman's students were college ready in Math, 39% were college ready in English Language Arts, and 20% were college ready in both subjects. In 2010, 56% of Everman's students were college ready in Math, 50% were college ready in English Language Arts, and 35% were college ready in both subjects. (Ex. 205; Ex. 206; Ex. 207.)
- FOF 1028. Everman ISD has insufficient facilities for full-day pre-K, although it is desperately needed. Everman ISD is a property-poor/fast growing district. Even if there were sufficient facilities, Everman does not have funds to hire and retain the necessary pre-K teachers, especially bilingual teachers. (RR5:175-76.)
- FOF 1029. Everman ISD has grown by about 100 students from the 2012-13 to the 2014-15 school year and the overwhelming majority of the growth was in pre-kindergarten and kindergarten. (Ex. 3541, Pfeifer Dep. (Vol. II), at 9.)
- FOF 1030. Everman ISD is intersected by I-20 and I-35. The district runs about forty buses which are essential to getting the district's students to school. Many of Everman ISD's buses

are old, some as old as twenty years old. The cost to maintain them is high, but Everman ISD does not have the funds to replace them. Everman ISD tried to outsource its transportation needs, but four contractors refused to bid because of the age of Everman ISD's fleet. (RR5:167-68, 221-23.)

- FOF 1031. In Everman ISD, the oldest operating campus is Hommel Elementary, which is overcrowded. It does not have a sufficient number of restrooms, and the cafeteria is insufficient for the number of students. It is estimated that it would take \$13 million to rehabilitate Hommel Elementary, which the district does not have. The next oldest school is Bishop Elementary, built in 1955. At Bishop, the ground floats and so the floor floats requiring the district to use mud jacking under the building to compensate. Nonetheless, the cafeteria is sinking. The district cannot afford to repair Bishop. One of Everman ISD's junior highs was built in 1962 for 400 students, with no windows (to conserve energy.) It now houses 800 children. The high school was built in 1961. It is fifty years old. E Ray Elementary was built in 1961. It, too, is fifty years old. These campuses are beyond the architect's statement of capacity; these campuses cannot hold any more children, and Everman cannot afford to repair or replace them. (RR5:193-94, 223-28.)
- FOF 1032. Roofing issues are the major deferred maintenance issue for Everman ISD. Everman cannot afford to fix them. HVAC units must be replaced and plumbing is also a major issue on the Everman ISD campuses and the district has insufficient funds to correct those problems. It does not have the science labs to meet the STAAR requirements or offer advanced science courses. (RR5:225-28.)
- FOF 1033. Everman cannot raise sufficient funds to address its current facility needs. Everman does not have sufficient science classrooms to meet its students' needs. Consequently, it is impossible for Everman to offer AP Chemistry, AP Physics or Physics 2. (RR5:225, 227.)
- FOF 1034. The Everman community passed a bond in May 2013, which raised Everman's I&S tax rate to 22.5 cents. The bond authorized \$40 million in bond sales, \$30.5 million of which have been sold. Even with the passing of the bond, Everman will not come close to addressing all of its facility needs. (Ex. 3541, Pfeifer Dep. (Vol. II), at 7-8.)
- FOF 1035. Everman ISD continues to feel the effects of the State's failure to fund the Instructional Facilities Allotment, which was a funding stream Everman was previously able to take advantage of. (*Id.* at 8.)
- FOF 1036. Everman's Career and Technology Programs are inadequate. The district offers an outdated home economics course, and a business class which teaches keyboarding, office procedure, and accounting. It is trying to start a computer animated career course, and they offer automotive technology through Tarrant County community college. It needs more of these types of programs, but its funding is inadequate to do more. (RR6:28-30; Ex.3202, Pfeifer Dep., at 70-75.)

- FOF 1037. The funding provided by the 83rd Legislature is insufficient to allow Everman to provide the programs it needs to meet the challenges of educating its students. (Ex. 3541, Pfeifer Dep. (Vol. II), at 24.)
- FOF 1038. Everman is not capable of offering the courses necessary to give students the flexibility and different graduation paths envisioned by HB5. Everman does not have STEM classes or the advanced science classes, Everman does not have any of the business and industry trade classes, Everman does not have the hospitality programs. At best, Everman could offer the Multidisciplinary pathway. Even with the funding provided by the 83rd Legislature, Everman is not able to offer advanced programs, more languages, summer school for people who want to accelerate, or technology. (Ex. 3541, Pfeifer Dep. (Vol. II), at 23-24.)
- FOF 1039. Even with the new funding appropriated by the 83rd Legislature, Everman, at the maximum \$1.17 rate, cannot raise the amounts dictated by any of the cost-of-adequacy estimates discussed in Part I.C.5 (FOF 603, *et seq.*) above. (*Id.* at 31-32.)
- FOF 1040. The funding Everman ISD is supposed to receive as a result of the 83rd Legislature's appropriations does not make up for the cuts Everman had to make in 2010 and 2011 nor for the low target revenue Everman has experienced since 2008. (*Id.* at 13.)
- FOF 1041. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Everman ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

#### x. Quinlan ISD

- FOF 1042. Quinlan ISD is a property-poor Chapter 42 district in Hunt County, outside of Dallas. Quinlan ISD educates 2,500 students. (RR20:71; Ex. 11323.)
- FOF 1043. Seventy percent of Quinlan ISD's students participate in the federal free and reduced lunch program, but that percentage is an underestimate of the number of students who are economically disadvantaged. (RR20:71.)
- FOF 1044. As a result of the State's budget cuts, Quinlan ISD was forced to cut 41% of its Administrative staff which includes assistant principals, counselors, nurses, and librarians. The district also cut 18% of its teaching staff and 14% of its auxiliary staff. (RR20:76.)
- FOF 1045. Quinlan ISD's superintendent testified that he estimated that the district needs \$9,400 per student to provide a general diffusion of knowledge to the students who are served by Quinlan ISD. If he had this additional revenue the district would extend the instructional day. It would increase its programs for at-risk students and have all-day three-year-old and four-year-old pre-K. It would reduce class size particularly in the early grades for reading comprehension. It would raise teacher salaries to retain teachers. It would

employ a mentor coach at each grade level to monitor student attendance, discipline, and academics. It would have a counselor, a vocational counselor, and a social worker at every campus. It would improve its science courses, expand reading courses, make technology available to students and expand its vocational programs. The district would have nurses and librarians at all campuses. It would replace its aging bus fleet to serve the 150 square miles encompassed by the district. Quinlan ISD would add depth and breadth to its course offerings including more AP classes, dual credit courses, and college-readiness classes. The district would make its facilities safer, repair roofs, HVAC systems, eliminate asbestos in its buildings, and equip its classrooms for a modern education. (RR20:105-06, Ex. 3206, French Dep., at 59-69.)

- FOF 1046. Quinlan ISD's M&O tax rate is \$1.04. The district is not able to raise that rate because of the poverty of its population. The tax delinquency rate has been rising, and Quinlan ISD's superintendent testified that it would be counter-productive to foreclose on any more houses. (Ex. 3206, French Dep., at 22; RR20:100-01.)
- FOF 1047. After the first administration of the STAAR exam, 58% of Quinlan ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 15.) Scores were particularly low on the Algebra, Biology, English I Reading, English I Writing, and World Geography EOCs. At the Level II final standard, only 25% of students passed Algebra, only 22% passed Biology, only 30% passed English I Reading, only 18% English I Writing, and only 24% passed World Geography. (Ex. 469 at 1.) At Level III, only 4% of students passed Algebra, 3% passed Biology, 3% passed English I Reading, 1% passed English I Writing, and 5% passed World Geography. (*Id.*) After the summer retake, 52% of ninth graders – which represents 104 students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 15.)
- FOF 1048. Sixty percent of the 200 ninth graders who took the STAAR exam this year in Quinlan ISD required remediation. (Ex. 3206, French Dep., at 53.)
- FOF 1049. Quinlan ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 226 (60.1%) of Quinlan ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 17.) One-hundred and twenty-five students failed multiple tests. (*Id.*) Only 11.7% of Quinlan's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 15.)
- FOF 1050. In 2008, according to the State's AEIS Report, 41% of Quinlan's students were college ready in Math, 54% were college ready in English Language Arts, and 28% were college ready in both subjects. In 2009, 49% of Quinlan's students were college ready in Math, 54% were college ready in English Language Arts, and 34% were college ready in both subjects. In 2010, 49% of Quinlan's students were college ready in Math, 54% were college ready in English Language Arts, and 30% were college ready in both subjects. (Ex. 451, 458.)

- FOF 1051. Quinlan ISD is forced to have paraprofessionals teaching certain classes at the middle school because it cannot hire certified teachers at the salary it can afford to offer. The superintendent of Quinlan ISD testified that if Quinlan ISD paid teachers in conformity to the state's minimum salary schedule, some of his teachers would qualify for food stamps. (RR20:82-83, 127.)
- FOF 1052. Quinlan ISD has serious facility and maintenance issues. The high school has structural problems requiring about \$10 million in repairs. The elementary schools have roof leaks and the HVAC routinely fails. Quinlan ISD does not have sufficient funds to make the necessary repairs and renovations. (RR20:86-87.)
- FOF 1053. The limited number of science labs and their poor condition in Quinlan ISD's middle schools pose safety issues for the students. The equipment is limited antiquated and inadequate. Because of gas leaks, the district cannot use Bunsen burners for experiments. They have not had the funds to repair these leaks. These problems make it impossible to cover all the TEKS in middle school in the way they are supposed to be taught. Quinlan does not have sufficient funds to make the necessary repairs. (RR20:87-88; Ex. 3206, French Dep., at 52-53.)
- FOF 1054. Superintendent French testified that Quinlan ISD was forced to reduce its pre-K programs to half day because of budget cuts, but re-instituted full-day pre-K in 2012 because there was a noticeable drop in preparedness of this group of students. (RR20:76-77.)
- FOF 1055. Quinlan ISD only has computers in one lab on each campus. These labs have twenty to twenty-five computers for all children on the campuses with 600 students, and those computers are five to six years old. A lack of funding prevents Quinlan from having more and better technology. Children in Quinlan usually do not have technology available at home. (RR20: 80-82; Ex. 3206, French Dep., at 56-58.)
- FOF 1056. Quinlan ISD is able to offer business information management, a small cosmetology program and a small automotive tech program. The district cannot afford the necessary equipment for an effective cosmetology or automotive tech program. Quinlan ISD was forced to cut its culinary arts program because it could not afford the necessary equipment. Quinlan needs a pre-nursing program, computer programming programs, and a pre-engineering program, but it does not have sufficient funds to offer these programs. These programs would prepare students for jobs that exist in the area. (RR20:94-95; Ex.3206, French Dep., at 39-42.)
- FOF 1057. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Quinlan ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

xi. **Bryan ISD**

- FOF 1058. Bryan ISD is a property-poor Chapter 42 district in central Texas adjacent to College Station. Bryan ISD currently educates 16,000 students on twenty-three campuses. (Ex. 3200, Wallis Dep., at 10, 32, 206; Ex. 11323.)
- FOF 1059. Seventy-eight percent of the students in Bryan ISD are economically disadvantaged. The student body is 52% Hispanic and 24% African American. (Ex. 3200, Wallis Dep., at 10.)
- FOF 1060. Even prior to the 2010 budget cuts, Bryan ISD did not have the resources to prepare a majority of its students to graduate college ready. Now they have to meet more rigorous standards and their funding was cut by \$6 million by the 82nd Legislature. (*Id.* at 14-15.)
- FOF 1061. As a result of the State's budget cuts, Bryan ISD cut \$4.5 million from its budget in 2011-12, but still had a \$1.5 million deficit. To make these cuts Bryan ISD reduced the district healthcare insurance premium by \$15 per employee, reduced the district contribution to the workman's compensation risk pool, and reduced administrative professional services by reducing special education district-level positions. It eliminated two professional technology positions and eliminated a dropout prevention specialist. It eliminated five special education teachers, an assistant principal, and an assistant band director. The custodial staff was reduced by approximately twenty. It eliminated three additional instructional aides and eliminated a life skills teacher. It eliminated stipends for bilingual education teachers, eliminated the tuition reimbursement program for its employees, and eliminated transfers between its middle schools and high schools. It reduced bus routes. It eliminated two middle school interventionists. It reduced the number of permanent substitute teachers. These cuts impacted negatively the education of students in Bryan ISD. (Ex. 3200, Wallis Dep., at 16-17, 19, 21.)
- FOF 1062. Because of budget cuts some classes at Bryan ISD's high schools will have thirty-five to forty students in them. Bryan ISD received class size waivers for its elementary schools. Bryan ISD could not continue its one computer to one student ratio in its middle schools because of a lack of funding. Those computers allowed students to use the INQUIRE and Odyssey programs for research and presentations. (*Id.* at 23-25.)
- FOF 1063. Bryan ISD's M&O tax rate is \$1.04. (*Id.* at 14.)
- FOF 1064. After the first administration of the STAAR exam, 63% of Bryan ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 7.) Scores were particularly low on the Algebra, English I Reading, English I Writing, and World Geography EOCs. At the Level II final standard, only 33% of students passed Algebra, only 38% passed English I Reading, only 25% passed English I Writing, and only 35% passed World Geography. (Ex. 163 at 1.) At Level III, only 15% of students passed Algebra, 9% passed Biology, 6% passed English I Reading, 1% passed English I Writing, and 12% passed World Geography. (*Id.*) After the summer retake, 57% of ninth graders – which represents 628 students – still had not passed at

least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 7.)

- FOF 1065. About 50% of Bryan's ninth graders had to take remediation. The State did not provide any funding for this remediation. Bryan ISD cannot accomplish the college-ready mandate under the existing funding structure even if it raises its tax rate to \$1.17. (Ex. 3200, Wallis Dep., at 56-58.)
- FOF 1066. Bryan ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 1017 (55.9%) of Bryan ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 7.) Five-hundred and ninety-three students failed multiple tests. (*Id.*) Only 21.3% of Bryan's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 5.)
- FOF 1067. In 2008, according to the State's AEIS Report, 56% of Bryan ISD's students were college ready in Math, 57% were college ready in English Language Arts, and 41% were college ready in both subjects. In 2009, 62% of Bryan's students were college ready in Math, 59% were college ready in English Language Arts, and 47% were college ready in both subjects. In 2010, 64% of Bryan ISD's students were college ready in Math, 61% were college ready in English Language Arts, and 50% were college ready in both subjects. (Ex. 161, 162.)
- FOF 1068. Eighty-seven percent of all students at Bryan ISD, 92% of ELL students, and 93% of economically disadvantaged students are not performing well enough to meet the college-ready standards. (Ex. 3200, Wallis Dep., at 76-77.)
- FOF 1069. Bryan ISD does not have the funding to provide the variety of courses necessary to get its high school students ready for the distinguished curriculum. (*Id.* at 33, 41)
- FOF 1070. One-third of Bryan ISD's school buildings are over fifty years old. The district's science labs are outdated and ill-equipped. Bryan high school has approximately 226 doors that open to the outside and ninety that open to the outside at one of the middle schools. This is a safety concern. There are plumbing issues on some campuses. Bryan ISD can only afford to make superficial fixes. There are portable buildings on many campuses which have been used for many years. The portables are not well insulated and in 2012-13, an entire campus will be housed in portable buildings because Bryan cannot afford to fix the buildings on this campus. (*Id.* at 49, 56.)
- FOF 1071. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Bryan ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

## xii. Belton ISD

- FOF 1072. Belton ISD is a property-poor Chapter 42 district located between Austin and Waco in central Texas. Belton ISD currently educates 9,800 students. It is a fast growing district. (Ex. 3226, Kincannon Dep., at 9-10; Ex. 609 at 12.)
- FOF 1073. Over 30% of Belton ISD's students are Hispanic, and its African American population is close to 7%. Forty-eight percent of its students are economically disadvantaged. (Ex. 3226, Kincannon Dep., at 12-13; Ex. 609.)
- FOF 1074. The superintendent of Belton ISD testified that the district does not have sufficient resources to provide the programs and services needed to give its students an opportunity to achieve the college-ready standard. It needs more resources to help children achieve higher levels in the elementary grades. It needs early childhood intervention, and remediation all through the lower grades and middle school. At the high school level, it needs to help students who still are not at grade level. It needs additional teaching staff and additional professional development to provide quality trained staff at every grade level so that it catches up students before they get to high school. (Ex. 3226, Kincannon Dep., at 27 and 142.)
- FOF 1075. Belton ISD's M&O tax rate is \$1.17. (Ex. 3006.)
- FOF 1076. After the first administration of the STAAR exam, 39% of Belton ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 5.) At Level III, only 23% of students passed Algebra, 17% passed Biology, 13% passed English I Reading, 4% passed English I Writing, and 19% passed World Geography. (Ex. 7613 at 1.) After the summer retake, 37% of ninth graders – which represents 250 students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 5.)
- FOF 1077. Belton ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 697 (48%) of Belton ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 9.) Three-hundred and forty-nine students failed multiple tests. (*Id.*) Only 27.4% of Belton's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 7.)
- FOF 1078. In 2008, according to the State's AEIS Report, 58% of Belton ISD's students were college ready in Math, 59% were college ready in English Language Arts, and 45% were college ready in both subjects. In 2009, 60% of Belton ISD's students were college ready in Math, 65% were college ready in English Language Arts, and 49% were college ready in both subjects. In 2010, 64% of Belton ISD's students were college ready in Math, 66% were college ready in English Language Arts, and 52% were college ready in both subjects. (Ex. 609, 614.)

- FOF 1079. Belton ISD has to buy its buses on a lease-purchase arrangement because it cannot afford to buy them outright. (Ex. 3226, Kincannon Dep., at 58-59.)
- FOF 1080. Belton ISD had a bond election in May of 2012 and raised \$60 million which it used to build three new schools for the district, two elementary schools and a middle school, to address the growth of the school district which has been 40% over a ten-year period. (Ex. 3226, Kincannon Dep., at 59-61.)
- FOF 1081. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Belton ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

### xiii. Kaufman ISD

- FOF 1082. Kaufman ISD is a property-poor Chapter 42 district located about thirty miles east of Dallas. Kaufman ISD educates 3,500 students. (Ex. 563, 574 and 11323.)
- FOF 1083. Sixty-three percent of Kaufman ISD's students qualify for the free and reduced lunch program. Forty percent of Kaufman ISD's students are Hispanic and about 7% of its students are African American. (Ex. 3208, Williams Dep., at 25-26.)
- FOF 1084. Kaufman ISD's M&O tax rate is \$1.17. (*Id.* at 68.)
- FOF 1085. After the first administration of the STAAR exam, 61% of Kaufman ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 15.) Scores were particularly low on the Algebra, Biology, English I Reading, English I Writing, and World Geography EOCs. At the Level II final standard, only 25% of students passed Algebra, only 32% passed Biology, only 32% passed English I Reading, only 29% passed English I Writing, and only 37% passed World Geography. (Ex. 3208 at 1.) At Level III, only 8% of students passed Algebra, 2% passed Biology, 3% passed English I Reading, 2% passed English I Writing, and 9% passed World Geography. (*Id.*) After the summer retake, 54% of ninth graders – which represents 141 students – still had not passed at least one EOC exam and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 15.)
- FOF 1086. Kaufman ISD's student performance did not show the necessary improvement in the second year of the STAAR-EOC exams. In Spring of 2013, 284 (16%) of Kaufman ISD's 9th and 10th graders failed at least one of the STAAR-EOC exams at the lower phase-in I standard required for graduation under HB5. (Ex. 6548 at 13.) One-hundred and seventy-nine students failed multiple tests. (*Id.*) Only 16.6% of Kaufman's 9th and 10th graders achieved the final level II standard on all graduation exams. (Ex. 6547 at 11.)
- FOF 1087. In 2008, according to the State's AEIS Report, 66% of Kaufman's students were college ready in Math, 60% were college ready in English Language Arts, and 50% were college

ready in both subjects. In 2009, 61% of Kaufman's students were college ready in Math, 67% were college ready in English Language Arts, and 50% were college ready in both subjects. In 2010, 59% of Kaufman's students were college ready in Math, 74% were college ready in English Language Arts, and 52% were college ready in both subjects. (Ex. 563, 564.)

- FOF 1088. Kaufman ISD is only able to offer one foreign language, Spanish, because of a lack of funding. (Ex. 3208, Williams Dep., at 187-188.)
- FOF 1089. Employers in Kaufman County are telling Kaufman ISD that graduates are not college or career ready. (*Id.* at 190-91.)
- FOF 1090. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Kaufman ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

**d. Edgewood ISD Plaintiff districts**

**i. Edgewood ISD**

- FOF 1091. Edgewood ISD is an urban, property-poor Chapter 42 school district located in San Antonio, Texas. (RR22:129; Ex. 4235.)
- FOF 1092. In 2012-13, Edgewood ISD educated 11,931 students. (Ex. 20254 at 15.) Of these students, 98.3% were Hispanic, 1% African-American, and 0.5% White. (*Id.*)
- FOF 1093. In 2012-13, 95.7% of Edgewood ISD's students were economically disadvantaged – a 3% increase from the previous year, and far in excess of the state average. (Ex. 4237 at 4; Ex. 20254 at 15.) More than 17.4% of Edgewood ISD's students (or approximately 2,199 students) were ELL in the same school year. (*Id.*)
- FOF 1094. As an urban district, Edgewood ISD has a high student mobility rate of approximately 24.5%. (RR22:140; Ex. 865 at Sec. II.) The student mobility rate is based on the number of times students enroll in or leave a school during the school year. A high mobility rate involves substantial disruption to the normal educational process, because teachers must interrupt their planned curriculum to assess and adjust to the turnover in the student population. This, in turn, has an overall negative effect on general student performance, creating additional challenges for Edgewood ISD. (RR22:138-40; Ex. 4224-S, Cervantes Dep., at 196; Ex. 840 – Ex. 856 (all at Sec. II).)
- FOF 1095. In FY2013, the property value per WADA in Edgewood ISD was \$60,631, an approximate \$2,100 decrease from the previous year. (*Compare* Ex. 20038, Cortez

Master workfile, with Ex. 4235.) The revenue per WADA in FY 2013 was \$5,825, a minimal increase from \$5,809 the previous year. (Compare Ex. 20038 with Ex. 4235.)<sup>52</sup>

- FOF 1096. Edgewood ISD has an M&O tax rate of \$1.17, and has been at the \$1.17 cap for six years. (Ex. 826 – Ex. 828; Ex. 4224-S, Cervantes Dep., at 198.) Edgewood ISD has no means of raising its M&O tax rate and no means to raise additional revenue to finance its maintenance and operations. (Ex. 4224-S, Cervantes Dep., at 198.)
- FOF 1097. Edgewood ISD also has an I&S tax rate of 25 cents. (Ex. 828.)
- FOF 1098. As stated earlier, no party demonstrated that the school districts were inefficiently or inequitably allocating their resources. (See *supra* Part I.C.6.b (FOF 655, *et seq.*.) The State recognized the district with a “Superior Achievement” rating under FIRST for the 2012-13 school year. (Ex. 11359.) Budgets provided by Edgewood ISD reflect that the district continues to allocate efficiently its resources in the same manner as prior years examined during trial. (Ex. 4237; Ex. 4278 – Ex. 4280.) In 2011-12, for example, 77% of the district’s budget was expended on payroll and salaries, 19% was spent on operating expenditures, and 4% was expended on capital assets. (Ex. 4237 at 5-6.)
- FOF 1099. For the 2013-14 school year, this pattern remains similar when considering district budget allocations. The district budgeted 79.8% of its general fund for salaries, 19.8% for operating expenditures, and .3% for capital projects. (Ex. 4278 at 7.)
- FOF 1100. As a result of the 82<sup>nd</sup> Legislature’s budget cuts, Edgewood ISD had to eliminate all campus interventionists and reduce its summer school opportunities by half, which hindered its effort to prevent dropouts and bring low-income students up to grade level. (Ex. 4237 at 7; RR22:154-62.) The district requires extended learning time with low-income students to provide the level of intensity required to get those students up to grade level. (RR22:160-61; Ex. 4237 at 11.)
- FOF 1101. Also due to lack of funding, bilingual teachers in Edgewood must teach both English-speaking children and ELLs in the same classroom, which is not an adequate learning environment for both the ELL and non-ELL students. Because of this exceptionally challenging environment, ELL teachers, including special education teachers, require higher quality ESL professional development which includes Structured Immersion Observation Protocol (“SIOP”) strategies that can help ELL students succeed and become academically proficient in the English language. However, there is no funding for this training. Full-day paraprofessionals are also needed, but lacking, in kindergarten classrooms to meet the needs of the high populations of ELL and low-income students in those classes. (RR14:157-58 (referencing Ex. 4231 at 31); Ex. 1345, Izquierdo Site Visits Report, at 3-4; RR22:149-50.)

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<sup>52</sup> Unless otherwise noted, the data cited for Edgewood Plaintiffs is the latest, but not yet final, 2012-2013 data produced by TEA.

- FOF 1102. The district was left with substantial needs that it cannot meet, such as quality professional development, extended learning time, high quality tutoring, family liaisons, and smaller learning communities for its low-income and ELL students. (Ex. 4237 at 9, 11; RR22:150-62 (district superintendent approximating the costs to implement and expand programs needed to provide reasonable opportunities to all students); Ex. 4224-S, Cervantes Dep., at 153-54.)
- FOF 1103. The additional funds resulting from SBI and HBI025 were not sufficient to meet Edgewood's remaining bilingual or compensatory education needs. (*Compare* Ex. 4237 at 8-11, *with* 4280.) For example, the additional \$497,364 Edgewood was able to generate for compensatory education from 2011-12 to 2013-14 as a result of new legislation is nowhere near the \$2 million plus in additional compensatory educational needs identified by Edgewood's superintendent. (*Compare* Ex. 4237 at 10-11, *with* 4280.) Similarly, the additional \$36,936 the district generated from 2011-12 to 2013-14 for Bilingual / ESL does not even cover the cost of adequate professional development for ELL teachers in the district, much less the additional expenditures Edgewood's superintendent identified as necessary to meet the needs of its ELL students. (*Compare* Ex. 4237 at 8-9, *with* 4280.)
- FOF 1104. Overwhelming class sizes also remain an issue for Edgewood ISD, and the district submitted 16 waiver applications for the 2013-14 school year. (Ex. 4281.) Edgewood also maintains both eligible and non-eligible three and four-year olds on its preschool waitlists. (Ex. 4285.)
- FOF 1105. The inability to provide the necessary opportunities in the classroom has led to poor student performance in Edgewood ISD. After the Spring 2013 administration of the STAAR exam, 50% of Edgewood ISD's students failed to meet the Level II phase-in standard on Algebra, 40% failed to meet the standard in Biology, 60% failed to meet the standard in English I Reading, and 80% failed to meet the standard in English I Writing. (Ex. 4282 at 40-44.)
- FOF 1106. Edgewood ISD students showed no improvement over time in these subject areas, and in fact, the percentage failing increased in every area. (*See* Ex. 4237 at 16, showing that in the first administration of the 2012-13 STAAR exam, 42% failed to meet the Level II phase-in standard on Algebra, 32% failed in Biology, 53% failed in English I Reading, and 72% failed in English I Writing.)
- FOF 1107. In addition, after the Spring 2013 administration, a total of 80% of Edgewood ISD's ninth and tenth graders had failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6548.)
- FOF 1108. Results were even more dismal at the Level II final standard for the same Spring 2013 Administration. Only 9% of Edgewood students passed Algebra I at the Level II final standard, 14% passed Biology, 19% passed English I Reading, and 8% passed English I Writing. (Ex. 4282 at 40-44.)

- FOF 1109. Finally, in 2013 at the Level III advanced standard, no student met the standard in English I Writing, and not more than 2% met the standard in Algebra, Biology, English I or Reading. (Ex. 4282 at 1, 4, 7, 9, and 20.) This performance was stagnant from the previous year, when no student met the standard in English I Writing, and not more than 3% met the standard in Algebra, Biology, or English I Reading. (Ex. 4237 at 20.)
- FOF 1110. Edgewood students who failed the test did not fare much better on the retake. After the 2012 summer retake, for example, 73% of ninth graders still had not passed at least one EOC exam at the initial phase-in level and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 6.)
- FOF 1111. Edgewood ISD graduates also struggled considerably in being college ready. In 2012, only 38% of Edgewood's students were considered College-Ready Graduates in both subjects. (Ex. 828 at 11; Ex. 4237 at 14.)
- FOF 1112. Whereas 24.9% of students statewide met the State's benchmarks under the SAT/ACT college-readiness indicator<sup>53</sup> in the 2012-13 school year (Ex. 20254 at 13-14), only 2.3% in Edgewood ISD reached this level, a decrease from 3.8% the previous year. (*Compare* Ex. 828 at Sec. 1, p. 11, *with* Ex. 20254 at 13-14.)
- FOF 1113. Out of almost 12,000 enrolled students, only 328 participated in AP exams in 2013. (Ex. 4238.) Only 15.9% of the AP students from John F. Kennedy High School, and 10.1% of AP students from Memorial High School scored a 3 or higher, compared to 50.5% statewide. (*Id.*)
- FOF 1114. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Edgewood ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

**ii. San Benito CISD**

- FOF 1115. San Benito CISD is a rural property-poor Chapter 42 district located in the Rio Grande Valley. (RR4:95.)
- FOF 1116. In FY2013, the property value per WADA in San Benito CISD was \$57,919, a decrease from \$59,758 the previous year. (*Compare* Ex. 20038 *with* Ex. 4235.) Its revenue per WADA increased only \$50 during the same time period, from \$5,842 to \$5,890. (*Compare* Ex. 20038 *with* Ex. 4235.)
- FOF 1117. San Benito CISD has an M&O tax rate of \$1.17. (Ex. 4235.) San Benito CISD's I&S tax rate is 13.49 cents. (*Id.*) San Benito CISD has no means of raising its M&O tax rate and

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<sup>53</sup> Under the previous accountability rating system, a student could be considered college ready if he or she met or exceeded the college-ready criteria on the SAT or ACT. (Ex. 10324 at 56.)

no means to raise additional revenue to finance its maintenance and operations. (RR4:95.)

- FOF 1118. The State recognized the district with a “Superior Achievement” rating under FIRST for the 2012-13 school year. (Ex. 11359.) Like Edgewood ISD, budgets provided by San Benito CISD reflect that the district continues to allocate its resources efficiently and in the same manner as prior years examined in this case. (Ex. 4227; Ex. 4312; Ex. 4313.) In 2009-2010, for example, 74% of the district’s budget was expended on payroll and salaries, 23% on operating expenditures, and 3% on capital outlay and debt services. (Ex. 4227 at 6.)
- FOF 1119. For the 2013-14 school year, this pattern remains similar when considering district budget allocations. The district budgeted 78.4% of its general fund for salaries, approximately 20.6% for operating expenditures, and less than 1% for capital outlay and debt service. (Ex. 4313 at 15.)
- FOF 1120. In the 2012-13 school year, San Benito CISD educated approximately 11,160 students. (Ex. 4316 at 14.) Of these students, 99.3% were minority students, including 0.1% African American, 99.0% Hispanic, and 0.8% White. (*Id.*) In addition, 83.9% were economically disadvantaged and 23.2% were ELL, slight increases from the previous year. (*Compare id. with* Ex. 805 at Sec. II, p.1.)
- FOF 1121. San Benito CISD lost approximately \$6 million as a result of the 82<sup>nd</sup> Legislature’s statewide budget cuts. (RR4:100.) To absorb the loss, the district eliminated thirty-six paraprofessional positions, causing the district to increase its student-teacher ratios. (RR4:103.) San Benito had to draw from its general fund solely to prevent further cuts to the classroom and is prevented from providing enrichment or lowering its tax rate. (RR4:101-02.)
- FOF 1122. San Benito CISD’s superintendent explained that due to the budget cuts, his district lacks funding to offer necessary interventions and services such as providing after-school tutorials, student transportation for extended day programs, retaining highly qualified teachers, or lowering class ratios. (RR4:76-79 (for example, the district is unable to provide tutoring to at least 10% of its economically disadvantaged students who are below grade level or to assist those who are struggling to keep up, and at least 500 to 600 students require summer school that the district is unable to provide).)
- FOF 1123. Due to limited funding, the district was unable to afford the ESL curriculum, not all classrooms have textbooks, and all have technology needs for ELL students. (RR14:162-63 (referencing Ex. 4231 at 37-38); Ex. 1345, Izquierdo Site Visits Report, at 7-8; RR4:92; RR22:222-23.) Teachers are also forced to teach in “mixed classrooms,” making it exceptionally challenging to implement fully the district’s transitional late-exit bilingual program, and still have available adequate professional development and ELL specialists to support them. The district is unable to compensate teachers for staying after school for trainings and meetings. As a result of this lack in support, program monitoring, and program implementation, program effectiveness suffers. (RR14:162-63

(referencing Ex. 4231 at 37-38); Ex. 1345, Izquierdo Site Visits Report. at 7-8; RR4:89-90.)

- FOF 1124. San Benito lacks funding to provide important interventions for its students needed for an adequate education, including extended learning time, high quality tutoring, summer school, and smaller learning communities for its low-income and ELL students. (RR4:73-83.)
- FOF 1125. The inability to provide the necessary opportunities in the classroom has led to poor student performance in San Benito CISD. After the Spring 2013 administration of the STAAR exam, 24% of San Benito's students failed to meet the Level II phase-in standard for Algebra, 22% failed Biology, 53% failed English I Reading, and 64% failed English I Writing. (Ex. 4315 at 38-42.) In all of these subject areas, San Benito fared worse in the 2013 administration of the STAAR exam than it did on the first administration. (*Compare id. with Ex. 4227 at 10.* showing that in the first administration, 18% of San Benito's students failed Algebra I, 16% failed Biology, 44% failed English I Reading, and 52% failed English I Writing.)
- FOF 1126. In the 2013 Spring administration, 86% percent of ELL students in San Benito were unable to meet the phase-in standard for English I Writing and 82% of ELL students failed to meet the phase-in standard for English I Reading. (Ex. 4316 at 4-5.)
- FOF 1127. In 2012, only 1 out of 2 San Benito students were considered College-Ready Graduates in both subjects. (Ex. 4316 at 12-13.)
- FOF 1128. In 2012-2013, students in San Benito CISD reached the State's standard under the SAT/ACT AEIS college-readiness indicator at rates under one-third of the state average (6.8% in San Benito CISD compared to 24.9% statewide). (Ex. 4316 at 13.) The district percentage decreased by 3 percentage points from 9% the previous year. (Ex. 805 at Sec. I, p. 11.)
- FOF 1129. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that San Benito CISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

### iii. La Feria ISD

- FOF 1130. La Feria ISD is a rural property-poor Chapter 42 district situated in the Rio Grande Valley in South Texas. (Ex. 4235.)
- FOF 1131. In FY2013, the property value per WADA in La Feria ISD was \$72,914, and its revenue per WADA was \$5,246, a decrease from \$5,559 the previous year. (*Compare Ex. 20038 with Ex. 4235.*)

- FOF 1132. In 2011-12, La Feria ISD had an M&O tax rate of \$1.04 and an I&S tax rate of 29.6 cents. (Ex. 4235.) La Feria ISD sought a TRE at least twice in recent years to increase its M&O rate above \$1.04, but those elections were unsuccessful due to economic difficulties and unemployment in the community. (RR15:197.) In 2013, on its third try, La Feria finally passed a TRE to swap I&S pennies for M&O pennies and is now at the \$1.17 M&O cap. (Ex. 4336, Cavazos Dep., at 18-19.)
- FOF 1133. The State recognized the district with a "Superior Achievement" rating under FIRST for the 2012-13 school year. (Ex. 11359.) Like Edgewood ISD, budgets provided by La Feria ISD reflect that the district continues to allocate its resources efficiently and in the same manner as prior years examined in this case. (Ex. 4231; Ex. 4232.) In 2011-12, for example, 81% of the district's budget was expended on payroll and salaries, 19% was spent on operating expenditures, and 1% was expended on capital assets. (Ex. 4232 at 5.)
- FOF 1134. La Feria ISD educated approximately 3,679 students in 2012-13, an increase of over one hundred from the previous year. (*Compare* Ex. 4232 at 2 with Ex. 4326 at 14.) In 2012-13, Hispanic students comprised 96.2% of the total student population, African-American students comprised 0.1%, and White students comprised 3.2%. (*Id.*)
- FOF 1135. In addition, 82% of La Feria students were economically disadvantaged in 2012-13 and 13.9% were ELL. (Ex. 4326 at 12.)
- FOF 1136. As a result of budget cuts, La Feria ISD was forced to eliminate teaching positions, reduce summer school availability, and reduce overtime, among other measures. As a result of the cuts, the district had to increase student-teacher ratios in the classroom. (RR18:32-34, 48-49.) These cuts further limited the district's ability to provide an adequate education for its low-income and ELL students. (Ex. 4232 at 6.)
- FOF 1137. La Feria's superintendent testified that the district lacks funding to provide necessary interventions for an adequate education, including quality professional development, extended learning time, high quality tutoring, ESL curriculum, textbooks and technologies needed to serve all ELL students, and smaller learning communities for its low-income and ELL students. (RR15:208-09; RR18:10-40; RR14:162-63 (referencing Ex. 4231 at 37-38); Ex. 1345, Izquierdo Site Visits Report, at 7-8; RR4:92; RR22:222-23.)
- FOF 1138. There are mixed classrooms in La Feria ISD as well. Specifically, professional development is limited in grades seven through eight, even though teachers have expressed the need for quality professional development to meet the challenge of managing both groups and both curriculum requirements simultaneously. Many of La Feria's secondary school teachers have not received adequate training for ELPS/SIOP for supporting ELLs or are not certified in ESL. (RR14:165-166 (referencing Ex. 4231 at 39); Ex. 1345, Izquierdo Site Visits Report, at 8-9; RR18:17-18, 28.) The district is unable to afford ESL curriculum; teachers are constantly having to translate their own materials and assessments; and not all classrooms have basic textbooks, technologies, and materials such as bilingual and pictures dictionaries, readers, and instructional games

needed to serve all ELL students. (RR14:162-63 (referencing Ex. 4231 at 37-38); RR4:92; RR22:222-23; RR14:165-166 (referencing Ex. 4231 at 39); Ex. 1345. Izquierdo Site Visits Report, at 7-9; RR18:17-18, 28.)

- FOF 1139. The inability to provide the necessary opportunities in the classroom has led to poor student performance in La Feria ISD. After the spring 2013 administration of the STAAR exam, 28% of La Feria's students failed to meet the Level II phase-in standard in Algebra. 22% failed Biology, 40% failed English I Reading, and 59% failed English I Writing. (Ex. 4324 at 34-38.)
- FOF 1140. For the same year, 33% of La Feria's economically disadvantaged students failed to meet the phase-in standard for Algebra I, 24% failed Biology, 41% failed English I Reading, and 62% failed English I Writing. One hundred percent of ELL students failed English I Reading and Writing. (Ex. 4324 at 34-38 and Ex. 4326 at 2-3.)
- FOF 1141. At the Level II final recommended standard, only 23% of students passed Algebra I, 25% passed Biology, 35% passed English I Reading, and 23% passed English I Writing. (Ex. 4324 at 34-38.)
- FOF 1142. Finally, only 2% of tested students in La Feria were able to meet the Level III advanced standard in Biology, and no student met the standard in English I Writing. (Ex. 4324 at 4, 8, and 15.)
- FOF 1143. After the summer retake, 63% of La Feria ISD's ninth graders still had not passed at least one EOC exam at the initial phase-in level and were not on track to graduate. (Ex. 6324, Moak Supp. Report One, at 7.)
- FOF 1144. In 2012, on TAKS less than half of La Feria's students were college ready in both subjects. (Ex. 4326 at 10.)
- FOF 1145. In 2012, 7.2% of La Feria ISD's students reached the state's criterion under the SAT/ACT college-readiness indicator, compared to 24.9% of students statewide. (Ex. 4326 at 11.) This represented a decrease of over two percentage points for La Feria ISD from the previous year. (Ex. 4015 at Sec. I, p. 11.)
- FOF 1146. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that La Feria ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

#### iv. McAllen ISD

- FOF 1147. McAllen ISD is a property-poor Chapter 42 district located in the Rio Grande Valley in South Texas.
- FOF 1148. In FY2013, the property value per WADA in McAllen ISD was \$189,762, a decrease from \$202,868 the previous year. (*Compare* Ex. 20038 with Ex. 4235.) Its revenue per

WADA was \$5,422, a decrease from \$5,777 the previous year. (*Compare* Ex. 20038 with Ex. 4235.)

- FOF 1149. McAllen ISD is taxing at an M&O rate of \$1.165, just a half-cent under the statutory maximum. (Ex. 11333 – 2012 Tab. column V.) Its I&S rate is 12.50 cents. (Ex. 4297 at 2.)
- FOF 1150. Of 24,815 total enrolled students in the 2012-13 school year, 64.9% of McAllen ISD's students were economically disadvantaged and 27.4% were ELL. (Ex. 4302 at 13.) Over the years, the trend in McAllen ISD has been a steady decline in the number of African-American and White students and a steady increase in the number of Hispanic students. (*Id.*)
- FOF 1151. The State recognized the district with a "Superior Achievement" rating under FIRST for the 2012-13 school year. (Ex. 11359.) Like Edgewood ISD, budgets provided by McAllen ISD reflect that the district continues to allocate its resources efficiently and in the same manner as prior years examined in this case. (Ex. 4238 at 5, Ex. 4309, Ex. 4296, Ex. 4297.) In 2010-11, for example, 84.5% of the district's budget was expended on payroll and salaries, 14.3% was spent on operating expenditures, and 1.3% was expended on capital assets. (Ex. 4238 at 5.)
- FOF 1152. For the 2013-14 school year, this pattern remains similar when considering district budget allocations. The district budgeted 79.3% of its general fund for payroll costs, 14.75% for operating expenditures, and 5.52% for capital projects. (Ex. 4297 at 19.)
- FOF 1153. As a result of the budget cuts, McAllen ISD had to close a school, consolidate buildings, and reduce health benefits for teachers, in addition to making other cuts. (Ex. 4233-E., Ponce Dep., at 194-96.) The district also has \$160 million in unmet facility needs. (*Id.* at 199-200.)
- FOF 1154. McAllen ISD's superintendent testified that the district lacks funding to provide necessary interventions for an adequate education, including smaller learning communities and class sizes for its low-income and ELL students. (*Id.*)
- FOF 1155. There are also insufficient funds to provide adequate technologies, textbooks, and translator/interpreter services to develop comprehensible materials for students and parents. (RR14:160-61 (referencing Ex. 4231 at 34-36); Ex. 1345, Izquierdo Site Visits Report, at 5-7.)
- FOF 1156. In 2010-11, McAllen had approximately 7,000 ELL students and more than 300 bilingual/ESL teachers. ELL teachers are assigned to several schools or classrooms and consequently do not have sufficient time to work effectively with ELL students. Additional middle school teachers are also needed for newcomer students who enter secondary schooling with academic gaps in their home language and require specialized support that they cannot and do not receive in a regular class. (RR14:160-61 (referencing Ex. 4231 at 34-36); Ex. 1345 at 5-7.)

- FOF 1157. The special education department in McAllen does not have sufficient assessments in Spanish and other languages to appropriately evaluate ELL students with disabilities, and the district needs additional funds for properly trained ELL special education teachers to deliver instruction utilizing second language acquisition and SIOP strategies. (Ex. 1345 at 5-7.)
- FOF 1158. Additional properly-trained personnel are needed in McAllen to review and evaluate ELL transcripts in order to provide credit for students to meet graduation requirements and place students in the appropriate courses. Professional development for teachers and school administrators is limited due to lack of funding, and program monitoring and implementation suffer as a result. (RR14:160-61 (referencing Ex. 4231 at 34-36); Ex. 1345 at 5-7.)
- FOF 1159. The additional funds resulting from SBI and HB1025 were not sufficient to meet McAllen's remaining bilingual or compensatory education needs. (Ex. 4255.) For example, McAllen did not have sufficient state compensatory funds to allocate in 2013-14 what it expended in 2012-13 for extended year summer school and dropout recovery and prevention programs, and counseling and guidance. (Ex. 4255 at 2.) Despite the need for additional adequate technologies, and textbooks for ELL students as described above, McAllen had to reduce its budget for supplies and materials for bilingual education by half. (Ex. 4255.) The district also had to reduce supplemental positions and materials for its K-1 Summer School Bilingual Program. (*See id.*) The district still does not have sufficient funds for needed bilingual counselors, coaches, bilingual special education teachers. (*See id.*)
- FOF 1160. Overwhelming class sizes also remain an issue for McAllen, and the district submitted 29 waiver applications for the 2013-14 school year. (Ex. 4298.) The district was not able to reduce class size for ELL students. (Ex. 4255.)
- FOF 1161. The inability to provide the necessary opportunities in the classroom has led to poor student performance in the McAllen ISD. In 2010-11, looking at all tests and all grades, nearly half of McAllen's ELL students failed to meet the TAKS met standard and 94% failed to reach the TAKS commended standard. (RR25:185-87, 190.)
- FOF 1162. In the 2011-12 school year, across all tests and grades, 68% of McAllen's ELL students failed to meet the TAKS met standard, an approximate 20-point increase from the previous year. (*Compare* Ex. 4305 at Sec. 1, p. 3 *with* RR25:185-87, 190.) Ninety-nine percent (99%) failed to reach the TAKS commended standard, a five percentage point increase from the previous year. (*Compare* Ex. 4305 at 3, *with* RR25:185-87, 190.)
- FOF 1163. For 2012-13, 49% of students in McAllen did not meet the Level II phase-in standard in English I Writing, 32% failed to meet this standard in English I Reading, 18% in Biology, and 21% in Algebra I. (Ex. 4302 at 2-3.)
- FOF 1164. Results were even worse at the Level III advanced standard. Only 10% of McAllen's students were able to meet the Level III advanced standard in Biology, 10% in English I

Reading, and 2% in English I Writing; 6% of economically disadvantaged students met that standard in English I Reading, 1% in English I Writing, and 4% in Biology. (Ex. 4299 at 72, 75, 77.)

- FOF 1165. In 2012, 49% of grade 12 economically disadvantaged students in McAllen were not College-Ready Graduates in both subjects, representing an 8 percentage point decline from the previous year. (Ex. 4238 at 9; Ex. 589 at 11; Ex. 4302 at 11.) Ninety-eight percent of McAllen's ELL students were not college ready in both subjects, an increase from 90% the previous year. (Ex. 4238 at 9; Ex. 589 at 11; Ex. 4302 at 11.)
- FOF 1166. While 24.9% of students statewide scored at or above the state's criterion under the SAT/ACT college-readiness indicator (Ex. 4302 at 12), only 18.5% of students did so in McAllen ISD. (*Id.*)
- FOF 1167. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds McAllen ISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

**v. Harlingen CISD**

- FOF 1168. Harlingen CISD is a property-poor Chapter 42 district located in the Rio Grande Valley in South Texas.
- FOF 1169. In FY2013, the property value per WADA in Harlingen ISD was \$130,875, a decline from \$136,166 the previous year. (*Compare* Ex. 20038 *with* Ex. 235.) Its revenue per WADA was \$5,458, a slight increase from \$5,404 the previous year. (*Compare* 20038 *with* Ex. 4235.)
- FOF 1170. Harlingen CISD has an M&O tax rate of \$1.04. (*Id.*) It has an I&S tax rate of 17.9 cents. (*Id.*) Harlingen CISD is taxing at \$1.04 but it is not able to raise its taxes above \$1.04 because of the high I&S rate and therefore, TREs have not been sought. (Ex. 4233-D, Flores Dep., at 156-57 (explaining that the community just passed a bond election); Ex. 11333 – 2012 Tab, Column V; Ex. 4336, Cavazos Dep., at 18, 19:1-20.)
- FOF 1171. In 2011-12, Harlingen CISD educated 18,464 students (Ex. 4293 at 6.) Of these students, 0.5% were African American, 90.6% were Hispanic, and 7.9% were White. (*Id.*)
- FOF 1172. In 2011-12, economically disadvantaged students comprised 77.5% of the total student population in Harlingen CISD, and 13.5% of the district's students were LEP. (Ex. 4293 at 6.) Harlingen CISD's total student enrollment and economically disadvantaged and LEP student enrollment have increased over time. (Ex. 4336, Cavazos Dep., at 12.)
- FOF 1173. The State recognized the district with a "Superior Achievement" rating under FIRST for the 2012-13 school year. (Ex. 11359.) Like Edgewood ISD, budgets provided by Harlingen CISD and testimony provided by Mr. Julio Cavazos reflect that the district

continues to allocate its resources efficiently and in the same manner as prior years examined in this case. (Ex 4239 at 5; Ex. 4289; Ex. 4336, Cavazos Dep., at 28-31.) In 2010-11, for example, 83.25% of the district's budget was expended on payroll and salaries, 14.21% was spent on operating expenditures, and 2.54% was expended on capital outlay and debt service. (Ex. 4238 at 5.)

- FOF 1174. For the 2013-14 school year, this pattern remains similar when considering district budget allocations. The district budgeted 83.77% of its general fund for payroll costs, 14.58% for operating expenditures, and 1.64% for capital outlay and debt service. (Ex. 20149 at 6.)
- FOF 1175. Moreover, Harlingen CISD lacks funding to provide necessary interventions for an adequate education, including quality professional development, smaller class sizes, extended learning time, sufficient services for parental involvement, increased technologies, and specialized learning communities for its low-income and ELL students. (Ex. 4233-D, Flores Dep., at 54, 83-84, 86-91, 157, 164, 212-220; RR14:158-60 (referencing Ex. 4231 at 32-33); Ex. 1345, Izquierdo Site Visits Report, at 4-5.)
- FOF 1176. Teaching quality in the elementary bilingual/ESL program implementation for ELLs is weak due to a lack of funds for the quality ongoing professional development, program specialists, and coaches, needed to support teachers and principals. There are mixed classrooms in elementary grades, adding to the difficulties already faced by the teachers. (RR15:121, 138-139, 173.) High school ELLs have an English for Speakers of Other Languages ("ESOL")/English Language Arts teacher for part of the day; the rest of the day, ELL students have core content teachers who do not have a strong preparation in SIOP. Currently, ELL students use English or poorly translated versions of the CSCOPE curriculum, which are insufficient for their needs, and translators are needed to develop the state-required common unit assessments for the required curriculum in Spanish. (RR14:158-160 (referencing Ex. 4231 at 32-33); Ex. 1345, Izquierdo Site Visits Report, at 4-5; Ex. 4233-D, Flores Dep., at 54, 83-84, 86-91, 157, 164, 212-20.)
- FOF 1177. In addition, there are no funds to support paraprofessionals to become teachers or to support training for teachers to receive their bilingual/ESL endorsement. (RR14:158-160 (referencing Ex. 4231 at 32-33); Ex. 1345, Izquierdo Site Visits Report, at 4-5; Ex. 4233-D, Flores Dep., at 54, 83-84, 219-20; RR15:128-29, 130, 140, 145.)
- FOF 1178. Similarly, the additional \$36,936 the district generated from 2011-12 to 2013-14 for Bilingual / ESL does not even cover the cost of adequate professional development for ELL teachers in the district, much less the additional expenditures Harlingen's superintendent identified as necessary to meet the needs of its ELL students. (*Compare* Ex. 4237 at 8-9, *with* 4280.)
- FOF 1179. Overwhelming class sizes also remain an issue for Harlingen. The district was not able to refill all of the 22 teaching positions it had to eliminate in 2010-11 as a result of budget cuts, and as a result, the district submitted 16 waiver applications for the 2013-14 school year. (Ex. 4281; Ex. 4336, Cavazos Dep., at 49:15-50:10.)

- FOF 1180. The inability to provide the necessary opportunities in the classroom has led to poor student performance in the Harlingen CISD and has prevented the district from providing a general diffusion of knowledge. (*See* Ex. 4336, Cavazos Dep., at 21:15-18.)
- FOF 1181. After the first administration of the STAAR exam, 63% of Harlingen ISD's ninth graders failed to meet the Level II phase-in standard on at least one EOC exam. (Ex. 6324, Moak Supp. Report One, at 7.)
- FOF 1182. For 2012-13, 37% of students in Harlingen CISD did not meet the level II phase-in standard in Algebra; 25% failed to meet this standard Biology; 39% failed to do so in English I Reading; and 52% failed to do so in English I Writing. (Ex. 4288 at 2-3.)
- FOF 1183. In 2012-13, almost 60% of Harlingen's economically disadvantaged students did not pass the English I Writing test at the phase-in standard, compared to 52% of students who failed districtwide. (*Id.* at 3.) In English I Reading, 82% of ELL students and 46% of economically disadvantaged students failed compared with 39% of all students in the district. (*Id.* at 2.) In Algebra I, only 23% of ELL students passed at the phase-in Level II standard or above, compared with 63% of students districtwide; 58% of economically disadvantaged students passed that test. (*Id.*)
- FOF 1184. No economically disadvantaged student in Harlingen was able to meet the Level III standard in English I Writing. (Ex. 20156, STAAR Summary Report, Spring 2013, Harlingen CISD, at 9.) Only 3% of economically disadvantaged students were able to meet the Level III advanced standard in Biology, compared with 12% of non-economically disadvantaged students. (*Id.* at 4.) In addition, only 7% of economically disadvantaged students met that standard in Algebra I, and 5% in English I Reading. (*Id.* at 20, 1, and 7).
- FOF 1185. No ELL student in the Harlingen CISD Class of 2012 or Class of 2011 was considered a College-Ready Graduate in both English and Mathematics (Ex. 4288 at 11.) In the Class of 2012, only 39% of economically disadvantaged students were considered College-Ready Graduates in both English and Mathematics, compared with 47% of all students. (*Id.*) In addition, only 5.6% of economically disadvantaged students scored at or above the state's criterion for college readiness in the SAT/ACT, compared to 12.5% of all students districtwide and 24.9% of all students statewide. (*Id.* at 12.) These performance rates did not increase significantly from the prior year's performance. (*Id.*) In 2012-13, only 153 out of 733 students tested in Harlingen CISD scored at the college ready level on the SAT. (Ex. 4336, Cavazos Dep., at 78-79.)
- FOF 1186. From 2009 to 2011, Harlingen CISD students have scored below the State and regional means on both the SAT and the ACT. (Ex. 4336, Cavazos Dep., at 77-78.)
- FOF 1187. In light of the findings above and in Parts I.B.1 to I.C.6, this Court finds that Harlingen CISD lacks sufficient funds to provide a general diffusion of knowledge to its students. The district also lacks meaningful discretion to raise its tax rates to provide local enrichment programs to its students.

vi. **Impact of 2013 legislation on Edgewood ISD Plaintiff districts**

FOF 1188. The additional funding provided through the increase in appropriations by the 83rd Legislature for the Edgewood Plaintiff districts does not render moot their adequacy, suitability, or state property tax claims and requests for relief. As discussed earlier (*see supra* Part I.B.2.f (FOF 65, *et seq.*)), the weights for ELL and economically disadvantaged remain unchanged and provide little additional money for ELL and economically disadvantaged students. For the property-poor Edgewood Districts, they are projected to receive between \$17 and \$21 more per ELL ADA in 2013-14 compared to the 2010-11 school year. (Ex. 20062A, Zamora Report, at 15.)

	2010-11	2013-14	LPE ADA BE/ESL
<b>Edgewood</b>	\$527	\$548	1,848
<b>Harlingen</b>	\$522	\$542	2,290
<b>La Feria</b>	\$500	\$517	421
<b>McAllen</b>	\$534	\$555	6,262
<b>San Benito</b>	\$518	\$538	2,108
<b>State</b>	\$524	\$545	

FOF 1189. The same rings true for the compensatory education weight. The Edgewood Districts are projected to receive between \$34 and \$41 more per economically disadvantaged ADA in 2013-14 compared to the 2010-11 school year. (Ex. 20062A, Zamora Report, at 15.)

	2010-2011	2013- 2014	2013-2014 LPE ADA SCE
<b>Edgewood</b>	1,054	1,095	10,506
<b>Harlingen</b>	1,043	1,084	15,655
<b>La Feria</b>	1,000	1,034	3,377
<b>McAllen</b>	1,068	1,109	17,550
<b>San Benito</b>	1,035	1,076	10,234
<b>State</b>	1,055	1,096	

FOF 1190. Not surprisingly, the lack of adequate funding, even after the changes enacted by the 83rd Legislature, has continued to limit the districts' ability to implement best practices essential to increase student performance of and provide an adequate education to its low-income and ELL students and substantial challenges remain for the Edgewood Districts

in providing a basic, quality education to their most needy students in the 2013-14 school year. (Ex. 20062A, Zamora Report at 21-22.)

- FOF 1191. The needs identified in the 2013-14 school year were consistent with those necessary best practices and interventions identified previously in this trial. (*See supra* I.C.2.c.) Edgewood ISD, for example has shifted classroom space (including the loss of libraries, science labs and conference rooms) to accommodate more pre-K students but still finds itself unable to provide all of their pre-K students with access to quality pre-K programs. (Ex. 20062A, Zamora Report, at 21.)
- FOF 1192. The additional funds resulting from SBI and HB1025 also were not sufficient to meet Harlingen's remaining bilingual or compensatory education needs. (*See generally* Ex. 4256 and Ex. 20149 at 9; *see also* Ex. 4336, Cavazos Dep., at 24-25.) At a minimum, the additional funds did not restore the \$5.3 million budget cut in 2010-11 or even allow the district to keep up with area inflation of approximately 5%. (Ex. 4336, Cavazos Dep., at 14:8-17:20, 18:3-19:7, 44-45, 53:7-11; Ex. 4337 at 4; Ex. 20150.)
- FOF 1193. During the same time period, due to sequestration, the district's federal funding decreased by approximately \$1 million, forcing the district to cut back on needed services such as summer school, tutoring, and extended learning time for at risk students. (Ex. 4336, Cavazos Dep., at 26-27, 60-61.)
- FOF 1194. As a result, the district still has areas of substantial need in its compensatory education programs notwithstanding the supplemental funding, such as additional teachers to provide needed extended day programs and to reduce class size, the reinstatement of tutoring for at-risk students that was eliminated when SSI funding was cut, extending preschool, quality, ongoing professional development for serving students who are at risk, and the offering of dropout prevention measures. (Ex. 20062A, Zamora Report, at 21; Ex. 20149 at 9; Ex. 4336, Cavazos Dep., at 43:19-49:22, 53:12-61:25; Ex. 4337 at 7; RR56:57-72, 113-16; Ex. 4337 at 7.) Despite the district's need for paraprofessionals for its ELL students, the district still has not been able to hire a single paraprofessional. (Ex. 4256.)
- FOF 1195. La Feria ISD identified unmet needs for bilingual students in summer programs, instructional coaches, updated technology, quality professional development and quality instructional resources. (Ex. 20062A, Zamora Report, at 21.) McAllen ISD noted the continuing need to employ and retain highly qualified bilingual teachers, offer quality extended day opportunities for bilingual students, and reduce class sizes. (Ex. 20062A, Zamora Report, at 22.)
- FOF 1196. The additional funds resulting from SBI and HB1025 similarly were not sufficient to meet San Benito's remaining bilingual or compensatory education needs. For example, overwhelming class sizes remain an issue for San Benito, and the district submitted 18 waiver applications for the 2013-14 school year. (Ex. 4314.)

- FOF 1197. An analysis of class size reduction in San Benito CISD provides an example of how inadequate the funds for ELL and economically disadvantaged students remain. Assuming San Benito CISD used all of its bilingual and compensatory education funds to reduce class size to 17:1 in grades K-5 with a deduction for indirect costs, five of the district's eleven elementary schools would not have sufficient funds to reduce their class size. (Ex. 20062A, Zamora Report, at 29-31.) Of course, meeting the basic educational needs of ELL and economically disadvantaged students means employing a comprehensive approach of best practices and interventions. (Ex. 20062A, Zamora Report, at 31.) Under the current school finance system, school districts like San Benito would not be able to employ a single approach—class size reduction—much less other necessary programs such as quality pre-K and quality extended day programs. (Ex. 20062A, Zamora Report, at 31.)
- FOF 1198. San Benito CISD identified deficiencies in their ability to offer competitive bilingual stipends for all bilingual teachers at the elementary level, to employ clerks to help with the state-mandated Language Proficiency Assessment Committee (LPAC) documentation and other state record-keeping demands of the bilingual/ESL program, to provide quality staff development in differentiated instruction specific to English Language Learners, and to hire instructional coaches. (Ex. 20062A, Zamora Report, at 22.)
- FOF 1199. The evidence demonstrates conclusively that the limited increased funding provided by SBI and HB1025 for the Edgewood Districts falls far short of providing the necessary resources to implement best practices and provide reasonable, effective learning opportunities for ELL and economically disadvantaged students. (Ex. 20062A, Zamora Report, at 31.)
- FOF 1200. Likewise, additional M&O funding for the Edgewood Districts provided through the temporary appropriations for the 2013-14 school year did not inject significant funds in those districts needed to resolve the unconstitutional deficiencies. (Ex. 20062A, Zamora Report, at 5-6, 15-32.) Among the poorest districts in the State, the limited, temporary additional funding does not provide those districts with meaningful discretion in setting their tax rates and it does not provide them with the adequate funds necessary to provide their students, especially their ELL and economically disadvantaged students, with the opportunities those students need to acquire a general diffusion of knowledge. (*Id.*)
- FOF 1201. Comparing the M&O revenue per WADA received in 2010-11 to the M&O revenue projected in 2013-14, two of the five low-wealth Edgewood plaintiff districts continue to receive less revenue per WADA in the 2013-14 school year, compared to the 2010-11 school year without any adjustment for inflation. (*See* Ex. 20062A, Zamora Report, at 6.) McAllen ISD is expected to receive \$96 less per WADA and La Feria ISD is expected to receive \$109 less per WADA. (*Id.*) The other three districts are expected to receive relatively minor increases in funding per WADA: Edgewood ISD (\$221 more per WADA); San Benito ISD (\$162 more per WADA); and Harlingen CISD (\$204 more per WADA). (*See id.*)

FOF 1202. HB5 did nothing to cut costs for the Edgewood Districts. For example, districts will have to expend funds to expand offerings to prevent the loss of students to neighboring districts with wider course offerings and endorsements. (Ex. 4336, Cavazos Dep., at 80, 84-86; *see also* FOF 107 for other examples of how endorsement requirements affect districts.) In addition, as stated in FOF 240, districts must partner with at least one institution of higher education to provide certain courses on campus. (Ex. 20062A, Zamora Report, at 9; RR55:138-39.) Districts who currently offer such programs will have a competitive advantage over those with more limited resources, who must expend resources to comply with that requirement. (*Id.*)

FOF 1203. Moreover, Harlingen CISD does not have sufficient funds to meet the additional costs of HB5, including hiring additional counselors and translators to meet the personal graduation plan requirements, providing additional infrastructure to provide statutory computer programming classes, and paying teachers to provide accelerated instruction for STAAR retesters. (Ex. 4336, Cavazos Dep., at 98:1-12; Ex. 20149 at 14; Ex. 4336, Cavazos Dep., at 84:15-89:22; 90:13-21; 93:2-21; Ex. 4337 at 11.) At a minimum Harlingen CISD would have to double its counseling staff, in order to meet the personal graduation plan requirements of HB5, not including any translation or bilingual services required to communicate meaningfully with ELL students and their parents. (Ex. 4336, Cavazos Dep., at 89-90.)

**D. Findings of fact relating primarily to TTSFC, Edgewood, and Fort Bend ISD Plaintiffs' financial efficiency claims<sup>54</sup>**

**I. The Legislature has structured the school finance system so that it denies most districts the funding necessary to achieve a general diffusion of knowledge.**

FOF 1204. The school finance system allows some districts to raise the revenue necessary to achieve a general diffusion of knowledge while most cannot do so at similar tax rates if at all; therefore, the system does not provide "substantially equal access to funding up to the legislatively defined level that achieves the constitutional mandate of a general diffusion

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<sup>54</sup> The findings of fact in this section address financial efficiency with respect to districts' ability to access revenue to fund the cost of an adequate education, i.e., the general diffusion of knowledge. These findings of fact demonstrate that the system as structured makes it impossible for all districts to access adequate funding with the tax caps, meaning that most districts do not have substantially equal access to funding necessary to provide a general diffusion of knowledge. The findings of fact next address the tax rate gaps and revenue gaps associated with CTR, M&O, I&S, M&O plus I&S, and maximum tax rates and the effect of changes to education appropriations by the 83<sup>rd</sup> Legislature on those gaps. These findings of fact demonstrate unconstitutional differences in the tax rates necessary to access funds, differences in revenues available at similar tax rates, and the significantly detrimental effect of these differences on property poor districts. As described below, the evidence establishes that property poor districts tax higher, receive less revenue for their tax effort, and suffer a classroom funding disadvantage when compared to their wealthier counterparts. These findings of fact establish that the Texas school finance system is unconstitutional in that there is not a direct and close relationship between a district's tax effort and its access to educational funds. Finally, the financial efficiency findings of fact address evidence of the impact of the system on individual districts, students, and families.

of knowledge.” *WOC I*, 107 S.W.3d at 571 (quoting *Edgewood IV*, 917 S.W.2d. at 730-31). and is unconstitutionally inefficient.

FOF 1205. The Court heard from three experts who conducted analyses of the ability of the plaintiff school districts to raise the money necessary to achieve a general diffusion of knowledge at similar tax rates. Dr. Wayne Pierce, Dr. Albert Cortez, and Dr. Catherine Clark used different methodologies, but all reach the same conclusion: the structure of the current system does not meet the Supreme Court’s mandate to provide “substantially equal access to funding up to the legislatively defined level that achieves the constitutional mandate of a general diffusion of knowledge” because most districts are unable to access the estimated cost of an adequate education. *WOC I*, 107 S.W.3d at 571 (quoting *Edgewood IV*, 917 S.W.2d. at 730-31). The testimony of these witnesses addresses whether school districts “have substantially equal access to similar revenues per pupil at similar levels of tax effort.” *Id.* at 730-31.

FOF 1206. As noted in Part I.C.5.f (FOF 625. *et seq.*) above, the Court was informed by three estimates of adequacy, which indicated that districts need a range of between \$6,404 and \$6,818 per WADA. in FSP funding in 2013-14 (\$6,176 – \$6,576 in 2010-11 dollars) in order to provide a general diffusion of knowledge. (See FOF 632; see also FOF 629 – FOF 631.) All three estimates reveal the system to be significantly underfunded and inadequate as a whole. (See FOF 632.) As supported by the testimony of the financial efficiency experts, all three estimates also reveal the system to be inefficient and inequitable. The financial efficiency analyses performed in this case established that substantial gaps exist in tax rates, in yields per penny of tax effort, and in revenue generated. The analyses demonstrate conclusively that property-poor school districts do not have substantially equal access to those revenues at similar tax effort. (See *infra* Parts I.D.1.b.i-I.D.1.b.iii (FOF 1223. *et seq.*.)

FOF 1207. This gross inequity in the system led parents, taxpayers, and approximately one-half of the school districts across Texas to challenge the financial inefficiency of the current school finance system. This is a substantial increase from the *West Orange-Cove* litigation in 2004-05. These include the TTSFC plaintiff group, the Fort Bend ISD plaintiff group, and the Edgewood plaintiff group. These districts also enroll well over one-half of the Texas public school student population. (See *supra* FOF 2, FOF 4, and FOF 5.)

**a. Property-poor districts cannot raise the revenue necessary for a general diffusion of knowledge at similar tax rates to the property-wealthy school districts or at any legal rate.**

FOF 1208. In 1995, the Texas Supreme Court determined that a nine cent difference in tax rates between property-wealthy and property-poor districts to raise the M&O and I&S funds necessary to provide an adequate education was not so significant as to violate the

efficiency requirement of Article VII, Section 1. *Edgewood IV*, 917 S.W.2d at 731.<sup>55</sup> Because the Supreme Court's determination was based on a system with a cap of \$1.50 and was prior to the Legislature's compression of tax rates in 2006 (*see supra* FOF 24), under the current compressed system, the "permissible" nine cent difference for M&O and facilities funding in 2005 is more comparable to a proportional six cent difference<sup>56</sup> on the M&O tax gap alone under the current \$1.17 cap on M&O taxes. The evidence described below establishes that the tax and revenue gaps under the current system greatly exceed that permitted under *Edgewood IV*.

- i. **The gap in tax rates between property-wealthy and property-poor districts necessary to achieve a general diffusion of knowledge has grown substantially since *Edgewood IV*.**
  - (a) **Dr. Albert Cortez's weighted average analyses demonstrate that the poorest districts enrolling 15% of the WADA in the state must tax at substantially higher rates (most beyond the legal limit) than the wealthiest districts enrolling 15% of the WADA to generate the revenue necessary for a general diffusion of knowledge.<sup>57</sup>**

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<sup>55</sup> At the time of *Edgewood IV*, the formula funding included both maintenance and operations and facilities funding; today, facilities are funded largely through I&S for which there is no recapture. The disparity in taxes and access to revenue between property-wealthy and property-poor districts is even greater if I&S is included. (RR23:94; *see* Ex. 3187, Pierce Report, at 13-14; *see also infra* Parts I.D.3.d (FOF 1289, *et seq.*), I.D.3.e (FOF 1301, *et seq.*), I.D.3.f.iii (FOF 1325, *et seq.*), and I.D.3.f.iv (FOF 1328, *et seq.*).

<sup>56</sup> At the time of *Edgewood IV*, under Senate Bill 7, "[t]he State [met] its constitutional duty to provide a general diffusion of knowledge through funding provided by Tiers 1 and 2" and provided facilities funding all within the tax cap of \$1.50. *Edgewood IV*, 917 S.W.2d at 730-31. Under House Bill 1, the State "compressed" tax rates by one-third – to \$1 in most cases. (*See* Ex. 6395 at 2; FOF 25). The stated legislative intent was to provide a general diffusion of knowledge through Tier 1 funding provided at the compressed tax rate. (Ex. 5630, Scott Dep., at 341, 343-45.) Because the tax rate at which districts should be able to access a general diffusion of knowledge has been reduced by one-third, from \$1.50 to \$1.00, and because facilities funding is now provided outside of Tiers I and II, the Court finds that the allowable tax difference should also be reduced by at least one-third – or from 9 cents to 6 cents.

<sup>57</sup> The Court notes that the findings regarding the analyses performed by Dr. Cortez for the 2011-12 school year are based on corrected data provided by TEA in January 2013, after the cross-examination of Dr. Dawn-Fisher revealed that the State's original data set contained errors. Dr. Cortez had used the State's data in order to prevent the State from questioning the reliability of his data. The Court finds that the supplemental analysis performed by Dr. Cortez, however, is consistent with his findings and opinions elicited in his testimony in this case. (*See generally*, Ex. 4251, Cortez 2nd Supp. Report, at 14-16.) Therefore, although the final numbers changed slightly between his initial report (Ex 4225, Cortez Supp. Report) and his final report (Ex. 4251, Cortez 2nd Supp. Report), they do not substantively change his opinions reflecting the inequity in the system (indeed, many of the gaps *increased* between property-wealthy and property-poor districts from his prior analysis).

- FOF 1209. Dr. Cortez performed a series of “weighted average” analyses of the funding disparities between school districts in Texas using finalized school finance data from TEA for the school years 2009-10, 2010-11, and 2011-12, and using near-final data for 2012-13.<sup>58</sup> (See generally Ex. 4000, Cortez Report; Ex. 4225, Cortez Supp. Report; Ex. 4251, Cortez 2nd Supp. Report; Ex. 20030, Cortez October 2013 Report.) The “weighted” approach is computed by grouping districts by percentile or decile, summing up the numerator variable (for example, property values) for each decile group and then dividing that total by another variable totaled among the grouping (for example, WADA), and then reporting the weighted average (wealth per WADA in this example) for each grouping. (RR23:34-36.)
- FOF 1210. Using this approach, Dr. Cortez performed the same analysis as the Supreme Court in *Edgewood IV* by comparing the average tax rates needed to raise the revenue estimated to be the cost of a general diffusion of knowledge of the wealthiest districts that collectively enroll 15% of the statewide WADA (“Top 15%”) to the average tax rates for the poorest districts that enroll 15% of the WADA (“Bottom 15%”). Dr. Cortez conducted these comparisons using yields based on both the revenue generated at the adopted M&O tax rates and that generated at the maximum \$1.17 tax rates. (See generally Ex. 4000, Cortez Report; Ex. 4225, Cortez Supp. Report; Ex. 4251, Cortez 2nd Supp. Report.) Under each of the methods employed by Dr. Cortez, the gap between the tax rate that the poorest and wealthiest 15% would need to raise the revenue necessary to achieve a general diffusion of knowledge is substantially greater than both the nine cent gap in *Edgewood IV* and the adjusted five-to-six cent gap that is more comparable today – increasing up to three and four times the *Edgewood IV* gap. (See *infra* FOF 1211 – FOF 1213.) Furthermore, under each analysis, the Bottom 15% of WADA would have to tax above the legal maximum of \$1.17 to generate estimated revenue necessary to provide a general diffusion of knowledge. (*Id.*)
- FOF 1211. **Analysis comparing the Top 15% and Bottom 15% using district yields at adopted M&O tax rates:** Using 2011-12 yields at adopted tax rates, the Bottom 15% of districts must tax at rates between 30 and 35 cents higher than the Top 15% of districts in order to generate revenue amounts near the estimates of adequacy provided in this case.<sup>59</sup> (See Ex. 4251, Cortez 2nd Supp. Report, at 12.) In each case, the rate the Bottom 15% would have to tax is above the legal limit of \$1.17.

<sup>58</sup> Both the State’s and Calhoun County’s equity experts incorrectly criticized Dr. Cortez for failing to analyze the financial efficiency system through a “weighted analysis,” though he did in fact do so. (RR21:70.)

<sup>59</sup> The \$6,000 figure is approximately the average FSP spending needed per 2010-11 WADA under the adequacy estimate provided by Mr. Odden. The \$6,500 figure is close to both the \$6,576 per 2010-11 WADA adequacy estimate based on the *Edgewood IV* calculation and the \$6,562 per 2010-11 WADA adequacy figure based on the testimony of Mr. Moak. The \$7,000 figure is close to the *Edgewood IV* and Moak estimates per 2011-12 WADA.

	2012-13 Adopted Tax Rate	2012-13 Near-Final Tax Rate	2013-14 Adopted Tax Rate
Poorest Districts with 15% of WADA	\$1.18	\$1.28	\$1.38
Wealthiest Districts with 15% of WADA	\$0.88	\$0.95	\$1.03
<b>Gap</b>	<b>\$0.30</b>	<b>\$0.32</b>	<b>\$0.35</b>

(*Id.* at 13, Table 9 (excerpted))

FOF 1212. **Reopening of the Evidence and 2012-13 Near-Final Data:** Following the reopening of the evidence, Dr. Cortez updated his analysis of the Top and Bottom 15% of WADA using near-final data for the 2012-13 school year and measured the impact of the 2013 legislative changes to funding.<sup>100</sup> (Ex. 20030, Cortez October 2013 Report.) In one part of his analysis, Dr. Cortez analyzed the school finance data for the 2012-13 school year using the same weighted approach described above. (*Id.* at 16.) Based on the 2012-13 school year, substantial gaps remained between the Top and Bottom 15% at adopted tax rates, ranging between 28 and 33 cents:

	2012-13 Adopted Tax Rate	2012-13 Near-Final Tax Rate	2013-14 Adopted Tax Rate
Poorest Districts with 15% of WADA	\$1.19	\$1.29	\$1.39
Wealthiest Districts with 15% of WADA	\$0.91	\$0.99	\$1.06
<b>Gap</b>	<b>\$0.28</b>	<b>\$0.30</b>	<b>\$0.33</b>

(*Id.* at 17 (excerpted).) Here again, in each case, the rate the Bottom 15% would have to tax is above the legal limit of \$1.17. Even at levels below the various adequacy

<sup>100</sup> In forming its findings and conclusions on the financial efficiency of the system, the Court does not rely on the \$1.17 analysis performed for the 2012-13 school year and the related \$1.17 analysis on the 83rd Legislature's changes as applied to the 2012-13 data in Exhibits 20037, 20038 and Tables 3, 5, 7, 9, 11, and 13 in Exhibit 20030 due to data and computation issues.

estimates, the tax gaps are substantial. At \$5,000, the Top 15% have a 23 cent tax advantage (76 cents v. 99 cents); at \$5,500, the Top 15% have a 26 cent tax advantage (\$0.83 v. \$1.09). (*Id.* at 17.)

FOF 1213. **The Impact of 83rd Legislature's Changes:** Dr. Cortez also applied the revised legislative formulas for the 2013-14 school year to the near-final 2012-13 school district data. (*Id.* at 1.) This procedure allows the court to measure the effects of the legislative changes and avoids concerns about the accuracy of revenue projections for the 2013-14 school year, as described previously in this case. (*Id.*) Applying the 2013 legislative changes for the 2013-14 school year to the 2012-13 school finance data, the gaps in tax rates needed to generate the levels of revenue necessary for a general diffusion of knowledge between the Bottom and Top 15% reduced marginally but remained substantial.<sup>91</sup>

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<sup>91</sup> In the supplemental hearing, the State averred on cross examination of Dr. Cortez that using yields at adopted tax rates would somehow not provide the court with accurate data reflecting the amount of M&O taxes needed to generate various levels of revenue to provide a general diffusion of knowledge. The Court finds such evidence and argument unavailing. First, as Dr. Cortez testified without contradiction from any other expert, using yields at adopted tax rates is a common and fair method for determining the tax rates needed to generate various levels of funding. (RR57:16-17, 57-58, 146-47.) Second, Defendants presented demonstrative evidence only of four school districts whose yields differed at various tax rates, but there was no expert testimony detailing how those rates were calculated and whether they were accurate. (*See, e.g., id.* at 53.) Third, the State implied that using actual tax rates needed to generate various levels of revenue would alter the gaps between the top and bottom 15% WADA districts or the top and bottom deciles found by Dr. Cortez. However, no such evidence was presented. The demonstrative evidence of four districts' yields out of 1,021 districts analyzed does not provide evidence sufficient to rebut the expert analysis of Dr. Cortez. As Dr. Cortez testified, a district's yield at its adopted tax rate may go up or down with a raise or decrease in taxes, and thus, the adopted tax rate provides the Court with a reasonable approximation of the yield that can be used to determine the tax rate needed to generate revenue necessary to offer a general diffusion of knowledge. (RR57:74-76, 77-78.) Defendants and Calhoun County presented the Court with no valid, reliable analysis showing otherwise. Fourth, the State seemingly criticized Dr. Cortez for using yields at adopted tax rates, referring to such as an "apples-to-oranges" comparison because adopted tax rates differ among school districts and that he should have, instead, used yields generated at the same rate of taxes. (RR57:56.) But as Dr. Cortez explained, the "apples" are the average adopted tax rates for each decile of school districts. (RR57:57.) The reality of the Texas school finance system is that school districts across Texas adopt different tax rates and yield different revenue at those rates. School districts adopt M&O tax rates to generate revenue to attempt to provide a general diffusion of knowledge and to meet the needs of their community – given the constraints in the system such as accompanying I&S tax rates and the ability to afford higher taxes. (*See supra* Part I.C.1 (FOF 210, *et seq.*)) It is unrefuted in this case that, for example, the school districts in the wealthiest decile on average have much higher yields at compressed tax rates and at the golden pennies and, thus, do not have to adopt tax rates at the higher rates with lower yields like the districts in the lowest decile. (*See generally*, Ex. 20030, Ex. 20038, Ex. 4340.) **Using yields at the same tax rate would skew the analysis and would not provide the Court with useful information in determining whether property-poor school districts have substantially equal access to similar revenue necessary to provide a general diffusion of knowledge as tax efforts similar to property-wealthy districts. Target revenue has further complicated matters because the courts cannot simply look at formula funding in order to determine the yields for all school districts as in years past.**

Finally, even when using the State's and Calhoun County's own evidence of the yields for various groupings of decile at similar tax rates, the results continued to show large disparities in revenues generated

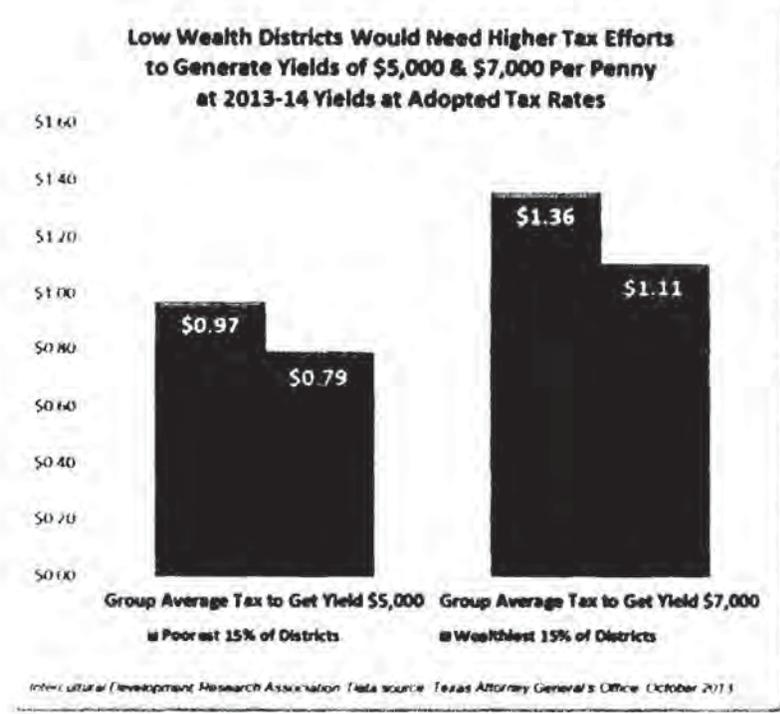
School District Grouping	Group Average Tax at \$500,000	Group Average Tax at \$1,000,000	Group Average Tax at \$2,000,000
Poorest Districts with 15% of WADA	\$1.16	\$1.25	\$1.35
Wealthiest Districts with 15% of WADA	\$0.91	\$0.98	\$1.06
<b>Gap</b>	<b>\$0.25</b>	<b>\$0.27</b>	<b>\$0.29</b>

(*Id.* at 19 (excerpted).) For all but the lowest estimate, the rate the Bottom 15% would have to tax is above the legal limit of \$1.17. At \$5,000, the Top 15% enjoy a 20 cent tax advantage (76 cents v. 96 cents); at \$5,500, the Top 15% have a 23 cent tax advantage (\$0.83 v. \$1.06). (*Id.*)

FOF 1214. TEA also produced projected school finance figures for the 2013-14 school year. (Ex. 20037, A. Cortez Hybrid Spreadsheet.) These figures were not based on near-final data due to the many unstable variables (such as enrollment, tax collections, etc.) that are likely to change between October 2013 (when the data was produced) and the fall of 2014 when TEA will have near-final data for the school year. (RR57:10-11, 38-39, 43; *see also* Ex. 20030 at 21.) Although Dr. Cortez expressed serious reservations regarding the 2013-14 TEA data, the data nevertheless reveal continuing, substantial gaps in the ability to generate the various levels of revenue between the Top 15% and the Bottom 15%, ranging between an 18 cent and 25 cent tax advantage for the Top 15%:

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and in yields per penny at each tax rates. (*See infra* Section 1.D.9.c (citing Ex. 3441, Affidavit of A. Cortez.) The State's additional criticism of averaging tax rates among the groupings of districts, whether by WADA or deciles of property wealth, was also meritless as the State's own expert witness, Dr. Dawn-Fisher, agreed that such averaging was reliable and that "weighting" taxes "wouldn't be an accurate reflection of what's actually happening in the state in terms of tax rates." (RR62:157-59, 145-46.)



(*Id.* at 24.)

FOF 1215. Although the gaps noted above reduced slightly by 1 to 4 cents after the 2013 legislation, they remain at least twice the size of the gap allowed by the Texas Supreme Court in *Edgewood IV* and three-to-four times the size of the adjusted gap. (FOF 1212.)

(b) When comparing tax rates of districts by deciles of property wealth, Dr. Albert Cortez's analysis further demonstrates that the poorest decile of districts must tax at substantially higher rates than the wealthiest decile of districts to generate the revenue necessary for a general diffusion of knowledge.

FOF 1216. Analysis comparing the top and bottom deciles of property wealth per WADA using district yields at adopted M&O rates: Dr. Cortez also performed his weighted analysis described above when comparing school districts by decile of property wealth per WADA. According to Mr. Wisnoski, former TEA Deputy Associate Commissioner for School Finance, the decile analysis is the same type of analysis utilized by TEA for a

number of years.<sup>62</sup> (Compare Ex. 4240 at 2, 9 and Ex. 6441, Wisnoski Dep., at 119-20 with Ex. 5653 at 152.)

FOF 1217. A significant equity gap is found when analyzing the level of M&O tax effort required by each weighted decile of school districts to generate revenue to meet the various estimates of adequacy using districts' yields at their 2011-12 and 2012-13 adopted tax rates. (RR23:47-49, 53-54; Ex. 20030 at 9-10.) Here again, the Court notes that under each estimate of adequacy, the poorest decile of districts could not reach the necessary level of funding because to do so would require taxing above the \$1.17 cap, nor could any of the other districts in the bottom three deciles. (Ex. 4251, Cortez 2nd Supp. Report, at 6; Ex. 20030 at 10.) For the 2011-12 school year, the wealthiest decile's tax advantage over the poorest decile ranged from 29 cents to 42 cents:

**Table 5: Tax Efforts Necessary to Generate Certain Revenue Levels per WADA at \$1.17 Tax Rate Yields, by School District Deciles, Using 2011-12 Data**

School District Grouping	Group Average Tax to Get Yield \$5,000	Group Average Tax to Get Yield \$5,500	Group Average Tax to Get Yield \$7,000
Poorest Decile	\$1.20	\$1.30	\$1.41
2nd 10% of Districts	\$1.21	\$1.31	\$1.41
9th 10% of Districts	\$1.03	\$1.11	\$1.20
Wealthiest Decile	\$0.65	\$0.924	\$0.99
Gap	\$0.35	\$0.38	\$0.42

(Ex. 4251 at 7 (excerpted).) Even for revenue amounts below the adequacy estimates, the tax rates gaps remained substantial, showing the wealthiest decile taxing 29 cents *less* for \$5,000 and 32 cents *less* for \$5,500 compared to the poorest decile. (*See id.*)

FOF 1218. **Impact of 83rd Legislature's Changes:** In the supplemental hearing, Dr. Cortez engaged in the same analysis of 2012-13 data and of the 2013 legislative changes as applied to the 2012-13 data. Both analyses show stark, continuing tax advantages for the wealthiest decile. (Ex. 20030 at 9-10, 13.) For the 2012-13 school year, the data show the following equity gaps:

<sup>62</sup> Mr. Wisnoski disaggregated school districts by wealth in a similar manner when presenting the Court with an overview of the Texas school finance system in this case (though this analysis was not an equity analysis).

**Table 6: Tax Rates Necessary to Cover Adequate Revenue Levels per \$100 of Property Value, 2012-13 Data**

School District Grouping	Group Average Tax for \$5,000	Group Average Tax for \$5,500	Group Average Tax for \$7,000
Poorest Decile	\$1.19	\$1.29	\$1.39
2nd 10% of Districts	\$1.19	\$1.29	\$1.39
9th 10% of Districts	\$1.03	\$1.11	\$1.20
Wealthiest Decile	\$0.82	\$0.89	\$0.96
<b>Gap</b>	<b>\$0.37</b>	<b>\$0.40</b>	<b>\$0.43</b>

(*Id.* at 10, Table 6 (excerpted).) Like the prior analysis, for revenue amounts below the adequacy estimates, the tax rates gaps remained substantial, showing the wealthiest decile taxing 32 cents *less* for \$5,000 and 35 cents *less* for \$5,500 compared to the poorest decile. (*See id.*)

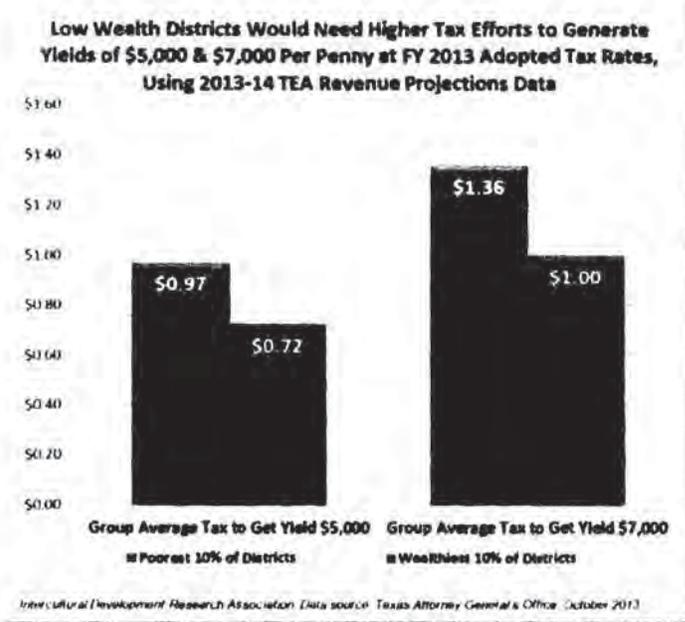
FOF 1219. When applying the 2013 legislative changes for the 2013-14 school year to the 2012-13 data, minimal changes resulted:

**Table 8: Tax Rates Necessary to Cover Adequate Revenue Levels per \$100 of Property Value, 2013-14 Data and Adequacy Estimates**

School District Grouping	Group Average Tax for \$5,000	Group Average Tax for \$5,500	Group Average Tax for \$7,000
Poorest Decile	\$1.16	\$1.26	\$1.35
2nd 10% of Districts	\$1.16	\$1.25	\$1.35
9th 10% of Districts	\$1.02	\$1.11	\$1.19
Wealthiest Decile	\$.82	\$0.89	\$0.96
<b>Gap</b>	<b>\$0.34</b>	<b>\$0.37</b>	<b>\$0.39</b>

(*Id.* at 13, Table 8 (excerpted).) For the revenue amounts below estimated amounts of the cost of an adequate education, the wealthiest decile taxed substantially less than the poorest decile, taxing 29 cents *less* at \$5,000 and 31 cents *less* at \$5,500. (*See id.*) Comparing Table 6 in FOF 1222, the tax rate gap accounting for the 83<sup>rd</sup> Legislature's appropriations closed the tax gap only **3 cents** to produce \$6,000 and \$6,500 in M&O revenue and 4 cents to produce \$7,000.

FOF 1220. Even when using the State's estimated data for the 2013-14 school year, the districts in the wealthiest decile are able to tax between 25 cents and 36 cents *less* than the districts in the poorest decile to raise the same amount of revenue.



(*Id.* at 22.)

FOF 1221. Based on Dr. Cortez’s comprehensive analysis, the Court finds unconstitutionally substantial gaps in tax rates necessary to provide a general diffusion of knowledge exist between low property wealth and high property wealth school districts.

b. **Only the wealthiest 259 districts are able to access the lowest estimate of revenue necessary to provide a general diffusion of knowledge within allowable tax rates.**

FOF 1222. Analyses by Dr. Wayne Pierce and Dr. Catherine Clark reveal that only the wealthiest districts are able to generate enough revenue to achieve adequacy within the current structure of the school finance system, while poor districts, even when taxing much higher, cannot. *Cf. Edgewood I*, 777 S.W.2d at 397 (concluding that the system was neither “financially efficient nor efficient” in the sense of providing the resources necessary for a “general diffusion of knowledge,” and “therefore it violates *article VII, section 1 of the Texas Constitution*.” (emphasis added)). An analysis of the ability of school districts to reach these adequacy estimates makes it clear that the current school finance system fails to provide all districts with substantially equal access to the revenue needed to achieve a general diffusion of knowledge.

i. **School districts cannot raise the inflation-adjusted *Edgewood IV* adequacy estimate at similar levels of tax effort.**

- FOF 1223. One of the adequacy estimates on which this Court relies is based on the Texas Supreme Court's opinion in *Edgewood IV*. There, the Court stated, in footnote 10: "Based on the evidence at trial, the district court found that meeting the accreditation standards, which is the legislatively defined level of efficiency that achieves a general diffusion of knowledge, requires about \$3,500 per weighted student." *Edgewood IV*, 917 S.W.2d at 755 n.10. (See also RR9:122.) As described in FOF 632 above, when adjusted for inflation, this number is equivalent to \$6,576 in 2010-11, \$6,818 in 13-14 and \$6,955 in 2014-15, and is a reasonable, credible and conservative estimate of the cost of achieving a general diffusion of knowledge (under the prior standards). (See RR54:123-25 (referencing Ex. 6618 at 18-19); RR9:122-23; RR16:23-26.)
- FOF 1224. Dr. Wayne Pierce analyzed how many districts could access \$6,576 – the *Edgewood IV* calculation adjusted to 2010-11 dollars. He determined that as of 2011-12, only 130 districts taxing up to \$1.04 in M&O could raise \$6,576 in revenue per WADA (using the 2010-11 definition of WADA). (RR9:159-60.) This means that in 2011-12, 894 districts could not, without a TRE, raise the inflation adjusted revenue amount that the Supreme Court determined necessary to achieve a general diffusion of knowledge under the prior academic standards. (*Id.*) As discussed herein, a system that allows local taxpayers to preclude a district from accessing sufficient funds for a general diffusion of knowledge is structurally unconstitutional.
- FOF 1225. As of 2011-12, only 233 districts taxing up to the \$1.17 cap in M&O could raise \$6,576 in revenue per WADA (using the 2010-11 definition of WADA.) (Ex. 3094; Ex. 3095; Ex. 3096; Ex. 3097; Ex. 3098; RR9:124-29.) This means that 791 districts could not raise the inflation adjusted revenue amount that the Supreme Court determined necessary to achieve a general diffusion of knowledge under the prior academic standards while taxing within legal limits (\$1.17 or below). (Ex. 3094; Ex. 3095; Ex. 3096; Ex. 3097; Ex. 3098.)<sup>61</sup>
- FOF 1226. The actions of the 83rd Legislature did not change these outcomes. It is projected that, in 2013-14, only 119 districts taxing at \$1.04 or less will be able reach the level of \$6,576 and only 202 districts taxing at \$1.17 or less will be able to reach that same the level of \$6,576. (Ex. 3524 at 1; Ex. 3525 at 1; Ex. 3526 at 1; Ex. 3527 at 1.)
- FOF 1227. Dr. Catherine Clark of the Texas Association of School Boards performed a similar analysis to determine how many districts could raise \$6,818 – the number from *Edgewood IV* inflation-adjusted to 2013-14 dollars. (See Ex. 6618 at 19; see also *supra* FOF 632.) Under the 2013-14 formulas, 924 districts, enrolling 5.9 million students in weighted average daily attendance ("WADA"), could not raise \$6,818 at a tax rate of

<sup>61</sup> The listing of those districts that could reach \$6,576 at \$1.17 or less and those that could not reach \$6,576 within the legal limits is in Exhibit 3098. (RR9:123-24; Ex. 3098 at 1.)

\$1.04. (RR58:48 (referencing Ex. 6622 at 19).) Furthermore, 875 districts, with 5.8 million in WADA, could not raise \$6,818 in revenue per WADA even if taxing at the \$1.17 cap. (*Id.*) In comparison, 81 school districts can raise this revenue amount at a tax rate of just \$1.00. (Ex. 6622 at 19.) This means that the vast majority of students live in districts that cannot raise the inflation-adjusted revenue amount that the Supreme Court determined necessary to achieve a general diffusion of knowledge under the prior academic standards at any permissible tax rate – much less within similar levels of tax effort to those districts that can raise this level at a tax rate seventeen cents below the cap. (RR58:48 (referencing Ex. 6622 at 19).)

FOF 1228. In 2014-15 dollars, the *Edgewood IV* number becomes an estimated \$6,955. (*See* Ex. 6618 at 19; *see also supra* FOF 632.) Under the 2014-15 formulas, 929 districts, with almost 6 million in WADA cannot raise \$6,955 in revenue per WADA with \$1.04 M&O tax rate. (RR58:49 (referencing Ex. 6622 at 20).) Furthermore 888 districts, with almost 5.9 million in WADA, cannot raise \$6,955 even if taxing at the \$1.17 cap. (RR58:49-50 (referencing Ex. 6622 at 20).) In comparison, 87 districts can raise this revenue amount at a tax rate of just \$1.00. (Ex. 6622 at 20.) In other words, in the next school year, the vast majority of students will still be living in districts that **cannot** raise the inflation-adjusted revenue amount that the Supreme Court determined necessary to achieve a general diffusion of knowledge under the prior academic standards **at any permissible tax rate** – and certainly cannot raise it at a level of tax effort similar to the \$1.00 tax rate at which the wealthiest districts will be able raise this amount. (RR58:49-50 (referencing Ex. 6622 at 20).)

ii. **Only 124 of 1,020 school districts can raise Dr. Odden’s estimated adequacy amount without a TRE.**

FOF 1229. Dr. Odden used an evidence-based approach to determine the cost of providing the appropriate interventions to meet the State’s standards. (*See supra* Part I.C.5.c (FOF 610, *et seq.*)) His estimate, prior to adjusting for inflation, indicates that districts need, on average, \$6,176 per WADA in 2010-11, or, once adjusted for inflation, \$6,404 per WADA, in 2013-14 and \$6,532 in 2014-15. (*See supra* FOF 632)

FOF 1230. Even when looking at the lower 2011 adequacy figure of \$6,176, and using the State’s own data, and incorporating the 2013 legislative changes to funding formulas, the Court finds that, as of FY14, only 124 districts are projected to reach \$6,176 in M&O revenue when taxing at \$1.04 or less and only 259 districts are projected to reach the same figure when taxing at 1.17 or less. (RR63:46-50 (referencing Ex. 11440).)

FOF 1231. Using the inflation adjusted number, according to the State’s own data, as of 2013-14, 99 districts, taxing at \$1.04 in M&O, could raise \$6,404 per WADA. (Ex. 11440 at Tab 2014, Column P.) This means that 1,128 districts in the state cannot raise the Odden estimate of the average revenue necessary to achieve a general diffusion of knowledge without a TRE.<sup>64</sup> Only 165 districts, taxing at the \$1.17 cap, could raise \$6,404 per

<sup>64</sup> The State’s data includes charter schools, which makes the total number of districts larger.

WADA. (Ex. 11440 at Tab “2014,” Column T.) This means that 1,062 districts cannot raise the Odden estimate of average revenue necessary to achieve a general diffusion of knowledge because to do so would require exceeding legal limits.

**iii. The vast majority of school districts cannot raise Mr. Moak’s estimated adequacy amount at similar levels of tax effort.**

FOF 1232. Mr. Lynn Moak testified that districts need, on average, \$1,000 more per WADA than they received in 2010-11, which translates to \$6,562 per WADA in 2010-11, or, once adjusted for inflation, \$6,804 per WADA in 2013-14, and \$6,941 per WADA in 2014-15. (See *supra* Part I.C.5.d (FOF 621) and FOF 632.)

FOF 1233. Using the lower 2010-11 adequacy figure of \$6,562, the Court finds that, as of 2013-14, only 119 districts can reach \$6,562 in M&O revenue when taxing at \$1.04 or less and only 208 districts can reach \$6,562 when taxing at 1.17 or less. (Ex. 3532 at 1; Ex. 3534 at 1.)

**iv. School districts cannot raise the average revenue of districts rated “Acceptable” in 2010-11 with similar levels of tax effort.**

FOF 1234. In 2010-11, the average revenue of districts rated “Acceptable” under the prior, less rigorous accountability system, was \$5,645. (RR58:41-43; see also *supra* Part I.B.3 (FOF 81, *et seq.*) (describing increased academic standards).)

FOF 1235. In 2013-14, *after* the actions of the 2013 legislature to “restore” the funding cuts, 607 districts, educating almost 4.2 million students, cannot raise \$5,645 by taxing at \$1.04. (RR58:44 (referencing Ex. 6622 at 18.) Forty-two districts could **not** raise this amount even by taxing at the \$1.17 cap. (*Id.*) In comparison, 260 districts can raise this amount at a tax rate of just \$1.00. (Ex. 6622 at 18.)

FOF 1236. The forty-two districts which cannot raise the amount of money necessary to provide an accredited education under the *prior* standards within permissible tax rates and the 607 districts that cannot do so without a TRE do not have substantially equal access to this level of funding at similar tax rates to those districts that can raise this amount at \$1.00.

**v. School districts cannot raise the 2012-13 statewide average revenue per WADA without a TRE.**

FOF 1237. The average revenue per WADA in the 2012-13 school year was \$5,511 per WADA. (RR58:37-38 (referencing Ex. 6622 at 17).) This number is approximately \$1,000 per WADA less than all of the inflation-adjusted estimates of adequacy presented to the court. (See *supra* Part I.C.5.c (FOF 622, *et seq.*).

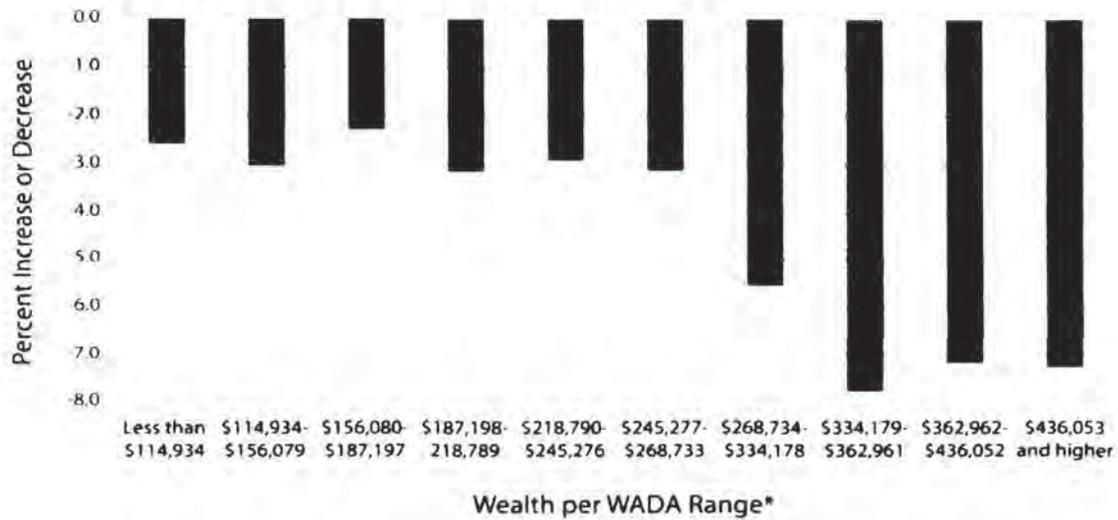
- FOF 1238. Yet in 2013-14, *after* the actions of the 2013 legislature, 404 districts, enrolling 1.9 million in WADA, could not raise \$5,511 taxing at \$1.04. (RR58:40 (referencing Ex. 6622 at 17).) Furthermore, eighteen districts could not raise \$5,511 per WADA even if taxing at the \$1.17 cap. (*Id.*) In comparison, 322 districts could raise this amount at the \$1.00 maximum Tier I tax rate. (Ex. 6622 at 17.)
- FOF 1239. The eighteen districts which cannot reach this funding level within legally permissible tax rates and the 404 districts that cannot do so without a TRE do not have substantially equal access to this level of funding at similar tax rates as those districts that can raise this amount at \$1.00.
- FOF 1240. Based on the above findings, the Court concludes that most students live in school districts that cannot reach the level of funding necessary to achieve a general diffusion of knowledge within legally permissible tax rates, and that this means these students do not have substantially equal access to this funding level at similar levels of tax effort as constitutionally required.
- c. **The effect of the legislative changes in 2011 and 2013 combine to “level-down” the system rather than “level up” all districts to the level necessary to achieve a general diffusion of knowledge.**
- FOF 1241. The findings above indicate that the State has far to go in meeting its obligation to provide all districts access to the revenue levels necessary to achieve a general diffusion of knowledge at similar tax rates. But Dr. Clark’s analysis of the formula changes made by the legislature in 2011 and 2013 reveal that, rather than making progress toward that goal, the changes resulted in “leveling down” funding for Texas public school districts, in contravention of the Supreme Court’s instruction. (*See* Ex.6622 at 2-15.)<sup>65</sup> *Edgewood IV*, 917 S.W.2d at 730.
- FOF 1242. As a result of the 2011 legislative changes, all districts’ resources across all wealth levels were reduced in the 2012-13 school year, at the same time that performance standards for students, schools, and districts were increased. (RR58:23-26 (referencing Ex. 6622 at 3-4).)<sup>66</sup>

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<sup>65</sup> Dr. Clark’s analysis of whether the system results in leveling up or leveling down looks at revenue at adopted tax rates and is not intended to be an analysis of whether districts have substantially equal access to similar revenue at similar tax effort. (*See* RR58:53.) Because this analysis was not intended as such by the expert, the Court does not rely upon it in order to answer that question.

<sup>66</sup> Dr. Clark performed her analysis of leveling down first by grouping districts into wealth deciles that had equal numbers of WADA in each decile and then by grouping districts into deciles that had equal numbers of districts in each decile. (*See* RR58:31-32.) Both analyses result in the same conclusion, that the State has leveled down funding at the same time it is raising standards. (*Compare* Ex. 6622 at 3-8 *with id.* at 9-14.)

Chart 1.1  
Change in Revenue per WADA, 2010-11 to 2012-13

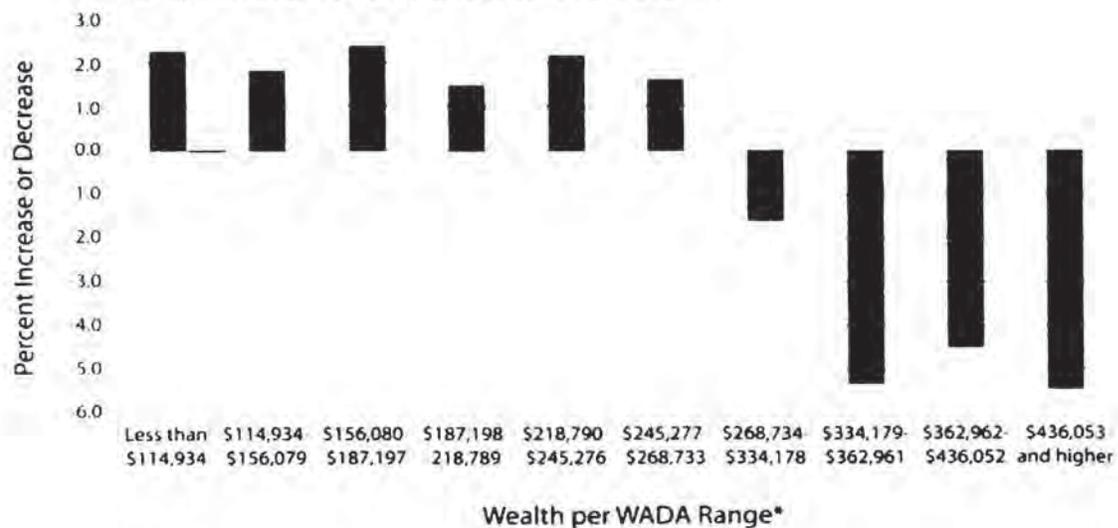


\*2012-13 Wealth per WADA with 2010-11 formulas

(Ex. 6622 at 8.)

FOF 1243. When taking into consideration the 2013 legislative changes, and comparing 2013-14 funding levels to pre-cut 2010-11 funding levels, the decreases in funding for school districts in the top four wealth deciles were greater than the slight increase in funding for the bottom six wealth deciles. (*Id.* at 5-6.)

Chart 1.2  
Change in Revenue per WADA, 2010-11 to 2013-14



\*2012-13 Wealth per WADA with 2010-11 formulas

(*Id.* at 6.)

- FOF 1244. On a system-wide basis, the losses outweighed the gains, with statewide average spending in 2013-14 being \$42 per WADA less than in 2010-11. (RR58:27 (referencing Ex. 6622 at 5).) Furthermore, the average wealth district in the state is in decile 7, a decile that loses \$94 per WADA in 2013-14 compared to 2010-11. (RR58:27.) The Court is not indicating that the property-poor school districts were accessing greater funds than the wealthier districts after this leveling down. Dr. Clark's analysis showed that even with the 2013 legislative changes enacted, the lowest wealth decile of districts is projected to receive over \$900 less per WADA in 2013-14 and \$800 less per WADA in 2014-15. (Ex. 6622 at 11, 13.)
- FOF 1245. Perhaps most importantly, this leveling down was done in the absence of any study or attempt by the Legislature to determine how much it costs districts to achieve a general diffusion of knowledge or whether school districts were able to achieve a general diffusion of knowledge before or after the leveling down. (*See* RR58:25-26, 54; *supra* Parts I.C.5.a (FOF 603, *et seq.*) and I.C.5.f (FOF 625, *et seq.*.)

**2. Unconstitutional tax rate gaps exist between property-poor and property-wealthy districts.**

- FOF 1246. In addition to the analyses above regarding the gap in tax rates necessary to achieve a general diffusion of knowledge, Dr. Pierce performed a series of "simple average" analyses of the funding disparities between school districts in Texas.<sup>67</sup> (RR9:33-35.) For each analysis, he began by sorting the districts by property wealth per WADA. He then grouped the districts into percentiles. In some analyses, he calculated the percentiles by district (e.g. out of 1,024, the "top 10%" would be the 102 wealthiest districts in 2011-12 and out of 1,021, the "top 10%" would be the 102 wealthiest districts in 2012-13), in others he calculated the percentiles by WADA (e.g., out of 1,024 districts with a statewide WADA of 5,670,091 in 2011-12, the top 10% would be the 181 wealthiest districts that collectively enroll 10% (570,686) of the statewide WADA and out of 1,021 districts with a statewide WADA of 5,984,196 in 2012-13, the top 10% would be the 178 wealthiest districts that collectively enroll 10% (592,783) of the statewide WADA). Dr. Pierce then calculated the average tax rate the bottom ten, fifteen, twenty, and twenty-five percent of districts would have to levy in order to receive the same average revenue as the top ten, fifteen, twenty, and twenty-five percent during the 2011-12 school year. The simple average was calculated by summing the applicable variable (e.g. tax rate) and dividing by number of districts in the percentile (to get average tax rate in this example). He performed this analysis looking at M&O rates, at I&S rates, and at Total (M&O plus I&S) Rates.

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<sup>67</sup> The State criticized Dr. Pierce for using simple averages; however, the State chooses to fund on a district basis rather than per capita, and Dr. Pierce's analysis is relevant and explains the reality of the differences among school districts and reflects the manner of funding chosen by the Legislature. (RR32:45-46.) Further, the Court notes that the State uses simple averages in determining the basic allotment for funding charter schools. (RR33:10-11.)

FOF 1247. In these findings and the Pierce analysis:

- a. Tax rate gap means the amount which property-poor districts tax in excess of what their wealthier counterparts tax in each given percentile comparison.
- b. Revenue gap means the difference in the amount of revenue that the property-poor districts receive at their higher tax rates compared to what their wealthier counterparts receive at their lower tax rates.
- c. Classroom funding disadvantage means the amount of additional funding the property-poor school districts would receive, per classroom of 22 in Average Daily Attendance (ADA), if they were funded at the same levels as their wealthier counterparts.<sup>68</sup>
- d. Yield gap means the amount of additional funds that the wealthier districts can raise, per penny of tax effort, compared to their property-poor counterparts.

FOF 1248. As detailed below in FOF 1249 and FOF 1250, the bottom percentiles would have to tax between 46 and 66 cents higher than the top percentiles to receive the same M&O revenue as the top percentiles received during the 2011-12 school year.<sup>69</sup> Under each of these calculations, the property-poor districts can never obtain the revenue that the property-wealthy receive, because the property-poor districts would have to tax higher than the \$1.17 cap for M&O.

FOF 1249. **M&O Tax Rates to match revenue of top 10% by percentiles of districts:** In order for the 10% of districts with the lowest property wealth to receive the same M&O revenue per WADA as the 10% of districts with the highest property wealth (\$7,998 per WADA), the bottom 10% of districts would have to tax, on average, 66 cents higher than the top 10% average tax rate of \$1.004, or at a tax rate of \$1.664. (Ex. 3010 at 1; Ex. 3011 at 1.) Comparing the bottom 15% of districts to the top 15%, the bottom 15% of districts would have to tax, on average, 54 cents higher than the top 15% average tax rate of \$1.021, or at a tax rate of \$1.561 in order to receive the same revenue. (Ex. 3010 at 1; Ex. 3011 at 1; RR9:53.)

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<sup>68</sup> The Court finds the comparison of revenue differences by classroom to be relevant to the constitutional analysis because that is the method chosen by the Legislature for providing education to Texas schoolchildren. The classroom funding disadvantage was calculated by first, assuming a 95% attendance rate, a typical elementary classroom of 22 students has 20.9 students in average daily attendance (ADA). [Multiply 22 x 0.95.] Second, divide each district's WADA (i.e., *weighted* ADA) count by its ADA to determine its WADA-to-ADA ratio. Third, multiply the average WADA:ADA ratio for the low-funded group by 20.9 ADA to determine the WADA count for an average classroom in that group. Finally, multiply this WADA count by the per-WADA funding gap to determine the classroom disadvantage between the low and high-funded districts.

<sup>69</sup> At the time of the initial phase of this trial, the 2011-12 data that is the basis of the following findings was the most current finalized data available. Although the 83<sup>rd</sup> Legislature made changes to elements of the system by appropriation, the structure of the school finance system was not changed so the 2011-12 data remains relevant to the determinative issues in this case.

- FOF 1250. **M&O Tax Rates to match revenue of top 10% by percentiles of WADA:** In order for the districts with the lowest property wealth enrolling 10% of the WADA to receive the same revenue per WADA as the districts with the highest property wealth enrolling 10% of the WADA, the bottom 10% of districts would have to tax, on average, 48 cents higher than the top 10% average tax rate of \$1.025, or at an M&O tax rate of \$1.505. (Ex. 3025 at 1; Ex. 3026 at 1.) Comparing the bottom 15% of districts to the top 15%, the bottom 15% would have to tax, on average, 46 cents higher than the top 15% average tax rate of \$1.025, or at a tax rate of \$1.485 in order to receive the same revenue. (*Id.*)
- FOF 1251. This same pattern of property-poor districts having to tax at a higher tax rate in order to receive, or attempt to receive,<sup>70</sup> the same revenue per WADA as their wealthier counterparts is evident when comparing M&O tax rates and M&O revenue in the top and bottom 10, 15, 20, and 25 % of districts. (Ex. 3011 at 1; Ex. 3026 at 1.)
- FOF 1252. Because wealthy districts are able to receive more revenue at lower tax rates resulting in lower average tax rates, using current tax rates underestimates the potential disparities in the system. In order to determine how much disparity there is in the system as a whole, and whether the amount of supplementation has become so great as to destroy the efficiency of the entire system, Dr. Pierce performed the same analysis using the maximum M&O revenue available to the top and bottom percentiles at the \$1.17 cap. As detailed below in FOF 1253 and FOF 1254, the bottom percentiles would have to tax between 57 cents and a \$1.02 higher than the \$1.17 M&O tax cap to receive the same M&O revenue as the top percentiles during the 2011-12 school year, **even taking into account recapture**. Under each of these calculations, the property-poor districts can never obtain the revenue that the property-wealthy districts receive, because the property-poor districts would have to tax higher than the \$1.17 cap for M&O.
- FOF 1253. **Maximum M&O Revenue per WADA (at \$1.17) by percentiles of districts:** In order for the 10% of districts with the lowest M&O revenue per WADA at \$1.17 to receive the same M&O revenue per WADA that the 10% of districts with the highest M&O revenue per WADA at \$1.17 can raise at \$1.17, the bottom 10% would have to tax, on average, \$1.02 higher than the top 10%, or at the rate of \$2.19. (Ex. 3069 at 1.) In order for the bottom 15% of districts to receive the same M&O revenue per WADA that the top 15% can raise at \$1.17, the bottom 15% would have to tax, on average, 78 cents higher than the top 15%, or at the rate of \$1.95. (*Id.*)
- FOF 1254. **Maximum M&O Revenue per WADA (at \$1.17) by percentiles of WADA:** In order for the districts with the lowest M&O revenue per WADA at \$1.17 enrolling 10% of the WADA to receive the same M&O revenue per WADA that the districts with the highest M&O revenue per WADA at \$1.17 enrolling 10% of the WADA can raise at \$1.17, the bottom 10% would have to tax, on average, 66 cents higher than the top 10%, or at the rate of \$1.83. (Ex. 3075 at 1.) In order for the bottom 15% of districts to receive the

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<sup>70</sup> Most property-poor districts can never receive the same revenue as their wealthier counterparts because to do so they would have to tax at rates above the legal limit.

same M&O revenue per WADA that the top 15% can raise at \$1.17, the bottom 15% would have to tax, on average, 57 cents higher than the top 15%, or at the rate of \$1.74. (*Id.* at 1.)

FOF 1255. Under the school finance system, property poor districts would have to tax at a significantly higher M&O rate to receive the same revenue per WADA their wealthier counterparts would receive at the maximum M&O rate of \$1.17. This pattern is evident at each level of comparison when considering M&O tax rates and M&O revenue in the top and bottom 10, 15, 20, and 25 percent of districts. (Ex. 3069 at 1; Ex. 3075 at 1.) As demonstrated above, districts in the bottom 10 and 15% of property wealth cannot access the same M&O revenues as the top 10 and 15% currently receive or would receive if taxing at the maximum \$1.17 M&O rate because to do so would require them to levy an M&O tax far in excess of the tax cap.

FOF 1256. Because not all districts have an I&S tax rate, Dr. Pierce also performed the same type of analyses of M&O revenue capacity using just those districts that levied I&S taxes (I&S Districts) during the 2011-12 school year and calculated the revenue and tax rate gaps between the top and bottom percentiles in the same fashion. (RR9:71-72; Ex. 3187, Pierce Report, at 13.) Under this way of analyzing the data, as detailed below in FOF 1257, the bottom percentiles would have to tax 47 to 49 cents higher and, once again, could not raise the amount the top percentiles receive without violating the \$1.17 cap.

FOF 1257. **Maximum M&O Revenue (at \$1.17) for I&S Districts by percentiles of WADA:** In order for the districts with the lowest property wealth enrolling 10% of the WADA to receive the same M&O revenue per WADA as the districts with the highest property wealth enrolling 10% of the WADA (top 10%), the bottom 10% would have to tax, on average, 49 cents higher than the top 10%, or at a tax rate of \$1.513. (Ex. 3033 at 1.) Comparing the bottom 15% to the top 15%, the bottom 15% would have to tax, on average, 47 cents higher than the top 15%, or at a tax rate of \$1.493. (*Id.*)

### **3. Unconstitutional revenue gaps exist between property-poor and property-wealthy districts.<sup>71</sup>**

FOF 1258. In addition to calculating the M&O tax rate property poor districts would have to levy to access the same revenue as the top 10 and 15% at current levels and at \$1.17, Dr. Pierce and Dr. Cortez also conducted analyses of the funding gaps between property-poor and property-wealthy districts. Although the two experts used slightly different methodologies, both the “weighted” average analysis by Dr. Cortez and the “simple”

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<sup>71</sup>The majority of the following analyses use school finance data through the 2012-13 school year, because the data for the 2013-14 school year will not be finalized until the spring of 2015, and is therefore still preliminary and subject to change. (See, e.g., RR57:11-13; see also RR23:33-34, 104 (discussing concerns with prior years’ analysis in the first phase of the trial) RR9:51-52; Ex. 4240 at 3-4 (same).) Using the 2012-13 adjusted data as a base year, and applying the 83rd Legislature’s formula changes for the 2013-14 school year, is a reliable method to help the Court isolate the effects of the formula changes on the equity of the system, without the “noise” created by preliminary data projections. (See RR57:12-14.)

average analysis by Dr. Pierce reveal great revenue disparities among the wealthiest and poorest percentiles. (See generally Ex. 4000, Cortez Report; Ex. 4225, Cortez Supp. Report; Ex. 4251, Cortez 2nd Supp. Report; Ex. 20030; Ex. 3187, Pierce Report; Ex. 3540, Suppl. Pierce Corrected Report.)

- FOF 1259. The comparison of districts by decile (which amounts to approximately 100 districts in each grouping) is similar to the analysis of the 100 wealthiest and 100 poorest districts relied upon by the Court in *Edgewood I*. See *Edgewood I*, 777 S.W.2d at 392-93. The decile comparison also is similar to the comparison in *Edgewood IV*, analyzing tax efforts needed to raise the amount needed for an adequate education between the three highest wealth groups of districts (totaling 15% of WADA) and the three lowest wealth groups of districts (totaling 15% of WADA). See *Edgewood IV*, 917 S.W.2d at 731 & n.12.
- FOF 1260. Whether the Court considers the gap in adopted tax rates (ATR), that is the gap in tax rates needed to generate the revenue necessary for a general diffusion of knowledge (above), or the gap in revenue between the highest property wealth districts and the lowest property wealth districts with 5, 10, 15, or 20% of the WADA, each gap has increased dramatically since the *WOC II* decision. (See generally Ex. 3100-3117; Ex. 4000, Cortez Report, at 15-23; Ex. 4225, Cortez Supp. Report; Ex. 4251, Cortez 2nd Supp. Report (showing similar gaps for years 2009-10 thru 2011-12); Ex. 20030, Cortez Supp. Report; Ex. 3187 Pierce Report, Ex. 3540, Suppl. Pierce Corrected Report.) Correspondingly, the average classroom funding disadvantage that the lowest property-wealth districts experience has increased during the same time period (aside from slight decreases resulting from the 2013 legislation). (Ex. 3106; Ex. 3111; Ex. 3114; Ex. 3117.)
- a. **Despite taxing at higher rates, property-poor school districts receive substantially less M&O revenue per WADA than their property-wealthy counterparts.**
- FOF 1261. The funding gaps are larger now than they were immediately following *WOC II*. Between 2005-06 and 2011-12, using the simple average analysis, the funding gap between the top and bottom decile of districts increased by \$890 per student (from \$1,868), despite the bottom decile having, on average, a 15.6 cent higher tax rate. (Ex. 3187, Pierce Report, at 11.) This represents an increase of nearly 50% in the gap that existed in 2005-06. (*Id.*)
- FOF 1262. Even if the disequalizing impact of Tier II is left out, the disparities in Tier I – the level intended to produce funding for the general diffusion of knowledge – is still substantial. (See *infra* Part I.D.3.b (FOF 1272, *et seq.*)) According to preliminary 2011-12 district data from TEA, compressed tax rates (CTR) for districts at or below the 15th percentile of wealth average are 1.3 cents higher than the compressed rates for districts at or above the 85th percentile of wealth. (*Id.* at 9.) Even though the tax gaps are not as great when considering only Tier I, these lower wealth districts still tax higher and have a Tier I funding level that is about \$1,667 per student below the Tier I funding level provided for districts in the higher wealth/higher funded districts. (*Id.*)

FOF 1263. **Target Revenue gaps between wealthiest and poorest districts:** An even more drastic funding gap is shown when sorting the same data set by target revenue funding levels. When comparing groups of districts with 15% of the WADA, the average compressed tax rates for districts in the group with the lowest target revenues is higher than the compressed tax rates for districts with the highest target revenues, yet the average Tier I funding level is about \$1,900 per student *below* that for the average district in the lower taxing, higher funded group. (*Id.*) This Tier I funding gap, *even at this fundamental instructional program level*, amounts to more than \$40,000 less funding in a typical elementary classroom of 22 children in the lower funded districts. (*Id.*)

FOF 1264. **ATR Revenue gaps between wealthiest and poorest deciles:** The Court also received expert testimony on the differences in revenue generated at adopted tax rates among the ten weighted deciles of districts grouped by property wealth for the school years 2010-11, 2011-12, 2012-13, and the legislative changes for the 2013-14 school year applied to the 2012-13 data. The same weighted methodology described above for Dr. Cortez applied in these analyses. Each analysis demonstrates that the students in the wealthiest decile of districts continue to access substantially greater revenues than students in the poorest decile of districts, despite the poorest decile of districts taxing their residents at substantially higher rates.

FOF 1265. For the 2011-12 school year, the wealthiest decile of school districts generated \$1,443 more per WADA than the poorest decile at average adopted tax rates.<sup>72</sup> This significant gap exists despite the poorest decile of districts taxing their residents 11 cents higher than the wealthiest decile. (Ex. 4251, Cortez 2nd Supp. Report, at 2. Even when examining districts at the sixth poorest percentile of districts, those districts generated \$1,560 less than the wealthiest decile at \$5,537 per WADA, despite taxing 7 cents higher (\$1.07) than the wealthiest decile. (Ex. 4251, Cortez 2nd Supp. Report, at 3.)

**Table 2: Average Revenue per WADA in 2011-12 Continues to Show a Large Gap Between Poorest and Wealthiest Deciles of School Districts**

School District Groupings	Average Property Wealth per WADA	Average Revenue per WADA at 2011 Adopted Tax Rates	Existing Average 2011 MSO Tax Rates
	2011-12	2011-12	2011-12
Poorest Decile	\$76,068	\$5,054	\$1.11
Wealthiest Decile	\$1,086,471	\$7,067	\$1.00
<b>Gap</b>		<b>\$1,443</b>	<b>\$0.11</b>

<sup>72</sup> Analyzing differences in revenue between property-wealthy and property-poor districts at existing, adopted tax rates and maximum tax rates is appropriate because the Court has determined that under the current system, all plaintiff districts are not able to provide a general diffusion of knowledge. *Compare Edgewood IV*, 917 S.W.2d at 730-31.

(Ex. 4251, Cortez 2nd Supp. Report, at 2 (Excerpted).)

FOF 1266. If all school districts taxed at the maximum rate of \$1.17, the gap per WADA would grow to \$1.839 per WADA between the wealthiest and poorest deciles of districts. (*Id.* at 4-5.)<sup>71</sup>

FOF 1267. **Impact of 83rd Legislature’s Changes.** In the supplemental hearing, Dr. Cortez engaged in the same analysis of 2012-13 data and of the 2013 legislative changes as applied to the 2012-13 data for the 2013-14 school year. Like the aforementioned analysis of the top and bottom 15% of WADA, both revenue gap analyses showed stark, continuing tax and revenue advantages for the wealthiest decile. (Ex. 20030 at 3-4, 7.) For the 2012-13 school year, the data showed the following equity gaps, including a gap of \$1.098 between the wealthiest and poorest decile, despite the poorest decile taxing *10 cents higher*:

**Table 2: Average Revenue per WADA in 2012-13 Continues to Show a Large Gap Between Poorest and Wealthiest Deciles of School Districts**

School District Groupings	No. of Districts in Group	Total WADA	Average Tax Rates	Group Average 2013 WADA Tax Rates
Poorest Decile	102	\$73,140	\$5,617	\$1.11
Wealthiest Decile	103	\$936,070	\$6,715	\$1.01

(Ex. 20030 at 3 (excerpted).)

FOF 1268. Even when examining districts at the sixth poorest percentile of districts, those districts generated \$1,239 less per WADA than the wealthiest decile, despite taxing *7 cents higher* than the wealthiest decile. (*Id.*)

FOF 1269. The 2013 legislative changes reduced, but did not materially change, the substantial revenue gaps between the poorest and wealthiest districts at average adopted tax rates. (Ex. 20030, Cortez Suppl. Hr’g Report, at 7.) When applying the 2013-14 legislative

<sup>71</sup> Similarly substantial disparities were found in the 2010-11 school year. The gap between the poorest and the wealthiest decile of school districts was \$1.431 at adopted tax rates for that school year, despite the poorest decile taxing at an average of \$1.11 (generating \$5,654 per WADA) and the wealthiest taxing at \$1.00 (generating \$7,085 per WADA). Even when examining districts at the sixth poorest decile of districts, those districts generated \$1,552 less than the wealthiest decile, despite taxing seven cents higher (\$1.07). (Ex. 4225, Cortez Supp. Report, at 3.) If all school districts taxed at the maximum rate of \$1.17, the gap per WADA would grow to \$1,785 per WADA between the wealthiest and poorest decile of districts. (*Id.* at 4.)

changes to the 2012-13 data, and comparing the revenue available to school districts by weighted decile groupings at adopted tax rates, the gap between the poorest and the wealthiest decile of school districts was cut by only \$147 per WADA, despite the poorest decile of districts taxing their residents *11 cents higher*. (*Id.*)

**Table 4: Comparison of Change in Average Revenue per WADA in 2012-13 at FY 2013 Adopted Tax Rates**

Decile	Number of Districts	2012-13 Revenue	Change in Revenue	FY 2013 Revenue
Poorest Decile	102	\$5,617	\$186	\$5,803
Wealthiest Decile	103	\$6,715	\$39	\$6,754
<b>Gap</b>		<b>\$1,098</b>	<b>\$147</b>	<b>\$951</b>

(*Id.* (excerpted).)

FOF 1270. Although the 83<sup>rd</sup> Legislature did slightly improve the relative position of the poorest districts with respect to the wealthiest, the minor reduction in the revenue gap did not sufficiently close the gap to achieve financial efficiency. These analyses, separately and together with the other efficiency analysis offered by Plaintiffs, critically show that the State has retreated from the Texas Supreme Court’s mandate requiring that “[c]hildren who live in poor districts and children who live in rich districts must be afforded a substantially equal opportunity to have access to educational funds.”

FOF 1271. The Court finds that the Texas school finance system was not financially efficient at the conclusion of the first phase of this trial, that the system is not financially efficient at the conclusion of the second phase of this trial, and the actions of the 83<sup>rd</sup> Legislature did nothing to cure this unconstitutional inefficiency.

**b. Analysis of the “gaps” in Tier I reveal that school districts do not have substantially equal access to similar revenue at similar tax effort in the basic tier, which is supposed to provide a general diffusion of knowledge.**

FOF 1272. According to Defendants, Tier I is intended to cover the cost of a basic, adequate education.<sup>24</sup> (*See supra* FOF 212; Ex. 5630, Scott Dep., at 341, 343-45; TEX. EDUC.

<sup>24</sup> Total M&O revenue includes Tier I and Tier II. Tier I (or basic education funding) is provided by a district’s CTR which is determined on a district by district basis with a maximum of \$1.00. Tier II is intended to provide enrichment funding through golden pennies (Level 1) or copper pennies (Level 2). Golden pennies (which are equalized at the highest rate of the entire funding scheme) are the first 6 cents above a district’s CTR. Pennies above a district’s CTR plus 6 cents up to the cap of \$1.17 are copper

Code § 42.301.) Although the evidence demonstrates that Tier I, for most districts, does not cover the cost of an adequate education, an examination of the inequities at the Tier I (Compressed Tax Rate) level is essential in any analysis of school finance efficiency because the Texas Supreme Court has made it clear that there must be similar revenue for similar tax effort throughout the basic tier (Tier I). *Edgewood IV*, 917 S.W.2d at 730-732.

FOF 1273. The most basic element of all equity analysis is the funding each district would receive, and at what tax rate, if they were to adopt, as their M&O tax rate, their Compressed Tax Rate ("CTR"). The analyses detailed below, using 2012-2013 data with 2013-2014 legislative parameters applied, show that the school districts in the wealthiest percentiles (as measured by percentile of WADA and percentile of districts) have much higher yields per penny of tax effort at lower compressed tax rates than districts in the poorest percentiles. Consequently, the wealthier districts are able to access Tier I revenues at substantially lower tax rates than the property-poor districts, which is inconsistent with the Texas Supreme Court's financial efficiency standard. (Ex. 3300 - 3305.)

FOF 1274. Substantial gaps in CTR yield per penny of tax effort, revenue per WADA, and classroom funding exist when sorting all districts by CTR yield and grouping by percentiles of districts FY14(13). These gaps persist despite "equalization" measures of the basic allotment and recapture. Even with recapture at this basic level, property wealthy districts retain both a tax rate and revenue advantage.

	4.5 ¢	\$37.53	\$3,257	\$115,482
	4.1 ¢	\$28.70	\$2,463	\$87,364
	3.8 ¢	\$23.46	\$1,993	\$70,390

(Ex. 3300 at 1; Ex. 3302 at 1; Ex. 3304 at 1.)

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pennies. A tax ratification election (TRE) is required for a district to levy a tax above \$1.04. Depending on a district's CTR, a district with a low CTR may be able to access all of its golden pennies without a TRE - a structural advantage not shared by districts with a CTR at or near the \$1.00 cap.

FOF 1275. Substantial Gaps in CTR yield per penny of tax effort, revenue per WADA, and classroom funding exist when sorting all districts by CTR yield and grouping by WADA.

	3.3 ¢	\$19.63	\$1,666	\$58,740
	3.0 ¢	\$17.43	\$1,481	\$51,866
	2.5 ¢	\$15.66	\$1,338	\$46,405

(Ex. 3301 at 1; Ex. 3303 at 1; Ex. 3305 at 1.)

FOF 1276. This same pattern (where property-poor districts have a higher CTR, receive a lesser yield and lesser revenue at their CTR, and suffer a significant classroom disadvantage as compared to their wealthier counterparts) is evident when comparing districts' CTR, CTR yield, and revenue received at their CTR in the top and bottom 5 % of districts all the way up to the top and bottom 50 % of districts. (Ex. 3300 – 3307.)

**c. Dr. Wayne Pierce's simple average analyses demonstrate that unconstitutionally large gaps in total M&O (Tiers I & II) revenue persist despite higher tax rates.**

FOF 1277. To demonstrate the total M&O (Tiers I & II) revenue and tax rate gaps among districts, Dr. Pierce, in FOF 1278 through FOF 1284, sorted all districts by property wealth and grouped them by percentiles of districts or WADA. He then compared the M&O tax rates and revenue by percentile. Dr. Pierce also compared M&O tax rates and revenues by districts and WADA after sorting districts by yield per penny of tax effort per WADA. The following summary tables use data from the 2012-2013 school year, which was the most recent data at the time of the reopening of the evidence.

FOF 1278. Under these analyses, property-poor districts in the bottom percentiles receive between \$1,522 and \$3,585 less in total M&O revenue per WADA (or between \$51,835 and \$124,776 less per classroom of twenty-two students) than the property-wealthy districts in the top percentiles, despite levying M&O taxes at rates between 7.1 cents and 15.3 cents *higher* than the property-wealthy districts. Furthermore, each and every analysis reveals that the districts in the bottom percentiles do not receive revenue sufficient to fund a general diffusion of knowledge, as estimated above in Part I.C.5.f (FOF 625, *et seq.*).

FOF 1279. **M&O ATR (Adopted Tax Rate) and Revenue Gaps (Tiers I & II) by Percentile of Districts.** Districts were ordered by property wealth and assigned to resulting percentiles with roughly 100 districts per decile (10% of 1021 districts). Table data is based upon average adopted tax rates (ATR) for each decile—sorted by M&O rates and by yield per M&O revenue per penny for all districts and for I&S districts only.

10.0 ¢	\$2,337	\$80,919		8.2 ¢	\$2,124	\$73,028
10.3 ¢	\$2,299	\$79,608		8.7 ¢	\$1,859	\$63,906
14.6 ¢	\$3,585	\$124,776		13.0 ¢	\$2,683	\$91,641
15.3 ¢	\$3,211	\$111,758		13.5 ¢	\$2,411	\$82,345

(Ex. 3308 at 1; Ex. 3309 at 1; Ex. 3314 at 1; Ex. 3315 at 1; Ex. 3332 at 1; Ex. 3333 at 1; Ex. 3338 at 1; and Ex. 3339 at 1.)

FOF 1280. **M&O ATR and Revenue Gaps (Tiers I & II) by Percentile of WADA.** Districts are ordered by property wealth and assigned to deciles of roughly equal groups of WADA. Table data is based upon adopted tax rates—sorted by M&O rates and by yield per M&O penny. The table reflects gaps in M&O tax rates among districts by percentile of all districts and for I&S districts by WADA rather than by a set number of districts.

7.9 ¢	\$1,902	\$65,276		7.1 ¢	\$1,837	\$62,719
8.2 ¢	\$1,663	\$57,069		7.5 ¢	\$1,597	\$54,537
10.9 ¢	\$1,908	\$66,048		9.0 ¢	\$1,658	\$56,486
11.6 ¢	\$1,735	\$60,072		9.5 ¢	\$1,522	\$51,835

(Ex. 3320 at 1; Ex. 3321 at 1; Ex. 3326 at 1; Ex. 3327 at 1; Ex. 3344 at 1; Ex. 3345 at 1; Ex. 3350 at 1; Ex. 3351 at 1.)

FOF 1281. At each level of analysis, from the top and bottom 5% to 50%, a comparison of total M&O tax effort and revenue by percentile of districts establishes that property poor districts tax higher and receive less M&O revenue than their wealthier counterparts and suffer a significant classroom funding disadvantage. (Ex. 3308 at 1; Ex. 3309 at 1; Ex. 3320 at 1; Ex. 3321 at 1.)

FOF 1282. The evidence establishes that property poor districts with the lowest yield per penny of M&O tax rate tax higher, receive less M&O revenue, and suffer a significant classroom funding disadvantage when compared to property wealthy districts at all levels of comparison from the top and bottom 5% to 50% of districts. (Ex. 3332 at 1; Ex. 3333 at 1; Ex. 3344 at 1; Ex. 3345 at 1.)

FOF 1283. **M&O ATR and Revenue Gaps (Tiers I & II) (I&S Districts).** Comparing only I&S districts, the evidence establishes that property poor districts tax higher, receive less M&O revenue for tax effort, and suffer a significant classroom funding disadvantage at every level of comparison from the top and bottom 5% to 50% of districts. (Ex. 3314 at 1; Ex. 3315 at 1; Ex. 3326 at 1; Ex. 3327 at 1.)

FOF 1284. **M&O Yield and Revenue Gaps (Tiers I & II).** The evidence establishes that I&S districts with the lowest yield per penny of M&O tax effort per WADA tax higher, receive less M&O revenue, and suffer more significant classroom funding disadvantage than I&S districts with a higher M&O yield. This pattern repeats at each level of comparison from the top and bottom 5% and 10% of districts. (Ex. 3338 at 1; Ex. 3339 at 1; Ex. 3350 at 1; Ex. 3351 at 1.)

FOF 1285. The gap in revenue available to the districts at the M&O tax cap of \$1.17 is even greater – between \$2,190 and \$4,653. Under each of these calculations, the revenue gap is substantially greater than that which existed at the time of *Edgewood IV* and represents a significantly higher proportion of the cost of an adequate education. *Edgewood IV*, 917 S.W.2d at 731. (Ex. 3452 at 1; Ex. 3453 at 1; Ex. 3458 at 1; Ex. 3459 at 1.)

FOF 1286. **Maximum M&O Revenue per WADA (at \$1.17) by percentile of Districts**

	0.0 ¢	\$4,653	\$169,945
	0.0 ¢	\$3,547	\$127,699

(Ex. 3452 at 1; Ex. 3453 at 1.)

FOF 1287. **Maximum M&O Revenue per WADA (at \$1.17), by percentile of WADA**

	0.0 ¢	\$2,565	\$90,374
	0.0 ¢	\$2,190	\$75,519

(Ex. 3458 at 1; Ex. 3459 at 1.)

FOF 1288. The evidence establishes that M&O revenue gaps and classroom funding disadvantages persist even at the maximum M&O tax rate of \$1.17. Whether analyzed by percentile of districts or WADA and by wealth, WADA, and yield, Dr. Pierce’s analysis repeatedly established that property poor districts tax higher, receive less revenue for their tax effort, and suffer a significant classroom funding disadvantage whether compared at adopted tax rate or at the maximum M&O tax rate at all levels of comparison from the top and bottom 5% to 50% of districts. (Ex. 3452 at 1; Ex. 3453 at 1; Ex. 3458 at 1; Ex. 3459 at 1.)

**d. Property-poor districts levy higher I&S taxes, yet raise less revenue for facilities.**

FOF 1289. Using the same process of sorting by wealth per WADA and grouping into percentiles of districts or WADA detailed in FOF 1246 above, Dr. Pierce calculated the average tax rate the bottom 10 and 15 % of districts would have to levy in order to receive the same average I&S revenue as the top 10 and 15 percent. (RR9:101-03.) As detailed below, the bottom percentiles would have to tax between 74 and 86 cents higher than the top percentiles to receive the same I&S revenue that the top percentiles receive, and between \$2.78 and \$6.01 higher to receive the same maximum I&S revenue that the top percentiles could raise at the 50 cent limit during the 2011-12 school year. Under each of these calculations, the property-poor districts can never obtain the revenue that the property-wealthy districts receive, because the property-poor districts would have to exceed the de facto 50 cent cap for I&S created by the 50 cent debt test. (*See supra* Part I.C.1.b.iv (FOF 263, *et seq.*.) Because there is no recapture of I&S revenues, property wealthy districts receive the full benefit of their wealth for every I&S penny of tax effort which creates the gross disparity in access to these revenues. Further, when funded, the relatively low guaranteed yield of \$35 per student per penny of tax effort does little to reduce that gross disparity. Neither the 82<sup>nd</sup> nor the 83<sup>rd</sup> Legislature funded new I&S dollars exacerbating the disparities – again to the disadvantage of property poor districts.

a. **I&S Tax Rate and Revenue by percentiles of WADA:** In order for the districts with the lowest property wealth enrolling 10% of the WADA to receive the same I&S revenue per WADA as the districts with the highest property wealth enrolling 10% of the WADA (top 10%), the bottom 10% would have to tax for I&S, on average, 86 cents higher than the top 10%, or at a tax rate of \$1.049. (Ex. 3036 at 1.) In order for the bottom 15% of districts to receive the same I&S revenue per WADA as the top 15%, the bottom 15% would have to tax, on average, 74 cents higher than the top 15%, or at a tax rate of 92.9 cents. (*Id.*)

- b. **Maximum I&S Revenue (50 cents) by percentiles of districts:** In order for the 10% of districts with the lowest I&S revenue per WADA at 50 cents to receive the same I&S revenue per WADA that the 10% of districts with the highest I&S revenue per WADA at 50 cents can raise, the bottom 10% would have to tax, on average, \$6.01 higher than the top 10%, or at the rate of \$6.51. (Ex. 3072 at 1.) In order for the bottom 15% of districts to receive the same I&S revenue per WADA that the top 15% can raise at 50 cents, the bottom 15% would have to tax, on average, \$4.13 higher than the top 15%, or at the rate of \$4.63. (*Id.*)
- c. **Maximum I&S Revenue (50 cents) by percentiles of WADA:** In order for the districts with the lowest I&S revenue per WADA at 50 cents enrolling 10% of the WADA to receive the same I&S revenue per WADA that the districts with the highest I&S revenue per WADA at 50 cents enrolling 10% of the WADA can raise at 50 cents, the bottom 10% would have to tax, on average, \$2.97 higher than the top 10%, or at a rate of \$3.47. (Ex. 3078 at 1.) In order for the bottom 15% of districts to receive the same I&S revenue per WADA that the top 15% can raise at 50 cents, the bottom 15% would have to tax, on average, \$2.78 higher than the top 15%, or at a rate of \$3.28. (*Id.*)

FOF 1290. This pattern of property-poor districts having to tax at substantially higher tax rates in order to receive the same I&S revenue per WADA as their wealthier counterparts is evident when comparing I&S tax rates and I&S revenue in the top and bottom 10, 15, 20, and 25 % of districts. (Ex. 3036 at 1; Ex. 3072 at 1; Ex. 3078 at 1.)

FOF 1291. Using the same process of sorting districts by wealth per WADA or yield per WADA, and grouping into percentiles of districts or WADA as described in FOF 1246, Dr. Pierce analyzed the facilities revenue available to the top and bottom 10 and 15 % of I&S districts during the 2012-2013 school year via I&S revenues. Under these analyses, property-poor I&S districts in the bottom percentiles receive up to \$1,582 less in I&S revenue per WADA (or up to \$54,771 per classroom of twenty-two students) than the property-wealthy districts in the top percentiles, despite levying I&S taxes at rates up to 4.6 *more* than the property-wealthy districts.

FOF 1292. **I&S Tax and Revenue Gaps by Percentile of Districts**

2.6 ¢	\$1,397	\$48,373		1.4 ¢	\$1,112	\$38,226
4.3 ¢	\$1,582	\$54,771		2.2 ¢	\$1,349	\$46,390
2.4 ¢	\$1,239	\$43,141		2.1 ¢	\$996	\$34,035
4.6 ¢	\$1,479	\$51,495		3.6 ¢	\$1,184	\$40,455

(Ex. 3310 at 1; Ex. 3311 at 1; Ex. 3316 at 1; Ex. 3317 at 1; Ex. 3334 at 1; Ex. 3335 at 1; Ex. 3340 at 1; Ex. 3341 at 1.)

FOF 1293. **I&S Tax and Revenue Gaps by Percentile of WADA**

1.2 ¢	\$1,023	\$35,104		0.4 ¢	\$1,015	\$34,667
2.0 ¢	\$1,219	\$41,851		1.5 ¢	\$1,182	\$40,343
0.9 ¢	\$764	\$26,468		1.2 ¢	\$669	\$22,783
2.1 ¢	\$921	\$31,890		1.9 ¢	\$816	\$27,810

(Ex. 3322 at 1; Ex. 3323 at 1; Ex. 3328 at 1; Ex. 3329 at 1; Ex. 3346 at 1; Ex. 3347 at 1; 3352 at 1; 3353 at 1.)

FOF 1294. Dr. Pierce's analysis establishes that property poor districts levy higher I&S taxes, receive less revenue, and suffer significant classroom funding disadvantage at every level when compared with their property wealthy counterparts. (Ex. 3310 at 1; Ex. 3311 at 1; Ex. 3322 at 1; Ex. 3323 at 1.)

FOF 1295. The gap in revenue available to the districts at the I&S limit (50 cents) is once again even greater – up to \$6,118 per WADA.

FOF 1296. **Maximum I&S Revenue per WADA (at 50 cents) by percentile of Districts**

	0.0 ¢	\$6,118	\$223,443
	0.0 ¢	\$4,630	\$166,698

(Ex. 3454 at 1; Ex. 3455 at 1)

FOF 1297. **Maximum I&S Revenue per WADA at (50 cents) by percentile of WADA**

	0.0 ¢	\$3,340	\$117,701
	0.0 ¢	\$2,847	\$98,158

(Ex. 3460 at 1; Ex. 3461 at 1.)

FOF 1298. Although adopted I&S tax rate differences are smaller than M&O tax gaps, the evidence established the same pattern where property poor districts tax higher for I&S revenue, receive less I&S revenue for that effort, and suffer a classroom funding disadvantage at all levels from the top and bottom 5% to 50% of districts. The greatest differences are seen in I&S funding or facilities funding capacity. Because I&S revenues are not recaptured, property wealthy districts receive the full tax revenue benefit of their greater property wealth. Property poor districts are further disadvantaged by the low equalization of I&S revenues – assuming that the Legislature appropriates the necessary funds for equalization. (Ex. 3454 at 1; Ex. 3455 at 1; Ex. 3460 at 1; Ex. 3461 at 1.)

FOF 1299. Because of the substantial gaps in I&S revenue per WADA per penny of tax effort, property-wealthy districts such as Eanes ISD also have the unique ability to use bond money (generated from I&S taxes not subject to recapture) to pay for certain expenses that might otherwise be funded from M&O money. (RR21:111; Ex. 5617, Reedy Dep., at 80; RR9:78-81.) Property-wealthy districts use bond funds, for example, to purchase and pay for computers, technology, buses, and other items that facilitate the education of their students (including the basic, adequate education) and thus have more funds to pay for operating expenses, including teacher salaries.<sup>75</sup> (RR21:11.) There is no yield benefit to using I&S tax revenue for M&O purposes for lower wealth districts because, for these

<sup>75</sup> This use of I&S revenues for M&O expenses can be viewed in two equally compelling ways: 1) as a result, property wealthy districts have additional unrecaptured “M&O” funding capacity that is not available to property poor districts further undermining financial efficiency; 2) this use of I&S revenues for M&O expenses indicated that those districts are out of discretion over M&O taxes and must resort to I&S revenues to fund a general diffusion of knowledge. The first affects financial efficiency of the system. The second implicates a state property tax violation.

districts. \$35 per ADA raises less than \$31.95 per WADA. (Ex. 3187, Pierce Report, at 14.) Yet some property-poor districts are still forced to do so because of increasing pressures on M&O revenues. (See, e.g., RR11:68-71, 84-85.)

FOF 1300. Disparate access to I&S funds affects more than just a district's ability to fund facilities. Schools housed in older facilities are significantly less likely to recruit experienced or National Board certified teachers to fill vacancies – holding salaries and student characteristics constant. (Ex. 1122, Vigdor Report, at 23-24.) Teachers working in older buildings are also more likely to quit in order to take a job in another nearby school district. (*Id.*) According to a recent Texas Comptroller report, the state's poorest students are concentrated in the oldest facilities. (Ex. 1070 at 5.) The Texas Comptroller found in 2006 that schools with economically disadvantaged student rates above 80% are on average forty-one years old, and have the lowest proportion of "good" or "excellent" facility ratings from administrators. (*Id.*) Schools serving high proportions of Hispanic students also tend to be older. (RR18:165, 178-79.)

**e. Property-poor districts levy higher Total (M&O plus I&S) taxes, yet raise less total revenue.**

FOF 1301. Using the same process of sorting districts by wealth per WADA, and grouping into percentiles of districts or WADA as described in FOF 1246 above, Dr. Pierce also calculated the average total tax rate (combined M&O plus I&S) the bottom 10 and 15 % of districts would have to levy in order to receive the same total revenue per WADA that the top 10 and 15 % receive, or could receive at the maximum rates. As detailed below, the bottom percentiles would have to tax between \$1.21 and \$1.96 higher than the top percentiles to receive the same total revenue as the top percentiles currently receive, and between \$3.25 and \$6.65 higher than the top percentiles to receive the revenue the top percentiles could receive at the maximum allowable total tax rate (\$1.67) during the 2011-12 school year. Under each of these calculations, the property-poor districts can never obtain the revenue that the property-wealthy receive, because to do so would require, on average, a total tax in excess of the combined legal limit (\$1.67).

a. **Total (M&O plus I&S) tax rates and revenues (I&S districts) by percentiles of districts:** In order for the 10% of districts with the lowest property wealth to receive the same total revenue per WADA as the 10% of districts with the highest property wealth (top 10%), the bottom 10% would have tax, on average, \$1.96 higher than the top 10%, or at a tax rate of \$3.123. (Ex. 3021 at 1; Ex. 3022 at 1.) Comparing the bottom 15% of districts to the top 15%, the bottom 15% of districts would have to tax, on average, \$1.51 higher than the top 15%, or at a tax rate of \$2.709. (*Id.*; RR9:86.)

b. **Total (M&O plus I&S) tax rates and revenues (I&S districts) by percentiles of WADA:** In order for the districts with the lowest property wealth enrolling 10% of the WADA to receive the same total revenue per WADA as the districts with the highest property wealth enrolling 10% of the WADA (top 10%), the bottom 10% would have to tax, on average, \$1.36 higher than the top 10%, or at a

tax rate of \$2.571. (Ex. 3038 at 1; Ex. 3039 at 1.) Comparing the bottom 15% of districts to the top 15%, the bottom 15% would have to tax, on average, \$1.21 higher than the top 15%, or at a tax rate of \$2.423. (*Id.*)

- c. **Total Maximum Revenue per WADA (at \$1.67) by percentiles of districts:** In order for the 10% of districts with the lowest revenue per WADA at \$1.67 to receive the same total revenue per WADA that the 10% of districts with the highest revenue per WADA at \$1.67 can raise at \$1.67, the bottom 10% would have to tax, on average, \$6.65 higher than the top 10%, or at a rate of \$8.32. (Ex. 3081 at 1.) In order for the bottom 15% of districts to receive the same total revenue per WADA that the top 15% can raise at \$1.67, the bottom 15% would have to tax, on average, \$4.69 higher than the top 15%, or at a rate of \$6.36. (*Id.*)
- d. **Total Maximum Revenue (at \$1.67) by percentiles of WADA:** In order for the districts with the lowest revenue per WADA at \$1.67 enrolling 10% of the WADA to receive the same total revenue per WADA that the districts with the highest revenue per WADA at \$1.67 enrolling 10% of the WADA can raise at \$1.67, the bottom 10% would have to tax, on average, \$3.71 higher than the top 10%, or at a rate of \$5.38. (Ex. 3085 at 1.) In order for the bottom 15% of districts to receive the same total revenue per WADA that the top 15% can raise at \$1.67, the bottom 15% would have to tax, on average, \$3.25 higher than the top 15%, or a rate of \$4.92. (*Id.*)

FOF 1302. This same pattern of property-poor districts having to tax at a higher tax rate in order to receive, or attempt to receive the same total revenue per WADA as their wealthier counterparts is evident when comparing total M&O plus I&S tax rates and M&O plus I&S revenue in the top and bottom 10, 15, 20, and 25 % of districts. (Ex. 3022 at 1; Ex. 3039 at 1; Ex. 3081 at 1; Ex. 3085 at 1.) Using the same process of sorting districts by wealth per WADA or yield per WADA, and grouping into percentiles of districts or WADA as described in FOF 1246, Dr. Pierce analyzed the total combined M&O plus I&S revenue available to the top and bottom 10 and 15 % of districts during the 2012-2013 school year. Under these analyses, property-poor districts in the bottom percentiles receive up to \$4,690 less in total revenue per WADA (or up to \$163,254 per classroom of twenty-two students) than the property-wealthy districts in the top percentiles, despite levying total taxes at rates up to 17.1 cents *more* than the property-wealthy districts. (*See infra* FOF 1303 – FOF 1306.) The gap in revenue available to the districts at the maximum total rate (\$1.67) is once again even greater – up to \$11,253 per WADA. (*See infra* FOF 1307 – FOF 1310.)

FOF 1303. M&O+I&S Tax Rate and Revenue Gaps (at ATR) by Percentile of Districts

12.6 ¢	\$3,734	\$129,291		9.6 ¢	\$3,236	\$111,254
14.6 ¢	\$3,881	\$134,380		10.9 ¢	\$3,208	\$110,296
17.1 ¢	\$4,824	\$167,918		15.1 ¢	\$3,679	\$125,676
19.9 ¢	\$4,690	\$163,254		17.1 ¢	\$3,595	\$122,800

(Ex. 3312 at 1; Ex. 3313 at 1; Ex. 3318 at 1; Ex. 3319 at 1; Ex. 3336 at 1; Ex. 3337 at 1; Ex. 3342 at 1; Ex. 3343 at 1.)

FOF 1304. **M&O+I&S Tax Rate and Revenue Gaps (ATR) by Percentile of WADA**

	9.0 ¢	\$2,925	\$100,381		7.5 ¢	\$2,852	\$97,385
	10.2 ¢	\$2,882	\$98,920		9.0 ¢	\$2,779	\$94,880
	11.8 ¢	\$2,672	\$92,515		10.2 ¢	\$2,327	\$79,269
	13.8 ¢	\$2,656	\$91,962		11.4 ¢	\$2,338	\$79,646

(Ex. 3324 at 1; Ex. 3325 at 1; Ex. 3330 at 1; Ex. 3331 at 1; Ex. 3348 at 1; Ex. 3349 at 1; Ex. 3354 at 1; Ex. 3355 at 1.)

FOF 1305. When viewed by total M&O plus I&S tax rates and revenue, the evidence established that property poor districts tax more, receive less total revenue, and suffer a significant classroom total funding disadvantage at all levels from top and bottom 5% to 50% of districts. (Ex. 3342 at 1; Ex. 3343 at 1; Ex. 3354 at 1; Ex. 3355 at 1.)

FOF 1306. The disparities in total M&S plus I&S revenue capacity are most apparent when comparing districts' access to revenue at the maximum rates.

FOF 1307. **Maximum M&O+I&S Revenue per WADA (at \$1.67), by percentile of Districts**

	0.0 ¢	\$11,253	\$434,537
	0.0 ¢	\$8,532	\$317,382

(Ex. 3468 at 1; Ex. 3469 at 1)

FOF 1308. **Maximum M&O+I&S Revenue per WADA (at \$1.67), by percentile of WADA**

	0.0 ¢	\$7,033	\$250,146
	0.0 ¢	\$6,344	\$223,752

(Ex. 3474 at 1; Ex. 3475 at 1.)

FOF 1309. Considering the findings above, the evidence clearly established that the tax rate and revenue gaps under the current system greatly exceed those found in *Edgewood IV* and compel the conclusion that there is not a direct and close correlation between a district's tax effort and the educational resources available to it.

FOF 1310. The ample evidence clearly establishes that, under any credible analysis, the Texas school finance system was not financially efficient at the conclusion of the first phase of this trial and is not financially efficient at the conclusion of the second phase of this trial because there is not a direct and close correlation between tax effort and educational funds and districts do not have substantially equal access to funds to support a constitutionally adequate education. The actions of the 83rd Legislature did nothing to cure this unconstitutional inefficiency.

f. **Dr. Pierce's analysis also shows that even after the actions of the 83rd Legislature, the State has failed to provide districts with substantially equal access to funding that is required by the Constitution in order to achieve a general diffusion of knowledge.**

FOF 1311. The actions of the 83rd legislature did nothing to cure the structural defects that cause unconstitutional disparities in M&O revenues which remain among districts.

FOF 1312. The actions of the 83rd Legislature did not significantly close M&O tax rate, M&O revenue, and M&O yield gaps; therefore, the Legislature made little to no progress in making the school finance system more efficient. (RR58:165-166.)

i. **Unconstitutional disparities in M&O revenues remain between districts after changes by the 83rd Legislature.**

FOF 1313. **Total M&O Funding (Tiers I & II) Current and Projected by percentile of Districts under 83rd Legislature's Changes**

	7.9 ¢	\$1,954	\$65,484
	8.2 ¢	\$2,124	\$73,028
	¢	\$1,978	\$69,033
	¢	\$1,915	\$66,833

(Ex. 3010 at 1; Ex. 3012 at 1; Ex. 3308 at 1; Ex. 3309 at 1; Ex. 3356 at 1; Ex. 3357 at 1; Ex. 3404 at 1; Ex. 3405 at 1.)

FOF 1314. **Total M&O Funding (Tiers I & II) Current and Projected by percentile of WADA under 83<sup>rd</sup> Legislature's Changes.**

	7.1 ¢	\$1,686	\$55,785
	7.1 ¢	\$1,837	\$62,719
	¢	\$1,695	\$58,775
	¢	\$1,635	\$56,646

(Ex. 3025 at 1; Ex. 3027 at 1; Ex. 3320 at 1; Ex. 3321 at 1; Ex. 3368 at 1; Ex. 3369 at 1; Ex. 3416 at 1; Ex. 3417 at 1.)

FOF 1315. **Total M&O Funding (Tiers I & II) Current and Projected Yield by percentile of Districts under 83<sup>rd</sup> Legislature's Changes**

	\$28.00	\$2,129	\$70,399
	\$33.38	\$2,683	\$91,641
	\$32.42	\$2,570	\$89,403
	\$32.12	\$2,545	\$90,723

(Ex. 3042 at 1; Ex. 3043 at 1; Ex. 3332 at 1; Ex. 3333 at 1; Ex. 3380 at 1; Ex. 3381 at 1; Ex. 3428 at 1; Ex. 3429 at 1.)

FOF 1316. **Maximum M&O Funding (Tiers I & II at \$1.17) Current and Projected by percentile of Districts under 83<sup>rd</sup> Legislature's Changes**

	0.0 ¢	\$2,790	\$95,678
	0.0 ¢	\$3,547	\$127,699
	0.0 ¢	\$3,436	\$128,675
	0.0 ¢	\$3,411	\$127,079

(Ex. 3068 at 1; Ex. 3070 at 1; Ex. 3452 at 1; Ex. 3453 at 1; Ex. 3476 at 1; Ex. 3477 at 1; Ex. 3500 at 1; Ex. 3501 at 1.)

FOF 1317. Under the changes by the 83<sup>rd</sup> Legislature, property poor districts continue to tax higher, receive less revenue and suffer significant classroom funding disadvantage. The 83<sup>rd</sup> Legislature's changes did little to close the gaps in M&O tax rates and revenues, and those changes by appropriation did nothing to alter the unconstitutional structure of the

system. The school finance system in its current form perpetuates financial inefficiency. (Ex. 3010; Ex. 3012; Ex. 3308; Ex. 3309; Ex. 3356; Ex. 3357; Ex. 3404; Ex. 3405; Ex. 3025; Ex. 3027; Ex. 3320; Ex. 3321; Ex. 3368; Ex. 3369; Ex. 3416; Ex. 3417; Ex. 3042; Ex. 3043; Ex. 3332; Ex. 3333; Ex. 3380; Ex. 3381; Ex. 3428; Ex. 3429; Ex. 3068; Ex. 3070; Ex. 3452; Ex. 3453; Ex. 3476; Ex. 3477; Ex. 3500; Ex. 3501.)

FOF 1318. The M&O gaps, as shown above, understate what is really going on in the system because wealthy districts continue to have the ability to use I&S funds for M&O purposes, which their less wealthy counterparts do not have the ability to do. This difference in access to funds for M&O expenses exacerbates the structural inefficiency reflected in tax and revenue gaps stated above.

**ii. Unconstitutional disparities in I&S revenues persist among districts after changes by the 83<sup>rd</sup> Legislature.**

FOF 1319. The legislature did nothing to change facilities funding and the disparities between districts based on wealth continue to remain problematic, particularly in light of the Legislature's failure to fund I&S equalization for a second biennium. When analyzing I&S tax rates and I&S revenue and sorting all districts by wealth and grouping those districts by percentiles of districts, comparing the top and bottom 15% of districts by wealth, the tax rate gap in FY12 was 1.3 cents and by FY 13 had grown to 1.4 cents. The revenue gap in FY12 was \$865 and by FY13 had grown to \$1,112 and is projected for FY14 and FY15 to be \$1,094 and \$1,094, respectively. The classroom funding disadvantage in FY12 was \$28,985, by FY13 had grown to \$38,226 and is projected to be in FY14 and FY15 \$38,197 and \$38,195, respectively. (Ex. 3013 at 1; Ex. 3014 at 1; Ex. 3310 at 1; Ex. 3311 at 1; Ex. 3358 at 1; Ex. 3359 at 1; Ex. 3406 at 1; Ex. 3407 at 1.)

FOF 1320. When analyzing I&S revenue and sorting all districts by wealth and grouping those districts by percentiles of WADA, comparing the top and bottom 15% of districts by wealth, the revenue gap in FY12 was \$770 and by FY13 had grown to \$1,015 and is projected for FY14 and FY15 to be \$999 and \$999, respectively. The classroom funding disadvantage in FY12 was \$25,476, by FY13 had grown to \$34,667 and is projected to be in FY14 and FY15 \$34,636 and \$34,634, respectively. (Ex. 3028 at 1; Ex. 3029 at 1; Ex. 3322 at 1; Ex. 3323 at 1; Ex. 3370 at 1; Ex. 3371 at 1; Ex. 3418 at 1; Ex. 3419 at 1.)

FOF 1321. When analyzing I&S tax rates, I&S revenue, and I&S yield per penny and sorting all districts by yield and grouping those districts by percentiles of districts, when comparing the top and bottom 15% of districts by wealth, the tax rate gap in FY12 was \$0.00 but by FY13 had grown to 2.1 cents. The revenue gap in FY12 was \$796 and by FY 13 had grown to \$996 and is projected for FY14 and FY15 to be \$969 and \$976, respectively. The yield gap in FY12 was \$52.10 and by FY13 had grown to \$83.69 and is projected for FY14 and FY15 to be \$81.69 and \$81.86, respectively. The classroom funding disadvantage in FY12 was \$26,325, by FY13 had grown to \$34,035 and is projected to be in FY14 and FY15 \$33,722 and \$34,783, respectively. (Ex. 3044 at 1; Ex. 3045 at 1; Ex. 3334 at 1; Ex. 3335 at 1; Ex. 3382 at 1; Ex. 3383 at 1; Ex. 3430 at 1; Ex. 3431 at 1.)

- FOF 1322. When analyzing I&S revenue and I&S yield per penny and sorting all districts by yield and grouping those districts by percentiles of WADA, when comparing the top and bottom 15% of districts by wealth, the revenue gap in FY12 was \$642 and by FY 13 had grown to \$669 and is projected for FY14 and FY15 to be \$671 and \$642, respectively. The yield gap in FY12 was \$36.75 and by FY13 had grown to \$50.66 and is projected for FY14 and FY15 to be \$50.87 and \$48.77, respectively. The classroom funding disadvantage in FY12 was \$21,087, by FY13 had grown to \$22,783 and is projected to be in FY14 and FY15 \$23,666 and \$22,626, respectively. (Ex. 3057 at 1; Ex. 3058 at 1; Ex. 3346 at 1; Ex. 3347 at 1; Ex. 3394 at 1; Ex. 3395 at 1; Ex. 3442 at 1; Ex. 3443 at 1.)
- FOF 1323. This same pattern (the property-poor districts receive less I&S revenue, receive a smaller yield per penny of tax effort, and suffer under a significant classroom funding disadvantage as compared to their wealthier counterparts) is evident when comparing I&S revenue and I&S yield in the top and bottom 5 % of districts all the way up to the top and bottom 50 % of districts. (Ex. 3013; Ex. 3014; Ex. 3310; Ex. 3311; Ex. 3358; Ex. 3359; Ex. 3406; Ex. 3407; Ex. 3028; Ex. 3029; Ex. 3322; Ex. 3323; Ex. 3370; Ex. 3371; Ex. 3418; Ex. 3419; Ex. 3044; Ex. 3045; Ex. 3334; Ex. 3335; Ex. 3382; Ex. 3383; Ex. 3430; Ex. 3431; Ex. 3057; Ex. 3058; Ex. 3346; Ex. 3347; Ex. 3394; Ex. 3395; Ex. 3442; Ex. 3443.)
- FOF 1324. The actions of the 83rd Legislature did not significantly close the I&S revenue gaps or the I&S yield gaps, therefore making little to no progress in making the school finance system more efficient.

**iii. Unconstitutional disparities in total revenue (M&O plus I&S) remain between districts following changes by the 83<sup>rd</sup> Legislature.**

- FOF 1325. When analyzing M&O plus I&S revenue and sorting all districts by wealth and grouping those districts by percentiles of districts, comparing the top and bottom 15% of districts by wealth, the revenue gap in FY12 was \$2,819 and by FY13 had grown to \$3,236 and is projected for FY14 and FY15 to be \$3,072 and \$3,009, respectively. The classroom funding disadvantage in FY12 was \$94,469, by FY13 had grown to \$111,254 and is projected to be in FY14 and FY15 \$107,230 and \$105,028, respectively. (Ex. 3015 at 1; Ex. 3016 at 1; Ex. 3312 at 1; Ex. 3313 at 1; Ex. 3360 at 1; Ex. 3361 at 1; Ex. 3408 at 1; Ex. 3409 at 1.)
- FOF 1326. When analyzing M&O plus I&S revenue and sorting all districts by wealth and grouping those districts by percentiles of WADA, when comparing the top and bottom 15% of districts by wealth, the revenue gap in FY12 was \$2,456 and by FY13 had grown to \$2,852 and is projected for FY14 and FY15 to be \$2,695 and \$2,634, respectively. The classroom funding disadvantage in FY12 was \$81,260, by FY13 had grown to \$97,385 and is projected to be in FY14 and FY15 \$93,391 and \$91,281, respectively. (Ex. 3030 at 1; Ex. 3031 at 1; Ex. 3324 at 1; Ex. 3325 at 1; Ex. 3372 at 1; Ex. 3373 at 1; Ex. 3420 at 1; Ex. 3421 at 1.)

FOF 1327. This same pattern (where property-poor districts receive less total revenue and suffer a significant classroom funding disadvantage as compared to their wealthier counterparts) is evident when comparing total revenue in the top and bottom 5 % of districts all the way up to the top and bottom 50 % of districts. (Ex. 3015; Ex. 3016; Ex. 3312; Ex. 3313; Ex. 3360; Ex. 3361; Ex. 3408; Ex. 3409; Ex. 3030; Ex. 3031; Ex. 3324; Ex. 3325; Ex. 3372; Ex. 3373; Ex. 3420; Ex. 3421.)

**iv. Unconstitutional disparities in revenue districts receive at \$1.67 (Max M&O plus I&S) remain between districts.**

FOF 1328. When analyzing maximum total revenue (M&O plus I&S) with all districts taxing at the maximum allowed \$1.67 and sorting all districts by wealth and grouping those districts by percentiles of districts, when comparing the top and bottom 15% of districts by wealth, the revenue gap in FY12 was \$7,511 and by FY13 had grown to \$8,532 and is projected for FY14 and FY15 to be \$8,318 and \$8,277, respectively. The classroom funding disadvantage in FY12 was \$289,970, by FY13 had grown to \$317,382 and is projected to be in FY14 and FY15 \$313,748 and \$312,045, respectively. (Ex. 3080 at 1; Ex. 3082 at 1; Ex. 3468 at 1; Ex. 3469 at 1; Ex. 3492 at 1; Ex. 3493 at 1; Ex. 3516 at 1; Ex. 3517 at 1.)

FOF 1329. This same pattern (where property-poor districts receive less total revenue and suffer a significant classroom funding disadvantage as compared to their wealthier counterparts) is evident when comparing total revenue, with all districts taxing at \$1.67, in the top and bottom 5 % of districts all the way up to the top and bottom 50 % of districts. (Ex. 3080, 3082; Ex. 3468; Ex. 3469; Ex. 3492; Ex. 3493; Ex. 3516; Ex. 3517.)

FOF 1330. When analyzing the maximum total revenue (M&O plus I&S) a district could raise, it is clear that the actions of the 83rd Legislature did not significantly close the total inefficiency built in to the system. Therefore, the Legislature made little to no progress in structuring the school finance system to be more efficient.

FOF 1331. The tax rate gap and the revenue gap between wealthy and non-wealthy districts both increased from FY12 to FY13. The actions of the 83rd Legislature will affect FY14 and FY15, but those actions did not, in any form or fashion, significantly change the existing revenue gaps between wealthy and non-wealthy districts as was found by this Court using FY12 data and is shown existing today using FY13 data.

FOF 1332. The actions of the 83rd Legislature did not cure the unconstitutional infirmities previously found by this Court. There continues to be too much unequalized revenue in the system such that the system is unconstitutionally inefficient. After the actions of the 83rd Legislature, all districts continue to be unable to provide a general diffusion of knowledge to their students at similar tax effort.

**g. The disparities identified by Plaintiffs' experts can be seen in regions throughout the state.**

- FOF 1333. In virtually every county in Texas where there is more than one district, there are meaningful and substantial differences in tax rates and the amount of revenue received between the districts and these disparities remain even after the actions of the 83rd Legislature. (RR9:32-33; RR9:130-37; Ex. 3009 at 1; RR63:53-67; Ex. 3542.)
- FOF 1334. In virtually every county in Texas where there is more than one district, the situation exists where property-poor districts tax at the same or higher rates than their wealthier neighbors, yet receive substantially less revenue per WADA. This remains true even after the actions of the 83rd Legislature. (Ex. 3009 at 1; RR9:32-33; RR63:53-67; Ex. 3542.)
- FOF 1335. The differences in tax rates and revenue received between property-poor districts and their property-wealthy counterparts, referenced in the previous two findings, are differences which are built in to the system and are simply what the system allows. (RR63:53-67; Ex. 3542.)

**i. Testimony by superintendents revealed large disparities in M&O revenue that leave property-poor districts unable to provide a general diffusion of knowledge, much less enrichment.**

- FOF 1336. Testimony from Plaintiffs districts' superintendents and taxpayers make it clear to this Court that the disparities in tax rates and revenues identified by the experts' statewide analyses can be seen in districts throughout the state. This evidence includes, but is not limited to, the testimony examples detailed below:
- FOF 1337. Pflugerville ISD Superintendent Charles Dupre testified regarding the disparities in funding levels within Travis and Williamson Counties, which show revenue differences of up to \$1.417 at similar tax rates:

	M&O Tax Rate	M&O Revenue per WADA	Difference
Pflugerville	1.04	5,506	
Hutto	1.04	5,821	+ 315
Manor	1.04	6,079	+ 573
Round Rock	1.04	6,251	+ 745
Marble Falls	1.04	6,307	+ 801
Dripping Springs	1.04	6,319	+ 813
Leander	1.04	6,358	+ 852
Georgetown	1.04	6,418	+ 912
Lake Travis	1.04	6,518	+ 1,012
Austin	1.079	6,531	+ 1,025
Lago Vista	1.04	6,710	+ 1,204
Eanes	1.04	6,834	+ 1,328
Jarrel	1.04	6,923	+ 1,417

(Ex. 3238 at 7.)

FOF 1338. Abilene ISD superintendent Dr. Heath Burns testified that Abilene ISD has a tax rate of \$1.04 – the maximum amount Abilene can tax without a TRE. In the 2011-12 school year, the first \$1.00 of Abilene ISD’s M&O tax rate generated \$5.015 per WADA compared to Lewisville ISD’s revenue per WADA of \$5,849 at the same rate. (See RR19:57-58 (referencing Ex. 6355 at 13).) Dr. Burns testified that the additional revenue could have a tremendous positive impact in his district; however, in order to raise the \$5,849 per WADA available to Lewisville ISD, Abilene would have to tax at a rate of \$1.20 ( $59.97 * 6 \text{ cents} + 31.95 * 14 \text{ cents}$ )<sup>70</sup> – twenty cents higher than Lewisville taxes, and higher than the legal limit. This calculation, based on the amount of revenue the districts have under the current system, shows a disparity significantly greater than that allowed by the Supreme Court in *Edgewood IV*. See *Edgewood IV*, 917 S.W.2d at 731. Importantly, *both* districts’ revenue amounts are less than any of the estimates of adequacy provided in this case. (See *supra* Part I.C.5.f (FOF 625, *et seq.*).

FOF 1339. According to former Northside ISD (Bexar County) Superintendent Dr. John Folks, Texas has an inequitable school finance system and children in the property-poor school districts suffer as a result. (RR25:99-100, 125-28; see also RR16:51-52.) Northside ISD is a Chapter 42 mid-wealth school district, with a wealth level of \$288,349 per WADA in 2011-12. (Ex. 4252.) For 2011-12, Northside ISD taxed at \$1.04 and generated \$5.671 per WADA, which is less than any of the adequacy estimates. (*Id.*) Neighboring Alamo Heights ISD (with property values of \$980,903 per WADA) taxed at \$1.04 and generated about \$1,000 more for \$6,666 per WADA, even after paying recapture. (*Id.*)

<sup>70</sup> This calculation assumes that the “copper penny” yield continues beyond the current statutory \$1.17 cap.

- FOF 1340. Anton ISD taxes at \$1.17 and receives \$5,278 per WADA. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per WADA. Anton's tax rate is 14.9 cents higher, but Anton receives \$2,257 less in revenue. (Ex. 3006; Ex. 3010.) Mr. Jim Knight, the superintendent of Anton ISD (a property-poor non-recapture district), is a former assistant superintendent of a property-wealthy school district, Canadian ISD. Canadian ISD generates approximately \$2,000 per WADA more than Anton ISD, despite taxing twenty-three cents lower. Mr. Knight testified about the remarkable differences between the educational opportunities he was able to afford for students in a property-wealthy district compared to a property-poor district. These opportunities made a difference in the outcomes of students and the overall teaching environment in the schools. (Ex. 3203, J. Knight Dep., at 26-32.) For example, Anton ISD does not have the funds to offer its students the courses necessary for the distinguished curriculum degree. (*Id.* at 46.) The district also does not have adequate funding to compete for qualified teachers. (*Id.* at 24-25.)
- FOF 1341. Superintendent Roy Knight worked in a property-wealthy district, Hallsville ISD, before becoming superintendent of Lufkin ISD. The major differences between the districts were that Hallsville was able to provide up-to-date technology for its district, keep class sizes smaller, and have continuous professional development training. Hallsville ISD brought in experts on brain development and assisted teachers with instructional techniques. Test scores were higher as a result. Hallsville is about 100 miles from Lufkin and is a similar community. Hallsville's poverty level is not as high and they have the benefit of oil and gas activity in their district. They have about \$6,512 per WADA compared to \$5,290 per WADA at the same \$1.04 tax rate as Lufkin. (Ex. 3199, R. Knight Dep., at 42-45.)
- FOF 1342. Alief ISD taxes at \$1.125 and receives \$5,683 per WADA. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per WADA. Alief's tax rate is 10.4 cents higher, but Alief receives \$1,852 less in revenue. (Ex. 3006; Ex. 3010.) Even before Alief was forced to make \$22 million in budget cuts because of target revenue funding, it lacked the resources to offer a full curriculum and prepare its students to be college and career ready. (RR8:121.) H.D. Chambers, the Superintendent of Alief, who previously served as the superintendent of Stafford MSD, testified that, because of higher target revenue, Stafford MSD was able to offer, for example, a full blown science, technology, engineering, and mathematics (STEM) program for a large percentage of its students. (Ex. 3205, Chambers Dep., at 37-38.)
- FOF 1343. Belton ISD taxes at \$1.17 and receives \$5,946 per WADA. The wealthiest 15% of districts, on average, tax at \$1.021 and receive \$7,535 per WADA. Belton's tax rate is 14.9 cents higher, and Belton receives \$1,589 less in revenue. (Ex. 3006; Ex. 3010.) Superintendent Kincannon testified that the distribution of funds to Belton ISD is not fair. Surrounding districts are all taxing at \$1.04 and getting more revenue per WADA than Belton ISD, which taxes at the maximum, \$1.17. (Ex. 3226, Kincannon Dep., at 148.)
- FOF 1344. Brownwood ISD taxes at \$1.04 and receives \$5,490 per WADA. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per

WADA. Brownwood's tax rate is 1.9 cents higher, but Brownwood receives \$2,045 less in revenue. (Ex. 3006; Ex. 3010.)

- FOF 1345. Bryan ISD taxes at \$1.04 and receives \$5,536 per WADA. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per WADA. Bryan's tax rate is 1.9 cents higher, and Bryan receives \$1,999 less in revenue. (Ex. 3006; Ex. 3010.) Bryan ISD does not have the financial resources to exercise discretion in the curriculum it offers. It can barely meet state mandates. (Ex. 3200, Wallis Dep., at 63-64.) The district does not have the funding to provide the variety of courses necessary to get its high school students ready for the distinguished curriculum. (*Id.* at 33, 41, 40-43.)
- FOF 1346. Edgewood ISD taxes at the maximum \$1.17 M&O rate and receives \$5,825 per WADA compared to cross-town wealthy school district, Alamo Heights ISD, which receives \$6,348 per WADA while taxing at \$1.04. (Ex. 20038.) Edgewood ISD, which has a very challenging student population, has many needs previously identified in these findings. Edgewood ISD still needs to replace additional school buildings but it does not have the capacity to fund the construction without additional IFA funds and those funds are not presently available. (Ex. 4224-S, Cervantes Dep., at 73, 200; *see also supra* Part I.C.7.d.i (FOF 1091, *et seq.*))
- FOF 1347. Everman ISD taxes at \$1.17 and receives \$5,629 per WADA. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per WADA. Everman's tax rate is 14.9 cents higher, and Everman receives \$1,906 less in revenue. (Ex. 3006; Ex. 3010.)
- FOF 1348. Because of its lower yield, Everman ISD cannot raise the \$6,576, which is the *Edgewood IV* calculation adjusted for inflation, at a tax rate of \$1.17, and it costs more for Everman ISD to educate its students in 2012 than it did in 1993 because of the higher standards that have been adopted. (RR12:201.) Everman ISD does not have discretion to spend its funds on anything not required by state mandates and standards. (RR5:196-99.)
- FOF 1349. Looking at I&S on the basis of yield per penny, Everman receives \$26.41 per I&S penny, while neighboring districts Carroll and Eagle Mountain-Saginaw receive \$69.60 and \$29.36, respectively. (Ex. 3541, Pfeifer Dep. (Vol. II), at 26.)
- FOF 1350. If Everman ISD was receiving the yield on their I&S pennies that Carroll is receiving on theirs, Everman ISD would receive approximately three times more I&S revenue. (*Id.*)
- FOF 1351. Van ISD taxes at \$1.17 and receives \$5,731 per WADA. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per WADA. Van's tax rate is 14.9 cents higher, and Van receives \$1,804 less in revenue. (Ex. 3006; Ex. 3010.) Van ISD is already at the \$1.17 tax cap and does not have the ability to raise more money. It cannot prepare children to be college or career ready with existing funding. (Ex. 3201, Witte Dep., at 33.)

- FOF 1352. Kaufman ISD taxes at \$1.17 and receives \$5,814 per WADA. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per WADA. Kaufman's tax rate is 14.9 cents higher, and Kaufman receives \$1,721 less in revenue. (Ex. 3006; Ex. 3010.)
- FOF 1353. Los Fresnos ISD taxes at \$1.17 and receives \$5,910 per WADA. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per WADA. Los Fresnos's tax rate is 14.9 cents higher, and Los Fresnos receives \$1,625 less in revenue. (Ex. 3006; Ex. 3010.)
- FOF 1354. Lubbock ISD taxes at \$1.04 and receives \$5,310 per WADA. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per WADA. Lubbock's tax rate is 1.9 cents higher, and Lubbock receives \$2,225 less in revenue. (Ex. 3006; Ex. 3010.) Even though Lubbock ISD's M&O tax rate is \$1.04, it has not pursued a TRE because of the poverty of its population. The success of a TRE is doubtful because its voters are aware that even if Lubbock ISD taxed at \$1.17 it could not raise what its neighbors, Friendship ISD and Lubbock-Cooper ISD, raise at \$1.04. (Ex. 3198, Garza Dep., at 30-32.) There is no educationally sound policy reason why students in Friendship ISD or Lubbock-Cooper ISD need more funding to educate their students than Lubbock ISD. The number of students living in poverty is higher in Lubbock ISD than in Friendship ISD or Lubbock-Cooper ISD. Lubbock ISD is funded at levels lower than Friendship ISD or Lubbock-Cooper ISD. (*Id.* at 31-32.)
- FOF 1355. Lufkin taxes at \$1.04 and receives \$5,290 per WADA. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per WADA. Lufkin's tax rate is 1.9 cents higher, and Lufkin receives \$2,245 less in revenue. (Ex. 3006; Ex. 3010.)
- FOF 1356. Pflugerville ISD taxes at \$1.04 and receives \$5,506 per WADA. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per WADA. Pflugerville's tax rate is 1.9 cents higher, and Pflugerville receives \$2,029 less in revenue. (Ex. 3006; Ex. 3010.)
- FOF 1357. Quinlan ISD taxes at \$1.04 and receives \$5,326 per WADA, an amount less than all of the adequacy estimates. The 15% of districts with the highest property wealth, on average, tax at \$1.021 and receive \$7,535 per WADA. Quinlan ISD's tax rate is 1.9 cents higher, and Quinlan ISD receives \$2,209 less in revenue. (Ex. 3006; Ex. 3010.) Nearby property-wealthy Rockwall ISD, at the same tax rate, gets \$6,385 per WADA. (RR24:89.) Quinlan ISD lost forty to forty-five teachers in 2011-12, most of who left because they could get better salaries in nearby districts. Quinlan is the de facto teacher training ground for Rockwell ISD. The lack of continuity hurts the education of students in Quinlan. (RR20:84-85.)

**ii. Testimony by taxpayer plaintiffs demonstrated large disparities in M&O revenue between neighboring districts across the state, despite higher tax rates.**

FOF 1358. In many cases, taxpayers in two districts within the same county pay taxes according to the same adopted tax rate on property of essentially the same value. However, the resulting revenue the State's funding scheme provides to educate the children who happen to live in those districts is drastically different. In other instances, not only is the revenue provided by the State drastically different, but the tax rates charged the property owners – and the resulting taxes paid on the similarly valued property – are also different, to the distinct disadvantage of the those owning property in the lower funded district. (RR9:129-134, Ex. 3128 – Ex. 3186.)

FOF 1359. In the 2011-2012 school year, a Pflugerville ISD taxpayers' home was valued by the Travis County Appraisal District ("TCAD") at \$165,328. The homeowner paid school taxes at an adopted M&O rate of \$1.04 on a taxable value of \$150,328, after the homestead exemption was applied. In Eanes ISD, another homeowner whose home was valued by the TCAD at \$165,231, paid school taxes at an adopted M&O rate of \$1.04 on a taxable value of \$150,231 after his homestead exemption was applied. The homeowner in Pflugerville, on property within the same county and appraised by the same appraisal district, paid about the same in taxes to support the maintenance and operations of the local school district as their counterpart with property in Eanes ISD. But, because of the gross inequities inherent in Texas's current school funding scheme, the taxpayers' children in Pflugerville ISD had access to over \$1,300 *less* per weighted student than those in Eanes ISD. At Eanes ISD's funding level, a classroom of twenty-two children in Pflugerville would have over \$30,000 in additional funding. (RR9:135-136; Ex. 3172 at 1; Ex. 3187, Pierce Report, at 17.)

FOF 1360. In Irving ISD in 2011-2012, a homeowner had his homestead valued at \$164,760 by the Dallas County Appraisal District ("DCAD"). His taxable value, after homestead exemptions were applied, was \$149,760 and the maintenance and operations tax rate was set at \$1.04 per \$100 valuation. In Highland Park ISD ("HPISD"), the DCAD appraised another homeowner's homestead at \$164,750. After his homestead exemptions were applied, which included additional local option exemptions, the taxable value of that property was set at \$116,800 and M&O taxes for the school district were assessed at a rate of \$1.027. The homeowner in Irving ISD paid taxes on a similarly valued property at a similar tax rate, and on a larger taxable value, but while he paid more in taxes on property of almost identical market value, the state funding system provided only \$5,308 per weighted student for Irving ISD and \$6,923 per weighted student for HPISD. If a classroom of twenty-two children in Irving was funded at the HPISD level, its funding level would be more than \$40,000 higher. (Ex. 3187, Pierce Report, at 17.)

FOF 1361. Located in Nacogdoches County in East Texas, Cushing ISD and Central Heights ISD are neighboring districts sharing a common boundary. In 2011-2012, a homeowner in Central Heights ISD had his home appraised at \$215,320 and after exemptions were applied (including a local option homestead exemption), paid school district M&O taxes

at a rate of \$1.04 on a taxable value of \$157,260. In Cushing ISD, a homeowner with similarly valued property (\$215,160 and \$157,130 after exemptions) had school property taxes assessed at the same \$1.04 rate. In this case, even though the tax effort of the two property owners was almost identical, the state funding system provided Central Heights ISD with about \$2,400 *less* per weighted student than it did Cushing ISD. At this 45% higher funding level, Central Heights would have an additional \$65,000 in funding for every twenty-two children. (*Id.* at 17-18.)

- FOF 1362. River Road ISD and Bushland ISD are neighboring school districts located just north of Amarillo, in Potter County. In 2011-2012, after exemptions, a homeowner in River Road ISD had a taxable valuation of \$195,448. A homeowner in Bushland ISD had a taxable valuation of \$195,446 on his home. Both districts assessed M&O tax rates of \$1.04 per \$100 valuation so the difference in required tax effort for each homeowner would have been insignificant. However, in 2011-2012 the state funding system generated over \$1,300 *less* per weighted student for River Road ISD than it did for Bushland ISD. (*Id.* at 18.)
- FOF 1363. In 2011-2012, a homeowner in Laredo ISD had a taxable value of \$109,662 on his home. In the same county, a homeowner in Webb CISD had a taxable value of \$109,530 assigned to his home. The homeowner in Laredo ISD paid school property taxes for M&O at an assessed rate of \$1.04 per \$100 of valuation. The homeowner in Webb CISD paid school property taxes for M&O at an assessed rate of \$0.8033 per \$100 of valuation. Even though the value of the properties was essentially equal, the homeowner in Laredo paid 30% more in school property taxes. The state funding system provides Laredo ISD with \$5,530 per weighted student, yet each weighted student in Webb CISD was funded at \$12,398, well over twice the funding level provided per weighted student for Laredo ISD. (*Id.*)
- FOF 1364. Randy Pittinger is a homeowner and taxpayer in Belton ISD. (RR8:66-70.) He is a private social worker and has been a hospital administrator. He has three children who graduated from the Belton ISD several years ago. (*Id.*) He is on the school board. His M&O taxes are \$1.17. His house is valued at \$316,493. (*Id.*) The \$1.17 tax rate generates \$5,946 per WADA for Belton ISD. (*Id.*) A taxpayer in a house of similar value in Salado ISD, which is also in Bell County, is taxed at \$1.04 for M&O and receives \$5,941 in revenue per WADA. (*Id.*) A taxpayer who lives in a house of similar value to Mr. Pittinger's in the nearby Georgetown ISD is taxed at \$1.04 and receives \$6,418 in revenue per WADA. (*Id.*)
- FOF 1365. Brad King is a homeowner and taxpayer in Bryan ISD. (RR8:26-31.) He is an engineer. (*Id.*) His house is valued at \$230,050. (*Id.*) His M&O taxes are \$1.04. (*Id.*) The tax rate generates \$5,536 per WADA for the Bryan ISD. A taxpayer in the College Station ISD adjoining Bryan ISD, who lives in a house of similar value, pays an M&O tax of \$1.00 and College Station ISD receives \$6,339 per WADA.
- FOF 1366. Chip Langston is a homeowner and taxpayer in Kaufman ISD. (RR8:9-14.) He is a CPA. (*Id.*) He has one daughter who graduated from Kaufman ISD several years ago.

(*Id.*) He is on the school board. (*Id.*) His house is valued at \$230,060. (*Id.*) His M&O taxes are \$1.17. (*Id.*) This tax rate generates \$5,814 per WADA for Kaufman ISD. (*Id.*) A taxpayer who lives eight miles away in Forney ISD, who has a house of similar value, pays \$1.04 in M&O taxes. (*Id.*) Forney ISD receives \$5,741 per WADA. (*Id.*) An additional taxpayer who lives in nearby Sunnyvale ISD, in a house of similar value, pays \$1.02 in M&O taxes and Sunnyvale ISD receives \$6,651 per WADA.

FOF 1367. Norman Baker is a homeowner and taxpayer in Hillsboro ISD. (RR8:53-57.) He is a production supervisor at Anheuser-Busch. (*Id.*) He has two sons who have graduated from Hillsboro ISD and a daughter who is still attending school. (*Id.*) He is on the Hillsboro ISD school board. (*Id.*) His house is valued at \$41,630. (*Id.*) His M&O taxes are \$1.15. (*Id.*) This tax rate generates \$4,915 per WADA for Hillsboro ISD. (*Id.*) A taxpayer who lives in nearby Glen Rose ISD in a house of similar value pays \$0.825 in M&O taxes. (*Id.*) Glen Rose ISD receives \$8,945 per WADA – or 45% more funding per WADA for 32.5 pennies less in tax rate or \$88,660 for a classroom of 22 students.

FOF 1368. These findings are not dependent on factors such as geographic locations, size, or population, but they occur in counties located all across the state and in counties of all sizes of population, both rural and urban. (Ex. 3187, Pierce Report, at 18.) These violations of substantially equal access to similar revenue for similar tax effort are not bound to just one area of the state or just one size of district or county. (*Id.*) Rather, they occur in all areas of the state and in all kinds of districts affecting hundreds of thousands of students, and the financial and economic impact is substantial and compelling. (*Id.*)

**h. The disparities in funding and educational opportunities between property-poor and property-wealthy school districts is further evidenced by the experiences of Texas families.**

FOF 1369. The effects of inadequate and inequitable resources for property-poor districts are not only shown in the data analysis at the district and school levels, but are also evidenced by educational experiences of the parents and students. Edgewood Plaintiff parent Yolanda Canales testified about the inequalities in educational opportunities her children experienced in a property-poor district, Pasadena ISD, compared to when they attended schools in a property-wealthy district, Clear Creek ISD. (RR17:236-254.) In the 2012-13 school year, she had two children on the free and reduced-price lunch program attending Pasadena ISD schools. (RR17:237.)

FOF 1370. Ms. Canales initially had three children attending public schools in property-poor Pasadena ISD. (RR17:236-54.) When her family's income increased, her family purchased a home in nearby property-wealthy Clear Creek ISD in order to have access to better schools. (RR17:241-54.) Ms. Canales immediately noticed the differences, such as better quality teachers, additional educational resources and programs, more extracurricular activities, and smaller class sizes. (*Id.*) When her children fell behind in school, the Clear Creek schools offered lots of tutoring. (*Id.*)

- FOF 1371. Ms. Canales would have preferred keeping her children in the wealthy district of Clear Creek ISD but after getting a divorce and the crash of the real estate market (Ms. Canales was a real estate agent), she was forced to move back to Pasadena ISD schools in 2008 with her children in a single-wide mobile home. (*Id.* at 236-39.) Her children's quality of education suffered as a result. (*Id.*)
- FOF 1372. Ms. Canales's eldest daughter graduated in 2010 on the minimum high school program and passed the TAKS test. She now struggles with coursework at the community college. (RR17: 243-45.) Ms. Canales's daughter in grade twelve has also struggled, despite passing the TAKS tests. (RR17:246-49.) She has taken coursework through the credit-recovery program, PLATO. (*Id.*) That program is not monitored full-time with a teacher and essentially allows students to recover credits without fully understanding the material. (*Id.*) Ms. Canales must also pay for her daughter's night school with her very limited income. (*Id.*)
- FOF 1373. Ms. Canales also spoke of the differences in basic science activities. For example, at Clear Creek, her eldest daughter dissected animals but at Pasadena, her younger daughter has not had any science experiments. (RR17:236-49.) As another example, her daughter attending high school in Pasadena schools does not bring home books because they do not have enough books for the students. Sometimes substitutes are not available in the classrooms, and the students are left unattended. (*Id.*)
- FOF 1374. Ms. Canales's youngest child attends half-day pre-K in Pasadena ISD. The program, which runs for only three hours, does not offer enough time for learning in that small window. (RR17:249-51.) The teacher appears overwhelmed and does not have enough assistance. (*Id.*) The classroom is also overcrowded and lacks supplies. (*Id.*) In fact, the teacher has to purchase some of her supplies. (*Id.*)
- FOF 1375. Ms. Canales joined this lawsuit because she is very concerned about her children's education after she, herself, struggled and obtained only a GED. (RR17:237-54.) Ms. Canales has also seen her older children struggle with being college ready and wants to ensure better opportunities for her youngest child. (*Id.*) She is aware of the differences in tax rates and funding between her district and other surrounding property-wealthy districts. (*Id.*) She has seen and experienced the variation in resources and education between property-poor and property-wealthy school districts. When asked what she wants out of this lawsuit, Ms. Canales responded that she "just want[s] fairness; equal opportunities for my children as well, regardless of the neighborhood we live in." (RR17:252-54.)

**4. The Structure of the system makes equalization impossible.**

**a. Gross disparities in property values still exist among school districts across Texas.**

- FOF 1376. Texas continues to rely substantially on local property taxes to fund its public schools, though property values across Texas remain incredibly disparate. Property wealth

variation alone explains about half of the variation in M&O revenues per WADA. (Ex. 3188, Baker Report, at 39.) Based on funding levels for the 2012-13 school year, property values per WADA range from \$22,218 (lowest) in Boles ISD to \$7,341,341 (highest) in Kenedy Countywide ISD. (Ex. 4252.) Even after the wealth equalization efforts described in FOF 45 – FOF 49 above, these disparities result in wide gaps in revenue per WADA. For its 740 WADA, Boles ISD receives \$5,648 per WADA while taxing at the maximum \$1.17 M&O rate; in contrast, for its 145 WADA, Kennedy Countywide ISD receives \$11,216 per WADA while taxing at a \$1.00 M&O tax rate – nearly twice that of Boles ISD. (Ex. 4252.) The vast majority of these differences cannot be explained away by local tax effort or any educational-related factors such as type of students served, small-size adjustments or transportation as adjustments for weighted students, school size, and transportation are all incorporated into the revenue per WADA figures. (See, e.g., RR23:105-06, 151, 160; RR57:15-18, 45-47.)

FOF 1377. These disparities can be seen in various regions throughout Texas and have much more to do with what is above and below the ground than with educational need. For example, Lufkin ISD is surrounded by, but not in, oil and gas shale areas. (Ex. 3199, R. Knight Dep., at 39-40, 41-42.) Lufkin ISD generated \$5,299 per WADA in 2012-13, but a 30-minute bus ride from Lufkin takes you to property-wealthy districts like Chireno ISD and Garrison ISD that have over \$6,500 per WADA, and Carthage ISD that has \$6,700 per WADA. (Ex. 3006; Ex. 3199 at 40.) As La Feria ISD Superintendent Dr. Nabor Cortez testified, the property-poor districts in the Valley all wished they had their own little island like property-wealthy Point Isabel ISD: “We all would love to have an island in our district, but we don’t. We don’t. We are poor and we are without our island.” (RR18:86-87.) Point Isabel ISD, which encompasses Padre Island, taxes at \$0.98 and raises over \$300 more per WADA than its neighbor, Los Fresnos ISD which, taxes *nineteen cents higher* at \$1.17. (See Ex. 3207, Salazar Dep., at 12-14; Ex. 3006.)

**b. The basic structure established in 2006 – and still in place today – over time collectively increased the disparities in revenues available to property-wealthy versus property-poor districts to unconstitutional levels.**

FOF 1378. The stark inequities in the resources and educational opportunities the State makes available for students in property-poor and property-wealthy districts discussed above did not occur by accident but result from systemic defects. At the time of *WOC II*, the then-existing school finance formulas emanated from the same formulas adopted by the Legislature in 1993 and found constitutional in 1995. See *WOC II*, 176 S.W.3d at 783-84, 791-92. However, following the 2005 *WOC II* decision, the State made at least three significant changes under HBI that, collectively, increased the inequities to heights not seen since before 1993: the compression of M&O tax rates by one-third; the reliance on a new hold-harmless provision commonly known as “target revenue” in lieu of formula funding to fund the majority of school districts; and the introduction of unrecaptured revenue generated from the “golden pennies.” (RR23:24-31.) These inequities caused by the structure of M&O funding are exacerbated by I&S funding that is unrecaptured and

available only by appropriation. That some districts are able to use I&S funds for expenses that were traditionally paid with M&O funds only increases the disparity.

- i. **The compression of tax rates arbitrarily reduces districts' taxing capacity to support basic adequate education and allows property-wealthy school districts to access greater revenue at lower tax rates.**

FOF 1379. As noted above, the post-*WOC II* legislation “compressed” districts tax rates by one-third of their 2005 rate. (*See supra* FOF 26 – FOF 27 and FOF 40.) A district that had been taxing at the \$1.50 cap currently receives a basic allotment based on a \$1 compressed rate. (*Id.*) However, a district with a tax rate below a dollar receives a basic allotment based on a lower compressed rate – for example, if a district had been taxing at \$1.45, its compressed rate would be \$0.9666. (*Id.*) While the basic allotment could be correspondingly lower if the districts were receiving the same formula funding in 2005, the lower compressed rate also means that the district can access its “golden pennies” at a lower tax rate. (*See supra* FOF 40 and FOF 44) And because the golden pennies are worth more than Tier I pennies (*compare* FOF 40 and FOF 46 with FOF 44 and FOF 46), the additional money gained from the two extra pennies (available without a TRE) can be significantly greater than that potentially lost by the lower compression percentage. In other words, a district with a CTR of \$0.9666 “loses” 3.34 pennies of Tier I taxing capacity but “gains” access to two additional golden pennies that are not subject to a TRE.<sup>77</sup> For the wealthiest districts, the gain from the two golden pennies can outstrip the “lost” Tier I funding. For most districts, however, the loss of Tier I pennies due to tax compression is just that – a loss of taxing capacity to support the basic, adequate education, as well as a reduction in their basic allotment. For a district with a CTR of \$0.9666, the \$4,765 basic allotment is reduced to \$4,606 – a calculation based not on need but arbitrarily determined by a district’s tax rate in a single year. The lost Tier I capacity is replaced with copper pennies -- the lowest level of equalization at \$31.95. Because each district’s CTR is arbitrarily determined by its 2005 tax rate, each district has a different CTR, different Tier I taxing capacity, different basic allotment (the starting point for all funding), different access to golden pennies, and different yields at the same tax rates when copper pennies are substituted for Tier I. Because of the defects and others (such as insufficient funding described above), Tier I cannot be equalized. The system is further structurally deficient because there are two Tier I funding mechanisms – formula funding and target revenue – with no equalization possible across the entire system.

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<sup>77</sup> Because the requirement for a TRE is pegged to the \$1.04 tax rate (not the compressed rate plus four cents), such a district could access all six golden pennies without a TRE. TEX. TAX CODE § 26.08(a), (n). (*See also supra* FOF 28, FOF 253.) Because wealthy districts were more likely to have a tax rate below \$1.50, they are more likely to benefit from the tax compression scheme – and many do. (*See* RR57:42-43; Ex. 11323; Ex. 3187, Pierce Report, at 8-9; *see also infra* Part 1.D.4.b.i (FOF 1378, *et seq.*))

- FOF 1380. As described earlier, “target revenue” is a hold harmless system that guarantees that a district receives, for its compressed rate, the revenue it would have received in 2005-06 or 2006-07, under the old formulas, if that amount is greater than that it receives under the new tiered system. (Ex. 1328, Casey Report, at 17.) Under the old formulas that form the basis of target revenue, a district might receive a “boost” in per student revenue from increased local property values in one year, that would be balanced out by a reduction in revenue the next year (Ex. 1328, Casey Report, at 18); however, the target revenue system takes the quirks of a single year’s formula results and makes them permanent, and as a result, there is no consistent relationship between a district’s property wealth and/or tax effort and its target revenue. (*Id.*; RR23:28-30.) The effect of vastly different target revenues despite the same tax rate and similar property values applies to low-wealth districts, as well as some property-wealthy districts. (RR23:29-30; Ex. 4000, Cortez Report, at 10.)
- FOF 1381. Target revenue has increased the tax rate gaps and revenue gaps among districts. (Ex. 3187, Pierce Report, at 9.) Indeed, a former cap of \$350 on revenue gains resulting from compressed rates was eliminated in 2009. (Ex. 1188, Dawn-Fisher Report, at 2.) The average compressed tax rates for districts with the lowest target revenues is higher than the compressed tax rates for districts with the highest target revenues. (Ex. 3187, Pierce Report, at 9.) The average Tier I funding level for those districts with the lowest target revenue is about \$1,900 per student *below* the Tier I funding level provided for the average district in the lower taxing, higher funded group. (*Id.*) This Tier I funding gap, *even at this basic instructional program level*, results in more than \$40,000 less in funding for a typical elementary classroom of 22 children in the lower funded districts. (*Id.*)
- FOF 1382. “Target revenue” was intended to be temporary but has already been extended through at least 2017. (RR23:74-75; RR10:76, 202.) It is part of a long legislative tradition of “temporary” hold harmless provisions. In *Edgewood IV*, plaintiffs complained that the wealth hold harmless (which essentially has the same effect as target revenue) then in existence had a de-equalizing effect on the school finance system; but the Supreme Court analyzed the school finance system assuming the hold harmless was no longer in existence since by law (at the time of the Court’s opinion *Edgewood IV*) the hold harmless was set to expire and be of no force and effect by 1996. (Ex. 3118 – Ex. 3122.) After the Supreme Court rendered its decision in *Edgewood IV*, the Legislature first extended the wealth hold harmless until the end of the 1997-1998 school year, then extended it until the end of the 1999-2000 school year, and finally made it permanent; and it lives on today through the target revenue system. (Ex. 3118 – Ex. 3125.)
- FOF 1383. During the testimony in the first phase of this trial, the State represented that target revenue was to be phased out in its entirety. (RR32:65-66.) The Court finds that the actions of the 83rd Legislature in increasing the target revenue adjustment factor from .9235 to .9263 were inconsistent with the representations made by the State during the first phase of this trial, and in fact the actions of the 83rd Legislature increased the amount some districts received through target revenue, meaning that districts benefitting

from target revenue would get an additional boost. (Ex. 3540 at 4.) This action, combined with the Legislature's previous patterns of turning hold harmless provisions into permanent features, gives the Court no confidence that the target revenue system will in fact be repealed in 2017 and it certainly does nothing to fix the outstanding constitutional violations in the present year. The Court takes the system as it exists today.

FOF 1384. In addition, the number of school districts benefiting from hold-harmless provisions has grown substantially from 34 property-wealthy school districts under the old school finance system in 2003-04 (*see WOC II*, at 761) to an estimated 236 property-wealthy districts for the 2013-14 school year. (Ex. 11470 at "ASATR funding tally" tab.) This is an increase of nearly 700 percent over the last ten years.

FOF 1385. And while target revenue was never intended to benefit primarily property-wealthy school districts (RR58:55), the vast majority of school districts benefiting from target revenue in recent years have been Chapter 41 districts. In 2007, 159 of the 1,022 school districts (or 15.6%) funded on target revenue were Chapter 41 districts. For the 2013-14 school year, 236 of the 305 school districts (or 77.4%) funded on target revenue are Chapter 41 districts. (Ex. 11470 at "ASATR Funding tally" tab.) And those 236 Chapter 41 districts receive 91% of the total ASATR funding today, compared to just 21% in 2007. (*See id.* at "Summary Tab.")

FOF 1386. Furthermore, the need to fully fund the school finance formulas to adequate and financially efficient levels for all districts remains the core obstacle in providing a constitutionally efficient system. Simply repealing the target revenue hold harmless for all school districts without a corresponding increase in formula funding would simply further "level down" the revenue of the districts, especially for those districts that require target revenue to provide a general diffusion of knowledge. (*See also supra* Part I.D.1.c (FOF 1241, *et seq.*.) Such action on its own would do nothing to *level up* the revenue of districts on formula funding to the level of a general diffusion of knowledge – a "solution" that the Supreme Court has previously said would do nothing to cure an unconstitutional inefficiency. *WOC I*, 107 S.W.3d at 571 (quoting *Edgewood IV*, 917 S.W.2d at 729-30). In other words, simply repealing the target revenue aspect of school finance for all school districts might reduce the disparity in funding (which is needed), but it would not cure the other constitutional infirmities.

ii. **The introduction of unrecaptured "golden pennies" into M&O taxes further increases the tax and revenue gaps in the ability of school districts to provide a general diffusion of knowledge.**

FOF 1387. Under "Tier II-A" or the "golden pennies," school districts are guaranteed up to the greater of Austin ISD's property wealth per WADA, or \$59.97 per WADA.<sup>78</sup> for the first

<sup>78</sup>By appropriation, the guaranteed yield is \$4,950 in 2013-14 and \$5,040 in 2014-15. (Ex. 6593A at 22R: RR54:103 (referencing Ex. 6618 at 5).)

six pennies above the compressed tax rate. (*See supra* FOF 44.) School districts with wealth levels exceeding these amounts are allowed to keep all of their revenue. (*See supra* FOF 46.) This is the first time since before Senate Bill 7 was enacted in 1993 that the Legislature has allowed property-wealthy school districts to generate unequalized revenue from M&O pennies. (RR23:27.)

FOF 1388. Although the golden pennies were intended to supplement a basic adequate education, the more rigorous standards and expectations for all students and school districts, coupled with rising costs and the recent budget cuts, have forced school districts to use revenue generated from those pennies for a basic, adequate education. (RR15:196-97, 199-209; RR3:154-56; RR19:158; 256-57; *see also supra* Part I.C.1 (FOF 210, *et seq.*) and Part I.D.1.b (FOF 1222, *et seq.*.) This was confirmed by even the property-wealthy school districts that generate substantially greater funds at those levels of tax effort compared to property-poor school districts. (Ex. 4224-M, Reedy Dep., at 79-80; Ex. 4224-I, Patek Dep., at 60; Ex. 4224-R, Wiggins Dep., at 93-94.) Because the “golden pennies” are necessary for a general diffusion of knowledge, it is appropriate to consider the revenue generated from the golden pennies for purposes of determining whether the system is financially efficient. (*See supra* I.D.1.b (page 272); RR23:105-08.)

**iii. The use of I&S revenues for traditionally M&O expenses increases the inefficiency of the system because property-wealthy districts have access to unrecaptured and unequalized funds not available to property-poor districts.**

FOF 1389. Because the system does not provide sufficient M&O funds under Tier I and Tier II to support a basic education, some districts have been compelled to use I&S revenues to finance M&O expenses such as buses and technology. (Ex. 3187, Pierce Report, at 13.)

FOF 1390. Because I&S revenues are not subject to recapture, property-wealthy districts receive the full benefit of their enhanced property values for every penny of I&S tax effort. (RR58:112, 138-139; Ex. 3187, Pierce Report, at 5.)

FOF 1391. The failure to fund the IFA in the last two biennia has a disparate effect on property-poor districts that are limited to the actual revenue from the district’s property value – assuming the districts have the financial wherewithal to issue bonds in the first place. (Ex. 3187, Pierce Report, at 14.)

**iv. The 2013 legislation did not make any structural changes to the system nor cure the constitutional inequities.**

FOF 1392. The changes enacted by the 83rd Legislature did not eliminate the constitutional deficiencies in the system. First, the legislative changes to funding under SB1 and HB1025 were not permanent changes made to the school finance system, but merely changed the funding appropriated in the 2013-14 and 2014-15 school years, which by

their very nature will expire at the end of the biennium. (RR58:102-03.) Second, and perhaps most importantly, the temporary changes in funding did not resolve the substantial gap in funding and tax rates between property-poor and property-wealthy school districts. Although the revenue gap was reduced slightly from the temporary appropriations, property-poor school districts still do not have substantially equal access to revenues necessary to provide a general diffusion of knowledge at similar tax efforts. (See *supra* Part I.D.1.b (FOF 1222, *et seq.*.) Third, many of the structural causes of the inequities remain largely unchanged in the system, such as the unrecaptured golden and I&S pennies and hold-harmless measures. (*Id.*: RR23:24-26; RR32:138-39; RR57:10-11; Ex. 3540, Suppl. Expert Report of Pierce, at 3-5.) In addition, the Legislature failed to make any changes to the weights, which continue, on average, to more heavily impact lower wealth districts. (RR57:42-43; see also *infra* Part I.D.5.b (FOF 1399, *et seq.*.) Nor did the legislature make any attempt to study the cost of meeting its standards or to ensure that it was leveling up funding for the poorest school districts to that standard. (See *supra* Parts I.C.5.a (FOF 603, *et seq.*), I.C.5.f (FOF 625, *et seq.*), and I.D.1.c (FOF 1241, *et seq.*.)

**5. The system has a disparate impact on property-poor districts and those districts with large populations of economically disadvantaged and ELL students.**

**a. The disparities result in the districts with the most challenging student populations receiving the least amount of funds.**

FOF 1393. The State has long recognized the importance of educating more-challenging student populations, such as ELL and economically disadvantaged students. Former Commissioner Scott testified that equipping underprivileged children with a quality education allows them the opportunity to compete on a level playing field with children born into wealth and privilege. (Ex. 4243, Scott Dep., at 2-3.) For this reason, students are held to the same standard by the State regardless of whether they attend a property-poor or high property-wealth or low-funded or high-funded district, and regardless of the student's race, ethnicity, or socio-economic status. (See, *e.g.*, *id.* at 11; *supra* Part I.B.3 (FOF 81, *et seq.*)

FOF 1394. In order to meet the promise of education identified by Mr. Scott, schools facing concentrated poverty, homelessness and transience need to provide not only comparable numbers of similarly qualified staff, but more of them in order to offer interventions designed to level the playing field for these children when compared with their more advantaged counterparts in other districts. (See *supra* Part I.C.2.c (FOF 379, *et seq.*.) Schools in neighborhoods with concentrated poverty need to offer high quality early childhood programming, smaller class sizes in the early grades, and extended learning time and/or small group tutoring. (*Id.*)

FOF 1395. When districts serving high-need and underperforming populations are faced with resource constraints, they are forced to divert resources from enrichment programs and advanced curriculum programs targeted at raising progress towards minimum standards

in core content areas. Such choices deprive advanced and underperforming students in these districts of important, necessary opportunities. If high-need districts are afforded sufficient resources, they can both target necessary resources toward remedial and basic programming and continue to offer challenging, broad and enriched curricula, which affects access to and potential success in college and beyond. (*Id.* at 60, 112-14.)

FOF 1396. Ignoring differences in costs when providing financial inputs to schools leads to disparity among children in the ability to attain, and ultimately in the attainment itself, of equitable educational outcomes. (RR16:16-17, 57.)

FOF 1397. As described earlier, the formulas the State uses to account for these differences are outdated and underfunded. (*See supra* Part I.C.2.d (FOF 456, *et seq.*.) The FSP funds Texas school districts as if their costs vary only by about 15% from lowest to highest cost/needs. (Ex. 3188, Baker Report, at 6.) By contrast, cost models estimated by Dr. Baker indicate that costs vary closer to 150%. (*Id.*) As a result, FSP substantially under-adjusts funding for the highest need/cost districts, most of which serve high concentrations of children in poverty and ELL children. (*Id.*) The under-weighting of the compensatory education and ELL programs has a great impact on the districts serving these populations, which happen to be mostly property-poor districts. (Ex. 3187, Pierce Report, at 15; Ex. 4000, Cortez Report, at 36-38; *see also infra* Part I.D.5.b (FOF 1399, *et seq.*.)

FOF 1398. Compounding matters, numerous studies have documented that wealthier school districts have an easier time recruiting highly qualified, experienced teachers. (Ex. 1122, Vigdor Report, at 3.) Teachers will sometimes accept a reduction in pay in order to take a job in a school serving fewer disadvantaged children. (*Id.*) While wealthier districts may also face a challenge due to the shortage of highly qualified teachers in the Texas labor pool, the districts serving the state's poorest children even more rarely have the option of hiring a teacher who has gained significant experience elsewhere. (*Id.*) The Edgewood ISD districts and the TTSFC focus districts exemplify many of the challenging attributes that Dr. Vigdor described in his report and are negatively impacted not only by their access to fewer dollars but also by the demographics of their student population and communities. (RR15:194-95; Ex. 4224-S, Cervantes Dep., at 172-73, 176-77; RR4:61-63; RR20:83-85; RR24:205; Ex. 3198, Garza Dep., at 49-50; Ex. 3200, Wallis Dep., at 32, 36.)

**b. The inadequacy of the weights imposes a disproportionate burden on property-poor districts.**

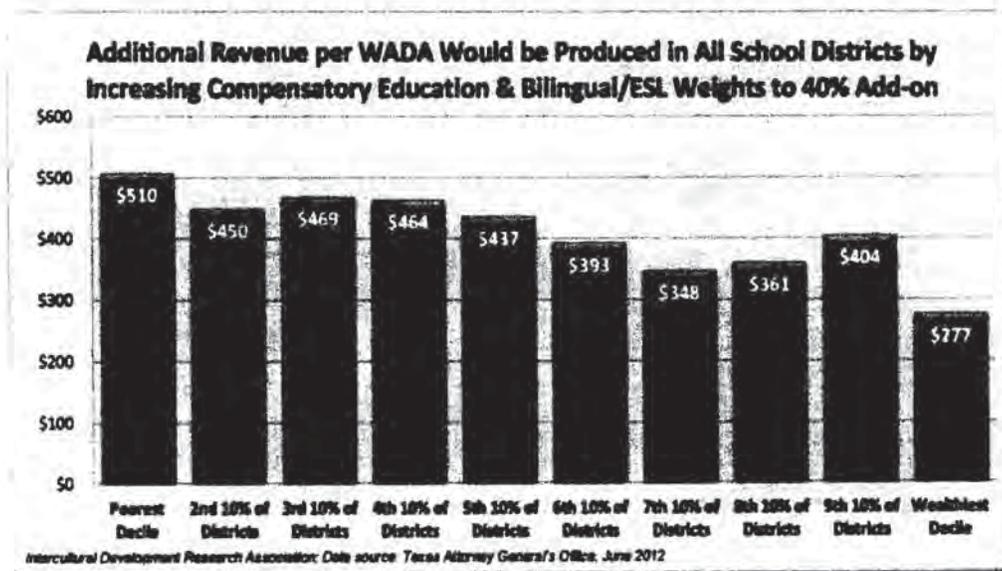
FOF 1399. The arbitrary and inadequate weights described above in Parts I.C.2.d.ii (FOF 466, *et seq.*) and I.C.2.d.iii (FOF 480, *et seq.*) also tend to negatively impact the lowest wealth districts greater than the highest wealth districts. (Ex. 4000, Cortez Report, at 36-40.)

FOF 1400. As stated previously, research has shown that a weight of “.4” for both the bilingual and compensatory education allotments is necessary to provide reasonable opportunities for those students to acquire a general diffusion of knowledge. (*Id.* at 33, 36-40.) Further, the evidence in this case reveals that there is a “concentration effect” that results in lower

student performance in districts with higher percentages of economically disadvantaged students that is not taken into consideration by the current weights. (*See supra* Part I.C.2.a.ii (FOF 294, *et seq.*))

FOF 1401. In the absence of that funding being made available through the FSP, property-poor districts are substantially less able to generate those revenues based on their existing yields. (Ex. 4000, Cortez Report, at 39-40.) The lowest wealth decile would need to tax at \$.95 per \$100 of property value to generate the needed revenue for their ELL and economically disadvantaged students, compared to 3 cents in the highest wealth decile. (*Id.*)

FOF 1402. Property-poor districts would also benefit more greatly from an increase of the bilingual and compensatory education weights from their current arbitrary weights to weights that reflect sound research. (*Id.* at 36-38.) In an analysis of the impact of increasing the funding weights for bilingual/ESL and compensatory education programs to a research-based weight of “.4,” the lowest wealth decile of districts would gain an average of \$510 per WADA compared to \$277 per WADA for the highest wealth districts. (*Id.*)



*Id.* at 37.

FOF 1403. It should be noted, however, that while such an increase would help serve those students appropriately, the gross inequities in the system between property-wealthy and property-poor districts would not be addressed solely by increasing the weights. (*Id.* at 38.)

**c. The State's special program cuts also bear a disproportionate burden on property-poor districts.**

FOF 1404. While all school districts suffered from the special program cuts identified above in FOF 56 – FOF 58, the state's lowest property wealth districts experienced on average larger cuts per student than other school districts. (*Id.* at 1.)

FOF 1405. In an analysis of the special program cuts by decile sub-grouped by property wealth per WADA, the lowest wealth districts lost an average of \$253 per WADA and accounted for 13% of special program cuts suffered by all public school districts. (*Id.* at 48.) In contrast, the state's highest property wealth school districts experienced the lowest cuts per student in all sub-groups at only \$21 per student and accounted for a mere 1% of all special program cuts. (*Id.*) The \$200 disparity in lost revenue reflected in special program cuts further exacerbate funding inequities between the state's lowest and highest wealth districts. (*Id.*)

**6. Student performance reflects the failure of the system to efficiently fund the general diffusion of knowledge.**

FOF 1406. The revenue disparities between the high and low-funded districts, identified in the prior findings, have the effect of denying meaningful educational opportunities to students attending the lower funded districts, taking the form of larger student-to-teacher ratios, larger class sizes, lack of teacher aids, and the lack of many other educational resources. (RR9:65-67; RR9:65-69, Ex. 3010 – Ex. 3086.)

FOF 1407. The differences in revenue have an impact on educational outcomes, which are the end-result of the myriad inputs to the educational process, with one important factor being equitable funding available to support local educational program efforts. (Ex. 4000, Cortez Report, at 24.) While funding may not be the sole predictor of educational success, it does impact school district access to other critical ingredients in the educational success matrix, including strong leadership at the district and campus levels and quality teaching that can be enhanced by resources allocated for professional development, as well as parent engagement programs and targeting of resources for students with special needs. (*Id.* at 24-25.)

FOF 1408. Districts that have more revenue, on average, have higher completion rates, lower teacher turnover, higher teacher base salaries, lower student-to-teacher ratios, and lower dropout rates than those districts with less revenue. (Ex. 3088; Ex. 3092; RR9:113-15, 118-19.)

FOF 1409. When posed with the question of how their district's educational programs would be affected if they were to receive \$1,000 less per WADA than they currently receive (meaning they would have to operate with budgets similar to those in which property-poor districts must operate at, but with much higher tax rates), the property-wealthy districts responded that the quality of their educational programs would be devastated and their achievement and ability to present meaningful opportunities to their students would be negatively impacted. (*See, e.g.*, Ex. 5618, Wiggins Dep., at 92.) It therefore follows

that the property-poor districts are already suffering from those devastating effects, as they so testified.

- FOF 1410. The testimony of superintendents throughout the state bears out the negative impact of disparate funding. The Everman ISD superintendent testified that the district cannot provide the basic program, much less enrichment, and cannot compete with other districts for career pathways, on advanced science offerings, or with courses for a distinguished diploma; as a result, Everman students are at the bottom of the college applicant pool because the district cannot afford a richer curriculum. (RR5:192, 196-200.)
- FOF 1411. Correspondingly, superintendents throughout the state also testified regarding the services they could provide and the improvements they could make if they were given the same funding as their property-wealthy counterparts. Dr. Folks testified, for example, that if Northside ISD in San Antonio was leveled up to the revenues available to nearby Alamo Heights ISD, it would have a tremendous positive impact on student achievement, especially given the increased standards. (RR25:103-05.)
- FOF 1412. The disparities in revenue can be seen at the local level. A school district receiving \$1,500 less per WADA, in a classroom of twenty students, would receive \$30,000 less than a wealthier district. At the school level, a property-poor school district would receive approximately \$300,000 less than a wealthy district at a school of 200 students. And at a district level of 2,000 students, the property-poor district would receive \$3,000,000 less. (RR23:59-60; *see also* RR9:64 (explaining that a difference of \$1,954 per WADA would mean that a lower wealth district among the 15% poorest by WADA would have access to \$65,484 less per classroom of twenty-two students than a district among the 15% wealthiest by WADA).) These funds could be used on a whole range of reasonable and necessary educational opportunities to increase student performance and provide an adequate education including, but not limited to: recruiting and retaining the qualified and competent teachers, improving technology, reducing class sizes, upgrading the quality of pre-K programs, and offering a fuller and deeper range of accelerated and intervention programs. (*See generally* RR15:18; RR4:73-74.)
- FOF 1413. The differences in revenue also do not limit themselves to the extreme gaps in excess of \$1,000 per WADA. As many school officials testified, a difference of a few hundred dollars per student can make the difference in preserving necessary educational programs to provide an adequate education. (*See, e.g.*, RR18:200-204 (explaining reductions in educational program resulting from \$1.4 million budget cut for 2011-12 school year); *see also* RR5:56 (Richardson ISD superintendent stating that \$300 would impact her property-wealthy district).) This is especially true today, when the stakes have been raised for both students and school districts. (*Id.*)
- FOF 1414. As resources are increasingly targeted toward passing the State's standardized tests, from which individual, school and district accountability is measured, resources are often diverted from the curriculum opportunities that provide for children exceeding bare minimum standards tied to subjects tested to be truly college ready, including access to

both intermediate level and advanced math and science courses at the secondary level. (Ex. 3188. Baker Report. at 60.)

**7. Response to Defense.**

**a. The effect of recapture has diminished since *WOC II*.**

- FOF 1415. Because the State continues to rely on property taxes, which are based on incredibly disparate property values across the state (*see, e.g.*, Ex. 20030 at 2), to fund a substantial portion of the school finance system, recapture remains an essential piece of the current school finance system to attempt to reach a financially efficient system. (*See WOC II*, 176 S.W.2d at 798.)
- FOF 1416. As recognized in *WOC II*, recapture had doubled over the prior ten years and nearly tripled dating twelve years back from the 2004-05 school year. (*See id.* at 760.) In contrast, since *WOC II*, the amount of recapture actually fell from 2005-06 when it was \$1.298 billion to approximately \$1.086 billion in 2011-12. (Ex. 11470 at "Summary Tab.") The amount of recapture today also constitutes a smaller percentage of the total FSP revenue available in the system. (*See id.* (showing total FSP in 2006 at \$29.990 billion compared to \$38.996 billion in 2012).)
- FOF 1417. Furthermore, although the number of districts actually paying recapture has increased from 142 in 2005-06 to 222 districts in 2011-12, the percentage of districts identified as "Chapter 41" that *actually pay* recapture has declined from 142 out of 152 (92%) in FY 2006 to 222 out of 305 (73%).<sup>79</sup> (Ex. 11470.) This reduction is largely a result of the target revenue system, which allows districts to offset their ASATR payment against recapture amounts due. (Ex. 6441 at 98-99; *see also* TEX. EDUC. CODE § 42.2516(f).) In addition, school districts with property values per WADA in excess of the equalized wealth levels of \$476,500 and \$319,500 continue to have available a number of credits that reduce the amount of recapture. (Ex. 6441 at 78-79.) Moreover, because the number of districts paying recapture has increased, but the amount of recapture paid has fallen, Chapter 41 districts are paying per capita less recapture today than they were six years ago. (RR32:166-68.)
- FOF 1418. These numbers are not projected to change course significantly in 2013-14. (Ex. 11470 at "Summary Tab." FY 2014.)

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<sup>79</sup> For example, Richardson ISD is identified as a Chapter 41 district, but has not paid any recapture for three years. (RR5:58-59.)

**b. Contrary expert analysis presented by the State and Calhoun County ISD Plaintiffs is not persuasive.**

- FOF 1419. The State Defendants and the Calhoun County ISD Plaintiffs presented witnesses on financial efficiency,<sup>80</sup> but neither compared the top 15% of WADA in the highest property wealth school districts versus the bottom 15% of WADA in the lowest wealth districts, or by decile, and neither analyzed whether property-poor school districts had substantially equal access to similar revenue at similar tax efforts as property-wealthy school districts – unlike the expert reports and analyses produced by Drs. Pierce and Cortez discussed above. These basic, essential omissions and methodological errors prohibit this Court from relying on those analyses in order to determine whether the State has satisfied its mandate of ensuring: “[c]hildren who live in poor districts and children who live in rich districts must be afforded a substantially equal opportunity to have access to educational funds.”
- FOF 1420. Both experts combined school districts into one of only two groups (“Chapter 41” and “non-Chapter 41” districts). (Ex. 4384, Kallison Equity Report, at 4-6; Ex. 1188, Dawn-Fisher Report, at 9-12.) Prior Supreme Court analyses of the gaps have never focused on this distinction. *See, e.g., Edgewood I*, 777 S.W.2d at 393 (examining 100 poorest and wealthiest districts); *Edgewood IV*, 917 S.W.2d at 131-32 (analyzing 15% of WADA in poorest and wealthiest districts). Such an analysis does not allow the Court to examine the inequities between school districts in order to answer the question of whether school districts with varying degrees of wealth have substantially equal access to similar revenue at similar tax effort. (*See, e.g., RR57:40-41* (explaining the clustering effect on the equity analysis).) Furthermore, both experts defined “Chapter 41” school districts as school districts with property values per WADA greater than \$319,500, even though few districts and even fewer pennies are subject to recapture at that lower level. (*See supra* FOF 47.) Finally, such a comparison is not appropriate to analyze whether the equity gap has increased or decreased, because it does not compare an equal number of districts or equal number of WADA. For example, the State compared the 152 districts that had Chapter 41 status in 2006 with all of the remaining districts and then compared the 302 districts that had Chapter 41 status in 2012 with all of the remaining districts. (RR33:41-50.) The Court finds that such analysis masks the advantages built into the system for the school districts in the wealthiest tier and that the comparison of school districts by decile and/or by 15% of WADA is more relevant, accurate, and enlightening with respect to the issues in this case.<sup>81</sup>

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<sup>80</sup> The Court notes that Calhoun County ISD expert Dr. James Kallison had not previously analyzed the financial efficiency of the Texas public school finance system, nor had he ever published any scholarly work in this field. (RR21:164-65.)

<sup>81</sup> While the Court does not accept the State's analysis of Chapter 41 versus Non-Chapter 41 districts as being appropriate in determining the constitutionality of the school finance system, Dr. Dawn-Fisher's latest analysis showed the total tax rate gap (M&O and I&S) between Ch. 41 districts and non-Ch.41 districts having grown more than three-fold: from 2.23 cents in 2006 to 6.88 cents in 2013. (Ex. 11470: RR63:24.)

- FOF 1421. Nevertheless, performing the same analysis by Dr. Dawn-Fisher demonstrates that the Texas school finance system is less equitable today than it was in 2006. For example, when comparing districts actually paying recapture against those districts not paying recapture, the FSP gap reported by Dr. Dawn-Fisher increases significantly from \$900 per WADA in 2006 to over \$1,400 per WADA in 2013, the last year with accurate and reliable data. (Ex. 11470 at “Summary Tab.”)
- FOF 1422. Most importantly, the State did not analyze the tax rates necessary for the district groups to generate a general diffusion of knowledge or any other specific amount of revenue. Despite this omission, the State’s limited analysis of tax rates demonstrated incredible inequities in the system. The State’s Exhibit 11323, on the tab entitled “yields,” shows that there are 250 districts in Texas that tax at \$1.17 and raise, on average, \$5,897.02 per WADA. (RR33:29; Ex. 11323 at “yields” tab.) The same exhibit, on the tab entitled “yields,” shows that there are fifty districts in Texas that tax, on average, at \$0.90 and raise, on average, \$6,029.13 per WADA. (Ex. 11323 at “yields” tab.) The 250 districts that are taxing at \$1.17 can never obtain the revenue that the fifty districts taxing, on average, at \$0.90 can get at \$0.90. (RR33:30; Ex. 11323 at “yields” tab.)
- FOF 1423. The dramatic effect of revenue gaps between property-poor and property-wealthy districts can be seen when comparing tax rates needed by property-poor districts to help them close the revenue gap. As Dr. Dawn-Fisher acknowledged, for a school district taxing at \$1.10 but generating \$607 less than a property-wealthy district taxing at the same rate, the property-poor district would need to raise its revenue almost nineteen cents at the copper penny yield – which would be impossible given the \$1.17 cap on M&O taxes. (RR62:160-61.)
- FOF 1424. The Court finds unavailing the State Defendants’ unfounded suggestion that small property-wealthy districts with less than 1,000 ADA cause the brunt of the inequities in the system, and notes that, neither Dr. Kallison nor Dr. Dawn-Fisher presented such an analysis in their reports. (*See generally* Ex. 1161, Kallison College Readiness Report; Ex. 1188, Dawn-Fisher Report.) First, as stated previously, the revenue per WADA figures relied on by this Court have already included in them school district size adjustments. (*See supra* FOF 1376.) Furthermore, cross-examination of Dr. Kallison on the inequities between similarly-sized school districts below 1,000 ADA revealed great differences among similarly-sized property-wealthy and property-poor districts, thus showing that the impact of small, property-wealthy districts would be offset by the poverty of small, property-poor districts. Comparing the 111 recapture districts with less than 1,000 ADA and the 111 lowest wealth districts with less than 1,000 ADA, both weighted and simple analysis showed substantial gaps in revenue at adopted M&O tax rates and in yield-per-penny differences, favoring property-wealthy school districts. (RR21:173-84.)<sup>82</sup>

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<sup>82</sup> Dr. Kallison was not presented as an expert by the Calhoun County ISD Plaintiffs in the second phase of the trial.

FOF 1425. To conclude, although the omissions and methods of the State Defendants and Calhoun County ISD Plaintiffs detailed above tend to mask the disparities among and between school districts based on property wealth, their data also show substantial gaps between property-wealthy and property-poor districts.

**c. The State's own underlying evidence in the second phase of trial further proves that the system remains constitutionally inefficient following the 83rd Legislature's changes.**

**i. The Legislative Budget Board's projections in Model 115 based on the 83rd Legislature's changes to funding demonstrate continued inequities in the system between property-poor and property-wealthy districts.**

FOF 1426. The projected effects of the actions of the 83rd Legislature can also be found in LBB Model 115, which shows a very minimal closing of the revenue gap between wealthy and non-wealthy districts. (Ex. 3539.) While Model 115 is not a proper or reliable measure of whether property-poor and property-wealthy school districts have substantially equal access to similar revenues at similar tax effort to provide a general diffusion of knowledge for some of the same defects discussed above in this subsection (such as including all "recapture" districts in one group), Model 115 does show projections that the gaps are expected to close minimally in FY 14 and FY 15. *Id.*

FOF 1427. The LBB, via Model 115 (*See* Ex. 3539), modeled the projected effect of the actions of the 83rd Legislature, in part, by analyzing the extent to which the revenue gap would be closed via the legislature's actions. Model 115 showed, when comparing the poorest districts (those with property values under \$100,000 per WADA) with the wealthiest districts (districts subject to current law recapture) in FY14, the poorest districts are projected to receive \$267 more per WADA than that received in FY 2013 and their wealthier counterparts are projected to receive \$125 dollars more, for a revenue gap closure projected at only \$142. (Ex. 3539 at 1.)

FOF 1428. Model 115 showed, in FY14, when analyzing the next set of districts via wealth, the property-poor group (those with property values between \$100,000 -- \$149,999 per WADA) is projected to receive \$263 more per WADA and their wealthier counterparts (those with property values between \$319,500 -- \$476,500 per WADA) are projected to receive \$171 more per WADA, for a revenue gap closure of only \$92. (Ex. 3539 at 1.)

FOF 1429. Model 115 showed, in FY14, when analyzing the next set of districts via wealth, the property-poor group (those with wealth levels between \$150,000 -- \$199,999 per WADA) received \$264 more per WADA and their wealthier counterparts (those with wealth levels between \$200,000 -- \$319,499 per WADA) are projected to receive \$265 more per WADA for a revenue gap *increase* of \$1. (Ex. 3539 at 1.)

FOF 1430. Model 115 showed, in FY15, when comparing the poorest districts (those with a wealth level below \$100,000 per WADA) with the wealthiest districts (Districts Subject to

Current Law Recapture) that the poorest districts received \$359 dollars more and their wealthier counterparts received \$138 dollars more for a revenue gap closure of \$221. (Ex. 3539 at 1.)

- FOF 1431. Model 115 showed, in FY15, when analyzing the next set of districts via wealth that the property-poor group (those with wealth levels between \$100,000 -- \$149,999 per WADA) received \$353 dollars more and their wealthier counterparts (those with wealth levels between \$319,500 -- \$476,500 per WADA) received \$217 dollars more for a revenue gap closure of \$136. (Ex. 3539 at 1.)
- FOF 1432. Model 115 showed, in FY15, when analyzing the next set of districts via wealth that the property-poor group (those with wealth levels between \$150,000 -- \$199,999 per WADA) received \$355 dollars more and their wealthier counterparts (those with wealth levels between \$200,000 -- \$319,499 per WADA) received \$355 dollars to keep the revenue gap in its current place. (Ex. 3539 at 1.)
- FOF 1433. It is evident from the State's own model that the actions of the 83rd Legislature did not, and will not, significantly close the substantial revenue gaps nor make the system financially efficient or equitable. (Ex. 3539 at 1.)
- FOF 1434. To the extent there has been any closure of the gap, it is minimal, as shown by LBB Model 115. (Ex. 3539.)
- FOF 1435. To the extent there has been any closing of the revenue gap, the wealthy districts, looking at the top and bottom 15 percent, could reopen the entire gap with approximately one penny of additional I&S tax. (Ex. 3540 at 78.)

ii. **The State's expert Dr. Lisa Dawn-Fisher's testimony on cross-examination confirms that the State has failed to provide districts with substantially equal access to revenue necessary for a general diffusion of knowledge and that the system is inequitable.**

- FOF 1436. Dr. Dawn-Fisher admitted that she was not analyzing whether property-poor school districts had substantially equal access to similar revenue in order to provide a general diffusion of knowledge at similar tax rates as property-wealthy school districts. (RR62:113-114.) Nevertheless, her testimony reveals continuing inequities in spite of the temporary changes to funding enacted by the 83rd Legislature.
- FOF 1437. Looking at the State's Ex. 11461, the wealthiest 10 % of districts contain 141,583 students, tax at a rate of \$1.006, and receive \$6,742 per WADA, while the poorest 25 % of districts contain 802,426 students, tax at a rate of \$1.096, and receive \$5,690 per WADA. The result leaves the property-poor districts taxing nine cents higher and receiving \$1.052 per WADA less using a weighted average approach. (Ex. 11461; RR63:33-35.)

- FOF 1438. The gap of \$1.052 found in the prior finding translates into a classroom funding disadvantage of more than \$30,000 for the property-poor districts. (RR63:35.)
- FOF 1439. No matter how you look at the system, Ch. 41 districts versus non-Ch. 41 districts or the 10 % wealthiest districts versus the 10 % poorest districts, you will see the trend has been, and continues to be, that the poor districts tax at higher rates than their wealthier counterparts yet receive less money. (RR63:36-37.)
- FOF 1440. According to the State's data, if the State took all of the M&O revenue (\$35,213,290,189) that all of the ISD's (excluding charters) have in Texas and divided it by all of the WADA (6,171,438) ISD's (excluding charters) have in order to get a system wide weighted average revenue per WADA, the average would be \$5.706. (Ex. 11470; Ex. 11440; RR63:28-29.)
- FOF 1441. There are only 257 districts (excluding charters), educating 923,980 students, in Texas that can raise \$5.706 if they were to tax at \$1.04 in 2014. (Ex. 11440; RR63:51-52.)
- FOF 1442. There are 763 districts (excluding charters), educating 3,684,150, in Texas that cannot raise \$5.706 if they were to tax at \$1.04 in 2014. (Ex. 11440; .)
- FOF 1443. There are 612 districts out of 1227 (including charters), educating 1,468,010 students, in Texas that cannot even raise \$5.500 if they were to tax at \$1.04 in 2014. (Ex. 11440; RR63:41-42.)
- FOF 1444. There are only 124 districts (including charters), educating 144,186 students, in Texas that can raise \$6,176 if they were to tax at \$1.04 in 2014. (Ex. 11440; RR63:46-47.)
- FOF 1445. There are 1,103 districts (including charters), educating 4,652,248 students, in Texas that cannot raise \$6.176 if they were to tax at \$1.04 in 2014. (Ex. 11440; RR63:46-47.)
- FOF 1446. There are only 259 districts (including charters), educating 908,000 students, in Texas that can raise \$6,176 if they were to tax at \$1.17 in 2014. (Ex. 11440; RR63:49-50.)
- FOF 1447. There are 968 districts (including charters), educating 3,888,434 students, in Texas that cannot raise \$6.176 if they were to tax at \$1.17 in 2014. (Ex. 11440;.)

**iii. State data presented by the State and Calhoun County during the second phase of the trial for the 2013-14 school year show property-poor districts yielding substantially less revenue at similar tax effort.**

- FOF 1448. The State and Calhoun County also presented evidence of school districts' revenue at varying levels of tax rates for the 2013-14 school year. (Ex. 5746.) Although the Court finds the method in which the data was computed questionable,<sup>81</sup> the data show that

<sup>81</sup> Dr. Dawn-Fisher, who did not produce Exhibit 5746 as part of her expert analysis in this case, did not conduct the analysis used to produce Exhibit 5746 and could not recall what changes were made to the

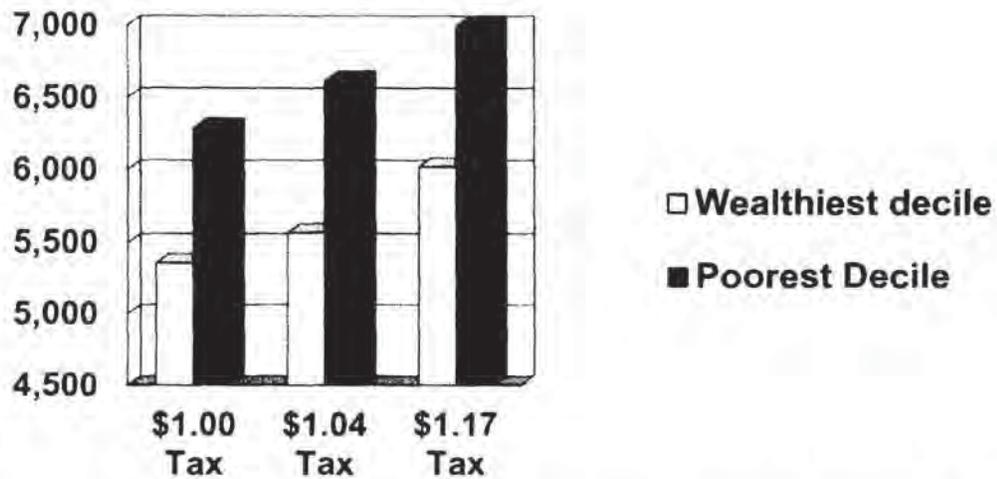
school districts do not have substantially equal access to similar revenue when applying the same tax rates. (Ex. 4340; Ex. 4341.) When comparing the revenue available to school districts by weighted decile groupings at a tax rate of \$1.00, the poorest decile of districts are able to generate only \$5.360 per WADA compared to the wealthiest decile generating \$6.291 per WADA, which results in a \$931 *advantage* for the students in the wealthiest decile of districts. (Ex. 4341 at 3.) The difference in yield per penny of tax effort is \$9.32, significantly greater than the \$2 difference noted in *Edgewood IV*. Compare *id.* with *Edgewood IV*, 917 S.W.2d at 757-58.

FOF 1449. When comparing the revenue available to school districts by weighted decile groupings at a tax rate of \$1.04, the tax and yield gaps grow between the poorest and wealthiest decile. At \$1.04, the poorest decile of districts are able to generate only \$5.570 per WADA compared to the wealthiest decile generating \$6.619 per WADA, which results in a \$1,049 *advantage* for the students in the wealthiest decile of districts. (Ex. 4341 at 3.) The difference in yield per penny of tax effort grows to \$10.08.

FOF 1450. When comparing the revenue available to school districts by weighted decile groupings at a tax rate of \$1.17, the poorest decile of districts are able to generate only \$6.020 per WADA compared to the wealthiest decile generating \$7.110, which results in a \$1,090 *advantage* for the students in the wealthiest decile of districts. (Ex. 4341 at 4.) The difference in yield per penny of tax effort is \$9.32, which remains significantly greater than the \$2 difference in yields noted in *Edgewood IV*. The following chart summarizes this data:

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calculations in order to correct the data from prior versions. (RR62:163-167 (referenced wrongly at times as "Exhibit 5647" in cross of Dawn-Fisher but clarified the next day as Exhibit 5746. (RR63:73-74.) According to Dr. Dawn-Fisher, for districts needing to tax six cents above their compressed rate, they should have received about \$31.95 per penny of tax effort, the copper penny yield. The exception may be certain hold-harmless districts but Dr. Dawn-Fisher was not sure. (*Id.* at 156-58.) However, a quick analysis shows districts not appearing to yield \$31.95 per penny. For example, according to Ex. 5746, Edcouch Elsa ISD was projected to receive \$5631 per WADA at its adopted tax rate of \$1.04 (Ex. 5746 at "2014 tab.") and should have received \$415.25 for the thirteen copper pennies above that rate. (RR62:168-170.) Instead, the State's calculations show that district receiving \$5,970 at \$1.17, a difference of \$339, or a yield of \$26.07 for the remaining thirteen copper pennies. (Ex. 5746 at "FY 2014 tab.") Calculations for other districts revealed similar results, drawing into question the reliability of the calculations. (*See id.*)



FOF 1451. Calhoun County ISD plaintiffs' position that the Court should treat the districts in the wealthiest decile apart from the other districts in the system finds no merit in past holdings in the Supreme Court of Texas and such practice would impede this Court's duty to determine whether all school districts have substantially equal access to similar revenue needed to provide a general diffusion of knowledge at similar tax effort. *Edgewood I*, 804 S.W.2d 491, 498-499 (Tex. 1991); *see also id.* at 500 (Gonzalez, J. concurring).

**8. Equity should be a guiding principle of the school finance system.**

FOF 1452. The findings shown above demonstrate an arbitrary, irrational and inequitable system that treats students in school districts differently based on where they live and go to school. No witness testified that such inequities in resources and revenues further any educational interest.

FOF 1453. Former TEA Commissioner Scott, testifying at the time as the then-current Commissioner, testified that Texas should not provide unequal educational opportunities depending on where a student lives and disagreed with the philosophy that some districts should have access to more resources than other districts. In response to a question of whether the State of Texas should value certain students more than other students because of where they live and attend school, he testified that it was "offensive to the very nature of what we expect our public schools to do. No, we shouldn't value students more than others." (Ex. 4243, Scott Dep., at 8-9.)

FOF 1454. The property-wealthy school districts also acknowledged the importance of equity and fairness for all Texas schoolchildren, especially because all children are held to the same, more rigorous and increasing standards. (*See generally supra* Part I.B.3 (FOF 81, *et seq.*)) Many of the superintendents for Chapter 41 districts acknowledged that they are not asking this Court to eliminate recapture or to reduce recapture or to provide their students with greater access to resources than lower wealth districts taxing at similar

effort. (RR5:62; Ex. 5618, Wiggins Dep., at 96-97.) Dr. Kallison, a school board member in property-wealthy Eanes ISD, agreed, testifying that equity was critically important to any school finance system. (RR21:94.)

FOF 1455. Equitable funding helps level the playing field for all schools and ensures that all districts have access to equitable resources and are thus equally investing in providing a high quality education for all students. The existing inequitable system instead pits school districts with vastly different resources against each other and encourages competition that is vastly inequitable. (Ex. 4000, Cortez Report, at 25.)

FOF 1456. Eight years ago, our highest state court held that “especially in this Information Age, education as a fundamental basis for our future has grown by orders of magnitude.” *WOC II*, 176 S.W.3d at 799. Since that time, the increase in rigor in Texas’s curriculum, accountability, and testing standards, as well as competition for higher education readiness and entry for all students, has resulted in an even more heightened need for a financially efficient system to ensure that *every* Texas child, no matter where they attend school, has access to the reasonable and necessary opportunities to reach their full potential and contribute to the great future of Texas.

FOF 1457. In light of the preceding findings, collectively and severally, the Court finds that the disparity in funding (where property-poor districts tax high and receive less) has the effect of denying reasonable and meaningful educational opportunities to the students attending the lower funded districts and denying to those students a general diffusion of knowledge as required by the state constitution. Based on these findings, the findings in Part I.C.5 (FOF 603, *et seq.*) and the additional testimony of the superintendents set out in Part I.C.7 (FOF 680, *et seq.*), the Court further finds that the Texas school finance system fails to provide districts with substantially equal access to funding up to the level necessary to provide a general diffusion of knowledge at similar tax effort. Further, this denial of equal access to the funding necessary to provide a general diffusion of knowledge must be addressed without delay.

FOF 1458. Even if a higher court finds the Texas school finance system provides districts with substantially equal access to funding up to the level necessary to provide a general diffusion of knowledge, the amount of unequal local supplementation in the system is so great that it, in effect, destroys the efficiency of the entire system. *See WOC II*, 176 S.W.3d at 792.

#### **E. Findings relating to the TTSFC Plaintiffs’ taxpayer equity claim**

FOF 1459. Plaintiff Joseph Langston, who resides in Kaufman ISD, pays property taxes at the same rate as other taxpayers in Kaufman ISD. (RR8:22.)

FOF 1460. Plaintiff Brad King, who resides in Bryan ISD, pays property taxes at the same rate as other taxpayers in Bryan ISD. (RR8:46.)

FOF 1461. Plaintiff Norman Ray Baker, who resides in Hillsboro ISD, pays property taxes at the same rate as other taxpayers in Hillsboro ISD. (RR8:64.)

FOF 1462. Plaintiff Randy Pittinger, who resides in Belton ISD, pays property taxes at the same rate as other taxpayers in Belton ISD. (RR8:83-84.)

**F. Findings relating to Intervenor’s qualitative efficiency claim**

FOF 1463. The Intervenor’s posit that the Texas educational system cannot be deemed constitutionally efficient until Texas adopts several structural reforms that have yet to attract majority support in the Legislature, including, among other things, eliminating the statutory cap on charter schools; changing laws, regulations and practices that govern teacher compensation, hiring, firing, and certification; creating greater school choice or vouchers; and modifying school district financial reporting requirements. While Intervenor’s contend that they do not seek any particular remedy besides a declaration that the system is “qualitatively inefficient” and therefore unconstitutional, a cure for the constitutional deficiency they allege necessarily would require the Legislature to adopt some version of their preferred educational policy choices. Their claims fail on both factual and legal grounds as described below and *infra* Parts II.A.7 (COL 58, *et seq.*) and II.B.6 (COL 87, *et seq.*).

**I. The Legislature to date has rejected most of the Intervenor’s proposed policy changes.**

FOF 1464. Nearly every one of the Intervenor’s complaints about the current educational system and their suggested reforms have been made the subject of proposed legislation in past legislative sessions, but none of these proposals has yet attracted majority support. *See, e.g.*, H.B. 1087, 82nd Leg. Reg. Sess. (Tex. 2011) (removing cap on charters); H.B. 17, 82nd Leg. 1st Called Spec. Sess. (Tex. 2011) (repealing teacher salary schedule); H.B. 1587, 82nd Leg. Reg. Sess. (Tex. 2011) (establishing rules regarding teacher evaluations based on performance); H.B. 33, 82nd Leg. 1st Called Spec. Sess. (Tex. 2011) (establishing school voucher program); S.B. 1575, 83rd Leg. Reg. Sess. (Tex. 2013) (establishing school voucher program); H.B. 1589, 82nd Leg. Reg. Sess. (Tex. 2011) (creating a new Center for Financial Accountability and Productivity in Education, to annually evaluate and rank each district, charter, and campus on productivity).

FOF 1465. The Legislature has the right to determine the “methods, restrictions, and regulations” of the educational system. *Edgewood IV*, 917 S.W.2d at 736 (quoting *Mumme v. Marrs*, 40 S.W.2d 31, 36 (Tex. 1931)). The Texas Supreme Court has stated unequivocally that, in discharging its review of article VII claims, it will “not dictate to the Legislature how to discharge its duty. . . . [nor will it] judge the wisdom of the policy choices of the Legislature, or . . . impose a different policy of our own choosing.” *WOC I*, 107 S.W.3d at 564 n.12 (citation and internal quotation marks omitted). The evidence does not establish a constitutional violation.

**2. The Intervenors have failed to prove that the system is qualitatively inefficient.**

- FOF 1466. The Intervenors failed to prove that the Texas educational system is inefficient, having defined “efficiency” as productive of results with little waste. Just as the Court’s constitutional review of suitability, adequacy, and financial efficiency is essentially a pass or fail review, so goes the Court’s review of qualitative efficiency. The Court does not ask if there is a better way. The Court only looks at what structure is in place or what is absent and determines whether it is arbitrary. The Intervenors’ challenges reflect their view of a better, more efficient public school system; however, the Court cannot say that the system is unconstitutional.
- FOF 1467. One of the Intervenors’ key experts, Dr. Paul Hill, defined efficiency as “the ratio of inputs to outputs” (RR36:43), but conceded that he had neither reviewed the inputs (the level of funding) or the outputs (the student performance results) of the Texas educational system. (RR36:170-73, 194-95.)
- FOF 1468. Another Intervenor expert, Dr. Eric Hanushek, in forming his opinion that the Texas school finance system was inefficient, did not visit any Texas school districts, speak to any Texas administrators or faculty, examine any school district budget or financial statement, attempt to quantify the amount of money spent inefficiently, or make any attempt to quantify the costs of various educational inputs. (RR37:128-29, 196-97, 199-201.) The only example of inefficiency he could provide was the way teachers are compensated in Texas (RR37:129, 197), but Dr. Hanushek (1) conceded that there was no solid evidence that a merit pay system would have a positive impact on student achievement (RR37:176-83), (2) conceded that a merit pay system might be more expensive than the status quo (RR37:202), (3) acknowledged that he had never personally assisted a state or school district with the design of a merit pay system or recommended any specific design (RR37:243), (4) acknowledged, but never offered any credible solutions to, the implementation difficulties associated with a merit pay regime, (RR37:180-83, 211-14, 216-19, 242-43; *see also supra* Part I.C.6.b.iii (FOF 664, *et seq.*)), and (5) acknowledged that a merit pay scheme raises valid concerns about destructive competition among teachers. (RR37:242.)
- FOF 1469. Dr. Hanushek likewise showed scatterplots of districts based on one year of spending and performance data, in an effort to show that some districts were spending their money much more efficiently than others, but Dr. Hanushek made no effort to identify those “efficient” districts or to determine why they were shown to be more efficient. (RR37:159-60.) Both the “efficient” and “inefficient” districts in these scatterplots utilize the traditional salary schedule (RR24:15) – the only example that Dr. Hanushek could give of an “inefficient” practice. (RR37:196-97.)
- FOF 1470. None of the Intervenor experts identified a measure by which the efficiency of the Texas educational system could be rated, either on an absolute or relative basis. Dr. Hill conceded that there was no generally accepted measure of efficiency in the scientific community, and he made no attempt to calculate one for Texas. (RR36:108, 176-77.)

One of the State's primary experts, Dr. Michael Podgursky, agreed that it is impossible to calculate the "frontier relationship" between inputs and outputs, *i.e.*, the most efficient way to raise student achievement. (RR30:61-62.) Dr. Hill further testified that even if Texas were the most efficient educational system in the country, he would still testify that it was inefficient because of the structural features of the system identified in his report. (RR36:196.)

FOF 1471. Dr. Vigdor also rebutted Dr. Hanushek's argument that "if resources are not used to achieve the maximum possible student outcomes, it is not possible to describe the student outcomes that will result from added funding." (Ex. 1001 at 3.) Dr. Vigdor explained that: (1) the production frontier cannot be observed in reality, and that it is impossible to verify whether the resources devoted to schools have been used in the most efficient manner possible; (2) the argument that the level of inefficiency in public schools exceeds that to be expected by virtue of its status as a human organization is a presumption rather than a fact; (3) the production frontier is also a moving target: many factors might raise the location of the frontier upward or downward; and (4) the only measurable, verifiable element represented in Dr. Hanushek's frontier analysis is the quantity of resources (encompassing financial resources, physical resources, and human resources), which substantial evidence indicates has declined in recent years. (RR24:39-41 (referencing Ex. 5412 at 52-53).)

**3. The evidence relating to the statutory cap on charter schools does not support a claim for qualitative inefficiency.**

FOF 1472. One of the Intervenor's and Charter School Plaintiffs' primary complaints is that the statutory cap on open-enrollment charters (which, at the time of the first phase of trial, limited the number of charters that can be awarded to 215) is inefficient and leads to "unmet demand," as evidenced by the thousands of students currently on charter school waiting lists. However, the statutory cap has not even been reached (209 charters had been awarded at the time of the first phase of trial and the commissioner and SBOE approved three more charters in November 2013 to begin operating in the 2013-14 school year), and any of the existing charter school operators are free to open additional campuses to meet this additional demand. (RR41:25; RR61:143.) The Intervenor's expert, Dr. Paul Hill, could not explain why the statutory cap acted as an impediment to meeting this additional demand. (RR36:144-48.) In fact, Dr. Hill testified that, given the large numbers of low-performing charter schools, Texas may have been too lenient in awarding charters. (RR36:145.)

FOF 1473. Former Commissioner Robert Scott also testified that it is reasonable to have a statutory cap in place is because there is a relationship between the number of charters in existence and the resources available at the TEA to review and monitor existing charters and review new applications, particularly in light of recent budget cuts at the agency. (Ex. 5630, Scott Dep., at 108-10.) In Mr. Scott's words, "when you create a charter, it's like creating a whole new school district" and "it adds that level of workload to the agency." (*Id.* at 110.) Mr. Scott stated a rational basis for maintaining a cap.

FOF 1474. The Court further notes that legislation was passed during the 2013 legislative session that increased the cap on charter schools to 225 charters beginning September 1, 2014 and by fifteen each year thereafter until September 1, 2019, when the statutory cap would stand at 305 charters. *See, e.g.*, Act of May 27, 2013, 83rd Leg., R.S., S.B.2 § 9 (codified at TEX. EDUC. CODE § 12.101(b-1 and b-2)).

**4. The evidence relating to the teacher compensation system does not support a claim for qualitative inefficiency.**

FOF 1475. The Intervenors' arguments regarding teacher merit pay reforms are addressed in Part I.C.6.b.iii (FOF 664, *et seq.*) and in FOF 1468 above.

**5. The evidence relating to the Chapter 21 statutes and regulations does not support a claim for qualitative inefficiency.**

FOF 1476. The Intervenors offered no persuasive evidence to support their argument that eliminating many of the statutes contained in Chapter 21 of the Texas Education Code governing teacher employment (and the related regulations) would result in substantial gains in student performance. Whether to modify or eliminate these statutes and regulations is a legislative policy choice and is not a question of constitutional dimension.

FOF 1477. Superintendents credibly testified that Chapter 21 does not create any significant inefficiencies for school districts. (*See, e.g.*, RR6:43-45; RR41:75-79.) Low-performing teachers often agree to resign instead of pursuing the full Chapter 21 procedures. (RR4:216-19; RR41:75-78; RR39:162-63.) When Chapter 21 procedures are pursued, they do not prevent school districts from removing low-performing teachers. (*See, e.g.*, RR41:75-79; RR6:43-45.) Superintendent testimony also showed that Chapter 21's minimum contract period does not cause problems for districts, but, in fact, protects them by ensuring that teachers do not leave before the end of a school year. (RR41:78-79.) The Court finds that Chapter 21 regulations do not create any significant inefficiencies in the system.

FOF 1478. The Intervenors proffered the testimony of Robyn Wolters, director of human resources for Irving ISD, to show that invoking the Chapter 21 non-renewal procedure is an expensive, time-consuming process. Much of her testimony about the costs of Chapter 21 non-renewal and termination procedures was based on hearsay. (RR39:157-59, 169-70.) Further, she only had personal knowledge of HR practices at Irving ISD and could not speak to the practices of the 1,023 other school districts in Texas. (RR39:164-66.) Ms. Wolters recognized that the Chapter 21 procedures were designed to protect teachers' due process rights so that they are not subject to arbitrary adverse employment decisions, and that such rights are important. (RR39:166-67.) Finally, Ms. Wolters could not provide any specifics about the cost of compliance with Chapter 21 procedures, either in terms of staff time or money. (RR39:169-70.)

FOF 1479. To the extent the Intervenors or the State Defendants challenge the ISD Plaintiffs' adequacy claims on the theory that removal of the Chapter 21 regulations would result in

performance gains without the need for additional resources, the Court points out that the ISD Plaintiffs must operate within the current statutory framework, and have no burden to disprove what might happen in a hypothetical world with a different statutory framework.

**6. The evidence relating to school choice proposals, including vouchers, does not support a claim for qualitative inefficiency.**

- FOF 1480. The Intervenors offered no persuasive evidence to support their argument that increasing school choice, through a voucher program or otherwise, could act as a substitute for additional funding to the existing system, or would significantly boost student achievement at little cost. Whether to adopt greater school choice is a legislative policy choice, not a question of constitutional dimension. The Legislature is the proper forum for such a debate, and to date, the Legislature has repeatedly rejected school choice proposals. Even in the most recent legislative session, the Legislature considered and rejected two school choice bills. S.B. 1575, 83rd Leg. Reg. Sess. (Tex. 2013); H.B. 3497, 83rd Leg. Reg. Sess. (Tex. 2013).
- FOF 1481. To the extent the Intervenors challenge the ISD Plaintiffs' adequacy claims on the theory that greater school choice would result in performance gains without the need for additional resources, the Court points out that the ISD Plaintiffs must operate within the current statutory framework, and have no burden to disprove what might happen in a hypothetical world with a different statutory framework.
- FOF 1482. Dr. Vigdor opined that basic economics suggests that introducing school choice would increase, not decrease, districts' collective wage bill. (Ex. 5400, Vigdor Supp. Report, at 9-10.) Those school districts that are presumed to have power over consumers in the market for education also possess a comparable degree of power over teachers in the labor market. Compared to a competitive labor market – in this context, one where many small education providers compete to hire teachers – entities with some degree of market power in labor markets can hire fewer workers and pay them less. (RR24:38-39.) Introducing competition into the market place, Dr. Vigdor stated, leads to increases in teacher compensation and expanded hiring of teachers. (Ex. 5400, Vigdor Supp. Report, at 9-10; RR24:36-38.)
- FOF 1483. Mr. Joseph Bast, president and CEO of the Heartland Institute, testified for the Intervenors regarding the Texas Taxpayers' Savings Grant Program ("TTSGP"), a school voucher bill that failed in the 82nd Legislative Session. (Ex. 8068 at 1.) As a threshold matter, this Court finds that Mr. Bast is not a credible witness and that he did not offer reliable opinions in this matter. While Mr. Bast described himself as an economist, he holds neither undergraduate nor graduate degrees in economics, and the highest level of education he completed was high school. (RR39:73.) Mr. Bast testified that he is 100% committed to the long-term goal of getting government out of the business of educating its own voting citizens. (RR39:126.) Further, his use of inflammatory and irresponsible language regarding global warming (Ex. 5688; Ex. 1246; Ex. 1247), and his admission

that the long term goal of his advocacy of vouchers is to dismantle the “socialist” public education system (RR39:127) further undermine his credibility with the Court.

FOF 1484. The proposed bill Mr. Bast discussed would have offered tuition grants to students upon entering private kindergarten or transferring from public to private schools equal to the amount of tuition at their private school, or 60% of the state average per-pupil maintenance and operations expenditure, whichever is less. (Ex. 1241 at 1.) Mr. Bast’s analysis ignored significant considerations related to the purported cost savings from the TTSGP, making his opinions unreliable. For example, Mr. Bast estimated the amount of the TTSGP grants and supposed savings by using per-pupil maintenance and operating expenditure figures from the 2009-2010 Pocket Edition, which included both federal funds and state funds targeted for low-income students, at-risk students, and ELL students. (RR39:101-08.) Under Mr. Bast’s calculations, students transferring to private schools would receive vouchers based on these compensatory spending programs, regardless of whether the students receiving the voucher fit any of these categories. (RR39:105-07.) In addition, Mr. Bast predicted that between 314,000 and 382,000 students would take advantage of the TTSGP in the second year of the program (RR39:32), and that the TTSGP would save the State approximately \$2 billion over two years. (RR39:33.) However, the TEA estimated that only 22,000 to 45,000 students would participate in the TTSGP, a fraction of what Mr. Bast estimated. (Ex. 8146 at 2.) In calculating the projected cost savings from the TTSGP, Mr. Bast also did not account for students who already transfer from public to private schools each year without receiving tuition assistance (RR39:117-18), nor did he account for students who start kindergarten in Texas private schools each year without receiving tuition vouchers. (RR39:119-20.) Mr. Bast agreed that the State would not achieve any savings by subsidizing these private school students who would have attended private schools even without receiving the TTSGP. (*Id.*)

FOF 1485. The LBB found that the TTSGP would actually cost the State money for the first two years it operated (RR39:97-99), and no government entity agreed with Mr. Bast’s conclusion that the grant program would save the State \$1 billion annually. (RR39:98-101.) For each of these reasons, the Court rejects Mr. Bast’s conclusions about the supposed costs savings that would have resulted from the TTSGP.

**7. The evidence relating to districts’ financial reporting requirements does not support a claim for qualitative inefficiency.**

FOF 1486. The Intervenor offered the testimony of Dr. Hill and Dallas businessman Mark Hurley to support their contention that Texas does not keep sufficient data to determine whether its educational dollars were being spent efficiently. This testimony was unpersuasive.

FOF 1487. When formulating his opinion in this case, Dr. Hill was unaware of the extensive data available in the Academic Excellence Indicator System (“AEIS”). (RR36:125, 159.) When presented with the data currently available in the AEIS system, Dr. Hill agreed that superintendents could perform financial analyses calculating the per pupil spending at different schools, but that the data set could not attach spending to individual students.

(RR36:159-61.) Dr. Hill presented no analysis of the costs of creating the data set he envisioned, and could not compare the costs of that data set with what Texas currently spends on educational cost data. (RR36:162-65.)

FOF 1488. While Mr. Hurley has a background in finances in publicly-owned and private companies, he admits that he has no background, experience, or knowledge of the operation of public schools in Texas, nor in school district or governmental budgeting or accounting. (Ex. 8145, Hurley Dep., at 93-94, 175, 177.) Mr. Hurley acknowledged that, in forming his opinions, he did not review the “oceans of data” available through the AEIS system (*Id.* at 160-62), nor did he review the materials that board members have available to them when approving the budget. (*Id.* at 166.) He also admitted that his opinions were limited to the materials he reviewed, which were primarily the school districts’ Comprehensive Annual Financial Reports. (*Id.* at 156-57, 164, 165.) Mr. Hurley further testified that the schedules he proposed in his report were mere examples, and that his proposals might not work for all districts and could and should be revised and improved by people with more knowledge of school district operations. (*Id.* at 169, 175, 178, 191, 197-99.)

**8. The evidence relating to other state mandates does not support a claim for qualitative inefficiency.**

FOF 1489. Dr. Hill testified about state mandates that he claims break the link between expenditures and educational outcomes, including mandates related to teacher pay, school staffing, and school administrative organization, among others (Ex. 1341, Hill Report, at 4-5), but Dr. Hill’s discussion of mandates in his expert report was drawn from his national research and he made no effort to determine which of these mandates applied in Texas. (RR36:179.) Many did not. (RR36:127-30, 179-83.) Nor did Dr. Hill offer any empirical or research evidence – beyond his own assertions – that removing any of the mandates that were applicable in Texas would lead to significant cost savings for districts or improvements in student performance. Dr. Hill also agreed that virtually all of the mandates he discussed could be removed with legislative action and that such legislative action had not yet attracted majority support. (RR36:193-94.)

**G. Findings relating to the Charter School Plaintiffs’ claims**

**1. Background on Texas charter schools**

FOF 1490. A charter is “an opportunity for a group of educators . . . to come together and provide innovative learning possibilities for students.” (RR41:13). The purposes of a charter are to, among other things, “increase the choice of learning opportunities within the public school system” and “encourage different and innovative learning methods.” TEX. EDUC. CODE § 12.001. (*See also* RR41:11.) They serve as an alternative to traditional school districts for families and students. (RR42:114-15.)

FOF 1491. There are three classes of charters under Chapter 12 of the Education Code. *See* TEX. EDUC. CODE § 12.002. These are: (1) home-rule school district charters that are operated

by school districts, *see id.* § 12.011-.030; (2) campus or campus program charters that a school district board of trustees may grant to parents and teachers for a campus or program on a campus, *see id.* § 12.051-.065; and (3) open-enrollment charters granted by the SBOE, *see id.* §12.101-.135. The remaining findings in this section address open-enrollment charters.

- FOF 1492. Most open-enrollment charter schools in Texas are operated by non-profit corporations. (RR41:5.)
- FOF 1493. A charter is a contract between the State Board of Education and a charter school applicant. (RR41:13-15, 21-22; Ex. 9043.) Each charter contract is for a five-year term, after which time the charter is up for renewal. If the charter is renewed, its term is ten years. (RR41:21-22.) The charter incorporates the charter applicant's application, and together the two constitute the full terms of the contract. (RR41:13-14; Ex. 9043.)
- FOF 1494. Once a charter is awarded, TEA treats the charter school in a manner similar to the way it treats a traditional public school. The charter school interacts with TEA's curriculum, performance-based monitoring, and monitoring and interventions departments, and with TEA's financial review division. (RR41:27; *see* RR41:26 (TEA considers a charter holder as a district.))
- FOF 1495. According to Robert Scott, former Commissioner of Education, "when you create a charter, it's like creating a whole new school district" and "it adds that level of workload to the agency." (Ex. 5630, Scott Dep., at 110.)
- FOF 1496. Charter schools and school districts are similar in many ways. For instance, both entities are subject to financial accountability requirements, have access to the Teacher Retirement System, and must satisfy state curriculum and graduation requirements. (Ex. 9048 at 22.)
- FOF 1497. Charter schools and school districts, despite their similarities, are quite different. Charter schools have much more flexibility in personnel matters, including that charter school teachers are employees "at will," there is no minimum salary scale for teachers, and charter schools are only partially subject to the disciplinary and placement procedures contained in Chapter 37 of the Texas Education Code. (Ex. 9048 at 23; RR42:80-83.) Moreover, a teacher in a charter school is required to have only a high school diploma, and is not required to be certified. TEX. EDUC. CODE § 12.129. (RR42:117.)

**2. Tier I and Tier II funding for open-enrollment charter schools is based on statewide averages for district-level adjustments and individualized adjustments for student-level weights.**

- FOF 1498. Charter schools are also funded differently than school districts. Charter schools, unlike school districts, lack taxing authority. TEX. EDUC. CODE § 12.102(4). Accordingly, charter schools are fully state funded. The State provides charter schools Tier I funding based on student attendance and student population characteristics. The State also

provides charter schools with Tier II funding, which is based on the statewide average of school district tax effort in Tier II. Some charter schools receive ASATR if necessary to meet their revenue target per WADA. (Ex. 1188, Dawn-Fisher Report, at 14.) *See generally* TEX. EDUC. CODE § 12.106.

- FOF 1499. Tier I funding for public school districts is based on each individual district's adjusted allotment, which is a function of and is adjusted according to that district's M&O tax rate, size, sparsity, and the CEI. Open-enrollment charter schools receive the same Tier I "special allotments" for students allocated to school districts (e.g., compensatory education, bilingual education, etc.). *See* TEX. EDUC. CODE §§12.106(a-1), 42.151-42.154. However, unlike school districts, each charter school's adjusted allotment is not adjusted for a charter's specific size, sparsity, or CEI. TEX. EDUC. CODE §§12.106(a-1), 42.102-42.105. Instead, one adjusted allotment number is applied to all charter schools so that they receive a statewide average of all the CEI, sparsity, and size adjustments received by all Texas school districts within their adjusted allotment. (RR42:104-05.)
- FOF 1500. Tier I funding for open-enrollment charter schools is calculated through weighted funding elements. The basic allotment, the statewide average adjusted basic allotment, and the statewide average adjusted allotment are then incorporated into the same funding formulas applicable to independent school districts, using the charter school's student counts for the student-level special allotments. (Ex. 6441, Wisnoski Dep., at 9, 11 (referencing Ex. 5653 at 140-45, Ex. 5654 at 127-31).)
- FOF 1501. Open-enrollment charter schools receive Tier II funding calculated using average school district M&O tax effort in Tier II. (RR42:105; Ex. 6441, Wisnoski Dep., at 9, 11 (referencing Ex. 5653 at 140-45, Ex. 5654 at 127-31).)
- FOF 1502. The target revenue amount for open enrollment charter schools is set at the level of funding under formulas in effect for charter school funding in year 2008-09 and using 2009-10 funding per WADA.
- FOF 1503. Charter schools are not eligible for separate facilities funding under either the Instructional Facilities Allotment or the Existing Debt Allotment. (Ex. 1188, Dawn-Fisher Report, at 15.)
- FOF 1504. Charter applicants are aware of the funding they will receive from the State when they enter into the charter contract. (RR43:166.)
- FOF 1505. Although charter schools do not receive specifically earmarked facilities funding, the total funding they receive under the Foundation School Program per ADA is nearly identical to that available to school districts. (Ex. 1188, Dawn Fisher Report at 15.) When considering General Fund revenue per ADA, charter schools fare better than school districts. By Fiscal Year 2012, charter schools received \$1.283 per ADA more than school districts. This funding difference exceeds the maximum amount of revenue available to school districts through the EDA program. This is similarly true when looking at All Funds revenue. Charters accordingly have access to revenue in excess of

what is available to school districts, and that revenue is available to meet charter schools' facilities needs. (*Id.* at 16-17.)

- FOF 1506. In 2013, charters in Texas were capped at 215. As noted above, the 2013 Legislature increased the statutory cap to gradually reach 305. (*See supra* FOF 1474.) The charter cap has been reached only once since the creation of charter schools in Texas. (RR41:24.) A charter holder may open more than one campus under the charter. There are currently over 500 charter campuses in Texas. (RR41:25.)
- FOF 1507. Even with the cap in place, charter schools have experienced exponential growth in Texas since 1996. (RR41:27-28 (referencing Ex. 11332 at 11).)
- FOF 1508. Although the majority of charter schools were either "recognized" or "academically acceptable" under the state's prior accountability system, charter schools were more than twice as likely as school districts to be ranked as either "exemplary" or "academically unacceptable." (Ex. 11332 at 13.) Specifically, in 2010-2011, 8.5% of charter schools were exemplary compared to 4.4% of school districts. Likewise, 17.6% of charter schools were academically unacceptable, whereas only 4.9% of districts have that designation. *Id.*

## II. Conclusions of law

### A. The constitutional parameters and application of factual findings

- COL 1. Article VII, Section 1 of the Texas Constitution – the "education" clause – provides: "A general diffusion of knowledge being essential to the preservation of liberties and rights of the people, it shall be the duty of the Legislature of the State to establish and make suitable provision for the support and maintenance of an efficient system of public free schools." Tex. Const. art. VII, § 1. According to the Texas Supreme Court, Article VII, Section 1 obligates the Legislature to meet three standards in providing for a public school system. First, the education provided must be adequate. *i.e.*, the public school system must accomplish "that general diffusion of knowledge . . . essential to the preservation of the liberties and rights of the people," and "must reflect changing times, needs, and public expectations." *WOC I*, 107 S.W.3d at 563, 572 (citing Tex. Const. art. VII, § 1); *see also WOC II*, 176 S.W.3d at 753. Second, the means adopted must be "suitable." *i.e.*, the "public school system [must] be structured, operated, and funded so that it can accomplish its purpose for all Texas children." *WOC II*, 176 S.W.3d at 753. Third, the system itself must be both qualitatively and quantitatively "efficient." *Id.* at 752-53. The primary focus of most of the constitutional challenges in this case is funding as it relates to providing a general diffusion of knowledge for all students: 1) is there enough; and 2) is everyone paying and receiving their fair shares. The State's constitutional duty to make suitable provision for an adequate, equitable public school system extends to all Texas school children. The benefits of such a system inure to the entire state and are necessary to guarantee a bright future for us all. This core value has been part of this state from its beginning and perhaps has never been more important than today.

COL 2. The Legislature must satisfy these obligations without relying on constitutionally-prohibited state ad valorem taxes. *See* Tex. Const. art. VIII, § 1-e (“No State ad valorem taxes shall be levied upon any property within this State.”). An “ad valorem tax is a state tax when it is imposed directly by the State or when the State so completely controls the levy, assessment and disbursement of revenue, either directly or indirectly, that the authority employed is without *meaningful discretion*. The determining factor is the extent of the State’s control over the taxation process.” *WOC I*, 107 S.W.3d at 578 (emphasis added) (citation and internal quotation marks omitted).

COL 3. Put another way, the Texas Constitution requires a public school finance system that is structured, operated, and funded (*i.e.*, is suitable) in a manner that (1) provides all districts access to funds sufficient to provide a general diffusion of knowledge, *i.e.*, a constitutionally adequate education (Article VII, Section 1), to all of its students, (2) provides, within an equalized system, substantially equal access to similar levels of revenue at similar tax rates, and (3) leaves districts with “meaningful discretion” to raise their tax rates in order to provide local enrichment programs to their students, if they so choose. (Article VIII, Section 1-e.)

**1. The role of the judiciary and the “arbitrary” standard of review**

COL 4. “The judiciary’s role, though important, is limited to ensuring that the constitutional standards are met.” *WOC II*, 176 S.W.3d at 753. It is not to “prescribe *how* the standards should be met.” *Id.* “[M]uch of the design of an adequate public education system cannot be judicially prescribed.” *Id.* at 779. The Legislature necessarily has “much latitude in choosing among any number of alternatives that can reasonably be considered adequate, efficient, and suitable. These standards do not require perfection, but neither are they lax. They may be satisfied in many different ways, but they must be satisfied.” *Id.* at 784.

COL 5. “Article VII, Section 1 allows the Legislature a large measure of discretion on two levels. The Legislature is entitled to determine what public education is necessary for the constitutionally required ‘general diffusion of knowledge’, and then to determine the means for providing that education; [however,] the Legislature does not have free rein at either level.” *Id.* For example, the Legislature may not “‘define what constitutes a general diffusion of knowledge so low as to avoid its obligation to make suitable provision imposed by article VII, Section 1.’” *Id.* (quoting *WOC I*, 107 S.W.3d at 571). Additionally, while the Legislature “‘certainly has broad discretion to make the myriad policy decisions concerning education,’” its choices must be informed by “‘guiding rules and principles properly related to public education,’” *i.e.*, they must not be arbitrary. *Id.* at 784-85.

COL 6. “It would be arbitrary, for example, for the Legislature to define the goals for accomplishing the constitutionally required general diffusion of knowledge, and then to provide insufficient means for achieving those goals.” *Id.* at 785.

COL 7. “[A] mere difference of opinion [between judges and legislators], where reasonable minds could differ, is not a sufficient basis for striking down legislation as arbitrary or unreasonable.” *Id.* (alteration in original) (quoting *Tex. Workers' Comp. Comm'n v. Garcia*, 893 S.W.2d 504, 520 (Tex. 1995)).

COL 8. However, “[f]or article VII, Section 1, as for other provisions, “[t]he final authority to determine adherence to the Constitution resides with the Judiciary.” *Id.* (quoting *WOC I*, 107 S.W.3d at 563 (citing *Marbury v. Madison*, 5 U.S. 137, 176-78 (1803) and *Love v. Wilcox*, 28 S.W.2d 515, 520 (Tex. 1930))).

## 2. “Meaningful discretion”/state property tax

COL 9. A district must have “meaningful discretion” in setting its property tax rates for a local ad valorem tax to remain constitutional under Article VIII, Section 1-e of the Texas Constitution. *WOC II*, 176 S.W.3d at 795-96.

COL 10. A district need not show that it is forced absolutely to the limit of the M&O tax cap to demonstrate that it lacks meaningful discretion. *WOC II*, 176 S.W.3d at 795-96. Given that the State “leaves largely to school districts the decisions on how best to expend education funds to achieve” adequacy, it is impossible to trace the impact of the adequacy requirement on each dollar spent for programs and teacher salaries. *Id.* at 796. “Recognizing these realities,” the Supreme Court instructs that “State influence on district taxing and spending cannot be measured exactly but must be gauged along a spectrum of possibilities.” *Id.*

COL 11. The opportunity for “local supplementation is made a core component of the system structure, necessitated by the basic philosophy of the virtue of local control. The State cannot provide for local supplementation, pressure most of the districts by increasing accreditation standards in an environment of increasing costs to tax at maximum rates in order to afford any supplementation at all, and then argue that it is not controlling local tax rates.” *Id.* at 797.

COL 12. In discussing possible remedial legislation in *WOC II*, the Supreme Court warned that “a cap to which districts are inexorably forced by educational requirements and economic necessities, as they have been under SB7, will in short order violate the prohibition of a state property tax.” *Id.* at 798. The evidence in this case convincingly established that Texas school districts have reached this point. The system is structured such that it is effectively impossible for districts to provide local enrichment because all funds that are available must be used to provide the basic, adequate education.

COL 13. At the time of *WOC II*, the Court found that the State’s control of “\$1 billion in local tax revenues recaptured from 134 districts [representing 12% of total enrollment],” was “a significant factor in considering whether local taxes have become a state property tax,” particularly considering that the “number of districts and amount of revenue subject to recapture ha[d] almost tripled since 1994.” *Id.* at 797. Those numbers have climbed, and

by the 2014-15 school year, it is estimated that \$1.24 billion will be recaptured from 246 (of the 356) Chapter 41 districts. (Ex. 11470 (“Summary” tab, cells K42-44).)

- COL 14. By imposing the compressed tax rate on districts, the State increased its control over public school finance. Districts lost discretion over one-third of their local tax revenues, and now their funding is dependent upon the Legislature’s appropriation of state funds to replace the lost revenues.
- COL 15. The plaintiff districts taxing at or near \$1.17 have shown that they lack meaningful discretion in setting the M&O tax rates, because they cannot raise their rates beyond \$1.17 and cannot materially lower their rates without further compromising their ability to provide their students with a constitutionally adequate education.
- COL 16. For Chapter 41 districts, any funds generated by an increase of more than six cents above their compressed rate are subject to partial recapture by the State under statutory formulas. Chapter 41 districts that wish to tax more than six cents above the compressed rate, and above \$1.04, are therefore forced to ask their voters to approve a tax increase in which a significant portion of the revenues raised could not be used locally and would instead be recaptured by the State. As reflected in Part I.C.1.b.iii (FOF 253, *et seq.*) above, as a practical consequence of the TRE requirement, the additional revenues that could be generated by setting the M&O tax rate between \$1.06 and \$1.17 are unavailable to many Chapter 41 districts, and thus do not constitute “meaningful discretion” for these districts.
- COL 17. Chapter 42 districts are particularly constrained by the yield structure as well. The lower yield of Chapter 42 districts at \$1.04 means they are “capped out” by the TRE at a lower revenue level, thus reducing their discretion that much sooner. Exacerbating the problem, Chapter 42 districts must then overcome significant obstacles to passing a TRE, including the poverty of their districts, the low yield of the copper pennies, and the high I&S tax rates many also pay for debt service. (*See supra* FOF 257 – FOF 258.)
- COL 18. Even if all districts could obtain taxpayer approval to tax at the maximum M&O tax rate of \$1.17, the tax revenues generated would be insufficient to fund an adequate education for most districts and would not provide local discretion for enrichment.<sup>84</sup>
- COL 19. For the reasons stated in Part I.C.1 (FOF 210, *et seq.*) above, this Court concludes that the lack of meaningful discretion in the school finance system is systemic, compromising the districts’ ability to provide local enrichment programming and to exercise meaningful discretion over the setting of their local M&O tax rates. The result is a state property tax in violation of Article VIII, Section 1-e.

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<sup>84</sup> The Court does not find that **all** districts are unable to provide an adequate education under the current system. Some property-wealthy districts are not forced to tax at the maximum rate and are able to generate sufficient funds for a basic education **and** for local enrichment. Those districts are a comparative few and do not save the school finance system from its unconstitutional structure.

3. Adequacy/general diffusion of knowledge

COL 20. “Under article VII, Section 1 of the Constitution of 1876, the accomplishment of ‘a general diffusion of knowledge’ is the standard by which the adequacy of the public education system is to be judged.” *Id.* at 787 (quoting Tex. Const. art. VII, § 1). This Court also takes heed of the Texas Supreme Court’s instruction that the “general diffusion of knowledge” standard is not a static concept. Rather, the standard must take into account “‘changing times, needs, and public expectations.’” *WOC I*, 107 S.W.3d at 572 (quoting *Edgewood IV*, 917 S.W.2d at 732 n.14). These changes generally increase the level of skill and knowledge students must possess. (RR28:175-76.)

COL 21. In *WOC II*, the Texas Supreme Court adopted this Court’s previous definition of constitutional adequacy, with one modification, as set forth below:

To fulfill the constitutional obligation to provide a general diffusion of knowledge, districts must provide “*all Texas children . . . access to a quality education that enables them to achieve their potential and fully participate now and in the future in the social, economic, and educational opportunities of our state and nation.*” TEX. EDUC. CODE § 4.001(a) (emphasis added). Districts satisfy this constitutional obligation when they [are reasonably able to] provide all of their students with a *meaningful opportunity* to acquire the essential knowledge and skills reflected in . . . curriculum requirements . . . such that upon graduation, students are prepared to “continue to learn in postsecondary educational, training, or employment settings.” TEX. EDUC. CODE § 28.001 (emphasis added).

*WOC II*, 176 S.W.3d at 787 (quoting this Court’s conclusions of law in *West Orange-Cove*).

COL 22. The Texas Supreme Court found it appropriate to “draw from statutory language the Legislature’s understanding of a general diffusion of knowledge.” *Id.* at 788. For example, with respect to Section 4.001 of the Education Code, it found that the “Legislature has expressly linked the stated mission of public education [– to ensure that all Texas children have access to a quality education that enables them to achieve their potential and fully participate now and in the future in the social, economic, and educational opportunities of our state and nation ] to the constitutional standard.” *Id.*

COL 23. In addition, the Supreme Court found that the Legislature, in Section 28.001, “labeled specific knowledge and skills ‘essential,’ just as a general diffusion of knowledge is.” *Id.* at 789. This provision states:

It is the *intent* of the legislature that the *essential* knowledge and skills developed by the State Board of Education under this subchapter shall require *all students* to demonstrate the knowledge and skills necessary to read, write, compute, problem solve, think

critically, apply technology, and communicate across *all* subject areas. The essential knowledge and skills shall also prepare and enable all students to continue to learn in *postsecondary educational, training, or employment settings*.

TEX. EDUC. CODE § 28.001 (emphasis added). These essential knowledge and skills are embodied in the TEKS, the curriculum adopted by the SBOE. See TEX. EDUC. CODE § 28.002 and 19 TEX. ADMIN. CODE §§ 74, 110-128.

COL 24. The Supreme Court then made the important observation that:

These clear, affirmative statements cannot be dismissed as merely hopeful rhetoric; rather, the Legislature must be presumed to have chosen its words deliberately. Nor can these words be read to describe a public education system that the Legislature believes would not only meet but exceed constitutional requirements. The specific reference to the constitutional standard in section 4.001(a) and the repeated use of the word “essential” in section 28.001 does not allow it. To avoid improper policy-making of its own, the district court properly looked to legislative policy statements.

*WOC II*, 176 S.W.3d at 789.

COL 25. With “changing times, needs and public expectations” in mind, the Legislature, after *WOC II*, set “college and career readiness” as the outcome goal of the Texas educational system through significant amendments to Chapters 28 and 39 of the Texas Education Code. (See *supra* Part I.B.3.a (FOF 82, *et seq.*)) As in *WOC II*, this Court looks to those legislative policies and choices to inform the definition of “general diffusion of knowledge.”

COL 26. The Legislature has defined college readiness as the level of preparation a student must attain in English language arts and mathematics to enroll and succeed, without remediation, in an entry-level college course in those subject areas. See TEX. EDUC. CODE § 39.024(a). The State has adopted the STAAR / EOC regime as a means to measure how well Texas students are acquiring and mastering the TEKS and are progressing toward the objective of college and career readiness. (See *supra* Part I.B.3.b (FOF 93, *et seq.*))

COL 27. In addition to amending the accountability and accreditation system for school districts, the legislative changes since *WOC II* established an elaborate set of requirements that affect individual students – requirements that determine whether students are able to be promoted or graduate. (See *supra* Parts I.B.3.b – I.B.3.c (FOF 93, *et seq.*)) This new element of the accountability system is a critical component of the legislatively-defined general diffusion of knowledge. Just as the Legislature may not “define what constitutes a general diffusion of knowledge so low as to avoid its obligation to make suitable provision” for the public school system, see *WOC I*, 107 S.W.3d at 571, it may not set accreditation requirements for school districts so low as to create the appearance that

districts are meeting those requirements, while tens of thousands of students are not able to be promoted or graduate because they do not meet the State's performance standards.

- COL 28. Any effort to assess the cost of the general diffusion of knowledge must take into account the fact that districts are bound by law to teach the full array of the TEKS, including both the required and enrichment curriculums. They must also offer a variety of programs and services described in Chapters 28-34 and 37-39 of the Texas Education Code, and abide by associated regulations implementing these and other mandates. These chapters contain numerous mandates for the provision of services to students. Among these mandates is the Legislature's longstanding requirement that "a school district may not enroll more than 22 students in a kindergarten, first, second, third, or fourth grade class," unless the Commissioner grants an exemption. TEX. EDUC. CODE § 25.112(a), (d).
- COL 29. It follows that the Legislature must ensure that districts have resources sufficient to provide all schoolchildren a meaningful opportunity to be college or career ready upon graduation from high school, to provide all schoolchildren a meaningful opportunity to acquire and master the TEKS as measured by the State's assessment system, and to meet the mandates of the Education Code. *See WOC II*, 176 S.W.3d at 785 ("It would be arbitrary, for example, for the Legislature to define the goals for accomplishing the constitutionally required general diffusion of knowledge, and then to provide insufficient means for achieving those goals.").
- COL 30. Part of the duty to ensure that districts have sufficient resources is a duty to make a reasonable effort to determine what it will cost to adequately provide for its own standards and meet its own definition of a general diffusion of knowledge. The State effectively has recognized and accepted this constitutional responsibility by enacting Section 42.007 of the Texas Education Code, which requires rule making and the conduct of specific studies on a biennial basis to determine the cost of meeting state performance requirements. (*See supra* Part I.C.5.a (FOF 603, *et seq.*)). As urged by the Intervenor, this is a necessary aspect of making suitable provision for public education and being productive of results without waste.
- COL 31. Measures that superintendents and other experts have identified as best practices to attain the legislatively mandated outcome objective of college and career readiness include, among other things, (a) manageable class sizes, particularly for economically disadvantaged and ELL populations, (b) preschool programs of sufficient quality to provide a "head start" to special needs students, (c) remedial and literacy programs to help ELL, economically disadvantaged, and other special needs students, including summer school and after school programs, (d) salaries that can attract and retain sufficient numbers of qualified teachers, and (e) vocational and career courses to give those students that cannot attend college an opportunity to succeed in post-secondary employment settings. (*See generally supra* Parts I.C.2.c (FOF 379, *et seq.*) and I.C.2.e (FOF 520, *et seq.*)). The Court identifies these practices as examples of ways to accomplish the general diffusion of knowledge, not to order the Legislature to adopt these practices as *per se* constitutional; however, where research supports a practice as effective, an approach that undermines those practices, without replacing them with

another approach that is supported by research as reasonable, could be considered arbitrary and unconstitutional.

- COL 32. This Court rejects the notion that the general diffusion of knowledge requires expenditures only in the instructional program described in statute and that other expenditures are merely “extraneous.” A district cannot provide a constitutionally adequate education without a sufficient support network, which may include, among other things, (a) adequate and well-maintained facilities, (b) nurses to keep students healthy, (c) security guards in certain schools to keep students safe, (d) guidance counselors to help students with course selection and with planning for college and careers, (e) paraprofessionals to provide vital assistance to teachers, (f) libraries with both print and electronic resources and librarians to assist students and teachers in using these resources, (g) tutors to help struggling students, and (h) transportation. (*See supra* Part I.C.3.d (FOF 575, *et seq.*.) In some districts, the general diffusion of knowledge may additionally require programs designed to keep students in school until graduation.
- COL 33. The Texas Supreme Court found that the constitutional right of adequacy extends to all schoolchildren. *See WOC II*, 176 S.W.3d at 774. These schoolchildren (and the general public) will be irreparably harmed if they are denied access to an adequate education. (*See supra* Part I.B.1 (FOF 11, *et seq.*.) Furthermore, these constitutional rights cannot be made subject to a vote. For this reason, at a minimum, school districts must be able to finance the cost of meeting the constitutional mandate of adequacy within the range of taxing authority not subject to the tax rate elections. In the current system, that level is an M&O tax rate of \$1.04 or below. *See WOC I*, 107 S.W.3d at 580 (“A public school system dependent on local districts free to choose not to provide an adequate education would in no way be suitable.”), at 584 (“As we have explained, the Legislature has chosen to make suitable provision for a general diffusion of knowledge by using school districts, and therefore the State cannot be heard to argue that school districts are free to choose not to achieve that goal.”) The State must fulfill its obligation to provide additional state funds to replace the local tax revenue that was lost when the Legislature imposed the compressed tax rate. The evidence established that a majority of districts would be unable to access sufficient tax revenues to accomplish the general diffusion of knowledge even at the maximum M&O tax rate of \$1.17; therefore, the school finance system is structured so that it is impossible for districts to access adequate funds to provide the basic, required level of education.
- COL 34. An adequate system must also include sufficient funding for facilities. *Edgewood IV*, 917 S.W.2d at 746. (*See supra* FOF 585.) The Legislature’s failure to adjust the facilities guaranteed yield to account for inflation and increases in construction costs from the \$35 established in 1999, failure to make facilities funding a permanent part of the school finance system, and failure to equalize funding by either substantially increasing the guaranteed yield or requiring recapture renders facilities funding constitutionally inadequate and financially inefficient.
- COL 35. Because of the fact findings in Part I.C (FOF 210, *et seq.*) above, this Court concludes that the Texas school finance system is presently in violation of the “general diffusion of

knowledge” clause of Article VII, Section 1 of the Texas Constitution because the Legislature “define[d] the goals for accomplishing the constitutionally required general diffusion of knowledge,” and then provided “insufficient means for achieving those goals.” *WOC II*, 176 S.W.3d at 785. This Court further concludes that the system is currently in violation of this same clause with respect to the economically disadvantaged and ELL student populations specifically.

#### 4. Suitability

- COL 36. “Suitability” under Article VII, Section 1 “refers specifically to the means chosen to achieve an adequate education through an efficient system.” *Id.* at 793. “[S]uitable provision” requires that the public school system be structured, operated, and funded so that it can accomplish its purpose for all Texas children.” *Id.* at 753.
- COL 37. As the Supreme Court noted, “if the funding system were efficient so that districts had substantially equal access to it, and the education system was adequate to provide for a general diffusion of knowledge, but districts were not actually required to provide an adequate education, the Legislature’s use of districts to discharge its constitutional duty would not be suitable, since the Legislature would have employed a means that need not achieve its end.” *Id.* at 793 (quoting *WOC I*, 107 S.W.3d at 584).
- COL 38. The Supreme Court also held that the “suitable provision” clause would be violated if “the Legislature substantially defaulted on its responsibility such that Texas school children were denied access to that education needed to participate fully in the social, economic, and educational opportunities available in Texas.” *Id.* at 794 (citation and internal quotation marks omitted).
- COL 39. The “suitable provision” clause is likewise violated by the Legislature substantially defaulting on its responsibility such that Texas school children are denied access to a meaningful opportunity to meet the rigorous new accountability standards and obtain a high school diploma, a prerequisite to succeeding in college or the workforce.
- COL 40. The “suitable provision” clause is also violated by the Legislature defaulting on its responsibility to make a reasonable effort to determine what it will cost to adequately and suitably provide for its own standards so that it can ensure that the system is in fact “structured, operated, and funded so that it can accomplish its purpose for all Texas children.” (*See supra* Part I.C.5.a (FOF 603, *et seq.*))
- COL 41. The State has failed to make suitable provision for free public schools as a result of multiple defects in the current design of the school finance system that cumulatively prevent districts from generating sufficient resources to accomplish a general diffusion of knowledge. For example, the State is relying on outdated, arbitrary weights and allotments that do not reflect the actual cost of education to determine funding levels for districts, and it further cut that funding by appropriating school finance funds based upon funds that are available rather than what funds are required.

COL. 42. Because the school finance system bears no relationship to the actual cost of providing access to a constitutionally adequate education, the school finance system as a whole is arbitrary and, therefore, fails to make suitable provision.

##### 5. Financial or quantitative efficiency

COL. 43. “The legislature is duty-bound to provide for an efficient system of education, and only if the legislature fulfills that duty can we launch this great state into a strong economic future with educational opportunity *for all*.” *Edgewood I*, 777 S.W.2d at 399 (emphasis added). Financial efficiency requires that “districts [] have substantially equal access to similar revenues per pupil at similar levels of tax effort” up to the level of adequacy. *WOC II*, 176 S.W.3d at 790.

COL. 44. The Legislature has chosen to rely heavily on local property taxes, which remain largely disparate across Texas, to discharge its duty to provide for an efficient system of public education. (*See supra* FOF 40 – FOF 47; Part I.D.4.a (FOF 1376, *et seq.*) The Legislature’s decision to rely so heavily on local property taxes to fund public education does not in itself violate any provision of the Texas Constitution, but in the context of a proliferation of local districts enormously different in size and wealth, it is difficult (though certainly possible) to make the result efficient – meaning “effective or productive of results and connot[ing] the use of resources so as to produce results with little waste” – as required by article VII, Section 1 of the Constitution. *WOC II*, 176 S.W.3d at 757.

COL. 45. “A system that operates with an excess of resources in some locales and a dearth in others is inefficient.” *Id.* at 756-57 (citing *Edgewood I*, 777 S.W.2d at 397; *Edgewood Indep. Sch. Dist. v. Kirby*, 804 S.W.2d 491, 496 (Tex. 1991) (“*Edgewood II*”); and *Carrollton-Farmers Branch Indep. Sch. Dist. v. Edgewood Indep. Sch. Dist.*, 826 S.W.2d 489, 497 (Tex. 1992) (“*Edgewood III*”). Therefore, the system must compensate for disparities in the amount of property value per student, so that property owners in property-poor districts are not burdened with much heavier tax rates than property owners in property-wealthy districts in order to generate substantially the same revenue per student for public education. *See id.* at 757. In other words, the Legislature must ensure that the funding system it develops provides access to those funds necessary to provide an adequate education at a substantially similar tax rate. *See id.* at 757, 790. So long as the Legislature continues to rely on local property taxes as the primary basis for funding the school finance system, the equalization provisions built into the public school finance system, including the cap on maintenance and operation tax rates and the recapture provisions, remain essential to providing that equal access. *See id.* at 798.

COL. 46. However, the guarantee of substantially equal access to similar revenue at similar tax effort cannot be achieved solely through the tax cap and recapture, because such a system would “‘level-down’ the quality of our public school system, a consequence which is universally regarded as undesirable from an educational perspective.” *Edgewood IV*, 917 S.W.2d at 730. To the contrary, the constitutional guarantee of an efficient system of public schools requires the State to level districts “*up to* the legislatively defined level

that achieves the constitutional mandate of a general diffusion of knowledge.” *WOC I*, 107 S.W.3d at 571 (quoting *Edgewood IV*, 917 S.W.2d at 730) (emphasis added).

- COL 47. Just as the State cannot artificially lower the standard of a general diffusion of knowledge in order to lower its funding obligation under the adequacy standard (*see WOC II*, 176 S.W.3d at 784), the State cannot level down to a funding level insufficient to provide for a general diffusion of knowledge. *See WOC I*, 107 S.W.3d at 571 (citing *Edgewood IV*, 917 S.W.2d at 729-30).
- COL 48. The Legislature’s decision on how to level up cannot be arbitrary – it must be “informed by guiding rules and principles properly related to public education.” *WOC II*, 176 S.W.3d at 784-85. A funding system that locks in the quirks of funding from a single year, and funds districts at different levels that are not connected to the district’s tax effort, or its educational needs, is not so informed. (*See supra* Part I.D.4.b.i (FOF 1379, *et seq.*.) Accordingly, the Court concludes that the Tier I funding provisions, CTR and target revenue, are arbitrary and unconstitutional.
- COL 49. Because “[a]n efficient system of public education requires not only classroom instruction, but also the classrooms where that instruction is to take place,” the system must be analyzed as a whole, taking into consideration both the instruction and facilities components. *WOC II*, 173 S.W.3d at 790 (quoting *Edgewood IV*, 917 S.W.2d at 726). The current structure for facilities funding violates the constitutional requirement that districts have substantially similar access to revenues for similar tax effort. The relatively low guaranteed yield coupled with the lack of recapture means that property-wealthy districts can far outstrip low wealth districts in access to funds for facilities necessary for a general diffusion of knowledge. Further, unlike formula funding for M&O expenses, facilities funding for eligible lower wealth school districts is not a permanent part of the school finance structure and is subject to appropriations. As a result, the Legislature can arbitrarily choose not to fund facilities to the same level as it has in the two most recent biennia, requiring districts to use already limited M&O funds for facility needs. The structural inequity in the current system is arbitrary and does not provide substantially equal access to similar revenues at similar tax rates. Further, the failure to update the guaranteed yield to a level that bears a relationship to the cost of maintaining, constructing, and renovating facilities is arbitrary and an unconstitutional failure to make suitable provision.
- COL 50. As long as the Legislature maintains an efficient system up to the level of adequacy in compliance with Article VII, Section 1, it may authorize local school districts to supplement their educational resources from local funds. *See Edgewood IV*, 917 S.W.2d at 732. Even then, “the amount of ‘supplementation’ in the system cannot become so great that it, in effect, destroys the efficiency of the entire system. The danger is that what the Legislature today considers to be ‘supplementation’ may tomorrow become necessary to satisfy the constitutional mandate for a general diffusion of knowledge. Supplementation must be just that: additional revenue not required for an education that is constitutionally adequate.” *WOC II*, 176 S.W.3d at 792.

- COL 51. Furthermore, the Supreme Court has clearly found that *all* districts must have “meaningful discretion” for enrichment purposes (*see supra* Part II.A.2 (COL 9, *et seq.*)), and the disparities in local property wealth (*see supra* Part I.D.4.a (FOF 1376, *et seq.*)) make it clear that, in order for this discretion to be truly meaningful for all districts, at least some portion of this additional “enrichment” revenue must be substantially equalized.
- COL 52. Having determined how the Legislature has defined adequacy/a general diffusion of knowledge, and how much it costs districts to provide for it, it is this Court’s role to determine whether school districts have substantially equal access to funding up to that level. The Texas Supreme Court has determined that the primary standard for evaluating substantially equal access is the differences in tax rates needed to fund an adequate education. *See Edgewood IV*, 917 S.W.2d at 731. In other words, even if every district in the state is reaching adequacy, if the gaps in tax rates necessary to do so are too great, the system is unconstitutionally inefficient. *Id.*
- COL 53. Based on the findings adopted herein (*see* Part I.D (FOF 1204, *et seq.*)), the Court concludes that the Texas school finance system is not financially efficient and fails to provide districts with substantially equal access to funding up to the level necessary to provide a general diffusion of knowledge at similar tax efforts and, as such, violates Article VII, Section 1 of the Texas Constitution. The State Defendants are not ensuring an efficient system of public schools where “[c]hildren who live in poor districts and children who live in rich districts must be afforded a substantially equal opportunity to have access to educational funds.” *WOC II*, 176 S.W.3d at 753 (citing *Edgewood I*, 777 S.W.2d at 397).
- COL 54. The Court further concludes that the facts in this case show that property-poor districts have far less access to the educational funds they need to achieve their full potential and meet the standards set by the State, and, therefore, the current school finance system is not efficient in the sense of producing results for the provision of a general diffusion of knowledge under Article VII, Section 1 of the Texas Constitution. *See id.* at 757; *Edgewood I*, 777 S.W.2d at 395.
- COL 55. The Supreme Court has not defined what amount of unequalized revenue above the level of a general diffusion of knowledge will cause the system to become inefficient. Based on the findings above, *see supra* Part I.D (FOF 1204, *et seq.*), which show substantial disparities in the system as a whole, this Court concludes that the current level of unequalized revenue in the system exceeds what can be tolerated to avoid destroying the efficiency of the entire system. *See WOC II*, 176 S.W.3d at 798.

## 6. Taxpayer equity

- COL 56. The taxpayer equity claim brought by Plaintiffs Langston, King, Baker, and Pittinger rests on Article VIII, § 1(a) of the Texas Constitution, which provides that “[t]axation shall be equal and uniform.” “Taxes are said . . . to be ‘equal and uniform,’ when no person nor class of persons *in the taxing district*, whether a state, county, or other

municipal corporation, is taxed at a different rate than are other persons *in the same district* upon the same value or the same thing, and where the objects of taxation are the same by whomsoever owned, or whatever they be.” *Norris v. City of Waco*, 57 Tex. 635, 641 (Tex. 1882) (emphasis added). Thus, “[t]he mandate that all taxes be equal and uniform requires only that all persons falling within the same class be taxed alike.” *Grocers Supply Co., Inc. v. Sharp*, 978 S.W.2d 638, 645 (Tex. App.—Austin 1998, pet. denied); see generally *Spring Indep. Sch. Dist. v. Harris County Appraisal Dist.*, 889 S.W.2d 562, 564-65 (Tex. App.—Houston [14th Dist.] 1994, *rev’d on other grounds by Enron Corp. v. Spring Indep. Sch. Dist.*, 922 S.W.2d 931 (Tex. 1996) (“From its earliest decisions, Texas courts have held that taxation is ‘equal and uniform’ when no person or class of persons in the same territory is taxed at a higher rate than other persons on the same property in the same district. Uniformity and equality means taxation based solely on the property’s value and not other factors.” (citations omitted)).

COL 57. There was no evidence that taxpayers within the same taxing district, here school districts, paid a different rate of taxes; therefore, there was no violation of Article VIII, Section 1(a).

#### 7. Qualitative efficiency

COL 58. The qualitative component of the efficiency clause is “simply shorthand for the requirement that public education accomplish a general diffusion of knowledge.” *WOC II*, 176 S.W.3d at 753. Qualitative efficiency requires the school finance system to provide the resources necessary for school districts to provide a general diffusion of knowledge to every child. See *Edgewood IV*, 917 S.W.2d at 736. The Texas Supreme Court has stated that “efficiency” in the context of the Education Clause includes the common meaning that the public schools should be productive of results without waste.

COI. 59. The Court finds that it has jurisdiction to determine the merits of the Intervenor’s claims. The Texas Supreme Court has emphasized that “[t]he judiciary’s role, though important, is limited to ensuring that the constitutional standards are met.” *WOC II*, 176 S.W.3d at 753. It is not to “prescribe *how* the standards should be met.” *Id.* “[M]uch of the design of an adequate public education system cannot be judicially prescribed.” *Id.* at 779. The Legislature has the right to determine the “‘methods, restrictions, and regulation’” of the educational system. *Edgewood IV*, 917 S.W.2d at 736 (quoting *Mumme v. Marrs*, 40 S.W.2d 31, 36 (Tex. 1931)). The Texas Supreme Court has stated unequivocally that, in discharging its review of article VII claims, it will “not dictate to the Legislature how to discharge its duty . . . [nor will it] judge the wisdom of the policy choices of the Legislature, or . . . impose a different policy of our own choosing.” *Id.* at 726. This standard, however, does not preclude the Court from determining whether the Legislature has acted arbitrarily in structuring different aspects of the public school system, *e.g.* the method of paying teachers, contract requirements, and review of employment disputes, or the method for reviewing districts’ financial accountability. If the method chosen for an appropriate purpose is totally ineffective or arbitrary, the Court could find that the structure violated the qualitative efficiency requirement. The Intervenor has failed to establish such a violation in this case.

COL 60. The Intervenors' arguments all take issue with policy choices of the Legislature, including, but not limited to, the Legislature's choices: (1) to impose a cap on the number of charter schools operators so that the TEA can effectively supervise these operators; (2) to adopt statutes and regulations that attempt to strike a balance between the need to protect the due process rights of teachers with the need of districts to terminate ineffective teachers; (3) to adopt teacher certification rules that ensure that students have access to teachers who are properly trained and certified; (4) to create a financial accountability system run by the TEA according to governmental accounting standards; (5) to permit regulations that restrict the use of Home-Rule School District Charters and the Public Education Grant Program; and (6) not to provide vouchers to subsidize private schools. While Intervenors contend that they do not seek any particular remedy besides a declaration of unconstitutionality, their claims necessarily involve challenging the constitutionality of the statutes and regulations to which they object. Based upon the evidence as noted in the Court's findings of fact, the Court cannot find that the Legislature acted arbitrarily with respect to the Intervenors' claims.

## **8. Charter School Plaintiffs' claims**

### **a. The Charter School Plaintiffs' adequacy claim**

COL 61. Because the ISD Plaintiffs established the inadequacy of their funding under the school funding formulas (*see supra* Part I.C.2 (FOF 271, *et seq.*), and because charter schools are financed based on state averages of ISD funding levels (*see supra* FOF 1498 - FOF 1502), the Charter School Plaintiffs prevail on their claim that funding for open-enrollment charter schools is also inadequate under Article VII, Section 1.

### **b. The Charter School Plaintiffs' claims arising out of differential funding with ISDs, including facilities funding**

COL 62. The charter-school system was created by statute and is not required by the Texas Constitution. TEX. EDUC. CODE § 12.001 *et seq.*; *LTTS Charter Sch., Inc. v. C2 Constr., Inc.*, 342 S.W.3d 73, 81, (Tex. 2011) (stating "The wellspring of open-enrollment charter schools' existence and legitimacy is the Education Code"). The Legislature established charter schools to "(1) improve student learning; (2) increase the choice of learning opportunities within the public school system; (3) create professional opportunities that will attract new teachers to the public school system; (4) establish a new form of accountability for public schools; and (5) encourage different and innovative learning methods." TEX. EDUC. CODE § 12.001.

COL 63. A charter for an open-enrollment charter school is in the form of a contract signed by the chair of the State Board of Education and the chief operating officer for the school. TEX. EDUC. CODE § 12.112. Each charter must comply with § 12.111 of the Texas Education Code. TEX. EDUC. CODE § 12.113.

COL 64. For the fiscal year ending August 31, 2014, the Commissioner may not grant more than a total of 215 charters. (RR61:121); TEX. EDUC. CODE § 12.101 (b-1). Between September

1, 2014 and September 1, 2018, the total number of charters that may be granted will increase from 215 to 270. TEX. EDUC. CODE § 12.101(b-1). "Beginning on September 1, 2019, the total numbers of charters for open-enrollment charter schools that may be granted is 305 charters." *Id.* (b-1).

COL 65. The Charter School Plaintiffs contend that Section 12.106 of the Texas Education Code, which sets out the manner in which charter schools are funded, violates Article I, Section 3 of the Texas Constitution, because unlike the school districts, charter schools are not eligible for separate facilities funding. The Court presumes that Section 12.106 is constitutional and defers to the Legislature's determinations of a statute's wisdom or expediency. *Enron Corp. v. Spring Indep. Sch. Dist.*, 922 S.W.2d 931, 934 (Tex. 1996).

COL 66. The Equal Protection Clause directs governmental actors to treat all similarly situated persons alike. *Sanders v. Palunsky*, 36 S.W.3d 222, 224–25 (Tex. App.—Houston [14th Dist.] 2001, no pet.) (citing *City of Cleburne v. Cleburne Living Ctr.*, 473 U.S. 432, 439 (1985)). Where neither a suspect classification nor a fundamental right is involved, the challenged law survives constitutional scrutiny if it is rationally related to a legitimate governmental purpose. See *Kadrmas v. Dickinson Pub. Sch.*, 487 U.S. 450, 457–58 (1988).

COL 67. The Legislature, in its discretion, created charter schools to serve as an alternative form of education in Texas, and in doing so, has relaxed applicable personnel requirements, subjects them to different levels of oversight and regulation, and allows them more flexibility in delivering curriculum to their students. These differences serve as a rational basis for the Legislature's policy choice to fund charter schools differently than it funds school districts.

**c. The Article VII, Section 1 claim challenging the statutory cap on open-enrollment charters**

COL 68. At the present time, the SBOE may not grant more than 215 charters for an open-enrollment charter school. TEX. EDUC. CODE § 12.101(b).

COL 69. The Texas Legislature did not act arbitrarily in limiting the number of charter schools to 215, in gradually increasing that limit over the next few years to 305, or in choosing to fund charter schools differently from traditional public school districts.

**B. Declaratory relief**

**1. Adequacy claims (ISD Plaintiffs)**

COL 70. The ISD Plaintiffs have shown that the cost of meeting the constitutional mandate of adequacy (the "general diffusion of knowledge") exceeds the maximum amount of funding that is available to them at the \$1.04 M&O tax rate (the highest rate accessible without a TRE). Accordingly, this Court declares the State's school finance system fails to satisfy the Article VII, Section 1 adequacy requirement as to the ISD Plaintiffs

districts. The ISD Plaintiffs also have shown that the cost of meeting the constitutional mandate of adequacy exceeds the amount of funding that is or would be available to them at the maximum \$1.17 M&O tax rate. Accordingly, this Court declares the State's school finance system fails to satisfy the Article VII, Section 1 adequacy requirement as to the ISD Plaintiffs' districts.

- COL 71. All performance measures considered at trial, including STAAR tests, EOC exams, SATs, the ACTs, performance gaps, graduation rates, and dropout rates among others, demonstrated that Texas public schools are not accomplishing a general diffusion of knowledge due to inadequate funding. Accordingly, this Court declares that the school finance system is constitutionally inadequate.
- COL 72. Because the ISD Plaintiffs collectively have also established a systemic/statewide "adequacy" violation, this Court declares that the Texas school finance system is presently in violation of Article VII, Section 1 of the Texas Constitution. Stated another way, this Court finds that the Legislature violated the "arbitrary" standard described in *WOC II* by "defin[ing] the goals for accomplishing the constitutionally required general diffusion of knowledge," and then providing "insufficient means for achieving those goals." *WOC II*, 176 S.W.3d at 785. The current structure of the school finance system is such that districts cannot generate sufficient revenues to fund and provide an adequate education.
- COL 73. The Edgewood ISD Plaintiffs, the TTSFC Plaintiffs, and the Fort Bend ISD Plaintiffs have further shown that economically disadvantaged students and ELL students are not achieving a general diffusion of knowledge and that the cost of providing a general diffusion of knowledge to these students exceeds the amount of funding made available for their education under the current school finance system. The Court concludes the funding for economically disadvantaged and ELL students is inadequate and arbitrary. Accordingly, this Court declares that the current public school finance system is inadequate for the provision of a general diffusion of knowledge for economically disadvantaged and ELL students under Article VII, Section 1 of the Texas Constitution.
- COL 74. The ISD Plaintiffs have further shown that the current facilities funding is constitutionally inadequate to suitably provide sufficient support for districts to maintain, build, and renovate the classrooms necessary for an adequate education. This constitutional infirmity exacerbates the problems resulting from inadequate M&O funding because many districts are forced to use those scarce funds to make up for unfunded facilities needs. Accordingly, this Court declares that considered separately and as part of the total school finance system, facilities funding is arbitrary and inadequate in providing Texas school children with the constitutional mandate of adequacy.
- COL 75. The ISD Plaintiffs have shown that the M&O and I&S funding available under the school finance system as a whole is insufficient to achieve a general diffusion of knowledge. Accordingly, this Court declares that the school finance system is arbitrary and inadequate in violation of Article VII, Section 1 of the Texas Constitution

## 2. State property tax claims (ISD Plaintiffs)

- COL 76. The ISD Plaintiffs have lost meaningful discretion to set their M&O tax rates, as their current rates effectively serve as a floor (because they cannot lower taxes without further compromising their ability to meet state standards and requirements) and a ceiling (because they are either legally or practically unable to raise rates further). Further, to the extent any of the ISD Plaintiff districts could raise their M&O tax rate to the statutory maximum rate of \$1.17 (and have not already done so), the districts would still remain unable to meaningfully use local tax dollars for local enrichment beyond the level required for a constitutionally adequate education, in violation of the prohibition on state ad valorem taxes. Thus, this Court declares that the ISD Plaintiffs have established an Article VIII, Section 1-e violation as to their districts.
- COL 77. Because the ISD Plaintiffs collectively have also established a systemic violation, this Court declares that the Texas school finance system is presently in violation of Article VIII, Section 1-e of the Texas Constitution.

## 3. Suitability claims (ISD Plaintiffs)

- COL 78. The ISD Plaintiffs have shown that the State has made no effort to determine the costs of meeting its own standards or of bridging the performance gaps. The ISD Plaintiffs have further shown that the costs of providing a general diffusion of knowledge exceed the funding provided through the current system, and that multiple defects in the current design of the school finance system – including inadequately funded weights for economically disadvantaged and ELL students – cumulatively prevent districts from generating sufficient resources to accomplish a general diffusion of knowledge for all students, and particularly with respect to the State’s economically disadvantaged and ELL students. Accordingly, this Court declares that the Texas school finance system violates the “make suitable provision” clause in Article VII, Section 1 of the Texas Constitution because the system is not “structured, operated, and funded so that it can accomplish its purpose [of providing a general diffusion of knowledge] for all Texas children.” *WOC II*, 176 S.W.3d at 753.
- COL 79. The Edgewood ISD Plaintiffs have further shown that the costs of providing a general diffusion of knowledge to economically disadvantaged and ELL students exceed the funding provided through the current system, due to the arbitrarily designed and insufficient weights for those students. This defect coupled with the arbitrarily designed and insufficient Foundation School Program funding made available to districts like the Edgewood ISD Plaintiffs cumulatively prevent those districts from generating sufficient resources to accomplish a general diffusion of knowledge for the State’s economically disadvantaged and ELL students. Because a majority of Texas schoolchildren are economically disadvantaged, this defect strikes the core of the school finance system. Accordingly, this Court declares that the Texas school finance system violates the “make suitable provision” clause in Article VII, Section 1 of the Texas Constitution because the system is not “structured, operated, and funded so that it can accomplish its purpose [of

providing a general diffusion of knowledge] for [economically disadvantaged and ELL] children.” *WOC II*, 176 S.W.3d at 753.

COL 80. This Court declares that the State’s school finance system fails to satisfy the “make suitable provision” requirement because Texas school children, particularly the economically disadvantaged and English language learners, are denied access to that education needed to participate fully in the social, economic, and educational opportunities available in Texas. Moreover, the failure of the Texas school finance system to fully pay the costs of a constitutionally adequate education, whether at the maximum tax rate available without a TRE, \$1.04, or at the maximum tax rate with voter approval, \$1.17, means that the structure, operation, and funding make it impossible for Texas public schools to accomplish a general diffusion of knowledge.

COL 81. The TTFSC Plaintiffs, Edgewood ISD Plaintiffs, and the Fort Bend ISD Plaintiffs, have shown that the Texas school finance system is structured, operated, and funded so that it cannot accomplish financial equity. Property wealthy districts are able to access substantially more funding at all levels of the system. Further, the use of two separate funding mechanisms for M&O, formula funding and target revenue, makes it impossible for the finance system to be equalized to accomplish financial efficiency. This Court declares that the Texas school finance system fails to satisfy the “make suitable provision” requirement because it is structured, operated, and funded so that it is impossible to achieve a general diffusion of knowledge in a financially efficient manner.

**4. Financial efficiency claims (TTSFC Plaintiffs, Edgewood ISD Plaintiffs, and Fort Bend ISD Plaintiffs)**

COL 82. The TTSFC Plaintiffs, Edgewood ISD Plaintiffs, and Fort Bend ISD Plaintiffs have shown that, in the current system, there is not a direct and close correlation between a district’s tax effort and the educational resources available to it, as required under Article VII, Section 1, and, as a result, there are large gaps in funding levels and tax effort between low property wealth and high property wealth districts. Plaintiffs have shown that these gaps disadvantage the students in their districts in acquiring a general diffusion of knowledge and are incompatible with a system that requires that “children who live in poor districts and children who live in rich districts . . . be afforded a substantially equal opportunity to have access to educational funds.” *WOC II*, 176 S.W.3d at 753. Instead, the system arbitrarily funds districts at different levels below the constitutionally required level of a general diffusion of knowledge. Plaintiffs have further shown that the school finance system violates the “efficiency” provisions of Article VII, Section 1 of the Texas Constitution in that a) it fails to provide substantially equal access to M&O and I&S tax revenues necessary to provide a general diffusion of knowledge at similar tax effort, and b) it permits an amount of unequal local supplementation in the system that is so great as to destroy the efficiency of the system. Plaintiffs have also shown that insofar as the State Defendants continue to rely on disparate property values and accompanying property taxes to fund public schools, equalization provisions such as equalized wealth levels, guaranteed yields, recapture, and caps on maximum tax rates, remain essential for a financially efficient and equitable public school system under Article VII, Section 1 of

the Texas Constitution. The State's failure to make facilities funding a statutorily permanent part of the Texas school finance system and failure to update the equalized wealth level/guaranteed yield (coupled with the lack of recapture) mean that low property wealth and high property wealth districts have vastly different access to facilities funding contributing to the inefficiency of the system as a whole.

- COL 83. This Court declares that the school finance system violates the "efficiency" provisions of Article VII, Section 1 of the Texas Constitution in that it fails to provide substantially equal access to revenues necessary to provide a general diffusion of knowledge at similar tax effort, and instead arbitrarily funds districts at different levels below the constitutionally required level of a general diffusion of knowledge.
- COL 84. Because the TTSFC Plaintiffs, the Edgewood ISD Plaintiffs, and Fort Bend ISD Plaintiffs collectively have established a systemic/statewide violation, this Court declares that the Texas school finance system is presently in violation of Article VII, Section 1 of the Texas Constitution with respect to both maintenance and operations funding and facilities funding, separately and as complementary aspects of the school finance system.

**5. Taxpayer equity claim (TTSFC Plaintiffs)**

- COL 85. Because (1) the TTSFC Plaintiffs have not complained of nor shown any impermissible variation in the rate of assessment of M&O taxes or I&S taxes on similar property values within a single school district; and (2) differences in benefits received from otherwise equitable and uniform property tax assessments does not render the system unequal or not uniform, the TTSFC Plaintiffs have failed to demonstrate that the current school finance system violates Article VIII, Section 1(a) of the Texas Constitution.
- COL 86. The Court hereby denies the TTSFC Plaintiffs' claim for declaratory judgment that the school finance system imposes a tax that is unequal and not uniform in violation of Article VIII, Section 1(a) of the Texas Constitution.

**6. Qualitative efficiency claim (Intervenors)**

- COL 87. The Intervenors' request for declaratory judgment that the school finance system violates the "qualitative efficiency" clause of art. VII, § 1 of the Texas Constitution fails because the Intervenors have not established that the Legislature acted arbitrarily with respect to funding charter schools, the regulation of teacher compensation, hiring, firing and certification, the school financial reporting requirements, or the statutory cap on charter schools. (*See supra* Parts I.F.3 – I.F.8 (FOF 1463, *et seq.*.)
- COL 88. The Court denies the Intervenors' request for declaratory judgment that these measures violate the qualitative efficiency requirement of the Education Clause.

## **7. Charter School Plaintiffs' claims**

- COL 89. Because the school finance system for independent school districts under the statutory formulas is constitutionally inadequate and because charter schools are financed based on state averages of school district M&O funding levels, this Court declares that funding for open-enrollment charter schools also is inadequate.
- COL 90. The Charter School Plaintiffs have not proved a violation of Article I, Section 3, because the Legislature had a rational basis for limiting the number of charter schools and funding them differently from traditional public school districts.
- COL 91. In addition, neither the cap on the number of charter schools nor the alternative funding method for charter schools renders the school finance system inefficient or unconstitutional under Article VII, Section 1.
- COL 92. Accordingly, the Court denies the Charter School Plaintiffs' request for declaratory judgment that the school finance system violates the efficiency provisions of Article VII, Section 1 of the Texas Constitution by failing to provide separate facilities funding to charter schools.
- COL 93. The Court denies the Charter School Plaintiffs' request for declaratory judgment that the school finance system violates the equal protection provisions of Article I, Section 3 of the Texas Constitution.
- COL 94. The Court denies the Charter School Plaintiffs' request for declaratory judgment that the limitation on the number of open-enrollment charter schools violates Article VII, Section 1 of the Texas Constitution.

### **C. Other relief**

#### **1. Injunctive relief**

- COL 95. In addition to the declaratory relief described above, this Court hereby enjoins the State Defendants from giving any force and effect to the sections of the Education Code relating to the financing of public school education (Chapters 41 and 42 and Section 12.106 of the Education Code) and from distributing any money under the current Texas school financing system until the constitutional violations are remedied. The effect of this injunction shall be stayed until July 1, 2015 in order to give the Legislature a reasonable opportunity to cure the constitutional deficiencies in the finance system before the foregoing prohibitions take effect.
- COL 96. This injunction shall in no way be construed as enjoining the State Defendants, their agents, successors, employees, attorneys, and persons acting in concert with them or under their direction, from enforcing or otherwise implementing any other provisions of the Education Code.

- COL 97. This injunction shall not bar suits for collection of delinquent taxes, penalties, and interest.
- COL 98. This injunction does not impair any lawful obligation created by the issuance or execution of any lawful agreement or evidence of indebtedness before July 1, 2015, that matures after that date and that is payable from the levy and collection of ad valorem taxes, and a school district may, before, on, and after July 1, 2015, levy, assess, and collect ad valorem taxes, at the full rate and in the full amount authorized by law necessary to pay such obligations when due and payable. A school district that, before July 1, 2015, issues bonds, notes, public securities, or other evidences of indebtedness under Chapter 45 of Education Code, or other applicable law, or enters into a lease-purchase agreement under Subchapter A, Chapter 271 of the Local Government Code, may continue, before, on, and after July 1, 2015, to receive state assistance with respect to such payments to the same extent that the district would have been entitled to receive such assistance under Chapter 42 or 46 of the Education Code, notwithstanding this injunction.
- COL 99. This injunction does not limit, modify, or eliminate the authority of a school district to issue or execute bonds, notes, public securities, or other evidences of indebtedness under Chapter 45 of the Education Code, or other applicable law, before, on, or after July 1, 2015, or to levy, assess, and collect, before, on, or after July 1, 2015, ad valorem taxes at the full rate and in the full amount authorized by Section 45.002 of the Education Code or other applicable law, necessary to pay such bonds, notes, public securities, or other evidences of indebtedness when due and payable.
- COL 100. This injunction does not limit, modify, or eliminate the authority of the commissioner of education, before, on, or after July 1, 2015, to grant assistance to a school district under Chapter 42 or 46 of the Education Code, in connection with bonds, notes, public securities, lease-purchase agreements, or evidences of indebtedness, including those described by Subchapter A, Chapter 271 of the Local Government Code.

**2. Attorneys' fees<sup>85</sup>**

**a. TTSFC Plaintiffs**

- COL 101. Under Section 37.009 of the Texas Civil Practice and Remedies Code, the TTSFC Plaintiffs shall recover from the State Defendants attorneys' fees in the sum of \$1,888,705.91, an amount that this Court finds to be both reasonable and necessary and equitable and just.
- COL 102. The sum awarded to the TTSFC Plaintiffs shall bear post-judgment interest at the rate of five percent (5%), compounded annually, from the date the judgment is signed until the judgment is paid in full.

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<sup>85</sup> The Court's rulings on State Defendants' objections to the ISD Plaintiffs' attorneys' fees are addressed in the Final Judgment. The amounts stated in these conclusions of law reflect the Court's rulings.

COL 103. The TTSFC Plaintiffs shall recover from the State Defendants appellate attorneys' fees in the following amounts that the Court also finds to be reasonable and necessary and equitable and just:

- a. \$325,000 if the State Defendants seek and obtain direct review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date the direct appeal is perfected in the Texas Supreme Court, with all such post-judgment interest to run until the judgment against the State Defendants is paid in full; or
- b. (1) \$325,000 if the State Defendants perfect an appeal from this Final Judgment to the Court of Appeals, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date of the notice of appeal in the Court of Appeals; plus (2) \$100,000 if the State Defendants seek review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date a petition for review is filed with the Supreme Court of Texas; with all such post-judgment interest to run until the judgment against the State Defendants is paid in full.

COL 104. If, following an appeal, the TTSFC Plaintiffs do not prevail on one or more of their claims, the Court finds that this award of attorneys' fees would still be equitable and just under Section 37.009 of the Texas Civil Practice and Remedies Code, because they have made significant contributions to the public debate on school finance law through this lawsuit. *See Scottsdale Ins. v. Travis*, 68 S.W.3d 72, 77 (Tex. App.—Dallas 2001, pet. denied) ("Under the [UDJA], attorney's fees may be awarded to the non-prevailing party.").

**b. Calhoun County ISD Plaintiffs**

COL 105. Under Section 37.009 of the Texas Civil Practice and Remedies Code, the Calhoun County ISD Plaintiffs shall recover from the State Defendants attorneys' fees in the sum of \$2,609,642.57, an amount that this Court finds to be both reasonable and necessary and equitable and just.

COL 106. The sum awarded to the Calhoun County ISD Plaintiffs shall bear post-judgment interest at the rate of five percent (5%), compounded annually, from the date the judgment is signed until the judgment is paid in full.

COL 107. The Calhoun County ISD Plaintiffs shall recover from the State Defendants appellate attorneys' fees in the following amounts that the Court also finds to be reasonable and necessary and equitable and just:

- a. \$500,000 if the State Defendants seek and obtain direct review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date the direct appeal is

perfected in the Texas Supreme Court, with all such post-judgment interest to run until the judgment against the State Defendants is paid in full; or

- b. (1) \$400,000 if the State Defendants perfect an appeal from this Final Judgment to the Court of Appeals, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date of the notice of appeal in the Court of Appeals; plus (2) \$325,000 if the State Defendants seek review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date a petition for review is filed with the Supreme Court of Texas; with all such post-judgment interest to run until the judgment against the State Defendants is paid in full.

COL 108. If, following an appeal, the Calhoun County ISD Plaintiffs do not prevail on one or both of their claims, the Court finds that this award of attorneys' fees would still be equitable and just under Section 37.009 of the Texas Civil Practice and Remedies Code, because they have made significant contributions to the public debate on school finance law through this lawsuit. *See Scottsdale Ins.*, 68 S.W.3d at 77 ("Under the [UDJA], attorney's fees may be awarded to the non-prevailing party.")

**c. Fort Bend ISD Plaintiffs**

COL 109. Under Section 37.009 of the Texas Civil Practice and Remedies Code, the Fort Bend ISD Plaintiffs shall recover from the State Defendants attorneys' fees in the sum of \$1,733,676.75, an amount that this Court finds to be both reasonable and necessary and equitable and just.

COL 110. The sum awarded to the Fort Bend ISD Plaintiffs shall bear post-judgment interest at the rate of five percent (5%), compounded annually, from the date the judgment is signed until the judgment is paid in full.

COL 111. The Fort Bend ISD Plaintiffs shall recover from the State Defendants appellate attorneys' fees in the following amounts that the Court also finds to be reasonable and necessary and equitable and just:

- a. \$400,000 if the State Defendants seek and obtain direct review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date the direct appeal is perfected in the Texas Supreme Court, with all such post-judgment interest to run until the judgment against the State Defendants is paid in full; or
- b. (1) \$300,000 if the State Defendants perfect an appeal from this Final Judgment to the Court of Appeals, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date of the notice of appeal in the Court of Appeals; plus (2) \$250,000 if the State Defendants seek review in the Texas Supreme Court, with post-judgment interest to accrue on said

amount at the rate of five percent (5%), compounded annually, from the date a petition for review is filed with the Supreme Court of Texas; with all such post-judgment interest to run until the judgment against the State Defendants is paid in full.

- COL 112. If, following an appeal, the Fort Bend ISD Plaintiffs do not prevail on one or more of their claims, the Court finds that this award of attorneys' fees would still be equitable and just under Section 37.009 of the Texas Civil Practice and Remedies Code, because they have made significant contributions to the public debate on school finance law through this lawsuit. *See Scottsdale Ins.*, 68 S.W.3d at 77 ("Under the [UDJA], attorney's fees may be awarded to the non-prevailing party.")

**d. Edgewood ISD Plaintiffs**

- COL 113. Under Section 37.009 of the Texas Civil Practice and Remedies Code, the Edgewood ISD Plaintiffs shall recover from the State Defendants attorneys' fees in the sum of \$2,194,027.92, an amount that this Court finds to be both reasonable and necessary and equitable and just.

- COL 114. The sum awarded to the Edgewood ISD Plaintiffs shall bear post-judgment interest at the rate of five percent (5%), compounded annually, from the date the judgment is signed until the judgment is paid in full.

- COL 115. The Edgewood ISD Plaintiffs shall recover from the State Defendants appellate attorneys' fees in the following amounts that the Court also finds to be reasonable and necessary and equitable and just:

- a. \$325,000 if the State Defendants seek and obtain direct review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date the direct appeal is perfected in the Texas Supreme Court, with all such post-judgment interest to run until the judgment against the State Defendants is paid in full; or
- b. (1) \$325,000 if the State Defendants perfect an appeal from this Final Judgment to the Court of Appeals, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date of the notice of appeal in the Court of Appeals; plus (2) \$100,000 if the State Defendants seek review in the Texas Supreme Court, with post-judgment interest to accrue on said amount at the rate of five percent (5%), compounded annually, from the date a petition for review is filed with the Supreme Court of Texas; with all such post-judgment interest to run until the judgment against the State Defendants is paid in full.

- COL 116. If, following an appeal, the Edgewood ISD Plaintiffs do not prevail on one or more of their claims, the Court finds that this award of attorneys' fees would still be equitable and just under Section 37.009 of the Texas Civil Practice and Remedies Code, because they

have made significant contributions to the public debate on school finance law through this lawsuit. See *Scottsdale Ins.*, 68 S.W.3d at 77 (“Under the [UDJA], attorney’s fees may be awarded to the non-prevailing party.”)

e. **The State Defendants, Intervenors, and Charter School Plaintiffs.**

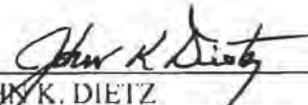
COL 117. The Court finds that it is equitable and just to deny the attorneys’ fees requests of the State, the Intervenors, and the Charter School Plaintiffs because they were predominantly non-prevailing parties and, while they contributed to the public debate on school finance law through this lawsuit, those contributions were not so significant as to warrant an award of fees.

3. **Continuing jurisdiction**

COL 118. This Court will retain continuing jurisdiction over this matter until the Court has determined that the State Defendants have fully and properly complied with its judgment and orders. *City of San Antonio v. Singleton*, 858 S.W.2d 411, 412 (Tex. 1993) (“A trial court generally retains jurisdiction to review, open, vacate or modify a permanent injunction upon a showing of changed conditions.”)

All relief not granted herein is DENIED.

SIGNED this 28<sup>th</sup> day of August, 2014.

  
\_\_\_\_\_  
JOHN K. DIETZ  
JUDGE, 250<sup>th</sup> District Court  
Travis County, Texas

Vernon's Texas Statutes and Codes Annotated  
Constitution of the State of Texas 1876 (Refs & Annos)  
Article VII. Education  
the Public Free Schools

Vernon's Ann.Texas Const. Art. 7, § 1

§ 1. Support and maintenance of system of public free schools

[Currentness](#)

Sec. 1. A general diffusion of knowledge being essential to the preservation of the liberties and rights of the people, it shall be the duty of the Legislature of the State to establish and make suitable provision for the support and maintenance of an efficient system of public free schools.

Report of Eric A. Hanushek

In the matter of

**THE TEXAS TAXPAYERS & STUDENT FAIRNESS COALITION, et al.**

**vs.**

**ROBERT SCOTT, et al.**

**Report for the**

**Efficiency Intervenors**

July 2012



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The facts in this report are based on my own personal knowledge, professional experience, and 45 years in education research. I have been asked to provide my expert opinion based upon my experience and research in my field and my review of both relevant literature and the filings of the parties in this case. My report focuses on the efficiency of spending by Texas school districts.

### PROFESSIONAL QUALIFICATIONS

I currently serve as the Paul and Jean Hanna Senior Fellow at the Hoover Institution of Stanford University. (Attached in Appendix A is a copy of my curriculum vitae). I hold courtesy appointments at Stanford University as Professor of Economics, as Professor of Education, and as Senior Fellow in the Stanford Institute of Economic Policy Research. I am also chairman of the Executive Committee for the Texas Schools Project at the University of Texas at Dallas, a research associate of the National Bureau of Economic Research, a member of the Koret Task Force on K-12 Education, and the area coordinator for the Economics of Education of the CESifo Research Network.

I am a Distinguished Graduate of the United States Air Force Academy and completed my Ph.D. in economics at the Massachusetts Institute of Technology in 1968. I served in the U.S. Air Force from 1965-1974.

I have served on a number of governmental boards and committees that deal with education research, evaluation, and policy. I am currently a Commissioner on the Congressionally-mandated Equity and Excellence Commission of the U.S. Department of Education. I was appointed by President George W. Bush to serve as a member of the Board of Directors of the National Board for Education Sciences and served on the Board from 2004-10 and as its chair from 2008-10. I was a member of the Congressionally mandated Independent Review Panel for the National Assessment of Title I. I have also been chair of the peer review committee of the U.S. Department of Education to evaluate state proposals to use growth modeling under No Child Left Behind. I was a member of the Governors Advisory Committee for Educational Excellence in California and a member of the Governor's Commission on a College Ready Texas in the State of Texas.

I previously held academic appointments at the University of Rochester, Yale University, and the U.S. Air Force Academy.

My government service includes being Deputy Director of the Congressional Budget Office, Senior Staff Economist at the Council of Economic Advisers, and Senior Economist at the Cost of Living Council.

I am a leading expert on educational policy, specializing in the economics and finance of schools. My on-going research spans a number of the most important areas of education policy including the impacts of high stakes accountability and of class size reduction and the importance of teacher quality. I have also worked on efficiency and resource usage and how these relate directly to policy concerns about school policy and the concepts of adequacy and equity. My analyses of growth and the economic impact of school outcomes provide an economic rationale for improving school quality and for promoting more efficient use of school resources.

My books include *Schoolhouses, Courthouses, and Statehouses: Solving the Funding-Achievement Puzzle in America's Public Schools* (2009); *The Handbook of the Economics of Education* (four volumes: 2006-2011); *Courting Failure: How School Finance Lawsuits Exploit Judges' Good Intentions and Harm Our Children* (2006); *The Economics of Schooling and School Quality* (2003); *Improving America's Schools* (1996); *Making Schools Work* (1994); *Educational Performance of the Poor* (1992); *Education and Race* (1972); *Assessing Policies for Retirement Income* (1997); *Modern Political Economy* (1995); *Improving Information for Social Policy Decisions* (1991); and *Statistical Methods for Social Scientists* (1977). I have published approximately 200 scholarly articles related to education policy and finance.

I serve as an editor or member of the Editorial Board for a number of scholarly journals and publications including Associate Editor, *Journal of Human Capital*; the Editorial Board, *Education Finance and Policy*; Co-editor, *Education Policy Series*, International Academy of Education/International Institute for Educational Planning, UNESCO; Editorial Board, *Education Next*; Editorial Board, *Economics of Education Review*; and Advisory Editor, *Social Science Research*.

I have frequently testified on a variety of policy issues before state legislatures and the U.S. Congress. I have been an expert witness on matters of education policy and finance in over 20 court cases.

I am a member of the International Academy of Education, a fellow of the National Academy of Education, a fellow of the American Educational Research Association, and a fellow of the Society of Labor Economists. I was awarded the Fordham Prize for Distinguished Scholarship in 2004. I am a past president of the Association for Public Policy Analysis and Management and previously served as a member of the Board of Directors of the American Education Finance Association.

## CONCLUSIONS AND BASIS OF OPINION

The issue of efficiency in school operations is central to all of the school finance court cases since the original California case of *Serrano v. Priest*. In simplest terms, if resources are not used to achieve the maximum possible student outcomes, it is not possible to describe the student outcomes that will result from added funding. Nor is it possible to describe how much spending is needed to achieve any desired level of performance. This is exactly the problem when there is inefficiency in spending because the use of resources determines exactly what outcomes are achieved and inefficiency implies that added funds will not yield the maximum results.

There has been a long history of analysis that indicates no consistent relationship between resources and achievement. After over four decades of investigation by me and numerous other researchers, it is clear to all that *how* money is spent is much more important than *how much* is spent. In simplest terms, efficient *use* of funds is key.

The courts around the nation have been plagued with this problem. When there are challenges to the operations of the school system, the court has historically felt restricted to considering just funding decisions, but this has not proved very successful.

These efficiency issues have motivated extensive analyses, and the scientific community is overwhelmingly in agreement about the fundamental facts of inefficiency – even if there is less agreement on how to deal with the problems. It has also motivated a variety of analyses of court interventions.

### **Resources and Outcomes – U.S.**

The national picture is easily summarized in charts 1-5. Nationally, resources have improved dramatically for U.S. schools over the period 1960-2009. The improvement has come in precisely the categories generally called for in policy discussions – smaller classes, better educated and more experienced teachers, and additional funds for schools. But national performance on the National Assessment of Educational Progress (NAEP), often called the Nation's Report Card, has not significantly improved (charts 2 and 3).

This national picture is found in the research literature. The hundreds of estimates on the impact of added resources that are available do not support the notion that increased resources will lead to consistent improvements.<sup>1</sup> Chart 4 shows the estimates of the impact of resources on student outcomes for the *best* available studies (see Hanushek (2003)). The majority of estimates of the impact of teacher-pupil ratios, teacher education, and teacher experience give no strong reason to believe that there is any relationship with performance, i.e., is statistically insignificant. While each input should have a positive effect, the only input with any noticeable impact is teacher experience. Subsequent research has shown that this effect is all explained by the improvements in effectiveness that the average teacher sees in the first one or two years of teaching (Rivkin, Hanushek, and Kain (2005)).

Some attention has been given to the evidence on class size found in the Tennessee STAR experiment.<sup>2</sup> The STAR experiment was not a very good experiment (Hanushek (1999b)). However, even ignoring the serious scientific problems, the results do not support added resources for class size reduction. Chart 5 summarizes the results from that experiment. Students placed in small classes (13-17 students) did better than those in large classes (21-25 students) at the end of kindergarten, and this differential is maintained through grade 3, the end of the experiment. But the differential remains the same even though more resources were provided across all of the grades (Hanushek (1999b)). In other words, at best the STAR experiment shows an impact of large reductions in class size during kindergarten but not during later grades. The other analysis of class size offers little reason to believe that class size reduction has a significant impact on student outcomes (Hanushek (1999a)).

### **Resources and Outcomes – Texas**

It is possible to compare the performance of districts in Texas to the national picture. The Texas Education Agency maintains and produces data on district performance along with measures of student demographics and school resources.<sup>3</sup> The

<sup>1</sup> See Hanushek (1981), Hanushek (1986), Hanushek (1997), Hanushek (2003).

<sup>2</sup> Word et al. (1990)

<sup>3</sup> These may be found through Snapshot School District Profiles: see <http://ritter.tea.state.tx.us/perfreport/snapshot/index.html>.

following analysis uses data for the 2010-11 school year for all of the independent school districts in Texas.

Chart 6 simply arrays the % passing all TAKS tests taken against the per pupil spending in districts. This restricts the districts to those with 5,000 or more students simply to see the range of districts. (Each circle represents one district, and the size of each circle represents the number of students in the district). Clearly there is a negative tilt indicating that the districts spending the most are also getting the lowest achievement.

This chart may be misleading, however, because extra funds are provided to those students judged as needing extra help – disadvantaged students, special education, etc. All subsequent state charts adjust for characteristics of the students and the school districts. In particular, a regression model was estimated where TAKS performance was regressed on % black students, % Hispanic students, % economically disadvantaged, % Limited English Proficient (LEP), % special education, % bilingual/ESL education, number of students in the district, number of students squared, and per pupil spending. Through these regression estimates, it is possible to adjust the estimated effect of spending to allow for demographic influences or district influences that might bias the estimates of spending.

Chart 7 provides the basic results. After allowing for the district factors in the preceding paragraph, it is possible to plot the relationship between per pupil spending and student performance on TAKS. The line shows the best estimate of the relationship – and it is slightly negatively sloped. In other words, districts spending more tend to get poorer results.

The real story is the cloud of districts with no relationship between spending and student outcomes – exactly the picture from the national analyses. Note that around the center, districts that are spending the same can be more than 40 percent different in terms of student pass rates.

There are a few very high spending districts. But, these high spending districts do not have undue influence. Looking at just districts spending less than \$15,000 per pupil, Chart 8 shows absolutely no relationship between spending and performance.

Looking just at small districts with 2,000 or fewer students does not change the picture (Chart 9). Neither does looking just at districts with more than 2,000 students alter this lack of relationship (Chart 10).

Chart 11 shows that looking just at the TAKS performance of economically disadvantaged students leaves the conclusion unchanged. In other words, the spending result does not seem to come from providing extra programs just for poor children.

Chart 12 shows that the same pattern is found with graduation rates. Districts that spend more do not see higher graduation rates after adjusting for student demographics and district size.

An alternative way to consider resources – and one that fits with state policies – is to look at the independent effects of teacher salaries and of pupil-teacher ratios. Chart 13 shows the impact of differences in teacher salaries on TAKS performance after allowing for student demographics and district size and for pupil-teacher ratios. There is a slight positive relationship, but the magnitude of impact is trivial. A \$10,000 increase in

average teacher salaries for a district would be associated with less than a 0.3 percentage point improvement in the TAKS passing rate. (The average state salary is \$44,306 with a standard deviation of \$4,036). In other words more than a two standard deviation in salaries yields an extraordinarily small increase in TAKS performance. (The TAKS passing rate is 75% with a standard deviations of 9.6%).

The analysis of pupil-teacher ratios (Chart 14) shows an identical picture – no influence of pupil-teacher ratios. The wildly different performance of districts is not explained by differences in staffing.

The large inefficiency among schools has been the subject of direct investigations by the Comptroller's office (Combs (2010)). Her investigation found that Texas laws and regulations worked to induce inefficient operations. Some districts were spending much more than others to achieve the same outcomes.

### **Court Ordered Funding**

A number of courts have, nevertheless, ordered significant increases in spending in an attempt to obtain improved student outcomes.<sup>4</sup> Perhaps the most noteworthy example is that of New Jersey where the courts have been continuously involved in funding decisions since the early 1970s!

In recent years the courts were particularly aggressive in calling for rapid spending increases that lifted New Jersey spending sharply faster than that of other states (Chart 16). The spending order was unique in that the courts identified 31 districts (called "Abbott Districts" after the court case of *Abbott v. Burke*) and permitted these districts to spend almost unlimited amounts.

If money was the driver of outcomes (and inefficient use of resources was not an issue), one would expect the dramatic increases in resources to push New Jersey students ahead of those elsewhere in the nation where fewer resources were available. Charts 17-22 provide a comparison of the growth in student performance in New Jersey and the U.S. for the period 1992-2009. For the most part, there is no relative performance difference after the courts infused extra funds into New Jersey schools. This analysis yields the same conclusions when the data on performance are extended to 2011.

Hanushek and Lindseth (2009) provide a similar analysis to other states where the courts have been aggressive about increased spending – Wyoming, Kentucky, and Massachusetts. In none of these does the extra funding appear to have paid off in enhanced school achievement. While Massachusetts has improved, most analyses attribute this to their rigorous accountability system, the use of local decision making, and the focus on eliminating achievement gaps.

### **Teacher Effectiveness**

While the research into student performance has shown that the common measures of school quality – spending, pupil-teacher ratios, teacher salaries – are not systematically related to student outcomes, it also shows that differences in teacher

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<sup>4</sup> The history of court involvement in school finance is found in Hanushek and Lindseth (2009). This section relies on the analysis in that book along with extension of it.

effectiveness are extremely important. The measure of teacher quality used here is “value-added” or the addition to learning of a teacher. There has been considerable research on the estimation and interpretation of value-added measures (Hanushek and Rivkin (2012)). The consistent estimates provide a way to looking at the economic implications of differences in teacher effectiveness.

Chart 24 shows estimates of the impact on future incomes of students from having teachers at different quality levels (Hanushek (2011)). Each of the rays indicates a teacher at a different percentile in the quality ranking (e.g., the 25<sup>th</sup> percentile or the 90<sup>th</sup> percentile). The estimates give the present value of future income increases when compared to an average teacher. They aggregate across all of the students in a classroom, explaining why they get larger as the class size goes up.

Compared to an average teacher, a 90<sup>th</sup> percentile teacher adds \$500,000 in income *each year she teaches*. But there are symmetric losses for a 10<sup>th</sup> percentile teacher.<sup>5</sup>

An alternative way to see the importance of teacher quality is to estimate the impact of the lowest quality teachers on student outcomes. This analysis is motivated by the importance of U.S. students being able to compete internationally. Right now the U.S. does not do well in terms of international levels of performance.<sup>6</sup>

If we consider the impact of the least effective teachers, we can see the possibilities for improvement. By replacing the bottom 5-8 percent of teachers with average teachers (Chart 25), the U.S. could move to the level of Canada, and possibly Finland, on the international tests.

Such a move would have dramatic impacts on the U.S. economy according to past estimates (Hanushek and Woessmann (2011)). The added growth over the next 80 years would have a present value 5-8 times our current GDP. These gains would obviously have dramatic implications for future economic well-being.

## Interpretation

The results of the analysis for both the U.S. and Texas indicate that there is an enormous amount of inefficiency in the operations of our public schools. By law, regulation, and custom we do not pay sufficient attention to teacher effectiveness and to using resources efficiently. We do not adjust salaries to reward excellence but instead give the same salary to different teachers that differ dramatically in effectiveness. When there are reductions in the number of teachers, the reductions are seldom done based on the effectiveness of the teachers but instead use seniority rules.<sup>7</sup> We also make policy related to things that are expensive but that have minimal impact on student outcomes such as class size reduction and regulations on class sizes.

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<sup>5</sup> These estimates are very similar to other estimates by Chetty, Friedman, and Rockoff (2011).

<sup>6</sup> To compare U.S. states to other countries, see Hanushek, Peterson, and Woessmann (2010) and Peterson, Woessmann, Hanushek, and Lastra-Anadón (2011). Moreover, the growth of student achievement in the U.S. has been insufficient to close the gaps with other countries; Hanushek, Peterson, and Woessmann (2012).

<sup>7</sup> Hanushek and Rivkin (2012), Goldhaber, Gross, and Player (2011), Goldhaber and Theobald (2011), Boyd, Lankford, Loeb, and Wyckoff (2011).

While charter schools have been shown to produce high achievement with lower spending than traditional schools, the expansion of charter schools has been thwarted in Texas.<sup>8</sup> Thus, by prohibiting competition from efficient charter schools, the entire system suffers.

The policies of the state toward teachers are particularly damaging to developing a productive and efficient system. When the State mandates teacher salary increases that are unrelated to performance, makes it difficult through labor laws to remove ineffective teachers, introduces certification requirements that are unrelated to classroom performance, or fails to develop a system that recognizes the forces of supply and demand, it effectively hurts the students by denying them the best education for the spending of districts.

Moreover, the attempts by courts to make judgments on common measures of school and teacher quality have been very unsuccessful. The fact that the common measures are unrelated to student outcomes dooms such attempts.

The success of our schools is vital to the state and to the nation. Therefore, we must remove the variety of Texas laws and regulations that prevent local districts from making decisions that would more efficiently use resources. Similarly we have to provide districts with incentives to improve student performance and to use resources more efficiently.<sup>9</sup>

#### **PUBLICATIONS, TESTIMONY, AND FEES**

The attached curriculum vitae lists my scholarly publications. It also lists my prior testimony. In addition to the court testimony, I gave depositions in the case of *Willston v. State of North Dakota* in December 2005 and in the case of *Consortium for Adequate School Funding v. The State of Georgia, et al.* in April 2008.

My hourly rate for analysis and testimony is \$375 per hour.

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<sup>8</sup> For Texas specific studies, see Hanushek, Kain, Rivkin, and Branch (2007) and Taylor et al. (2011). More generally, see CREDO (2009, 2010).

<sup>9</sup> See the discussion of approaches in Hanushek and Lindseth (2009).

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**Report Exhibits for**

**THE TEXAS TAXPAYERS & STUDENT FAIRNESS COALITION, *et al.***

**vs.**

**ROBERT SCOTT, *et al.***

**Report for the Efficiency Interveners**

Eric A. Hanushek

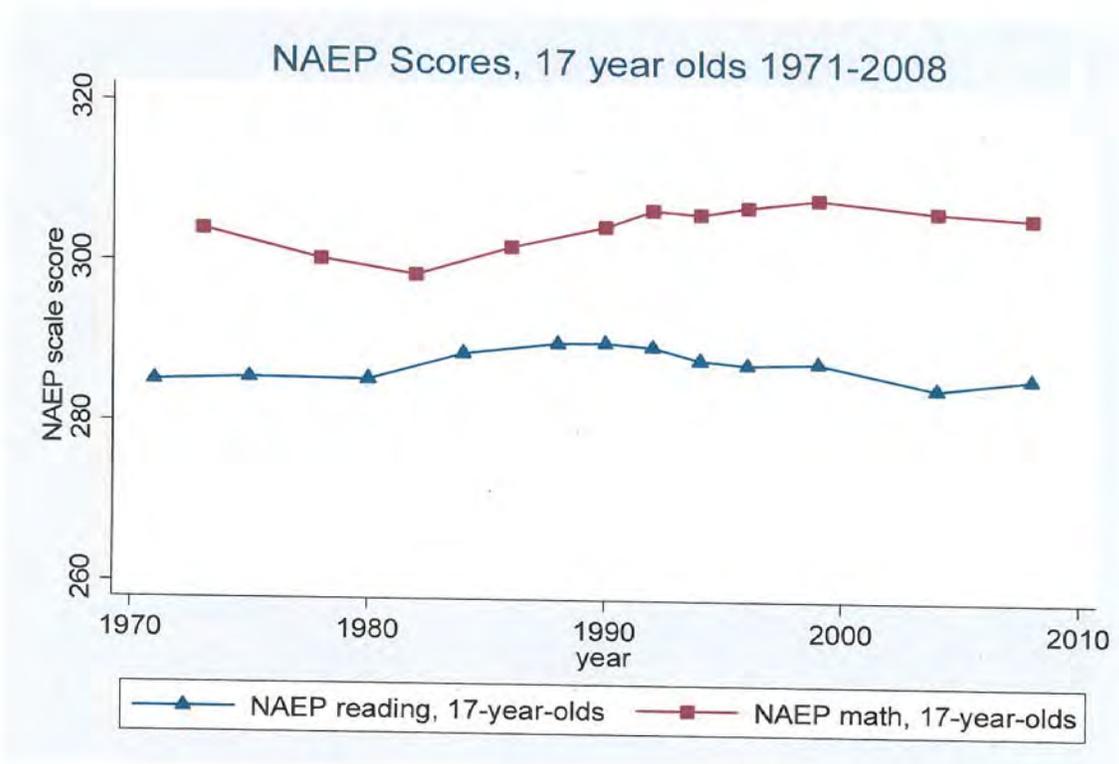
July 2012

## Public School Resources in the United States, 1960-2009

	1960	1980	2000	2009
Pupil-teacher ratio <sup>a</sup>	25.8	18.7	16.0	15.3
% teachers with master's degree or more	23.5	49.6	56.8	n.a.
Median years teacher of experience	11	12	14	n.a.
Real expenditure per student (2008-9 \$'s)	\$2,560	\$5,775	\$8,765	\$10,591

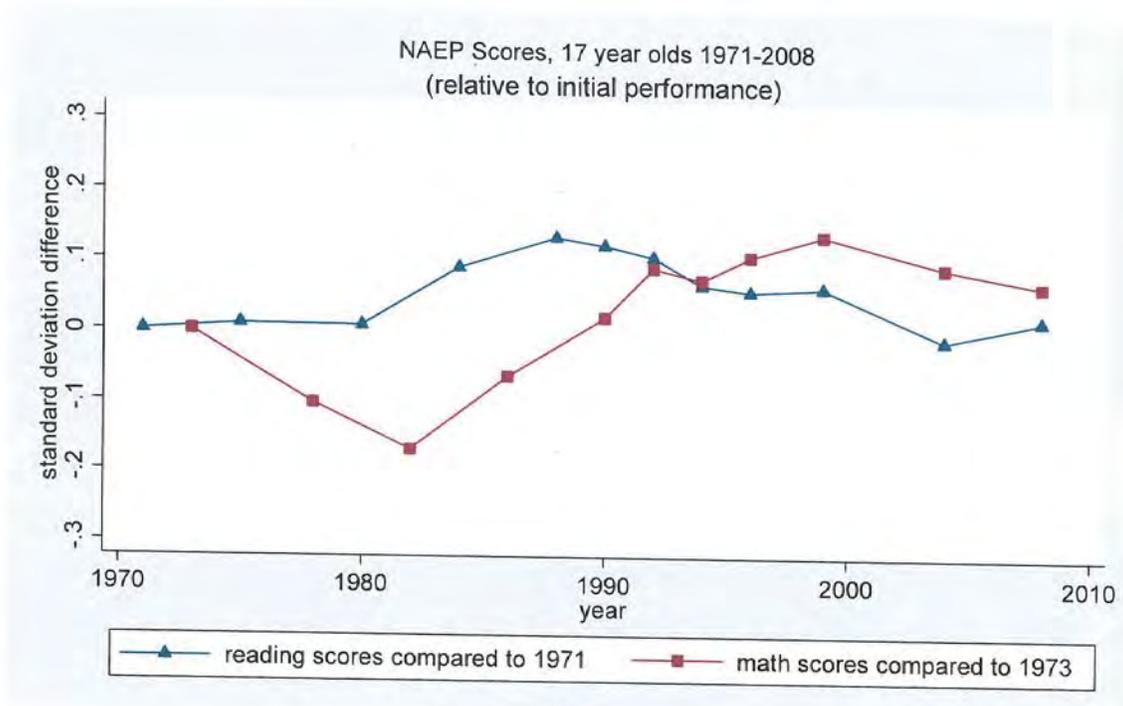
n.a. not available; Source: U.S. Department of Education, *Digest of Education Statistics*

Texas Taxpayers vs. Scott et al

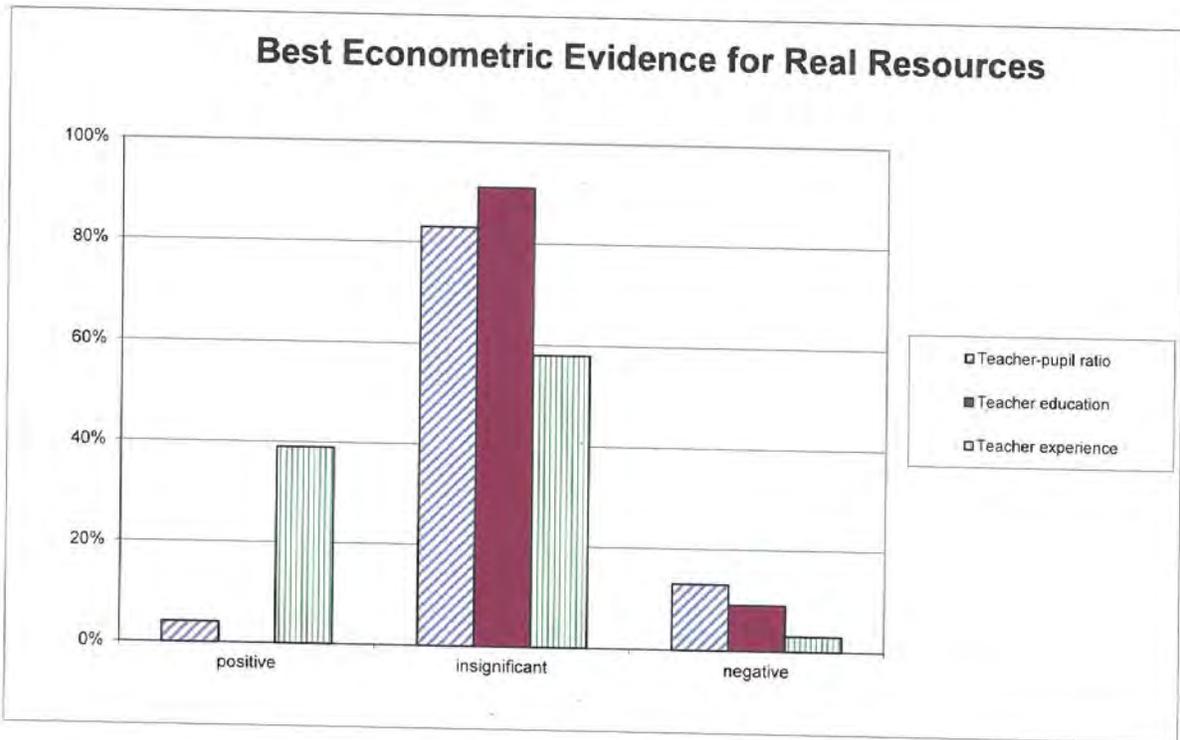


Source: author calculations using data from <http://nationsreportcard.gov/>

Texas Taxpayers vs. Scott et al.

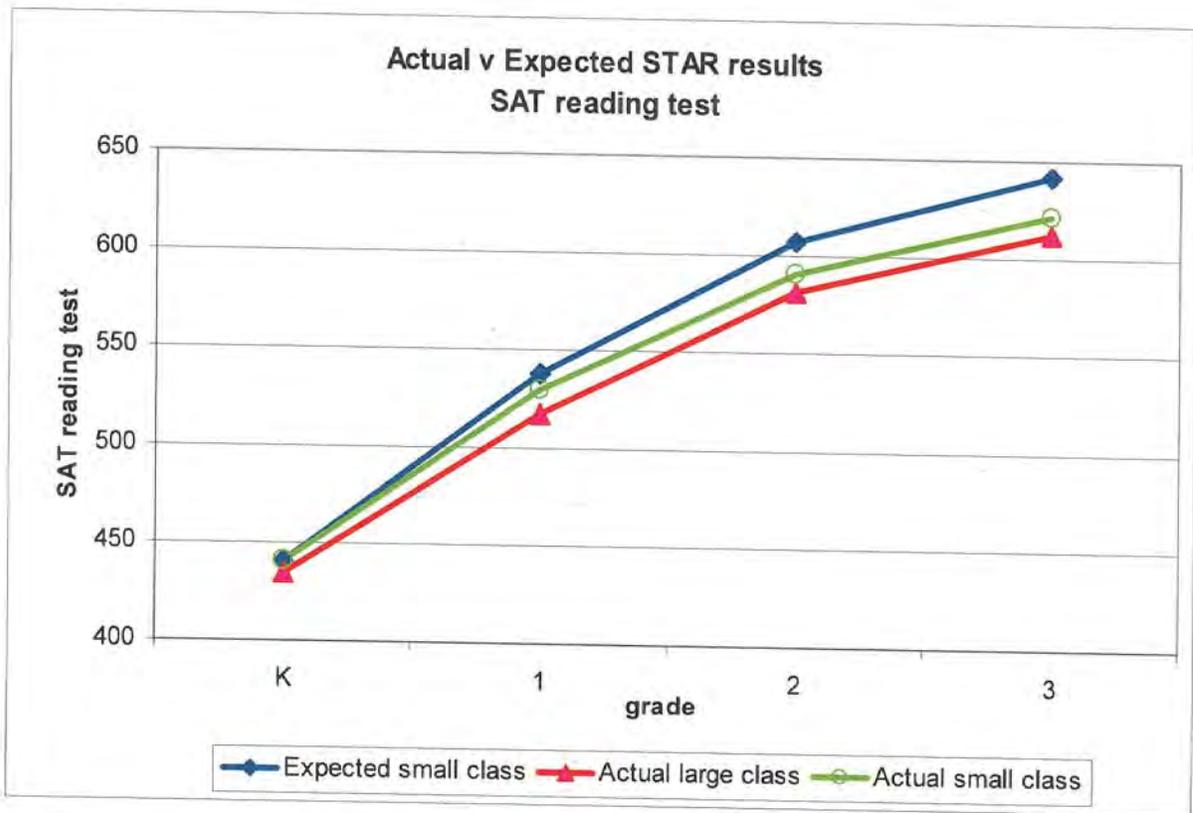


Source: author calculations using data from <http://nationsreportcard.gov/>



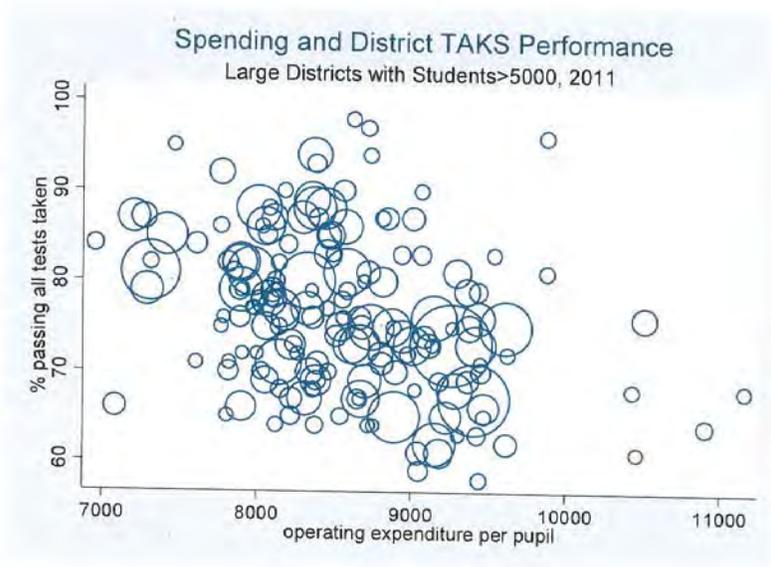
Source: Hanushek, Eric A. 2003. "The failure of input-based schooling policies," *Economic Journal* 113, no. 485

Texas Taxpayers vs. Scott et al.



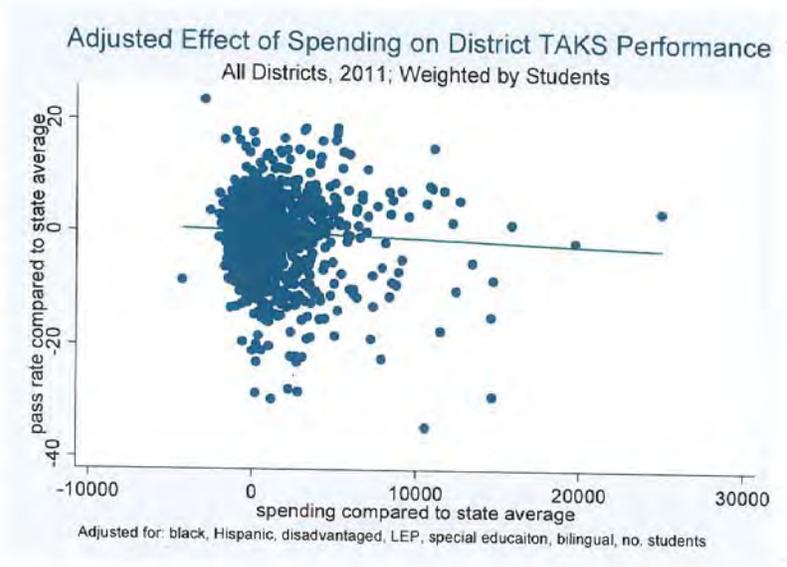
Source: Author calculations from Hanushek, Eric A. 1999. "Some findings from an independent investigation of the Tennessee STAR experiment and from other investigations of class size effects." *Educational Evaluation and Policy Analysis* 21, no. 2

Texas Taxpayers vs. Scott et al.



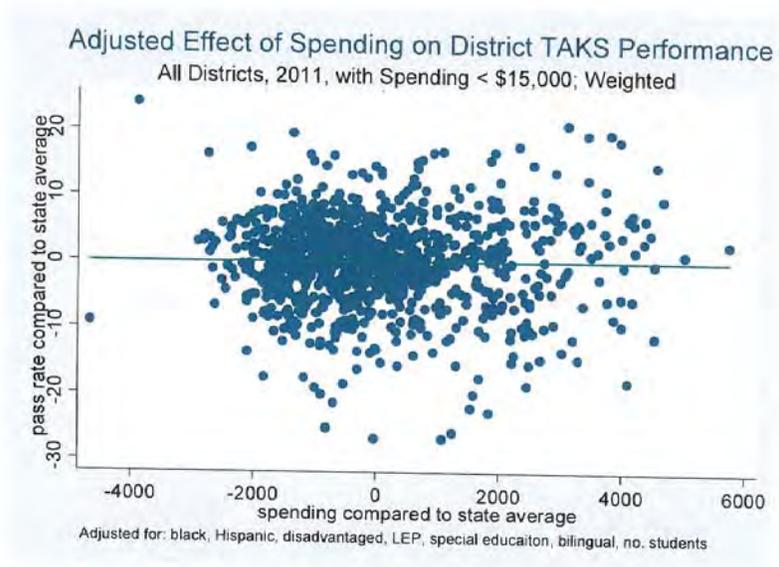
- Source: Author calculations from TEA data.

Texas Taxpayers vs. Scott et al.

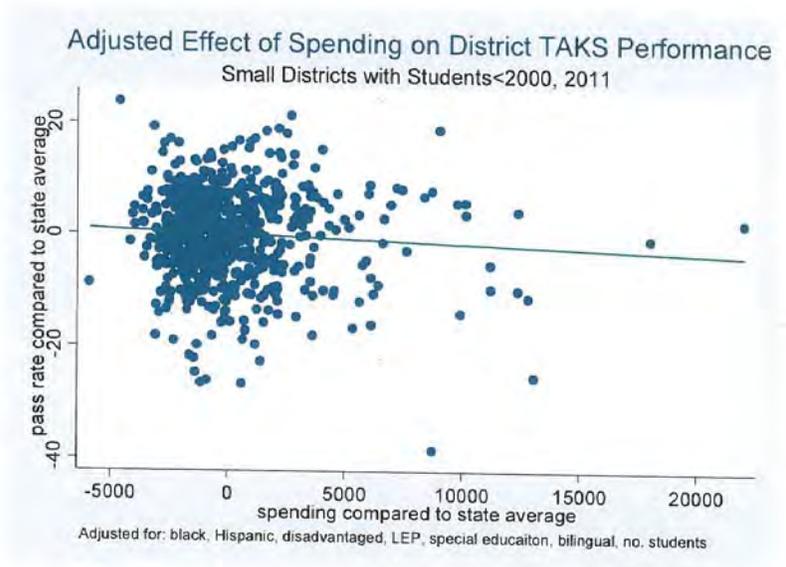


- Source: Author calculations from TEA data.

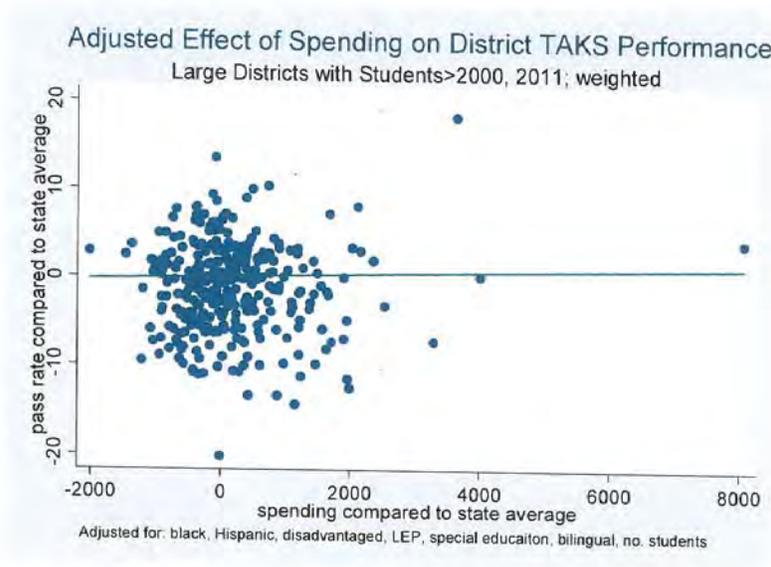
Texas Taxpayers vs. Scott et al.



- Source: Author calculations from TEA data.

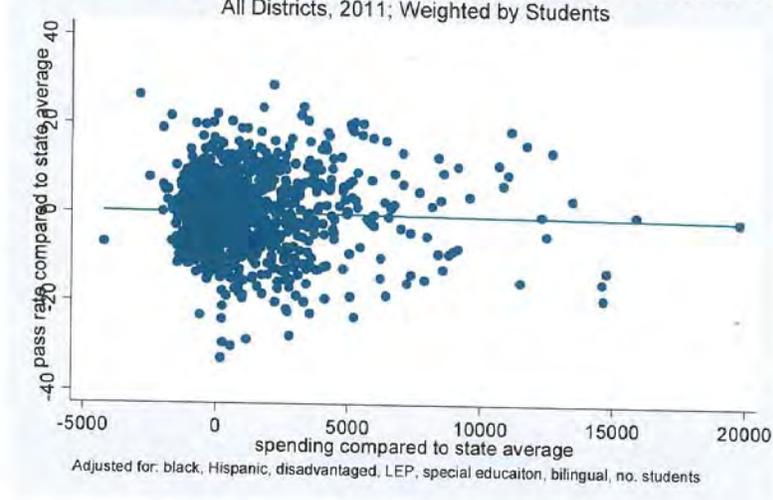


- Source: Author calculations from TEA data.

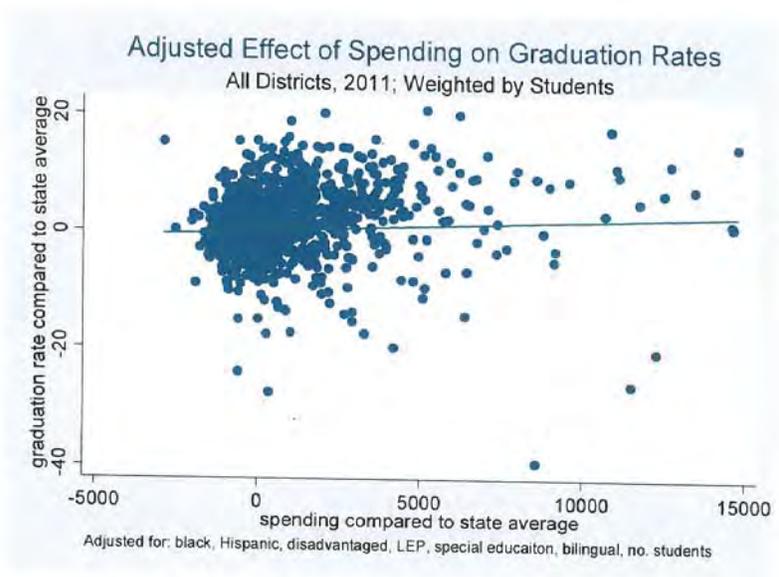


- Source: Author calculations from TEA data.

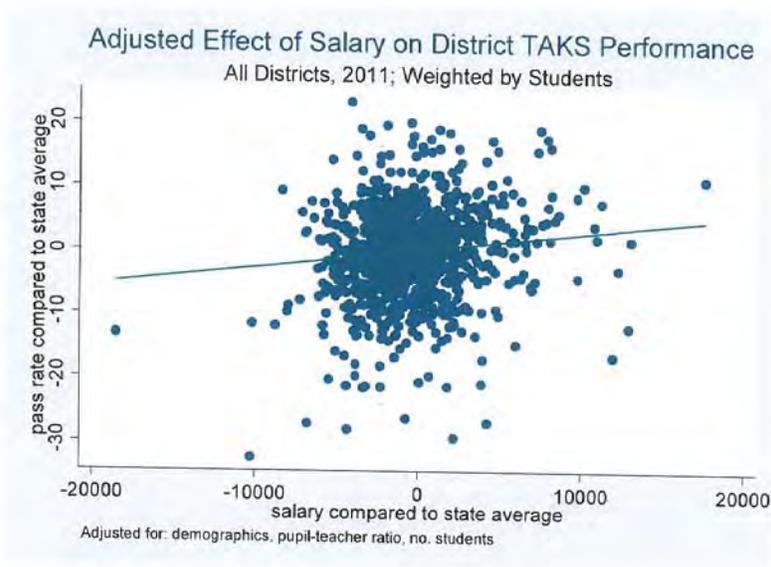
Adjusted Effect of Spending on TAKS Performance of Disadvantaged  
All Districts, 2011; Weighted by Students



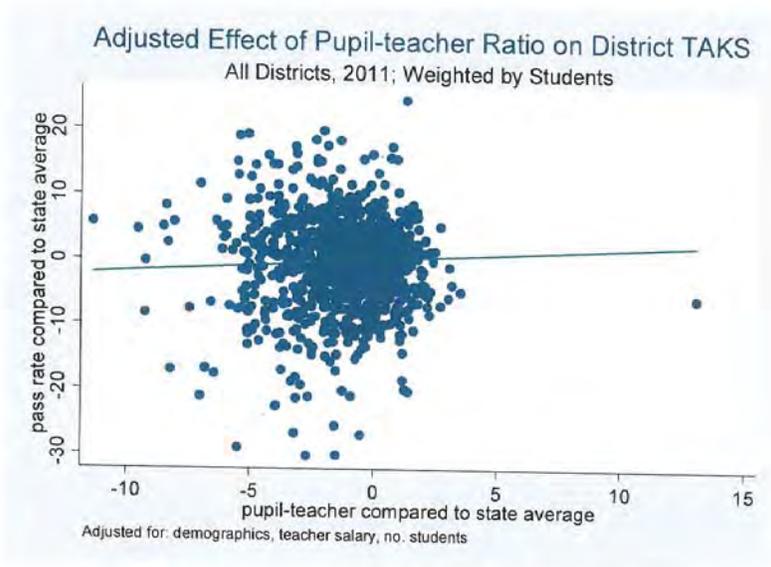
- Source: Author calculations from TEA data.



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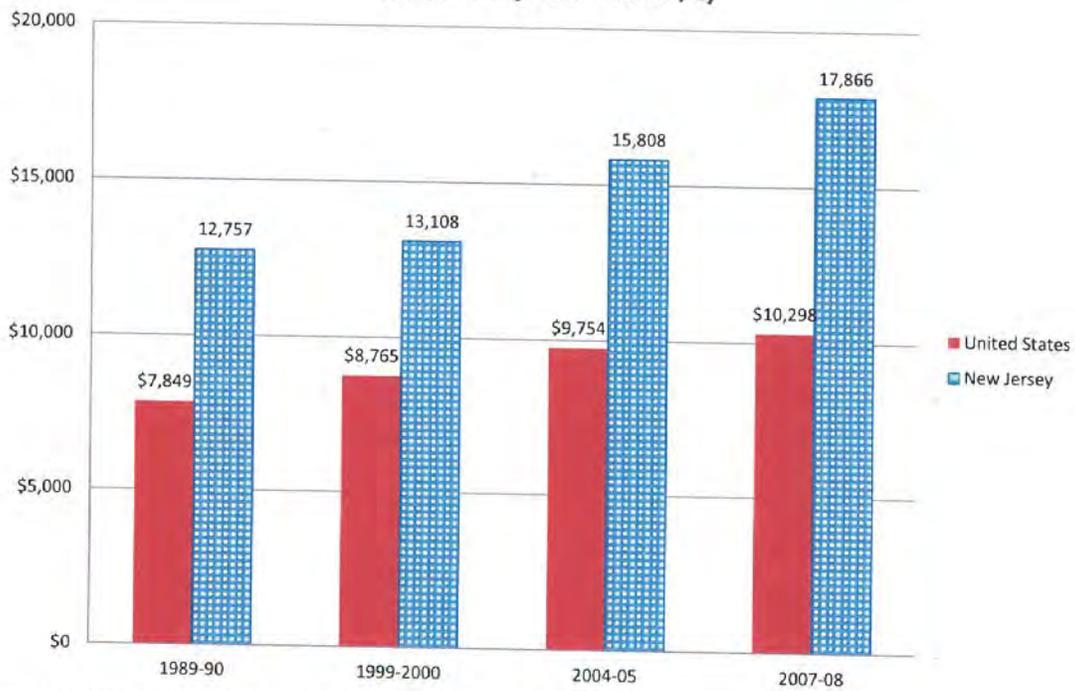


- Source: Author calculations from TEA data.

## **Court Ordered Spending New Jersey**

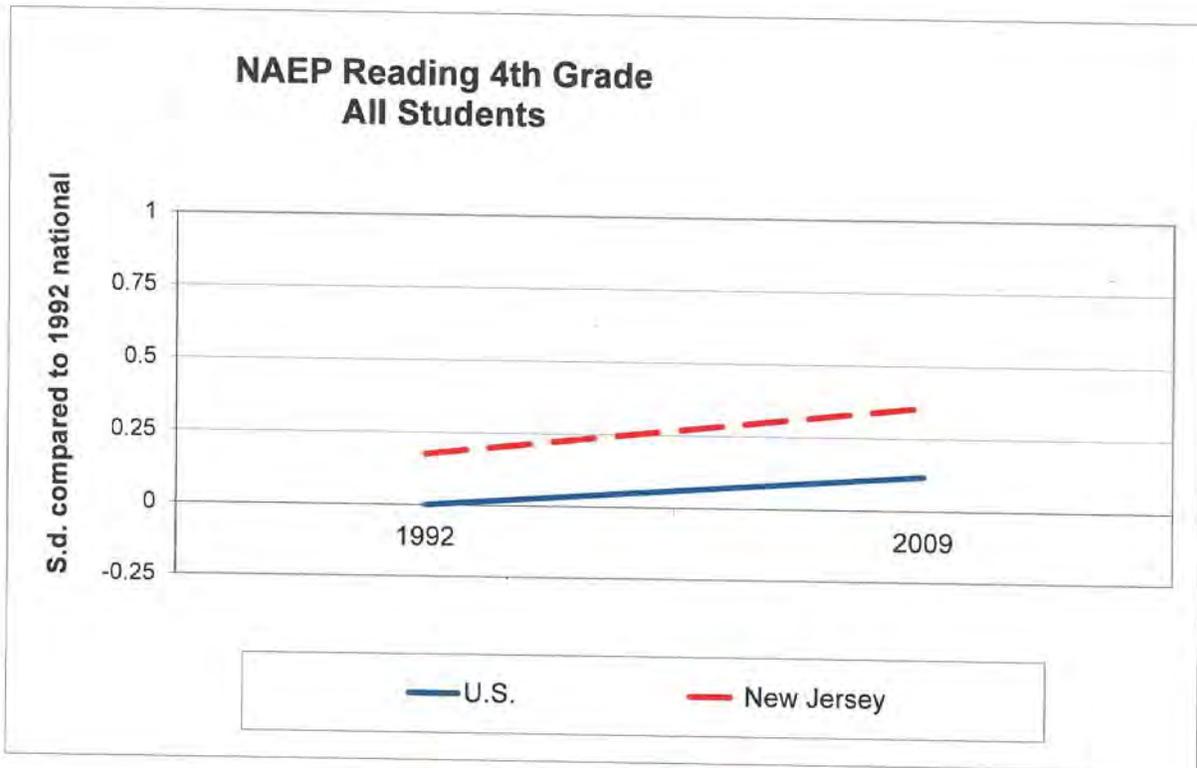
- New Jersey provides longest and clearest evidence about the ineffectiveness of judicial intervention on spending
- New Jersey spending has increased dramatically compared to national spending
- New Jersey performance has not significantly increased compared to national performance

**Current Expenditure per Pupil  
U.S. versus New Jersey  
(Inflation adjusted -- 2009 \$'s)**



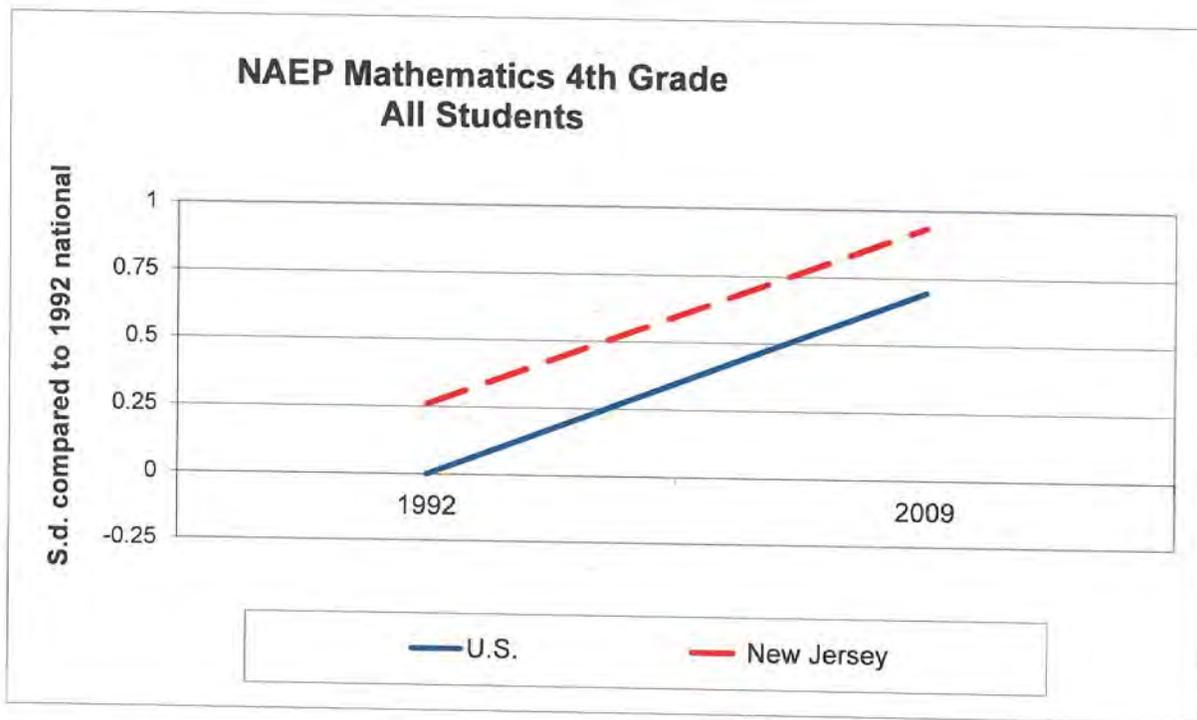
Source: U.S. Department of Education, *Digest of Education Statistics*

Texas Taxpayers vs. Scott et al.

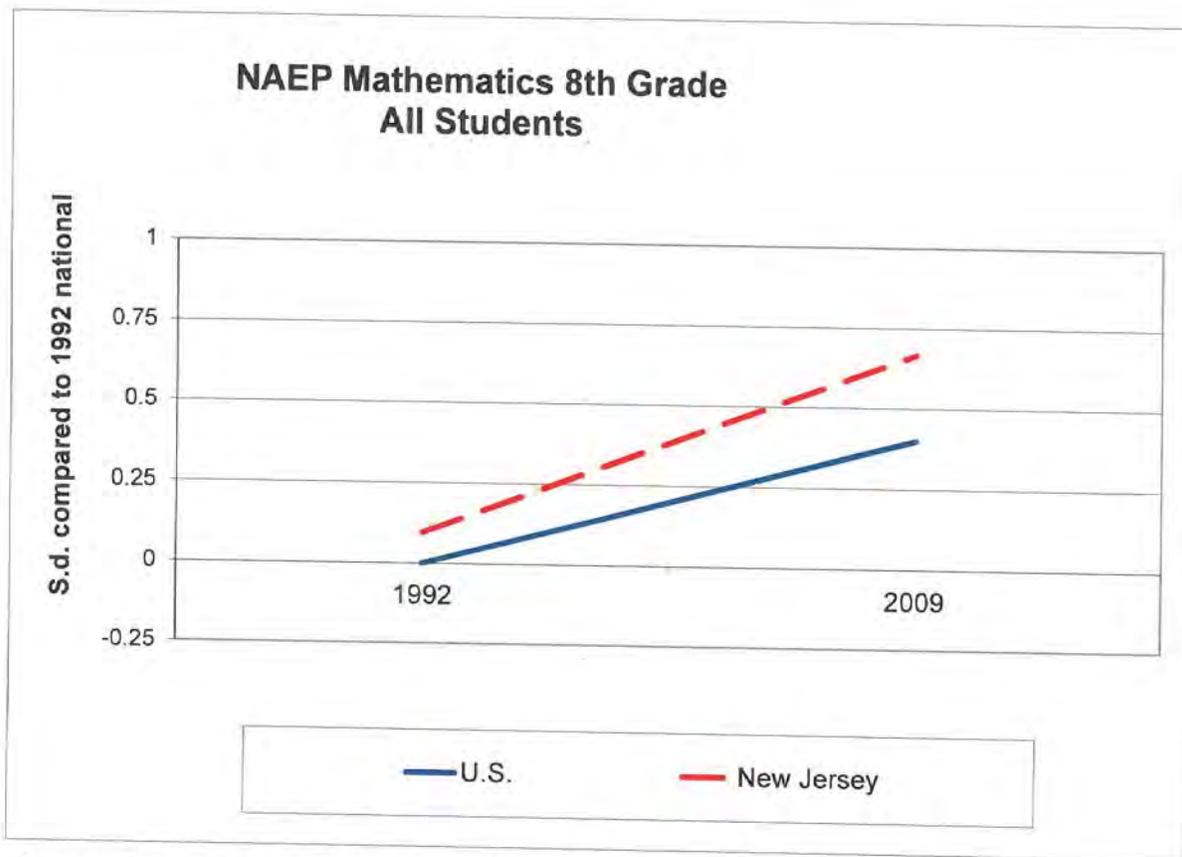


Source: Author update from Hanushek, Eric A., and Alfred A. Lindseth. 2009. *Schoolhouses, courthouses, and statehouses: Solving the funding-achievement puzzle in America's public schools*. Princeton, NJ: Princeton University Press.

Texas Taxpayers vs. Scott et al.

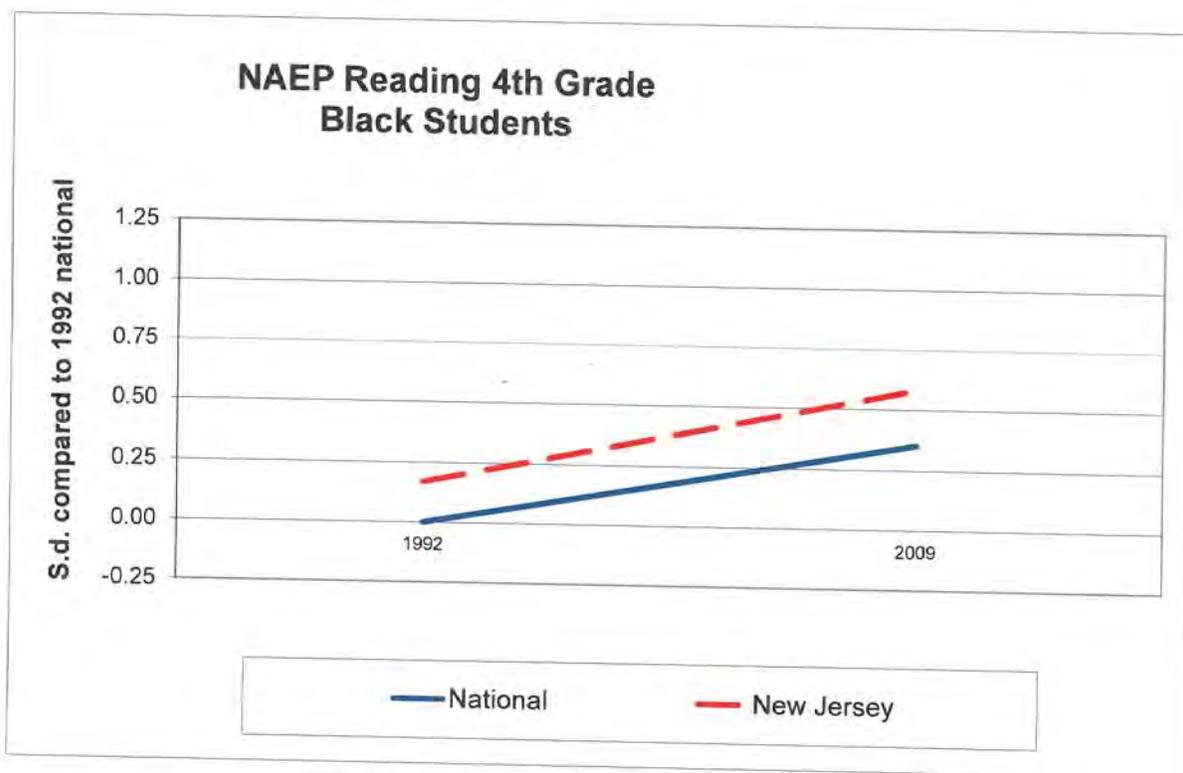


Source: Author update from Hanushek, Eric A., and Alfred A. Lindseth. 2009. *Schoolhouses, courthouses, and statehouses: Solving the funding-achievement puzzle in America's public schools*. Princeton, NJ: Princeton University Press.



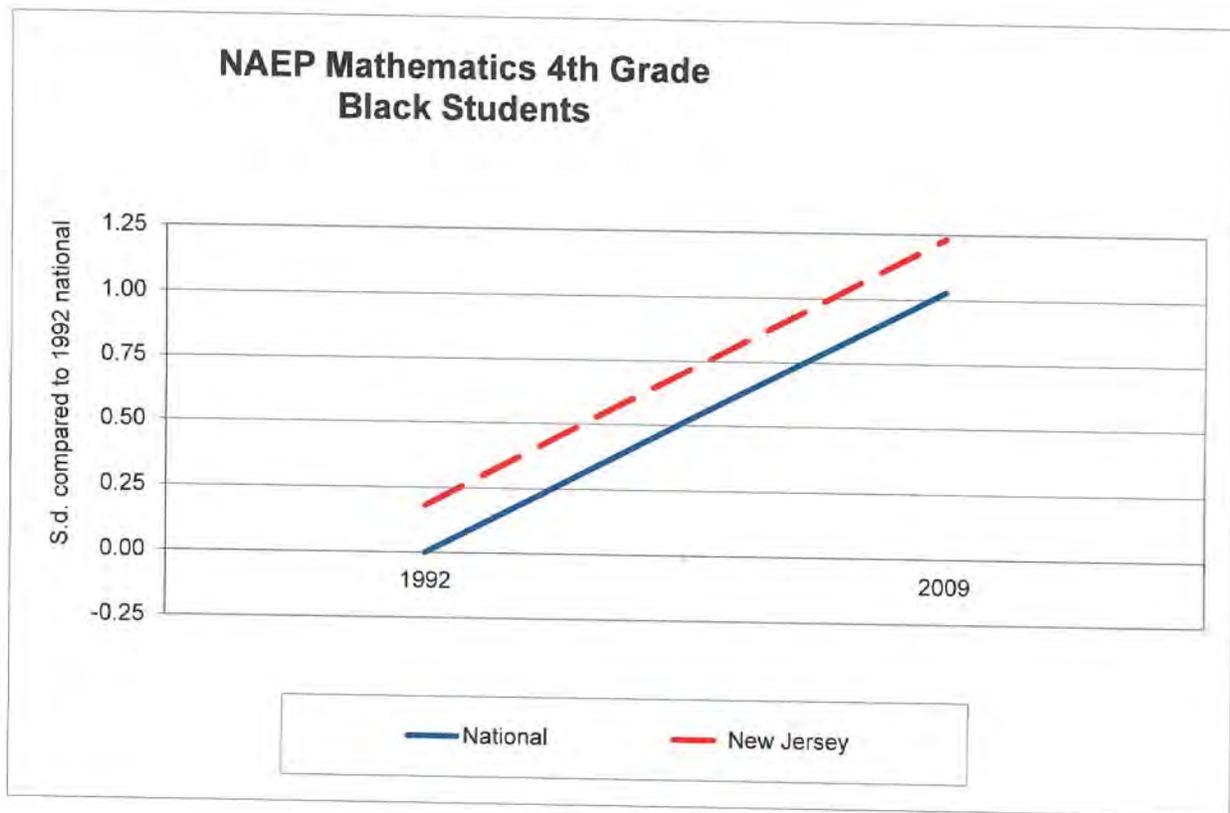
Source: Author update from Hanushek, Eric A., and Alfred A. Lindseth. 2009. *Schoolhouses, courthouses, and statehouses: Solving the funding-achievement puzzle in America's public schools*. Princeton, NJ: Princeton University Press.

Texas Taxpayers vs. Scott et al.



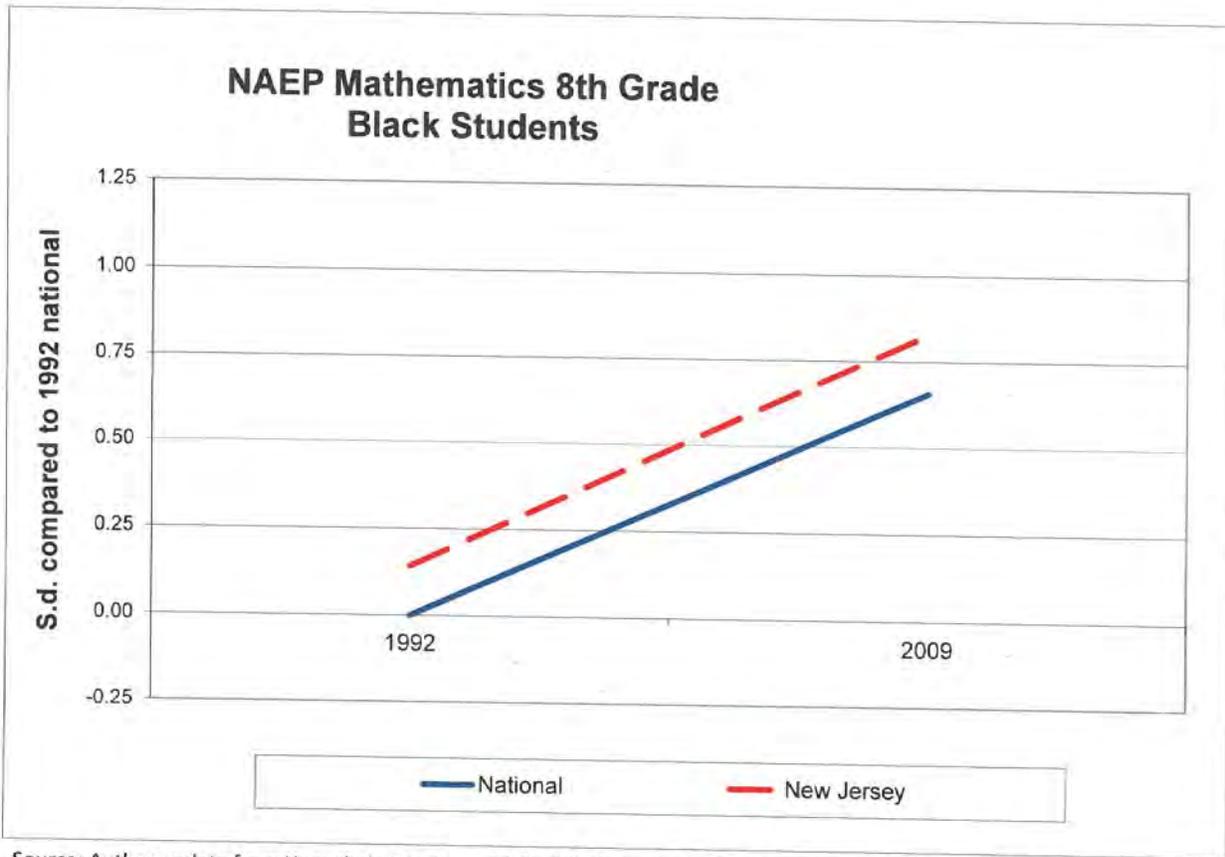
Source: Author update from Hanushek, Eric A., and Alfred A. Lindseth. 2009. *Schoolhouses, courthouses, and statehouses: Solving the funding-achievement puzzle in America's public schools*. Princeton, NJ: Princeton University Press.

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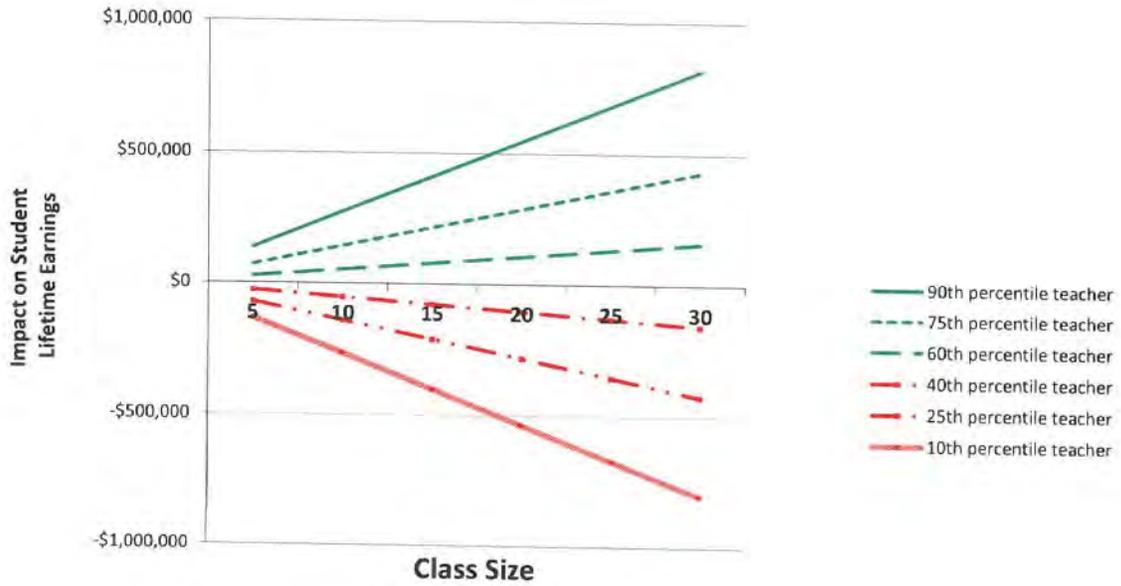


Source: Author update from Hanushek, Eric A., and Alfred A. Lindseth. 2009. *Schoolhouses, courthouses, and statehouses: Solving the funding-achievement puzzle in America's public schools*. Princeton, NJ: Princeton University Press.

# Teacher Effectiveness

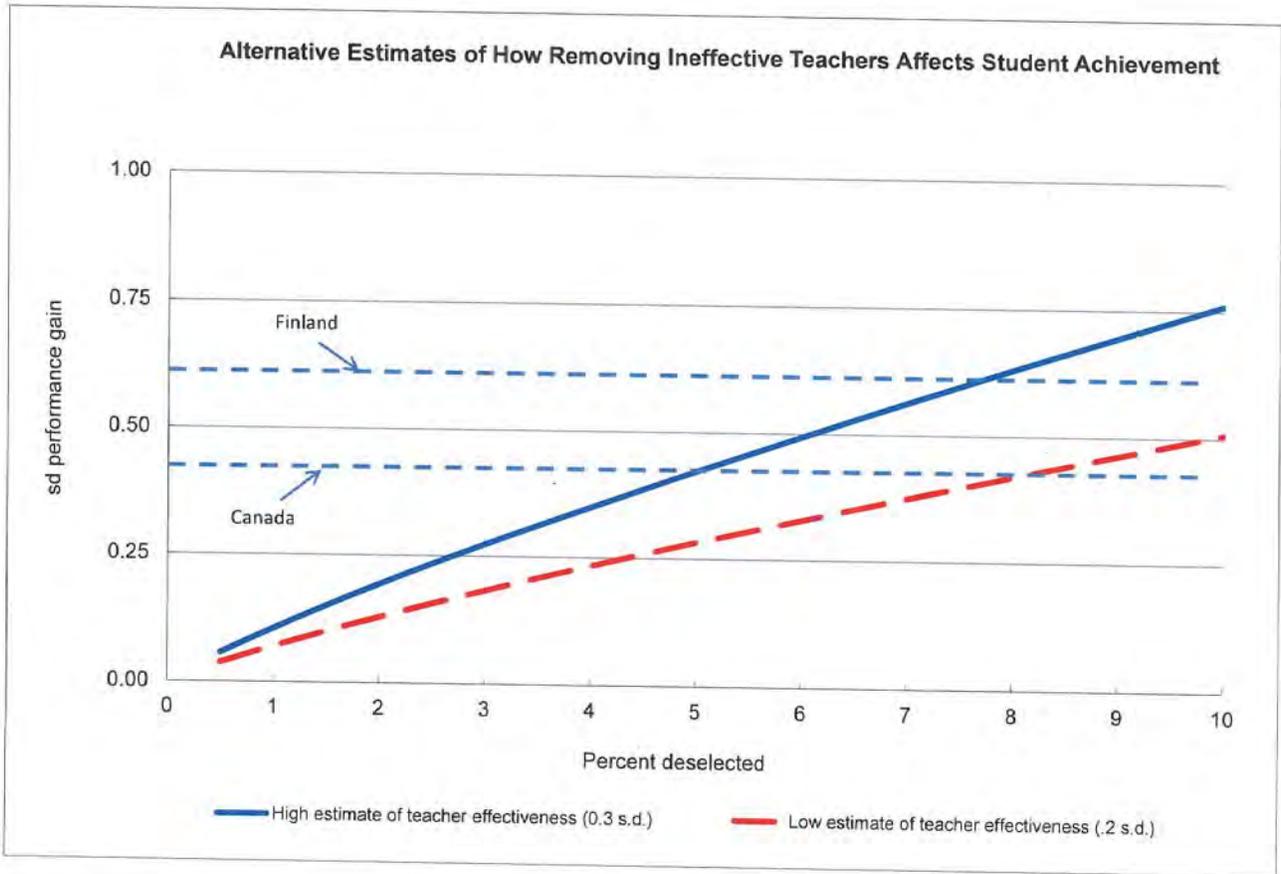
- Research shows that teacher effectiveness is the most important aspect of schools
- Economic value is seen from individual student outcomes and from impact on national growth
  - By class size
  - International

**Impact on Student Lifetime Incomes by Class Size and Teacher Effectiveness  
(compared to average teacher)**



Source: Hanushek, Eric A. 2011. "The Economic Value of Higher Teacher Quality." *Economics of Education Review* 30, no. 3

Texas Taxpayers vs. Scott et al.



Source: Hanushek, Eric A. 2011. "The Economic Value of Higher Teacher Quality." *Economics of Education Review* 30, no. 3  
 Texas Taxpayers vs. Scott et al.

Supplemental Report of Eric A. Hanushek

In the matter of

**THE TEXAS TAXPAYERS & STUDENT FAIRNESS COALITION, *et al.***

**vs.**

**ROBERT SCOTT, et al.**

**Report for the  
Efficiency Intervenors**

September 2012

This supplement to my July 2012 report provides an updated analysis that includes district spending for 2011 and adjustments for cost differences across districts. The 2011 spending reflects data that were not available on the “district snapshot for 2011.” The supplement also explores the impact of adjusting spending according to the comparable wage index for each district.<sup>1</sup> The summary of the new analysis is that all prior conclusions remain intact when these alternate estimates are made.

The original report included an analysis that considered student performance in 2011 and compared that to the level of spending per pupil in 2010. This supplement adds the same analysis but uses the spending data for 2011. Chart 26 represents the relationship between added spending and the district performance on the TAKS test for all districts after adjusting for student backgrounds (% black, % Hispanic, % disadvantaged, % LEP, % special education, and % bilingual) and for number of students. (Charts are numbered consecutively with original report). The important result is that there is an insignificant (negative) marginal effect of more spending on student performance.

Chart 27 restricts the sample to districts spending less than \$15,000 per student and weights the districts by their number of students. These changes leave the conclusion the same (although the negative slope is more pronounced).

Chart 28 considers just districts with more than 2,000 students. Again, marginal spending adjusted for district characteristics is negatively related to TAKS performance.

Charts 29 and 30 look at the performance just of disadvantaged students in the districts. Again, there is no evidence that added spending by the districts leads to greater performance, even after adjusting for the characteristics of the students.

Charts 31 and 32 adjust the spending of each district for the district specific Comparable Wage Index. This adjustment does not change the overall picture. Even after adjusted for potential wage differences, added spending does not lead to improved student performance.

Correction: With this supplemental report, it is also necessary to correct a typographical error in the original report. The bottom of page 5 should read: “A \$10,000 increase in average teacher salaries for a district would be associated with less than a 3 percentage point improvement in the TAKS passing rate.”

## Reference

Taylor, Lori L. 2006. "Comparable wages, inflation and school finance equity."  
*Education Finance and Policy* 1, no. 3 (Summer): 349-371.

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<sup>1</sup> Taylor (2006)

**Supplemental Report Exhibits for**

**THE TEXAS TAXPAYERS & STUDENT FAIRNESS COALITION, *et al.***

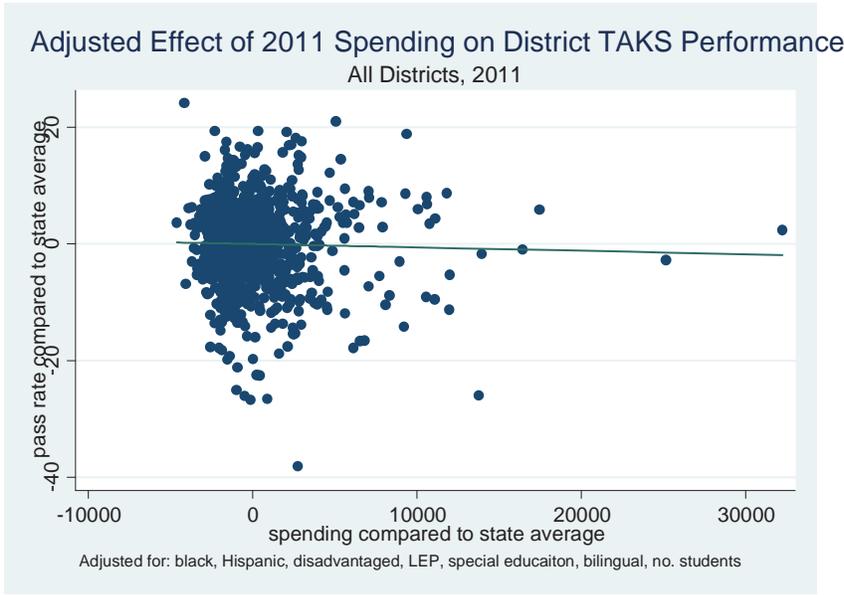
**vs.**

**ROBERT SCOTT, et al.**

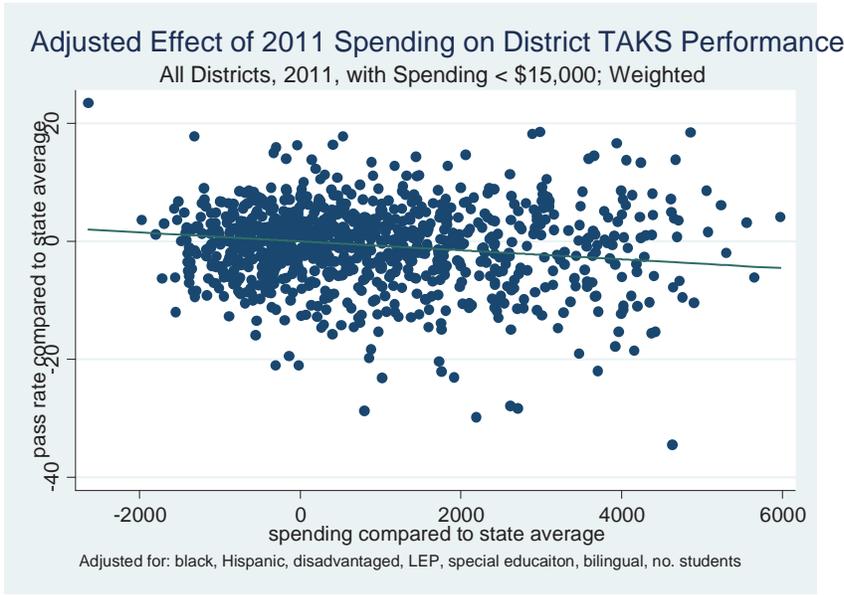
**Report for the Efficiency Interveners**

Eric A. Hanushek

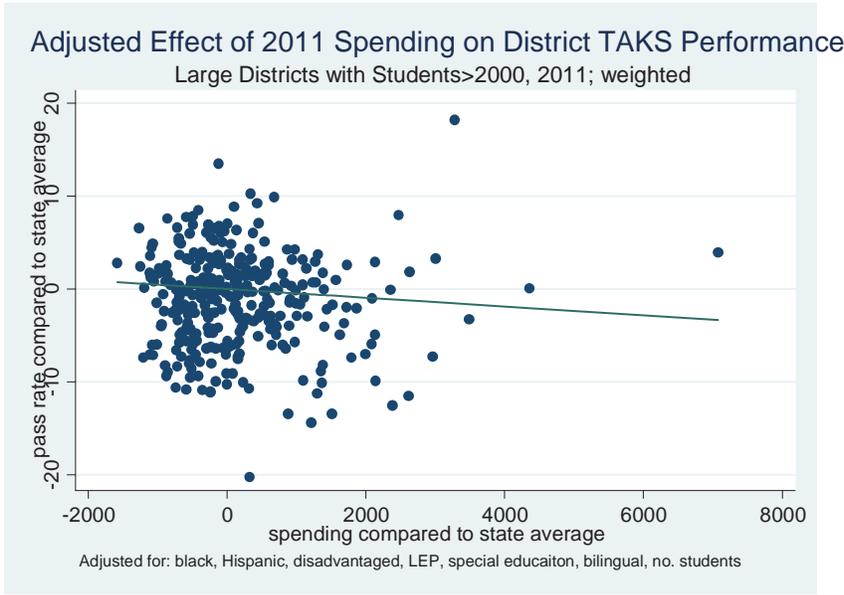
September 2012



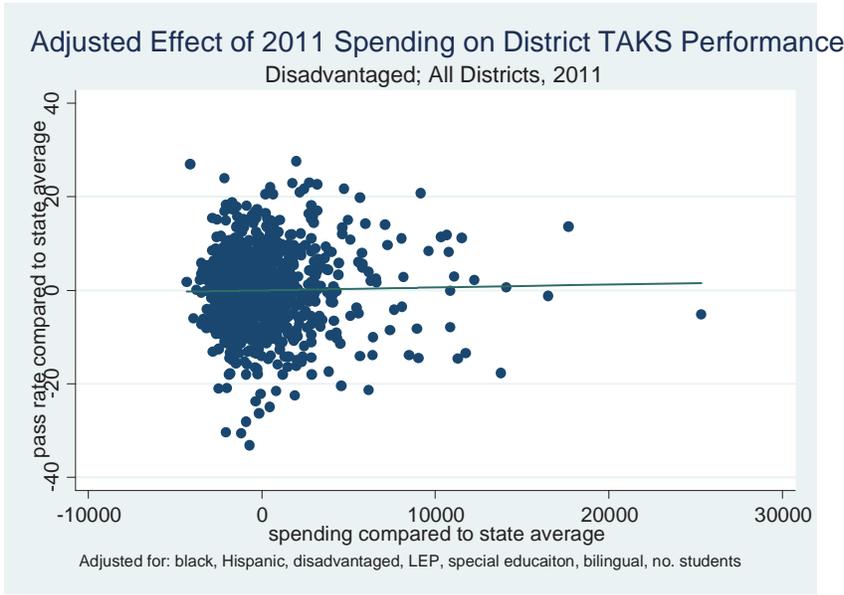
- Source: Author calculations from TEA data.



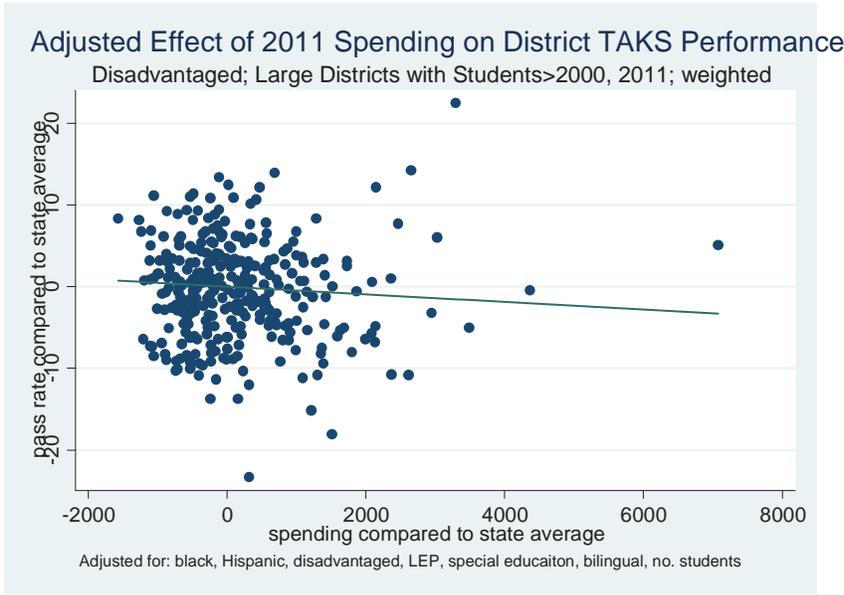
- Source: Author calculations from TEA data.



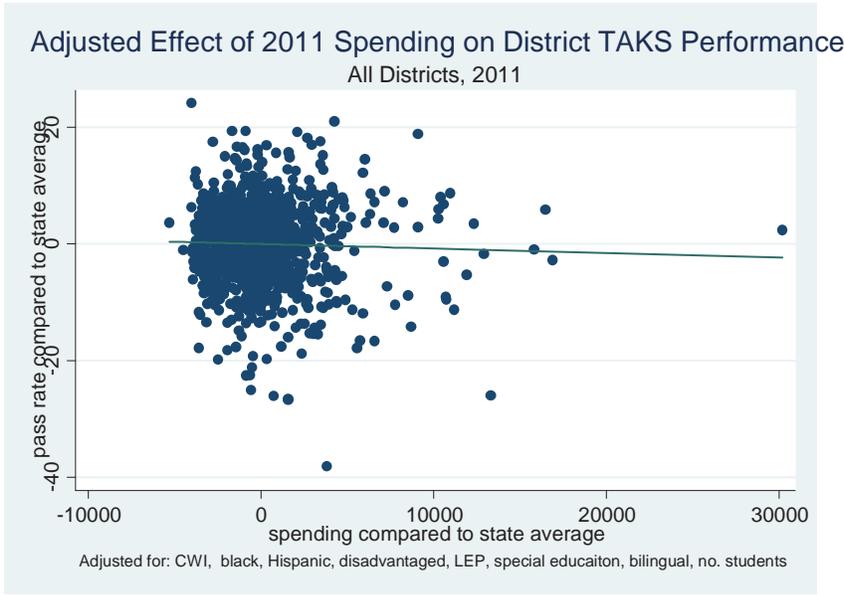
- Source: Author calculations from TEA data.



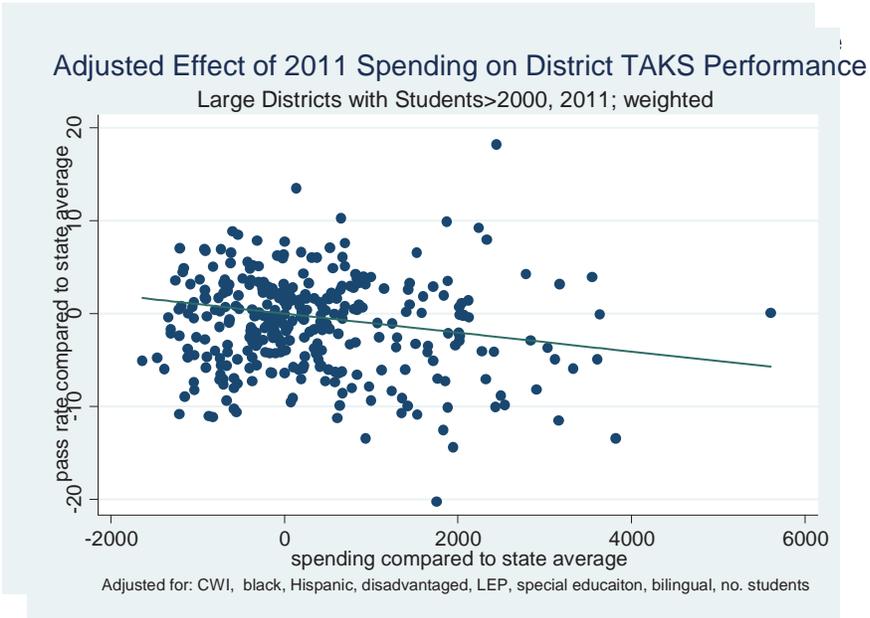
- Source: Author calculations from TEA data.



- Source: Author calculations from TEA data.



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REPORTER'S RECORD  
VOLUME 37  
CAUSE NO. D-1-GN-11-003130

THE TEXAS TAXPAYER & STUDENT ) IN THE DISTRICT COURT  
FAIRNESS COALITION, et al; )  
CALHOUN COUNTY ISD, et al; )  
EDGEWOOD ISD, et al; )  
FORT BEND ISD, et al; TEXAS )  
CHARTER SCHOOL ASSOCIATION, )  
et al; )

Plaintiffs, )

JOYCE COLEMAN, et al., )

Intervenors, )

TRAVIS COUNTY, TEXAS

VS. )

MICHAEL WILLIAMS, COMMISSIONER )  
OF EDUCATION, IN HIS OFFICIAL )  
CAPACITY; SUSAN COMBS, TEXAS )  
COMPTROLLER OF PUBLIC )  
ACCOUNTS, IN HER OFFICIAL )  
CAPACITY; TEXAS STATE BOARD )  
OF EDUCATION, )

Defendants. )

200TH JUDICIAL DISTRICT

\*\*\*\*\*

TRIAL ON THE MERITS

\*\*\*\*\*

On the 16th day of January, 2013, the  
following proceedings came on to be heard in the  
above-entitled and numbered cause before the Honorable  
John K. Dietz, Judge presiding, held in Austin, Travis  
County, Texas:

Proceedings reported by machine shorthand.



1           A.     I graduated with a bachelor of science degree  
2 from the U.S. Air Force Academy and then have a Ph.D. in  
3 economics from MIT.

4           Q.     Currently, now, you serve as a senior fellow at  
5 the Hoover Institution. I also show that you are on the  
6 executive committee for Texas Schools Project at the  
7 University of Dallas; is that correct?

8           A.     That is correct.

9           Q.     And what do you do for the executive committee  
10 for the Texas Schools Project?

11          A.     Well, that is a management position. The Texas  
12 Schools Project has for something over 15 years been  
13 studying performance of schools in Texas using the Texas  
14 data to understand how school policy impacts  
15 achievement. They -- currently on the executive  
16 committee, I'm in charge with others of manage --  
17 ensuring that the operation at the University of Texas  
18 at Dallas runs smoothly and makes data available. The  
19 University of Texas at Dallas is also -- has been  
20 designated as an education research center by the State  
21 of Texas, and part of my management responsibility is  
22 ensuring that we perform under those contracts.

23          Q.     And so that involves the research and  
24 processing of Texas education data?

25          A.     It does.

1 Q. And how long have you been in that position?

2 A. Well, I think I came on as chair of the  
3 executive committee in 2003 after -- unfortunately, the  
4 person who started the whole project, John Kain, died  
5 then. I had been working on the project for a number of  
6 years before that in the early -- in the mid '90s.

7 Q. So you were no stranger to Texas education  
8 data; would that be fair to say?

9 A. That is correct.

10 Q. I also see that you are on the -- coordinator  
11 for the economics of education of the CESifo Research  
12 Network. What is that?

13 A. CESifo. CEF is the Center for Economic  
14 Studies --

15 THE REPORTER: Can you say it for me?  
16 CSI?

17 THE WITNESS: C-E-S-i-f-o, all run  
18 together.

19 A. That's a combination of the Center for Economic  
20 Studies at the University of Munich and the Ifo  
21 Institute, which is a government research institute  
22 that's associated with the university. They have a  
23 network of worldwide researchers on various applied  
24 economics topics ranging from the environment to macro  
25 economics. I was asked by them to coordinate their

1 efforts in the economics of education. And we have an  
2 annual conference of the world's top researchers in  
3 economics of education in Munich from the U.S. and from  
4 Europe and Australia and other places.

5 Q. So your knowledge ranges from expertise on  
6 Texas data, United States data and international data,  
7 correct?

8 A. That is correct.

9 Q. I want to talk about some of the governmental  
10 boards and committees you serve on. You are on the  
11 congressionally-mandated Equity and Excellence  
12 Commission of the U.S. Department of Education. Are you  
13 currently serving there?

14 A. I am currently serving there. The report of  
15 that commission will be out in the next two weeks, but  
16 it's a large commission that has been trying to deal  
17 with finance and equity issues in education.

18 Q. And who appointed you to that position?

19 A. Secretary Duncan of the U.S. Department.

20 Q. You're on the National Board for Education  
21 Sciences?

22 A. I am no longer on there. I had served my eight  
23 years, I believe it was, the term, and was chair in the  
24 end, but it's -- there's only a two-term limit on the  
25 National Board for Education Sciences.

1 Q. And who appointed you to that position?

2 A. That's a presidential appointment, and I was  
3 appointed by President Bush and confirmed by the Senate  
4 for that.

5 Q. Skipping down, and there's more of this that's  
6 in your report for the Court's review. I'm hitting some  
7 of the highlights. You're also on the Governor's  
8 Commission on a College Ready Texas in the state of  
9 Texas?

10 A. That's again a commission that's gone out of  
11 existence, but in the past I had served on the Texas  
12 commission.

13 Q. And who was that appointment made by?

14 A. Governor Perry.

15 Q. You're currently associated with Stanford  
16 University as well?

17 A. Yes.

18 Q. The Hoover Institution. And how long have you  
19 been there?

20 A. I've been there since 2000.

21 Q. In your report you say that you have looked at  
22 efficiency and resource usage as well as teacher  
23 quality. Have those issues been things that you've  
24 researched for many, many years?

25 A. Yes.

1 Q. Briefly, you've written a number of books, the  
2 most recent of which is *Schoolhouses, Courthouses and*  
3 *Statehouses: Solving the Funding-Achievement Puzzle in*  
4 *America's Public Schools* in 2009; is that correct?

5 A. That's correct.

6 Q. It's going to deal with some of the issues that  
7 we talk about today, correct?

8 A. Absolutely.

9 Q. And another issue I want to bring up, you said  
10 that you are an economist by trade, but in 1977 I show  
11 that you had actually written a book called *Statistical*  
12 *Methods for Social Scientists*. What is that?

13 A. Well, one branch of economics involves  
14 statistics and empirical work. That's called  
15 econometrics in economics. I wrote a textbook for  
16 basically economists, political scientists, sociologists  
17 on how to use statistics effectively to answer social  
18 policy questions or the questions that came up in those  
19 disciplines.

20 Q. So I can colloquially say that you've written a  
21 textbook on econometrics?

22 A. Yes, but that was in the past. I keep working  
23 on it, but I have not updated that textbook.

24 Q. In your report that you've given us and  
25 attached to it -- which is now an exhibit before the

1 Court, you have a list of publications that we're not  
2 going to go through, but would it be fair to say that  
3 all of your publications have been on the issues of  
4 education and education policy?

5 A. No. I've actually worked on some other issues,  
6 but that's the vast majority, is on education and  
7 education policy.

8 Q. You also serve on the editorial board of a  
9 number of scholarly journals and publications, correct?

10 A. Yes.

11 Q. And in that, you will be -- you review other  
12 people's works, basically peer review those?

13 A. I both peer review them myself and assign peer  
14 reviewers to look over articles.

15 Q. And lastly, you also testify on a variety of  
16 policy issues before state legislatures and the U.S.  
17 Congress?

18 A. Yes.

19 Q. You've been an expert witness on matters of  
20 education policy and finance in over 24 cases?

21 A. I believe that's true.

22 Q. Let's move on to your opinions in this case,  
23 and I'm going to go ahead and pull up your report. You  
24 start off with the conclusions and basis of your  
25 opinion. How would you tell the Court or describe for

1 the Court the conclusions that you've reached, and we'll  
2 talk about those specifically?

3 A. The overview of my opinion is actually quite  
4 simple. I spent a lot of time looking at how resource  
5 use in school translates into achievement in  
6 performance, a topic that economists would call  
7 efficiency of schools. And the answer is after four  
8 decades of study by me and others in the field, we don't  
9 find a very consistent relationship between the  
10 resources provided to schools and their performance. So  
11 that implies in simplest terms that there's a lot of  
12 inefficiency in schools and that if resources were used  
13 better, we could expect higher achievement from our  
14 schools and our students.

15 Q. And those opinions are based on your study of  
16 finance systems across the United States, correct?

17 A. That's true.

18 Q. And also on well over a decade worth of work of  
19 Texas data?

20 A. Both, yes, Texas data and international data.  
21 You find the same -- if we look across and try to  
22 explain why Finland does better than the U.S., you find  
23 the same thing.

24 Q. And that's something that you've studied,  
25 correct?

1 A. Yes.

2 Q. Now, we'll go ahead and hit this off from the  
3 beginning. How many times have you heard it stated that  
4 Dr. Hanushek says money doesn't matter?

5 A. I've lost track of the number of times of that.  
6 That's a common statement.

7 Q. And is that statement true or untrue?

8 A. Oh, it's absolutely not true. That's not at  
9 all what my opinion is. It's not that money can't  
10 matter or it never matters. It's that when we look at  
11 current spending patterns, we can't expect it to matter  
12 if we don't do anything else but add money to a school  
13 system.

14 Q. Here in this report -- I'm just going to  
15 highlight it here. "It is clear to all that how money  
16 is spent is much more important than how much is spent."

17 A. That's true. I think that that's actually the  
18 majority opinion of researchers in the area now, that  
19 you have to worry about how it's spent along with how  
20 much is spent at any point in time.

21 Q. And as a side note of that, are you going to  
22 offer any opinions today regarding the current adequacy  
23 of funding in the Texas school system?

24 A. I am not.

25 Q. And so as the efficiency intervenors have said

1 in their pleading, more money may or may not be  
2 necessary; we're looking at efficiency issues. That's  
3 also your opinion as well?

4 A. That is precisely what I'm testifying to today.

5 Q. I'll tell you what, then. Let's get right into  
6 it. The first thing we're going to do that you've done  
7 in your report is you have looked at resources and  
8 outcomes in the U.S., and we're going to briefly cover  
9 this because you believe it relates to the Texas picture  
10 as well, correct?

11 A. Absolutely.

12 Q. Okay. So we are going to skip down to chart  
13 No. 1. And if you could, explain for the Court chart  
14 No. 1.

15 A. Chart No. 1 summarizes the resource patterns  
16 for the entire U.S. -- for public schools in the U.S.  
17 over the last half century from 1960 until 2009. What  
18 we see is that there's been a remarkable addition of  
19 resources to our schools. The -- I've lost chart 1.

20 Q. Sorry about that. This popped up here. There  
21 we go.

22 A. What I've looked at is major categories of  
23 spending that actually align well with the policy  
24 discussions in many places. The pupil-teacher ratio and  
25 class size has been hotly debated in the U.S. In 1960

1 there was a pupil-teacher ratio of 25.8. By 2009 it had  
2 fallen to 15 or slightly above 15 pupils per teacher.

3 The teachers with a master's degree went  
4 from less than a quarter of the teachers having a  
5 master's degree until in 2000 over half. We don't have  
6 the numbers for 2009 because of the data source to get a  
7 consistent picture, but from other data sources, we know  
8 that it has not fallen below a half with master's  
9 degrees.

10 Similarly, we have the most experienced  
11 teacher force today that we've had at least in the post  
12 World War II era, going from the median years of teacher  
13 experience of 11 in 1960 to 14 in 2000, and again, that  
14 has not dropped in 2009.

15 Now, the importance of these three items  
16 is that they essentially determine how much is spent on  
17 schools. The teachers are paid according to whether  
18 they have master's degrees and their amount of  
19 experience, so salaries are related to experience and  
20 degree level. And then the pupil-teacher ratio simply  
21 says how many kids can you spread the salary across at  
22 any point in time. So the bottom line is the most  
23 telling. In 1960, in 2009 dollars, so taking out  
24 inflation here, in 2000 -- in 1960, we were spending  
25 \$2,560 per student. In 2009, we're spending over four

1 times that amount. We're spending \$10,591. This is the  
2 national average for the U.S. of spending in 2009. So  
3 we've dramatically increased resources in precisely the  
4 way that many experts in education call for, smaller  
5 classes, more experience, more better-trained teachers.

6 Q. So what you're doing is showing that since  
7 1960, as these things that they have called for have  
8 been increased according to policy, that it has not  
9 played out in how it's played out with dollars?

10 A. This is the dollar statement of all of our  
11 efforts to in fact improve our schools, which has been a  
12 national effort for a long period of time.

13 Q. And how has that played out with achievement?

14 A. Well, unfortunately, we haven't gotten much for  
15 it, at least as far as we can tell from standardized  
16 tests. The next two charts actually give the pattern  
17 of -- this is from the National Assessment of  
18 Educational Progress or NAEP.

19 Q. Right. Let me take a ...

20 We're looking at your report, which is  
21 Exhibit 1001. I just wanted to state that for the  
22 record. We just looked at chart 1 in Exhibit 1001. We  
23 are now going to chart 2 in Exhibit 1001, your main  
24 report. What does this show?

25 A. The National Assessment of Educational Progress

1 has tracked the performance of students on a consistent  
2 basis since the late '70s -- or late '60s, early '70s.  
3 What I've done is traced out the pattern of performance  
4 of a representative sample of U.S. students -- of  
5 17-year-old U.S. students in both reading and math. The  
6 blue line with triangles on it gives reading scores, and  
7 the red line with squares on it gives the math scores.

8           What you see is that there's a minuscule  
9 improvement if I compare the 2009 -- or 2008 performance  
10 of 17-year-olds with the first performance we have on  
11 them, so that while we've quadrupled resources for  
12 schools that's shown on the last slide, we've gotten no  
13 achievement gains. There's been little movements up and  
14 down of both performance over time, but it hasn't  
15 amounted to anything that -- of substance.

16       Q.    So this slide is important in context with  
17 Slide No. 1?

18       A.    That is absolutely true. This is showing what  
19 did we get from putting more resources into our system  
20 as run today.

21       Q.    Now, we have heard some testimony in this case  
22 about the fact that 9th grade scores are showing a  
23 spike, showing an improvement. Why is that not really  
24 important for what we're talking about today?

25       A.    Well, we saw -- it's actually both

1 13-year-olds, which are roughly 8th graders, and nine --  
2 or eight-year-olds that we have the similar scores on.  
3 And the earliest scores showed some improvement during  
4 the '80s. That's sort of leveled out now. The  
5 9th grade -- the 8th grade scores for 13-year-olds also  
6 showed some improvement, less than for the young people,  
7 and it's leveled out. But none of those have translated  
8 into performance at the end of schooling when students  
9 are going into college or going into the labor market,  
10 which is presumably the achievement we care about for  
11 economic purposes. And so we have not translated any of  
12 these gains that we've seen earlier in earlier periods  
13 into performance for people who are graduating.

14 Q. When it really matters.

15 A. When it matters.

16 Q. Slide No. 3 in Exhibit 1001, what is that  
17 showing us?

18 A. This is actually just a transformation. It's  
19 the same slide as the previous one, but I've put  
20 everything compared to zero in the score in the earliest  
21 observation, and you can see that -- and this changes  
22 the units, the standard deviations that some people use  
23 in order to show how it's moved the whole distribution.  
24 And what you see is that the triangles for the reading  
25 scores are -- I think it's .1 -- .01 standard deviation

1 above starting point, which is nothing by -- for any  
2 practical purposes. And there's slightly larger impact  
3 on math scores, but it's not of the order of magnitude  
4 that matters for the economy or for these students.

5 Q. In other words, compared to Slide 1, how much  
6 bang for our buck did we get for that slight improvement  
7 in math and basically no improvement in reading?

8 A. Well, we get something that rounds to zero,  
9 that we put in a lot of resources and we didn't see the  
10 gains, at least in terms of math and reading  
11 performance.

12 Q. Slide No. 4, can you describe for the Court  
13 what Slide No. 4 is?

14 A. Slide No. 4 is a little bit complicated, but  
15 it's here because the aggregate evidence that I gave  
16 before is subject to some criticism. There are other  
17 things that might have been going on in the world, in  
18 society. Parents might have gotten poorer, spend less  
19 time with their kids. We have more single parent  
20 families and so forth.

21 What's behind all of this evidence,  
22 though, is a large amount, literally hundreds of  
23 estimates at a better -- with better statistical  
24 estimates of the impacts of the factors of experience,  
25 class size and teacher degree levels. So the things

1 that I showed you on the first slide have been looked at  
2 at the classroom level across different schools, across  
3 the nation. And as I say, there have been literally  
4 hundreds of them.

5           This slide says let's just take the very  
6 best evidence in terms of the scientific background and  
7 detail that went into these estimates and let's look at  
8 just the very best studies so it's not any confusion  
9 about how the study was done, and let's look at the  
10 impacts of these primary resources on student  
11 achievement.

12           Now --

13       Q.    Let me ask you real quick, just to kind of make  
14 sure that this is clear on the record. What you did as  
15 an economist and as a statistician is go back and look  
16 at the past decades of work on these three issues off to  
17 the right-hand side of chart No. 4, and you looked at  
18 those with an eye toward the statistical quality and the  
19 educational policy quality and came up with a factor of  
20 basically compiling or aggregating all of these works  
21 together?

22       A.    Precisely. This is what's commonly called  
23 today meta-analysis where you in fact find all of the,  
24 in this case, published estimates that come from  
25 published documents to give some overall quality, all of

1 the published estimates. This is a very refined subset  
2 of those that looks at the performance of individual  
3 students over time in individual classrooms and relates  
4 them to the inputs that we saw in that first slide that  
5 we've been buying.

6 Q. Now, these are the best of the best. You also  
7 looked at all of them. Were the results all much  
8 different than this?

9 A. No, no. The results from the hundreds of  
10 studies behind this are precisely the same. They give  
11 you exactly the same pattern.

12 Q. And this chart -- and we're going to get in and  
13 talk about it in just a second here. The source of it  
14 is an article you wrote in 2003 called "The Failure of  
15 Input-Based Schooling Policies" in Volume 485 of the  
16 *Economic Journal*?

17 A. That is correct.

18 Q. And was that a peer-reviewed article?

19 A. Yes.

20 Q. And is that a reliable article?

21 A. Yes.

22 Q. Let's go ahead and talk about now what this  
23 shows.

24 A. Well, what I've done is put the results of  
25 these individual studies for the impacts of

1 teacher-pupil ratio, teacher education, teacher  
2 experience, into three categories. One category are  
3 estimated positive impacts, which is what the  
4 conventional wisdom says we should get. If we have more  
5 teachers per pupil, we should get higher achievement.  
6 If we have more experience, we should get higher  
7 achievement. If we have more educated teachers, we  
8 should get higher achievement. So the left-hand column  
9 are positive and statistically significant, ones that we  
10 have a lot of confidence that they really are positive  
11 and we're not being confused by the statistics.

12           The center column are all the  
13 insignificant -- statistically insignificant results,  
14 which are ones that we don't have much confidence about  
15 whether they're positive or negative.

16           And then the final right-hand column are  
17 ones that estimate negative and statistically  
18 significant effects, which by the statistics say we have  
19 a lot of confidence that you actually are worse off by  
20 adding these resources.

21       Q.   Well, let me ask this real quickly. So, for  
22 instance, with the green stripes on teacher experience,  
23 the positive would mean that those statistical studies  
24 found a positive relationship between teacher experience  
25 and what? Achievement?

1 A. Yes.

2 Q. And then the middle one, the green stripes were  
3 all the studies that found an insignificant relationship  
4 between teacher experience and achievement?

5 A. That's correct.

6 Q. And then the far right-hand side, negative,  
7 would be the studies that found a negative relationship  
8 between teacher experience and achievement?

9 A. That's correct.

10 Q. Okay.

11 A. And so the -- there are three -- three things  
12 that I'm summarizing in each of those categories. If  
13 you look in the left-hand column, you see that there is  
14 nothing for teacher education. None of the best studies  
15 find a significant positive impact of having a master's  
16 degree for teachers.

17 Q. Now, this isn't saying that we want uneducated  
18 teachers, is it?

19 A. No, it's not, but it says --

20 Q. What is it --

21 A. It says if you walk into your school where your  
22 child has a new teacher and the principal proudly  
23 announces "And your teacher has a master's degree," you  
24 should take no information from that. That gives you no  
25 information about whether this is a particularly

1 effective teacher or not.

2 Q. Okay.

3 A. You find a small number of studies, less than  
4 5 percent, that show that pupil-teacher ratios or  
5 class -- the opposite of class size has a positive  
6 impact on achievement. And you find slightly more that  
7 find that teacher experience has a positive effect, a  
8 little under 40 percent of the studies.

9 Q. Well, let's talk about that issue of teacher  
10 experience. So we have this -- 40 percent are showing a  
11 positive relationship. Why don't we focus more on  
12 teacher experience?

13 A. Well, since this work has been done, we've  
14 figured out exactly what's going on. There have been  
15 subsequent very detailed studies that show that there  
16 are gains in teacher experience in the first year or  
17 two, or maybe three years, but that after that, you get  
18 no gain for more experience, so that almost all studies  
19 say that a fifth year teacher is just as likely to be  
20 effective as a 25th year teacher. But the difference is  
21 that we pay a lot more for the 25th year teacher than we  
22 do for the fifth year teacher, and so that's what leads  
23 to the efficiency issues.

24 THE COURT: May we ask you not to study  
25 lawyers?

1 MR. DIAMOND: My thoughts exactly.

2 Q. (BY MR. DIAMOND) Now, the studies that you're  
3 talking about that show this fifth year teacher and  
4 20-year teacher, are those just your studies or are  
5 there other studies out there?

6 A. No, I think there are a large number of  
7 studies, including one by Professor Vigdor, who  
8 testified here before. Charles Clotfelter, Helen Ladd  
9 and Jacob Vigdor wrote a recent article that finds  
10 precisely that.

11 Q. And when was that article written?

12 A. I believe it was published in 2010. It was  
13 written a few years before that, but it uses North  
14 Carolina data to show that for high school students  
15 there doesn't appear to be any experience effect after  
16 the fifth year.

17 Q. And so that article, the 2010 article that  
18 included Dr. Vigdor, found that there was -- the  
19 difference between a fifth year teacher and a 20-year  
20 teacher was basically nil?

21 A. Yes.

22 Q. Anything else you need to say about this slide?

23 A. Well, the real story of this slide is the  
24 center column where most of the studies in this grouping  
25 of the best studies find no effect of any of those,

1 which says -- it doesn't say that experience never pays  
2 off or that education never pays off; it says it doesn't  
3 consistently pay off and that the way we hire teachers  
4 today does not ensure that teachers who get more  
5 education are actually doing better in the classroom.

6 Q. And again, just so I can put kind of a road  
7 sign in here, these three topics, teacher-pupil ratio,  
8 teacher education and teacher experience, all relate  
9 back to chart No. 1, which shows the increasing  
10 expenditures but no increasing achievement?

11 A. Exactly. These are essentially the drivers of  
12 cost per pupil in our school system, and they're the  
13 areas where we've devoted a lot of policy attention,  
14 where legislatures have put more money in to ensure that  
15 teachers have more education.

16 Q. Are you saying that class size doesn't matter?

17 A. I'm saying that it doesn't consistently matter.  
18 It may in some cases. For some students, for some  
19 teachers, for some subjects, it may pay to have smaller  
20 classes. But then again, for other students and  
21 teachers and classes, it doesn't matter. And so the  
22 idea of reducing all class sizes is not good management  
23 because you don't get the results, the gains in terms of  
24 achievement.

25 Q. So you're not against -- for instance, what the

1 Edgewood districts would talk about would be that  
2 disadvantaged kids operate -- or learn better in a small  
3 class environment. You're not saying that's unwise?

4 A. I'm not saying that. I'm saying that each  
5 district should evaluate whether they in fact get the  
6 gains they want, because class size reductions are very,  
7 very expensive. But in certain circumstances, lower  
8 class sizes may be a very effective tool, but in other  
9 circumstances it isn't, and you shouldn't have small  
10 classes in cases where it doesn't matter.

11 Q. Let's switch now to Slide No. 5. What does  
12 that show?

13 A. A considerable amount of attention in terms of  
14 class sizes going to something called Project STAR,  
15 which was an experiment in Tennessee in the mid 1980s.  
16 It's gotten a lot of attention because it randomly  
17 assigned students to classes of different sizes, so  
18 randomly assigned some students to small classes which  
19 they had as 14 to 16 students, randomly assigned some  
20 students to large classes, which were -- I think was 23  
21 to 25 students, and randomly assigned another group to  
22 large classes, 23 to 25, but provided a teacher aide to  
23 them. It then followed these students in those small  
24 classes or large classes from kindergarten through  
25 Grade 3 and measured the performance at the end of the

1 term. It's gotten the attention that it has because  
2 random assignment is generally viewed as one of the most  
3 reliable ways to understand the impact of something. So  
4 that's why we use it in drug -- drug treatments when we  
5 test new drugs. We randomly assign drugs to different  
6 patients to try to understand the impact of new drugs or  
7 in this case the impact of smaller classes.

8 Q. And what was found?

9 A. Well, I should preface this by saying that it  
10 wasn't a very good experiment. There are different  
11 qualities of experiment, and just saying it's random  
12 assignment isn't enough. But if we forget about the  
13 problems with the experiment per se, what it found was  
14 that at the end of kindergarten, there was a small  
15 difference between those in small classes and those in  
16 larger classes. There was no impact, by the way, of  
17 classroom aides so that after the first year they just  
18 eliminated that as a separate category and looked at  
19 large versus small.

20 Q. And let me just clarify something on the chart  
21 as we go through it. For instance, on the bottom axis,  
22 it says K. That would represent the achievement at the  
23 end of kindergarten or is that at the beginning?

24 A. That's at the end of kindergarten. So what I  
25 plotted out here are scores at the end of kindergarten,

1 1st, 2nd and 3rd grade, which was the course of the  
2 experiment. And on the vertical axis is the SAT, the  
3 Stanford Achievement Test. And this is a reading test.  
4 You get the same answer for a math test.

5           And the way to look at this is that the  
6 bottom line, the red line with triangles in it, shows  
7 the performance over time of students in the large  
8 classes. The green line, which is above that, shows the  
9 performance of the students that were in the small  
10 classes. And what you see is that they in the small  
11 classes started out with higher achievement in  
12 kindergarten. This got slightly larger in 1st grade and  
13 then narrowed again in 2nd and 3rd grade.

14           Now, the reason why there's a third line  
15 on this is a line that I added myself, which is what you  
16 would expect if in fact class size had a consistent  
17 impact on performance. Remember that the students had  
18 small classes in four different grades, kindergarten,  
19 1st grade, 2nd grade and 3rd grade. And when they did  
20 that, they should have gotten the benefits of small  
21 classes in 2nd and 3rd grade, too. So you would expect  
22 that these lines, instead of being parallel, as the  
23 green and red lines are, you would expect them to  
24 diverge, because throughout the entire four-grade  
25 period, the students in the small classes are getting

1 more resources, more individualized attention, more  
2 teacher knowing where each student is and so forth, all  
3 of the things we expect to get from small class sizes.  
4 They don't diverge. The blue line says here's what you  
5 should have gotten if the gains in kindergarten were  
6 found again in 1st grade, 2nd grade and 3rd grade and  
7 they accumulated.

8 Q. But they did not accumulate?

9 A. They did not. They did not. So at best, it  
10 says that there's a small gain in kindergarten and maybe  
11 1st grade and no impact of class size in 2nd and 3rd  
12 grade.

13 Q. So on -- and this concludes -- this is the last  
14 slide on the national picture. So we have this picture  
15 where this is kind of a side note showing a fairly  
16 prominent test on class size, correct?

17 A. That is correct.

18 Q. And the red and the green line are the actual  
19 findings of the STAR test, correct?

20 A. That is true.

21 Q. Okay. And then the blue line is something you  
22 put in as what should have been expected if you were to  
23 accumulate those scores but did not actually come out in  
24 the test itself?

25 A. And if class size had an impact in the

1 subsequent grades.

2 Q. And just so it's clear, even though you have  
3 issues with the STAR test, this is assuming that it's a  
4 good test, right?

5 A. That is correct. It's not the STAR test; it's  
6 the entire experimental methodology, and it wasn't a  
7 good experiment in the sense of the way it was designed  
8 and monitored.

9 Q. So why is it important that you present this  
10 national picture before we go to Texas?

11 A. We have 40 plus years of people studying the  
12 same issues across the entire nation, across different  
13 school systems, and so from the national picture, we get  
14 a much broader sense of the impacts of resources and  
15 specific resources on performance than we can get if we  
16 look at just the Texas experiment -- experience, because  
17 the evaluations in Texas have been more limited than  
18 they have been nationally. But the reason for showing  
19 the national picture is that we will see the impacts  
20 that we estimate for Texas are very similar to those  
21 that we've gotten from the national picture, and so I  
22 want to show that there's nothing unusual about Texas  
23 compared to this national picture and that the national  
24 judgment about the ineffectiveness of just putting more  
25 resources in seems to hold in Texas.

1 Q. And particularly, to aim those resources at  
2 certain policies that have not really played out?

3 A. That is true.

4 Q. To close this out, I want to bring up a concept  
5 with this national picture as we go into Texas that in  
6 the most recent Texas Supreme Court opinion in *West*  
7 *Orange-Cove*, the Supreme Court said money is not the  
8 only issue. Does this support that conclusion?

9 A. Absolutely. This comes back to the story that  
10 how resources are used is at least if not much more  
11 important than how much there -- how many resources  
12 there are available.

13 Q. And you talked about how these types of things  
14 kind of shackled the management of school districts.  
15 Would you say that it interfered with the efficiency of  
16 the management of school districts?

17 A. Well, to the extent that they focused on just  
18 these issues without looking at other management issues,  
19 yes, the efficiency is harmed. I mean, that's -- we'll  
20 see pictures, but the whole story nationally is that  
21 we're paying for things that don't seem to have an  
22 impact on student achievement. And so if we think of  
23 efficiency as getting the most achievement for what  
24 we're spending, it's quite clear that we're not doing  
25 that because we're buying the wrong things.

1           Q.     Switch now to Slide 6.  We're now going to talk  
2 about Texas.  Before we go through these, I think I'd  
3 like to talk about -- we're about to go through a series  
4 of slides and kind of summarize this from our  
5 standpoint.  They're all going to show the same thing  
6 from a different angle; is that correct?

7           A.     That's correct.

8           Q.     Okay.  So let's just go through these.  Tell us  
9 what Slide 6 shows and what you did in that slide.

10          A.     Slide 6 is just a simple picture to try to get  
11 us seeing what happens in Texas.  On the horizontal axis  
12 is operating expenditures per pupil.  As we see in  
13 districts, this is just for large districts with 5,000  
14 or more students.  On the vertical axis is the percent  
15 passing all TAKS tests.  This is in 2011.  And the size  
16 of these -- each circle represents an individual  
17 district.  The size of the circle tells you how many  
18 students are in that district.  So these are all  
19 districts with at least 5,000 students, but as we know,  
20 Houston and Dallas and others are much larger than 5,000  
21 students, so they have larger circles.

22                         And what you see is that this picture is  
23 sort of sloping down to the right-hand side, which says  
24 districts that are spending more seem to be getting less  
25 performance.  Now, this is just really a warm-up slide

1 because this is -- can be misleading. We know that some  
2 districts have students that need more help that are --  
3 come to school farther behind that have more demands on  
4 the schools. And so if those students are found in  
5 districts that are spending more, you might get a slide  
6 like this, even though it has nothing to do with the  
7 money.

8 Q. Okay. Let me now switch. You did a  
9 supplemental report; is that correct?

10 A. I did.

11 Q. And what was in that supplemental report?

12 A. Well, the original report had a series of  
13 analyses of performance across school districts that  
14 related performance on the TAKS test in 2011 to the  
15 achievement that was available when I did the report  
16 which -- I mean, to the expenditures that was available,  
17 which was for 2010. What I did was to subsequently --  
18 when the data came out for 2011 spending, simply update  
19 the analysis to include the 2011 spending. So it  
20 probably makes sense to just look at the 2011 spending  
21 relationships that we found in the supplemental report.

22 Q. That's what we're going to do now. We're going  
23 to switch to the supplemental report, which is  
24 Exhibit 8001, I believe; is that correct?

25 THE COURT: Yeah, I would appreciate --

1 just for the purposes of the record, I noticed that  
2 these don't have an exhibit number, and so if you can  
3 make that attempt to "We're now looking at Exhibit" --

4 MR. DIAMOND: Yeah. We've been on 1001,  
5 and I didn't write these down there. Let me just look  
6 real quick on -- I've got a listing of this.

7 THE COURT: That's fine. Take your time.

8 Q. (BY MR. DIAMOND) So now we are shifting over  
9 to -- from Exhibit 1001, your report, to Exhibit 8001,  
10 which is your supplemental report, and we're on Slide 26  
11 of that report. What does that slide show?

12 A. Slide 26 is an overview that we'll see multiple  
13 times -- in multiple different forms soon. It compares  
14 spending on the horizontal axis against percent passing  
15 the state TAKS test for each district. Each point on  
16 the line -- on the graph is an individual district. But  
17 this is a special graph that is produced after we've  
18 adjusted for the demographics and characteristics of the  
19 school district. In particular, this comes from a  
20 statistical regression analysis that takes into account  
21 the percent black students in the district, the percent  
22 Hispanic, the percent economically disadvantaged, the  
23 percent with limited English proficiency, the percent  
24 special education, the percent bilingual, the number of  
25 students in the district, and the number of students

1 squared in the district. These factors are all included  
2 as potentially factors that could determine the  
3 performance of students independent of how much is  
4 spent.

5 THE COURT: And would you be so kind as to  
6 tell us, when you say you adjusted for it, what was it  
7 that you actually did?

8 THE WITNESS: What I did was a multiple  
9 regression analysis across all of the districts in the  
10 state of Texas that had as the dependent variable the  
11 percent passing rate on all TAKS tests in 2011 and the  
12 series of independent variables, separate variables that  
13 measured those, plus per pupil expenditure. What I've  
14 graphed is the relationship that you would get if you  
15 used that statistical model to adjust everybody to  
16 having the same percentage black, the same percentage  
17 Hispanic and sort of equalized all districts in terms of  
18 all the demographics and the size of the district.

19 THE COURT: I'm going to ask you a couple  
20 of legally required questions. Is this technique of  
21 multiple regression where you compare multifactors and  
22 standardize them across all the districts -- is this --  
23 is this something that other economists doing the same  
24 type of work would recognize as a technique, a  
25 legitimate technique?

1 THE WITNESS: Absolutely.

2 THE COURT: Are there uses outside of  
3 educational policy research where this technique is  
4 used?

5 THE WITNESS: It's used throughout  
6 economics, throughout political science, throughout  
7 sociology.

8 THE COURT: Was this part of your  
9 textbook?

10 THE WITNESS: Yes, it was. This is the --

11 THE COURT: I just made a wild guess.

12 THE WITNESS: This is -- the substance --  
13 when the textbook was produced in 1977, people were just  
14 trying to figure out exactly what are the properties of  
15 these estimates and when can we use them appropriately,  
16 and the textbook was designed to teach introductory  
17 graduate students how to use these techniques  
18 appropriately. They're now used standardly so that  
19 people barely even say what they've done when they  
20 present an article. It's just a passing remark, "I did  
21 a regression analysis," and they will give some details.  
22 For example, in this -- one detail that I  
23 didn't mention here is that all these results are  
24 weighted by the number of students in the district. So  
25 it's not being determined by the small -- all the small

1 rural districts in the state, but it's weighted  
2 essentially by students. And the regression line, the  
3 line that's drawn there, would be the separate impact of  
4 spending after I've adjusted for all those other factors  
5 on achievement.

6 THE COURT: Thank you.

7 Q. (BY MR. DIAMOND) That same kind of line of  
8 questions about any of the techniques you've used to  
9 examine anything in this case or for this case, you've  
10 used commonly accepted scientific technique, correct?

11 A. Absolutely.

12 Q. Have you used anything that's outside the realm  
13 of acceptance in the scientific or economic community?

14 A. No. I should say -- go back to the  
15 introductory slides. Those are usually used as  
16 descriptive slides and not to be proof of causal  
17 relationships, but that's why I went to the subsequent  
18 regression studies that are -- that are commonly used in  
19 an analytical approach.

20 Q. Okay. Let's go back to Slide 26. Have you  
21 described what you found -- everything you found in that  
22 slide?

23 A. Well, the first thing you see, the line that's  
24 drawn in there is just the best line through the  
25 districts of how spending affects achievement. I should

1 point out that on all the slides, the point zero in  
2 spending is the average spending for all the districts  
3 in the state, and the point zero on the vertical axis,  
4 the pass rate, is the average pass rate. So for the  
5 state of Texas in 2011, the average pass rate was around  
6 75 percent, and the average spending was a little over  
7 10,000 in 2010, about 11,000 in 2011, so that -- that's  
8 what -- where the zero points are.

9 Q. And --

10 A. The real point of this whole picture is the  
11 cloud on the left. The cloud there shows the  
12 performance of districts right around the state average  
13 in terms of spending. And you see some districts at the  
14 state average are having students that are achieving 25  
15 to 30 percentage points less on the test in terms of  
16 passing rates than the average. And some districts are  
17 getting 20 percentage points more passing on the test  
18 than the average. And they're spending the same amount,  
19 and we've adjusted for their characteristics, so you can  
20 think of them as having the same student populations,  
21 and yet there is a 45 percentage point difference in  
22 terms of the outcomes, the passing rate.

23 Q. So what you're saying is the vertical  
24 relationship or the -- looking at this vertically is  
25 really more important than the horizontal line?

1           A.     Absolutely.  What you see is that with -- that  
2 there's this cluster of schools and some districts are  
3 doing much, much better than others, and some are doing  
4 much, much worse than others and spending the same  
5 amount.  And so what -- the purpose of all of this is to  
6 say, well, if the current array of districts and their  
7 patterns of behavior is indicative of what we'll see in  
8 the future, if we just added more money, moved them  
9 horizontally on this, we would still get this widely  
10 different performance but no expectation that the pass  
11 rates would improve from what we see when we look across  
12 districts.

13           Q.     Moving on to Slide 27, what is Slide 27?

14           A.     Well, what I have here is a series of different  
15 estimates that are slightly different and designed to  
16 show that it's not a few outlying districts, peculiar  
17 districts, that are determining both the scatter of  
18 points and the shape of this line.  So here, if you  
19 notice, there were a few districts that were spending  
20 greater than \$15,000 per student where the average is  
21 around 11,000 in 2011.

22                   THE COURT:  Would you toggle back to the  
23 previous slide?

24                   So the differences between these slides is  
25 that you've changed the horizontal axis.

1                   THE WITNESS: I both changed the  
2 horizontal axis, but I've changed the sample of  
3 districts I've looked at. I have thrown out all of  
4 those really high-spending districts to make sure that  
5 they aren't determining the whole picture, the shape of  
6 the line.

7                   THE COURT: I -- it looks like -- if  
8 you'll toggle forward. So you're just looking at those  
9 that are spending up to 6,000 above the state average as  
10 opposed in your previous slide where you had districts  
11 out to the 30,000.

12                   THE WITNESS: That's true. It's slightly  
13 above -- it's -- the state average changes a little  
14 because it's the average of the schools that I have, and  
15 so I've thrown out the high spending. But those are  
16 actually fairly small districts, and so they don't  
17 actually move the state average by very much.

18                   THE COURT: And there's -- while I'm just  
19 looking at it, there's one question I have, and that is  
20 I would take it that if you looked at the intersection  
21 of zero on the vertical axis and zero on the horizontal  
22 axis, that the districts that were to the left and above  
23 would be pretty efficient and pretty productive, and  
24 those below and to the right would be less so?

25                   THE WITNESS: Precisely. That's precisely

1 the point.

2 THE COURT: Okay.

3 Q. (BY MR. DIAMOND) Back to Slide 27.

4 A. So this throws out the few districts that are  
5 spending much above the average, and I managed to spread  
6 out all the districts more because we don't have to put  
7 down those outliers on this picture, and what you see is  
8 the same cloud. You see that there's no systematic  
9 relationship within the district spending less than  
10 \$15,000 than there was for the whole state.

11 And you see the same pattern -- if you  
12 look at the zero point again, the state average, you see  
13 that there is right at the state average something on  
14 the order of 35 percentage points difference in passing  
15 rates between the best district and the poorest  
16 district. And it doesn't really matter where you slice  
17 that. You can slice that at any spending level as you  
18 go off to the right. And if you look vertically at any  
19 spending level, you see this dramatic difference in  
20 performance after we've adjusted for any demographic  
21 differences of the districts.

22 Q. And what you would expect to see if money was  
23 being wisely spent was the hori -- what is now a  
24 horizontal or slightly sloping down line sloping up and  
25 everybody gathered around that line?

1           A.     That's precisely it. We should see everybody  
2 very close to the line, and it should be going up to the  
3 right if we're getting value for the extra spending.

4           Q.     Slide 28.

5           A.     Slide 28 froze out all of the districts of less  
6 than 2,000 students, which turns out to be a large  
7 number in Texas. That's almost 700 districts that have  
8 less than 2,000 students. But if I look at just the  
9 large districts that are left, the close to 400  
10 districts, I get exactly the same pattern, the cloud  
11 with a slightly downward sloping line as the best line  
12 through them after again adjusting for demographics.

13          Q.     So what we're doing is we're going through  
14 these and just looking -- we're turning the gemstone  
15 slightly and looking at different facets and we're  
16 seeing the same thing?

17          A.     Precisely.

18          Q.     Okay. Next slide, 29.

19          A.     29 is looking at the performance of  
20 economically disadvantaged students on these tests.  
21 There has been a suspicion, and I think it's right, that  
22 economically disadvantaged students might be more  
23 sensitive to what goes on in school districts than more  
24 advantaged, because the more advantaged have parents  
25 that can compensate for anything they don't get in

1 school. This is because of the -- the testing gives you  
2 separate information for disadvantaged students. This  
3 looks at just their performance but again adjusts for  
4 the different district demographics, the concentration  
5 of black students or Hispanic students and so forth.  
6 And what you find here is -- you know, this line is  
7 slightly positive, but it's insignificantly different  
8 than a flat line, which is no relationship. And again,  
9 you see some districts are really much, much better at  
10 teaching disadvantaged students than others and that  
11 there's this very wide difference in pass rates among  
12 disadvantaged students at any spending level.

13 Q. Slide 30?

14 A. Slide 30 is disadvantaged students in large  
15 districts. If there are -- if Houston and Dallas and so  
16 forth have particular other difficulties in -- that  
17 require more spending and so forth, if we look across  
18 the large districts with disadvantaged students, we  
19 again see no pattern that we're expecting. We don't see  
20 a positive line. We don't see all the districts lined  
21 up along this positive line with spending. What we see  
22 is a cloud where some districts are spending their money  
23 effectively and others aren't.

24 MR. DIAMOND: Take a break.

25 THE COURT: So let's take a ten-minute

1 break. See y'all back at 10:30.

2 (Recess taken)

3 MR. DIAMOND: May I proceed, Your Honor?

4 THE COURT: Yes, sir.

5 Q. (BY MR. DIAMOND) Had we finished talking about  
6 Slide 30?

7 A. I believe we had.

8 Q. Okay.

9 A. They're all very similar, and so the important  
10 part is how the set of schools differs.

11 Q. Okay. Slide 31.

12 A. Slide 31 does something that is slightly  
13 different. There is some concern that some areas are  
14 more difficult for hiring teachers than others, that the  
15 salaries are higher. There is something called the  
16 Comparable Wage Index that is produced out of Texas A&M  
17 and is used nationally that is a potential way of  
18 adjusting the spending to allow for the fact that it  
19 costs more to hire people in some areas than in others.

20 What this slide does is just take all the  
21 districts -- it doesn't go through all of the different  
22 variants on it, but takes all the districts, does  
23 exactly the same thing except uses spending adjusted by  
24 the Comparable Wage Index, and you get exactly the same  
25 picture, slightly downward sloping line, but the story

1 is again this cloud of districts that are spending the  
2 same amount, now in adjusted terms, that are  
3 statistically the same in terms of demographics and that  
4 are getting very, very different achievement levels.

5 Q. Is the Comparable Wage Index something that's  
6 commonly used in the economic realm or statistical  
7 realm?

8 A. It's used sometimes, yes, sometimes not. It's  
9 not a perfect index, but it's a way of trying to allow  
10 for any wage differences.

11 Q. Okay. Slide 32?

12 A. Slide 32 is exactly the same picture as the  
13 last one, which uses the spending adjusted for wages,  
14 the Comparable Wage Index, but only for the large  
15 districts, those with more than 2,000 students. Again,  
16 it's not differences among the larger districts that's  
17 driving the performance, but in fact, it's an inherent  
18 difference in how schools are operating.

19 Q. And again, the same results as we've been  
20 seeing in every graph?

21 A. Same results. Adjusting for demographics,  
22 adjusting for wage cost differences, adjusting for the  
23 size of districts and looking at just the large  
24 districts gives you the same answer.

25 Q. I'm going to skip -- go back to your original

1 report, Exhibit 1001. We have two more of these slides.

2 What is Slide 13 showing on Exhibit 1001?

3 A. Instead of looking at how overall operating  
4 expenditures affect achievement, this looks at how  
5 salary differences paid across districts and how also  
6 pupil-teacher ratios affect performance. What you see  
7 here is the best line -- again, adjusting for the  
8 demographics of the district, the best line throughout  
9 all the districts is -- has a slightly positive effect  
10 so that it says if we increase the average teacher  
11 salary by \$10,000 -- average teacher salary today is  
12 somewhere between 40 and \$45,000. If we increased that  
13 by \$10,000, the estimates would suggest that we would  
14 get a 3 percent higher pass rate on the TAKS test in  
15 those districts. So if we wanted to go from 75 percent  
16 passing the TAKS to 95 percent passing the TAKS, which  
17 is something that we often think of doing, bringing  
18 everybody up to that level, it would amount to spending  
19 70 or \$80,000 on average more for teachers or moving the  
20 average teacher salary according to the relationships we  
21 see up well over \$100,000 per teacher per year.

22 Q. Now, you're not saying that teachers don't need  
23 raises, are you?

24 A. I'm not saying anything about whether they need  
25 them or not. I actually think that the best teachers

1 are quite underpaid and we ought to give them raises,  
2 but the worst teachers are quite overpaid. So this is  
3 looking at the average following the pattern of spending  
4 that's done in the districts today.

5 Q. Slide 14.

6 A. Slide 14 is looking at the other part of this  
7 same regression analysis for all districts weighted by  
8 number of students, adjusted for demographics. It's  
9 looking at the effect of pupil-teacher ratios on TAKS  
10 scores, and it says that there's a slight positive  
11 impact of achievement. As we have higher pupil-teacher  
12 ratios, it gets slightly higher achievement, but it's  
13 insignificantly different than zero. Again, the point  
14 is that districts that are performing well and districts  
15 that are performing poorly have chosen the same  
16 pupil-teacher ratio; they just are getting very  
17 different results.

18 Q. This kind of brings us to the end of these  
19 Texas slides, looking at these various relationships and  
20 looking at it from different angles. First of all, kind  
21 of circle back around to your original statement. Does  
22 this have anything to do with adequacy of funding?

23 A. No, it doesn't.

24 Q. Does this have anything to do with whether or  
25 not more or less money is needed in the system?

1       A.     Doesn't say anything about that.

2       Q.     And so what is -- as we look at all these, what  
3 are these slides saying to the Court?

4       A.     These slides are saying exactly the same thing  
5 that we get from the 40 years of national studies.  If  
6 we simply put more resources into schools and use it the  
7 way districts have been using it here, districts in  
8 Texas have been using it, we should not expect to see  
9 higher achievement of our students on average.  We will  
10 see some districts that use that money wisely.  We'll  
11 see other districts that use that money poorly.  And  
12 they will balance out according to the historic pattern  
13 within Texas, which is the same as the historic pattern  
14 within the U.S.

15       Q.     How would you describe that in terms of waste  
16 of resources?  What does that do with the resources that  
17 are spent if they're spent in that way and we don't get  
18 achievement?

19       A.     Well, it's absolutely clear that we are wasting  
20 resources to the extent that we are spending on things  
21 that don't matter.  Now, it could be that they're  
22 spending on something else that we value.  I just looked  
23 at the TAKS test.  Maybe it's -- they're spending on  
24 physical education, which we value, or extracurricular  
25 activities, which we value.  But it's doubtful that

1 those activities are swinging these differences, because  
2 this is talking about the average spending of \$11,000  
3 per student. And yes, we're spending a little bit on  
4 those, but that's not what's driving these large  
5 differences.

6 Q. The Texas Supreme Court has defined efficiency  
7 as productive of results in connoting the use of  
8 resources such as there's little waste. Would you  
9 describe this as a little waste?

10 A. No, it's a huge waste, to the extent that we  
11 can find ways to do our schooling the way the better  
12 schools do it and not the way the poorer schools do it.  
13 And if we just put money out to all the districts, we're  
14 not guaranteeing that they're going to use the best  
15 practices. They'll use the typical practices, I would  
16 expect.

17 Q. So this is a question of how, not whether, how  
18 the money is spent, not whether or to what amount it is  
19 increased or decreased?

20 A. Exactly.

21 Q. Very briefly, you had given some slides  
22 regarding court-ordered spending in New Jersey --

23 THE COURT: Could we go back to this  
24 slide, because there's something I'd like to visit?

25 MR. DIAMOND: This one?

1 THE COURT: Yeah, I'll pick that one.

2 Doctor, within the area that you've  
3 defined, which is plus 20, minus 30 on pass rate and  
4 minus ten, plus 15 on the pupil-teacher ratio -- I'm  
5 just picking this scatter diagram. So within that area  
6 that you've described, if there was no effect, you had  
7 random effects, wouldn't your distribution look  
8 different than what you got there?

9 THE WITNESS: I'm not sure why, Your  
10 Honor. What do you have in mind?

11 THE COURT: Well, if nothing was at work,  
12 then each potential dot in space would have an equal  
13 probability of having a district in it.

14 THE WITNESS: It's random within a smaller  
15 group is the way I would describe it. It's closer  
16 related that there's -- we don't expect to get zero  
17 passing or 100 percent passing in any district, but  
18 within their -- this range that you described of sort of  
19 the boundaries of the cloud, it looks pretty random to  
20 me. And it's not explained by the demographics of the  
21 district. It's not explained by district size. These  
22 are variations that we see for very different spending  
23 levels that we just see appearing. It would be very  
24 nice if we could identify some of those districts that  
25 are in the plus ten to 20 range in terms of pass rates

1 and reproduce them, but we haven't been able to do that  
2 on just the aggregate basis the way we structured our  
3 schools now. We haven't provided, in my opinion, the  
4 right incentives. We haven't provided the right salary  
5 structure to get the good teachers in there, which I  
6 think is the key to it all. And if we resist making  
7 some of those changes and just put more money in, it's  
8 unlikely that we should expect any higher achievement.

9 THE COURT: Thanks.

10 MR. DIAMOND: Thank you, Your Honor.

11 THE COURT: I'll be back.

12 THE WITNESS: Yes, Your Honor.

13 Q. (BY MR. DIAMOND) New Jersey. What I'm going  
14 to do is just kind of flip through these slides.  
15 There's five or six of them. And just tell me very  
16 briefly why it is that you put these slides in. You  
17 have this court-ordered spending, a slide regarding  
18 current expenditure, U.S. versus New Jersey, and then  
19 some NAEP reading, math, broken out in various topics.  
20 What is the purpose of putting these in the report?

21 A. This was just identifying one of the instances  
22 where in the past there has been a court order that led  
23 to very large changes in the spending for districts. In  
24 New Jersey, it was for 31 of the most impoverished  
25 districts called the Abbott districts, and they were

1 essentially told you can spend anything you want; just  
2 do it the way you think is best. And spending in  
3 New Jersey is out of sight by Texas standards. It's  
4 about \$18,000 per student per year in New Jersey. It  
5 has risen after the court order in the *Abbott* case,  
6 which is -- the *Abbott* case that was relevant was in the  
7 late 1990s. It's actually been in courts for 40 years,  
8 but the relevant case on spending for the *Abbott*  
9 districts was in the 1990s. And spending for the whole  
10 state increased much more rapidly than the nation. If  
11 we look at the performance of students relative to the  
12 nation, we see very little evidence that they got the  
13 gains from them. We particularly do not see the gains  
14 for the disadvantaged students that were the focus of  
15 the *Abbott* court case by the Supreme Court in  
16 New Jersey, which has been running the schools in  
17 New Jersey until very recently.

18 Q. So as an economist and a statistician or an  
19 econometrics expert, what's happened is you've got a set  
20 of districts that basically have a blank check and  
21 you're able to look at how that's affected achievement?

22 A. That's right. Well, not quite. The problem is  
23 that I have scores for the entire state and not just for  
24 the specific districts. But the *Abbott* districts have  
25 somewhere between 20 and 30 percent of the disadvantaged

1 and the black population of the state, so that if you  
2 had a big impact on the Abbott districts, it should show  
3 up in the state averages.

4 Q. Let's change gears now to something that you  
5 just notified the Court, that -- one of the things  
6 you're saying is if we just keep putting money into the  
7 same system, we're not going to see anything from that  
8 money. And you brought up the fact that you believe  
9 teacher effectiveness is the key; correct?

10 A. I did.

11 Q. And here on Slide 23, you say research shows  
12 that teacher effectiveness is the most important aspect  
13 of schools.

14 A. Yes. This actually is a statement that came  
15 out of my work in Texas where, along with Steven Rivkin  
16 and John Kain, I did studies of how much difference is  
17 there between good and bad teachers measured in terms of  
18 gains in student performance. This work has been  
19 replicated now in a number of different states, in a  
20 number of different venues, and I think you will find  
21 that in the media and the research world, people  
22 consistently say now that the quality of teachers is the  
23 most important aspect of schools and that this says that  
24 we could in fact change student achievement if we got  
25 more effective teachers in there. So the very early

1 slides that I showed where the NAEP scores didn't change  
2 at all over time, in my opinion, had we focused the  
3 extra spending more on effective teachers and got rid of  
4 ineffective teachers, we would have seen a very  
5 different picture there of NAEP scores over time.

6 Q. Let's switch now to Slide 24 and very briefly  
7 bring up that the source of that is an article you wrote  
8 entitled "The Economic Value of Higher Teacher Quality"  
9 in the *Economics of Education Review*. Do you see that?

10 A. That is correct.

11 Q. Is this from a peer-reviewed article?

12 A. It is.

13 Q. And very briefly, before we get into this, can  
14 you identify what's been marked as Exhibit 8020?

15 A. Yes, that's a copy of the article.

16 Q. Okay. And the next two slides we're going to  
17 look at are derived from research done in this article,  
18 correct?

19 A. That is correct.

20 Q. Okay.

21 MR. DIAMOND: Your Honor, at this time I'd  
22 like to offer Exhibit 8020 into the record.

23 MS. HALPERN: No objection.

24 MR. TURNER: No objection.

25 THE COURT: Admitted.

1                                    (*Exhibit 8020 admitted*)

2           Q.       (BY MR. DIAMOND) Tell us what we're seeing and  
3 what you found in Slide 24.

4           A.       Slide 24 is a fairly complicated slide that  
5 tries to summarize the impact of differences in teacher  
6 quality on the economic outcomes for students. What  
7 this does is relate performance of teachers to the  
8 subsequent earnings of individual students in a class  
9 and tries to find out how much difference does it make.

10                               Now, what this does is to take the broad  
11 and growing literature on the difference in teacher  
12 quality so that I know the different -- how much  
13 achievement a 90th percentile teacher will get compared  
14 to a 10th percentile teacher, and it combines that with  
15 information on how valuable is more achievement to  
16 people when they go into the labor market, so I can  
17 estimate the impact on future earnings of people. In  
18 simplest terms, people who know more earn more, and  
19 that's been documented across a number of studies, some  
20 of my own, some of others. And people who have better  
21 teachers know more when they go into the labor market.  
22 So this puts the two together.

23                               And what's important here -- maybe if I  
24 walk through part of this slide, you can get a feel for  
25 this. If we take the very top line, the solid line,

1 which is green on the Court's color copy, this is the --  
2 relates the achievement gains you would expect each year  
3 from a teacher in the 90th percentile, that is ranking  
4 teachers in terms of their effectiveness and go to a  
5 very good teacher in the -- at the 90th percentile or  
6 above, a top 10 percent teacher.

7           What is plotted on the vertical axis is  
8 the value to students of these teachers, once again, in  
9 the labor market over their career. So it's an estimate  
10 of the present value. If I discount for how far in the  
11 future you get the income and so forth, it gives the  
12 value, and it's added across all the students in a  
13 class. So the horizontal axis here is actually class  
14 size because a good teacher with more students gets more  
15 value than a good teacher with fewer students, just  
16 because there are more that get the advantages of that  
17 teacher.

18           As you see the 90th percentile teacher, if  
19 she had a class size of 30, she would be generating some  
20 \$800,000 added income compared to an average teacher.  
21 That is each and every year, the good teacher is  
22 increasing future earnings by some \$800,000 across the  
23 30 students. Now, it's less if you have 20 students.  
24 If you have only 20 students in the class, she's  
25 generating half a million dollars per year in added

1 earnings.

2 Q. And that's aggregate for the class; it's not  
3 800,000 for each of those 30 students.

4 A. No, no. It's -- the present value is a little  
5 over \$20,000 per student for those. And so that's why  
6 it fans out, is that the more students you have, the  
7 more economic impact is generated by a good teacher.

8 Now, the other lines on this -- the top  
9 green lines are above average teacher, so the short  
10 dashed line is the 75th percentile and the lower line is  
11 the 60th percentile, some slightly above average. And  
12 you see that all the teachers above average, according  
13 to our best research on teacher effectiveness, generate  
14 added income for their students and to the economy.

15 Now, the unfortunate part is that the  
16 bottom -- is the bottom part that's in red in the color  
17 version, but the solid bottom line is a 10th percentile  
18 teacher. A 10th percentile teacher is subtracting  
19 roughly equal amounts compared to an average teacher.  
20 So to the extent that we allow currently 10th percentile  
21 teachers to stay in the schools, they counteract the  
22 positive impact of the 90th percentile teacher. And  
23 that's why if we don't do anything to manage our  
24 teaching force, we don't get any of these gains, and  
25 some students are dramatically hurt.

1 Q. How about the economy? How does it affect the  
2 economy?

3 A. Well, the -- this has direct implications for  
4 the economy, because what's really going on here is that  
5 the achievement measured for students is a measure of  
6 their skills that they take to the labor force. And the  
7 labor force is -- when it's looking for skilled labor,  
8 like the Austin labor market is looking for more skilled  
9 workers, it can't find them if in fact they're not being  
10 produced beforehand.

11 Q. So for instance, in this case, one of the  
12 efficiency intervenors is the Texas Association of  
13 Business who is making claims that the fact that the  
14 system is not producing results, not producing a work  
15 ready or a college ready workforce, is actually hurting  
16 the workforce. And does this support that?

17 A. Oh, absolutely. And it says that if they want  
18 skilled labor and it's not there, they have to go  
19 someplace else, either to other states or  
20 internationally to attract workers that have the skills.

21 Q. And it's -- it's hurting the workforce in such  
22 a way that it's not just worry, concern or vexation; it  
23 is actual dollars to the workforce?

24 MR. HINOJOSA: Objection, leading.

25 THE COURT: It's shameless.

1 Q. (BY MR. DIAMOND) What would you say the effect  
2 is -- how would you describe this effect? Is it a  
3 pecuniary effect or is it a non-pecuniary effect?

4 A. Oh, absolutely. If they can't find skilled  
5 workers, it's going to cost them more to try to attract  
6 them from other places.

7 Q. The results that are in this Slide No. 24, have  
8 similar results been found in other literature?

9 A. There has been. There's actually an excellent  
10 study that was produced within the last year that was  
11 actually highlighted in the *New York Times* by three  
12 other economists, Raj Chetty, Jonah Rockoff and John  
13 Friedman. What they did was a very unique study. They  
14 got information on earnings of individuals in -- from  
15 New York City basically, from the IRS. The IRS gave  
16 them the earnings records of a group of students. They  
17 could then trace back to what teachers these workers had  
18 when they were in school and relate the value-added or  
19 what the teachers were providing them in school to their  
20 earnings, and they got similar answers. They got  
21 answers that were in the several-hundred-thousand-dollar  
22 difference for having a good teacher versus a mediocre  
23 teacher that are comparable to these based upon direct  
24 information from tax returns and the actual earnings of  
25 workers.

1 Q. And would you transfer these type of pecuniary  
2 damages to the Texas economy also?

3 A. Well, I think so, because the Texas economy is  
4 heavily dependent upon people from the Texas schools.  
5 There's ways to substitute by bringing in people from  
6 outside of Texas or outside of the country, but the  
7 Texas workforce is largely a Texas-educated workforce.

8 Q. Is there any literature out there or  
9 researchers that have contested your studies that have  
10 gone into Slide 24?

11 A. Not on this slide that I know of. I mean, this  
12 is a very active area of research, particularly on the  
13 variations in teacher quality, but what this study has  
14 behind it is a composite of a dozen different studies of  
15 teacher quality, so it's not dependent upon any specific  
16 set of estimates.

17 Q. Slide 25, what is that showing?

18 A. Slide 25 actually goes to a different point.

19 Q. And let me add something here just real quick.  
20 That is also out of the same study that has been  
21 admitted as Exhibit 8020, the economic value of higher  
22 teacher quality, correct?

23 A. It is.

24 Q. And what is it showing?

25 A. This is looking at a different point. With one

1 of my colleagues in Germany, Ludger Woessmann, I have  
2 been doing a lot of work on how important is it to the  
3 U.S. economy to have higher achievement, and the answer  
4 in simple terms is a lot. It's very, very important  
5 that we have a better educated workforce.

6 THE COURT: It's this study. This is your  
7 Woessmann study.

8 THE WITNESS: Oh, okay. Then perhaps I  
9 don't have to go into much detail, but I'll summarize.

10 THE COURT: I'm printing up the conclusion  
11 right now.

12 THE WITNESS: What we did was to relate  
13 differences in student achievement across nations to the  
14 growth rate of nations, and we found that higher  
15 performance on achievement tests that are given  
16 internationally, math tests that are walked around the  
17 world so that we know how our students are doing  
18 relative to other places, has a huge impact. One of the  
19 simplest comparisons is a comparison to Canada. Canada  
20 does quite a bit better than we do on these  
21 international tests. It's 40 points on the PISA test,  
22 which is four tenths of a standard deviation, large -- a  
23 big difference but attainable, we know.

24 If we could be -- get to the point of  
25 Canada within the next 20 years, the estimates from my

1 work with Woessmann suggests that the present value, the  
2 added gains to the gross domestic product of the U.S.  
3 for being Canada over the next -- the present value  
4 calculated over the next 80 years would be something on  
5 the order of \$70 trillion. \$70 trillion compares to our  
6 current gross domestic product of between 15 and  
7 \$16 trillion. So it's a huge impact on our economy.  
8 It's like a 20 percent increase in the wages of every  
9 worker over the next 80 years. That's what it amounts  
10 to.

11                   Now, if I look at the impact of teachers  
12 on these scores, and particularly, if I look at the  
13 impact of the bottom end of teachers, the poorest  
14 teachers on these scores, I find that that's also pretty  
15 dramatic. What I've done here is an experiment that  
16 says let's rank all the teachers in the nation based  
17 upon their effectiveness as we see in these other  
18 studies. So we ranked them from the least effective to  
19 the most effective. And then let's say, what would  
20 happen to U.S. achievement if we could replace the  
21 bottom 1 percent with an average teacher or the bottom 2  
22 or the bottom 5 percent with an average teacher? What  
23 this chart shows is a little -- there's some uncertainty  
24 in exactly how much difference there is between the best  
25 and the worst teachers. So the bottom dashed line, the

1 red line, shows what proportion of the teachers we would  
2 replace with an average teacher for the low estimate of  
3 teacher effectiveness. And if I trace that all out to  
4 the dotted line that's labeled Canada, it looks like  
5 that if I replace 8 percent of our teachers with just an  
6 average teacher, not a superstar, just an average  
7 teacher, we could be at the level of Canada.

8           The top line, which is an estimate that  
9 says there's actually a -- given the uncertainty, a  
10 possibility that teachers are more different than --  
11 than we've estimated, by that estimate, where I've  
12 traced that solid blue line out to the 5 percent point,  
13 it hits Canada. So it says that if I could replace 5 to  
14 8 percent of the worst teachers with an average teacher,  
15 I could expect to get to Canada, which is by historical  
16 impacts on the economy estimated to have an impact of  
17 \$70 trillion.

18           Now, there's actually some -- the solid  
19 blue line actually crosses the line, which is Finland,  
20 which is the world's example here, and everybody wants  
21 to be like Finland because they've done the best on some  
22 of these international tests over time. It says that  
23 8 percent of the teachers might get us to Finland, which  
24 is worth over \$100 trillion in terms of the present  
25 value, counting from the added growth.

1           So to me, this is dramatic evidence that  
2 the future of our nation depends upon improving the  
3 quality of our students, and the way we know from  
4 research to do that is improving the quality of our  
5 teachers.

6           Q.     (BY MR. DIAMOND)  Something that has not been  
7 focused on in the last 50 years?

8           A.     No.  There's been a lot of discussion and much  
9 more recent discussion in the last few years as a number  
10 of states have changed their laws to say, well, we're  
11 going to do away with tenure that doesn't pay attention  
12 to quality; we're going to have an evaluation system  
13 that identifies quality teachers; we will only keep  
14 teachers if they meet some minimum performance.  So  
15 there's been a lot of attention given to Wisconsin where  
16 the governor got into a great brawl with the teachers  
17 unions in Wisconsin, leading to a recall election and  
18 all of that.  But there are another dozen states that  
19 have also followed along that line of some components of  
20 better evaluations of teachers, making it possible to  
21 get more effective teachers in the classroom.

22           Q.     This has been characterized in this courtroom  
23 as you are calling for firing, quote unquote, 5 to  
24 8 percent of the teachers per year.  What is inaccurate  
25 about that?

1       A.     Well, every aspect of that sentence is  
2 inaccurate. First, it says we're going to replace these  
3 teachers with average teachers one way or another. If  
4 we know how to do it through professional development,  
5 which I'm not sure that we do, but if we could improve  
6 these teachers to the average, we would get the same  
7 effect. If we moved the ineffective teachers to other  
8 duties in schools and had them doing other things --  
9 they might be very effective managers, for example, but  
10 not particularly effective at classroom management --  
11 that would get the same effect. But there's also some  
12 that we probably want to encourage to go to other  
13 occupations. Whether we fire them or point to the fact  
14 that they're going to be happier and do better in other  
15 occupations is another matter.

16       Q.     But you --

17       A.     But this is only -- only once -- a one-time  
18 change. It's not an annual replacement of teachers. It  
19 says if we did this once and we replaced the bottom 5 to  
20 8 percent with an average teacher, then all we would  
21 have to worry about is the new teachers that come in  
22 with normal attrition in the system. So 5 to 8 percent  
23 of the new teachers might be ineffective, but we're only  
24 bringing in 7 to 10 percent of our teaching force new  
25 each year, so it's 5 percent times 7 percent or .35

1 percent of the teachers that we would have to replace  
2 according to this policy to maintain that standard of  
3 quality. So it's not every year. It's over some period  
4 of time. It's not even in one particular year. It's  
5 over some period of time. If we move the quality of our  
6 teaching force up, we can expect by historical evidence  
7 to have a much more vibrant economy and be much more  
8 competitive internationally and for the state of Texas.

9 Q. This presupposes something, and that is that we  
10 would know which teachers are effective and which  
11 aren't, correct?

12 A. Yes.

13 Q. And so if we have a teacher appraisal system  
14 that does not link student performance with a particular  
15 teacher, is it even possible to do that?

16 A. Well, it's possible -- I think it's pretty  
17 obvious who the bottom 5 to 8 percent of the teachers  
18 are, frankly. If you walk into any school, I think  
19 there would be almost unanimity on who were the teachers  
20 that were not doing well and perhaps harming our kids.  
21 The principal knows it. The other teachers know it.  
22 The kids know it. The parents know it. Probably the  
23 janitor knows it, of who are the worst teachers. And  
24 there's some evidence that in fact principal evaluations  
25 line up with estimates of effectiveness.

1           The problem is that we haven't had an  
2 evaluation system that we feel confident using in  
3 personnel matters in making these decisions. Some  
4 businesses are happy enough with whatever evaluation  
5 system they use, but we give special scrutiny in the  
6 public sector, and that has been an area where Texas has  
7 not done very well as far as I can tell. Other states  
8 are pushing very hard to improve their evaluation  
9 system. Perhaps the best example is the Washington,  
10 D.C. school system, which is rightfully known for being  
11 a horrid system, but in the last three years, they have  
12 worked to change their teacher evaluation system so that  
13 they now provide huge bonuses to good teachers to try to  
14 keep them, and they also fire teachers. They send them  
15 off to other jobs if they show that they're ineffective.

16       Q.     What do you think about the idea that  
17 Dr. Vigdor had in his supplemental report, commenting on  
18 your idea -- or your research that imposing risk on  
19 teachers makes the teaching profession less attractive?

20       A.     Well, it's clear that through -- in teaching  
21 and other places, we generally expect to have to pay  
22 people to assume more risk. So we pay people in  
23 dangerous occupations more than other less dangerous  
24 occupations just to compensate for the risk. And  
25 there's -- I think it's likely that we would have to

1 increase salaries to get the same people to come into  
2 teaching.

3           On the other hand, the way we've organized  
4 teaching right now, we tend to select a very risk averse  
5 group. People come into teaching because there's no  
6 danger of anything happening to them. They just get  
7 into the classroom and they stay there forever  
8 regardless of what's going on, and they get paid  
9 systematically for that regardless of how well they do.  
10 So I -- there's some advantages, I think, to changing  
11 the people we attract into teaching.

12       Q.    And you just said something with regard to risk  
13 aversion. If we're going to get the most effective  
14 teachers, we're going to have to pay them, right?

15       A.    I believe so.

16       Q.    Pay them more?

17       A.    I believe that we -- as I said briefly before,  
18 we underpay our best teachers and we overpay our worst  
19 teachers. We should try to raise the salaries for  
20 really effective teachers, but we should not provide  
21 salaries to people who are ineffective that are harming  
22 our kids.

23       Q.    Dr. Vigdor had put an opinion into his  
24 supplemental report along with this that the current  
25 system has monopsonistic characteristics that cause a

1 drive-down of teacher wages and that if you inject  
2 choice or competition into the system, it would cause an  
3 increase in teacher wages. Do you agree with that basic  
4 assumption?

5 A. I think that's probably correct. If you have  
6 more people competing for the good teachers, you expect  
7 their salaries to be driven up some. But right now, if  
8 nobody's really competing for them, it holds their  
9 salaries down. So this is sort of an argument against  
10 the people who want blanket increase in salaries. If we  
11 maintain a system that has no competition in it, we  
12 expect the schools to be able to sort of hold down the  
13 wages for those people.

14 Q. And looking at that, just kind of based on  
15 arithmetic, that's going to cost more money, isn't it?

16 A. It would probably cost more money to get the  
17 teacher force I want, but that's -- that doesn't mean  
18 that you have to raise the overall spending on schools,  
19 because if we just did a simple calculation, we would  
20 find that slight increases in class size free up lots of  
21 resources and would have by all of our research much  
22 less impact on students than getting better quality  
23 teachers in there.

24 Q. One of the things that's going on in this case  
25 legally is that I'm not going to ask the Court to order

1 the things that you are recommending today. That's not  
2 what we're here for. We're here to show that the system  
3 is inefficient, so I want to ask you this. Is the lack  
4 of a policy like this, this teacher effectiveness  
5 policy, this search for effective teachers -- is it --  
6 or describe the extent to which it would cause  
7 inefficiency in the system.

8 A. Oh, I think that's the big story behind all the  
9 pictures I had presented before. Personnel costs are  
10 the largest portion of all school budgets, and paying  
11 the teachers are the -- is the largest component we  
12 have. If we're not paying teachers according to their  
13 effectiveness, we introduce huge amounts of inefficiency  
14 in there because we're spending more money than we have  
15 to for -- based on the performance for a number of  
16 teachers. We're lucky to get some good teachers in  
17 there that are willing to do this for one reason or  
18 another, but we're building in inefficiency into the  
19 system by not having any relationship between salaries  
20 and performance in the classroom.

21 Q. To what extent is that inefficiency? Is it  
22 small or large?

23 A. Oh, I think it's large. I think it actually  
24 explains a large portion of that cloud that we had  
25 before. Some districts, one way or another, tend to

1 hire better teachers and have better teachers that are  
2 paying off and other districts don't.

3 Q. Okay. Let's go briefly now to one final  
4 discussion. Here on Page 8 of Exhibit 1001, you talk  
5 about this idea of the policies of the State toward  
6 teachers that are particularly damaging to developing a  
7 productive and efficient system. Do you see that?

8 A. Yes, I do.

9 Q. You talk about when the State mandates teacher  
10 salary increases that are unrelated to performance. Are  
11 you talking about the recent statewide across-the-board  
12 teacher pay raises that have happened in Texas over the  
13 last several years?

14 A. Precisely, where the State pays everybody the  
15 same regardless of their effectiveness. This is not  
16 something that most economists would recommend.

17 Q. You say here it makes it difficult through  
18 labor laws to remove ineffective teachers. So one of  
19 your policies or this main policy of teacher  
20 effectiveness is we've got to replace these -- the  
21 bottom 5 to 8 percent, but given the current state of  
22 being able to -- for the ones that would need to be  
23 terminated, how is that possible? Or describe the ease  
24 at which that could be done in Texas.

25 A. Well, it's difficult because there's not a good

1 evaluation system of teachers. Most teachers in the  
2 state of Texas, it's my understanding, are ranked at the  
3 top of their -- of the profession, so it's hard through  
4 the evaluation system to identify them. There are  
5 requirements to give notice of dismissal. There are  
6 appeals processes that go through the commissioner level  
7 that are expensive and time-consuming. There are a  
8 series of the certification requirements also. I guess  
9 they're slightly different than the removal process, but  
10 they limit who gets in with little evidence at all that  
11 the certification requirements are related to  
12 effectiveness in the classroom. So there are a series  
13 of mandates and requirements and practices in the state  
14 of Texas that build in inefficiencies, ineffective  
15 management decisions about who's running it and who's  
16 teaching.

17 Q. You also mention here that you fail to develop  
18 a system that recognizes the forces of supply and  
19 demand. Would that be along the lines of something such  
20 as paying a high school math teacher the same as you pay  
21 a 3rd grade teacher?

22 A. That's absolutely the case. In fact, we know  
23 that the market for people with math skills is very  
24 different than the market for people with physical  
25 education skills and yet we systematically pay the same

1 to both. We systematically tend to pay the same to  
2 teachers that work in difficult disadvantaged schools.  
3 We systematically pay the same for special education  
4 teachers, which are hard to find. By having this  
5 uniform salary schedule, we in fact make it very  
6 difficult to efficiently hire teachers, to pay the right  
7 salaries that we need to get the people we want.

8 Q. And all of that plays into describing what way  
9 that plays into, if it does, the inefficiency of the  
10 system?

11 A. Oh, absolutely, and the absence -- you know,  
12 the overall absence of much competition among schools  
13 that reinforces all of those policies because it allows  
14 them to continue. If we had competitive schools that  
15 were not following the same rules, then it would put  
16 pressure on all these rules and on the school districts  
17 to move away from these systems that inhibited hiring  
18 the best teachers.

19 Q. How important in the system is competition?

20 A. Well, I think it's essential. I mean, it -- we  
21 know from outside of schools with -- in the private  
22 industry, we're very sensitive to monopolies. Why?  
23 Because monopolies produce too few products at too high  
24 a price, and they don't innovate as much as industries  
25 that have more competition. That's what we need in

1 education. We need more innovation. We need options  
2 for parents that are stuck in the district.  
3 Disadvantaged parents that are stuck living in the  
4 middle of Dallas and have no option other than their  
5 local public school are being damaged. They don't have  
6 the options that your kids and my kids have of buying  
7 into another district that we think might be better off.  
8 So the competition comes through both providing places  
9 and options for all kids in Texas, and it comes in by  
10 putting pressure on the monopolistic elements of the  
11 system to adjust and expand and improve.

12 Q. So you would agree with economist Jacob Vigdor  
13 that the system does have monopolistic or monopsonistic  
14 characteristics?

15 A. Absolutely.

16 Q. And that those characteristics lead to, would  
17 you agree, vast inefficiencies in the system?

18 A. I think so. I mean, we're just experimenting  
19 with how to introduce competition into the system.  
20 We've gotten great advantages in the past to having  
21 universal education in this country and in Texas, but  
22 now we're trying to experiment with ways to introduce  
23 more competition. We've had some nascent experiments  
24 with charter schools where some states are moving toward  
25 more voucher-like systems, not necessarily vouchers, but

1 tuition credits and other things as a way to give more  
2 flexibility and more competition.

3 Q. And do you find that charter schools are a  
4 viable option?

5 A. I think that they're providing the only  
6 competition in many instances and that they are  
7 something that is important. They haven't overwhelmed  
8 the system. There are some good ones and there are some  
9 bad ones. And there are limited numbers of them, so you  
10 can't be assured of having a good charter school as an  
11 alternative to your neighborhood school everywhere  
12 because there are limits on them.

13 Q. You talk about this idea that the expansion of  
14 charter schools -- here at the top of this page, the  
15 expansion of charter schools has been thwarted in Texas.  
16 What do you mean by that?

17 A. Well, there are caps on the number of charter  
18 schools that can be had, and I don't see any reason for  
19 that. I see a reason to have the State evaluate over  
20 time the performance of charter schools and to close  
21 down both charter schools that are ineffective and  
22 public -- traditional public schools that are  
23 ineffective, but I don't see putting caps on them. I --  
24 there's -- there are application processes that mean  
25 that you have to show that you're serious and

1 knowledgeable to get a charter. Once you do that, I'm  
2 not sure why you should have limits.

3 Q. One final thing. On the competition issue, do  
4 you believe -- or describe to what extent you believe  
5 the system could be efficient without competition?

6 A. Well, we can think of trying to do it through  
7 regulation and rules and laws, but that has proved to be  
8 very ineffective. You know, it's hard to run the  
9 schools in a thousand districts -- there are like 4,000  
10 schools in Texas -- out of Austin by regulations.  
11 You know, you can try to mimic the market by setting up  
12 regulations that we think look like competition, but  
13 it's hard to do that.

14 Q. And so how does that affect the efficiency of  
15 the schools if there is no competition?

16 A. Well, it obviously holds it back. That's --  
17 that's the reason why the U.S. is the strongest economy  
18 in the world, is that in general in our private sectors  
19 we have a lot more competition and more competition than  
20 other countries have in producing goods and services,  
21 and it's paid off in terms of our national economy.  
22 There is little reason in my mind to think that schools  
23 are inherently different than the rest of U.S. society  
24 and economy.

25 MR. DIAMOND: Your Honor, I'll pass the

1 witness.

2 THE COURT: Who's next?

3 MS. HALPERN: Your Honor, I am.

4 THE COURT: Well, why don't we take a  
5 wiggle break.

6 *(Recess taken)*

7 THE COURT: Ms. Halpern, did you have any  
8 questions at all?

9 MS. HALPERN: I'm not sure. I'm going to  
10 try to make up a few as we go.

11 **CROSS-EXAMINATION**

12 BY MS. HALPERN:

13 Q. Dr. Hanushek, I know you were sitting in the  
14 courtroom this morning when we had a small argument  
15 before the Court, and I think we're going to start  
16 there.

17 Up on the screen is Exhibit 1007, which is  
18 admitted in evidence already in this case. It's an  
19 article by you called the confidence men. And I want to  
20 ask you, because Dr. Odden was asked about this on  
21 direct examination in his testimony, how is it that you  
22 came to write this article?

23 MR. TURNER: Your Honor, we just wish to  
24 renew our objection, and I request a running objection  
25 on this series of questions for the reasons

*Emc*

"A general diffusion of knowledge being essential to the preservation of the liberties and rights of the people, it shall be the duty of the Legislature of the State to establish and make suitable provision for the support and maintenance of an efficient system of public free schools." *Texas Constitution Article 7 Section 1*

**WHAT KEEPS TEXAS SCHOOLS FROM BEING AS EFFICIENT AS THEY COULD BE?  
Paul Hill**

The framers of the Texas State Constitution did a good thing when they defined the state's obligation to provide an "efficient" education system for all the state's children. Like all states, Texas needs to make sure all children learn what they need to become self-supporting participants in the economy and self-directing citizens of a modern democracy. The "efficient" term adds something important, i.e. a concern with using taxpayer money and students' time to the greatest benefit to the state and thereby protect the "rights and liberties" of the people.

Past education policy debates have ignored the "efficient" term. In particular, the educational "adequacy" movement has set questions of optimum resource use aside, implicitly accepting established ways of doing business that were never built for efficiency, and asking how much more money, given the way the system now runs, would be needed to get much better outcomes for students.

In a world where resources are always finite, it is necessary to consider effectiveness in light of expenditures, i.e. efficiency. The most efficient policy or program is one that produces the highest ratio of outcomes, however measured, per dollar spent. The point: there are multiple ways to get to effectiveness and some are more efficient than others. This, not the funding level for a system that is structured to be inefficient, should be what the court focuses on.

**BARRIERS TO EFFICIENCY**

Three things about today's public education militate against efficiency:

- 1) Costs are hidden and unknown
- 2) Schools are forced to do many things that detract from their main work, and tie up resources that could be used more aggressively.
- 3) There are many barriers to experimentation with new ideas and transfers of funds from less- to more-efficient schools and programs.



## **Costs are hidden**

Why is our current system not built to be efficient? There are many layers to the answer, but the most basic is that our system does not require, or even allow, schools to count the cost of what they do. Even if school leaders wanted to make the most effective use of every penny, they would not have the basic information they would need, about what different people, resources, and processes cost.

The same is true at the district level. Districts do not track how much is spent at the school level or on centrally administered programs and services, in a detailed manner which would allow them to make meaningful efficiency/productivity calculations. Districts can create estimates of how much is spent per school or per pupil, but these depend on simple averaging operations – for a school that means total district expenditures divided by the number of students in the district multiplied by the number of students in the school.

Results based on averaging are at best weakly linked to reality, since 1) in Texas the broad spending category called “instruction” accounts for over half of total spending in a district and these are unevenly distributed among schools; 2) some schools have more resident programs and resources (e.g. tutors, counselors, enrichment specialists) than others; and 3) some schools have more teachers per pupil than others, and 4) some schools – often those that also have disproportionate numbers of teachers and resident special programs – also have more highly paid teachers than other schools in the same district.

Thus, even if educators wished to calculate efficiency, and judge they could not do so with the information available.

## **Mandates tie up funds arbitrarily**

The lack of data is just the tip of the iceberg. In general, schools are required to do things that have been mandated without any consideration for their cost or consequences for school performance. Moreover, these mandates must be fulfilled even if people in schools see better ways to use the resources available to them.

I won't try to provide a comprehensive list of such mandates here.<sup>1</sup> But examples will help.

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<sup>1</sup> See, for example, Chubb, John E., *Overcoming Governance Challenges in K-12 Online Learning*, in Finn, Chester E. and Daniela Fairchild, *Education Reform for the Digital Era*, Washington, the Thomas Fordham Institute 2012, pp.99-134/; Hill, Paul T., *Picturing a Different Governance Structure for Public Education* in Manna, Paul and Patrick McGuinn (eds). *Rethinking Education Governance*, Washington D.C, Brookings Press 2012 (forthcoming). See also Murphy, Joseph, *Governing America's Schools: The Shifting Playing Field*, *Teachers College Record* Volume 102, Number 1, February 2000, pp. 57-84

Some come from state legislatures, which set days and hours of operation for schools; allocate funding in well defined categories to limit schools' freedom over how they spend their money; set licensing requirements that prevent schools from hiring people without specific (and often arbitrarily defined) training and experience; and mandate school staffing patterns – a teacher for every so many pupils, a minimum administrative structure for a school no matter how small (e.g. a principal, assistant principal, librarian and nurse) and an extra administrator for every so many students above some minimum.

Some come from the federal government, e.g. requirements that teachers paid from federal funds be given some duties and not others, that schools use particular forms of test to assess student learning, that handicapped children be educated in the least restrictive environment possible but be given whatever extra instructional services they may require without regard for cost.

Further mandates come from local school boards, which can decide what methods and materials schools may use, and assign staff to a school without regard for the school's needs and priorities. Local school boards also create mandates for particular schools when they intervene in staffing or programming decisions on behalf of constituents.

Nobody would seriously argue that all these mandates were put in place to make schools more effective or efficient. In fact, no single rationale can explain them, other than they are designed to protect adults. When adopted, by legislatures, school boards, or administrative agencies, most were justified as reasonable expedients in crisis or concessions to group demands.

There are some mandates that were initially justified as increasing school effectiveness – for example, class size limits, teacher licensing, seat time requirements, and mandates that drive salary decisions and protect school employees at the expense of students. Some of these mandates have certain logic, and there could be some examples of schools that adopted certain policies (e.g. small class sizes) to good effect. However none of mandates were based on evidence that the required actions made all schools more effective, or were more effective than other possible actions costing them the same amount.<sup>2</sup> Nor were these supposedly effectiveness-oriented mandates coordinated in any way. Each was the product of

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<sup>2</sup> Some governance constraints arise from perennial problems, e.g. schools' tendency to under-serve handicapped children and to try to hand pick the easiest-to educate so they can look good. Rules to protect students against discrimination are perennial

targeted advocacy, not an integrated theory of school effectiveness. Instead, they were enacted one at a time and often for different reasons.<sup>3</sup>

A special kind of mandate is the result of teacher collective bargaining agreements, or in states like Texas, state labor laws which are effectively just collective bargaining at the state level.<sup>4</sup>

Mandates that break the links between performance and expenditure include:

Automatic raises linked to seniority, given to any teacher whose performance remains above a very low minimum<sup>5</sup>

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<sup>3</sup> For a more complete account on the constraints imposed on experimentation and flexible use of public funds see Hill, Paul T., Marguerite Roza, and James Harvey, *Facing the Future: Financing Efficient Schools*, Seattle, Center on Reinventing Public Education 2008.

<sup>4</sup> For a summary of scholarly work on these results of union-promoted provisions see Hill, Paul T, *The Costs Of Collective Bargaining Agreements And Related District Policies*, in Hannaway, Jane and Andrew Rotherham (Eds.) *Collective Bargaining in Education Negotiating Change in Today's Schools*, Harvard Education Press 2006m ch. 4.

<sup>5</sup> There is an extensive literature in economics about the disconnect between the bases on which teacher pay is set in public education and consequences for students. Important examples include: Aaronson, Daniel, Lisa Barrow, and William Sander, *Teachers and Student Achievement in the Chicago Public High Schools*. Working Paper WP-02-28 (Federal Reserve Bank of Chicago, 2002); Aaronson, Daniel, Barrow, L., & Sanders, W. (2003). *Teachers And Student Achievement In Chicago Public High Schools*. Chicago: Federal Research Bank of Chicago; Goldhaber, Dan, & Brewer, Dominic (1997). *Why Don't Schools And Teachers Seem To Matter? Assessing The Impact Of Unobservables On Education Production*. 32, 505–523; Goldhaber, Dan, Dominic J. Brewer, and Deborah J. Anderson, "A Three-Way Error Components Analysis of Educational Productivity," *Education Economics* 7 (3) (1999); Hanushek, Eric A. (2003). *The Failure Of Input-Based Resource Policies*. *Economic Journal*, 113, F64–F68; Hanushek, Eric A, John F. Kain, and Steven G. Rivkin, "Teachers, Schools, and Academic Achievement." Working Paper 6691 (National Bureau of Economic Research, 1998); National Council on Teacher Quality, "Increasing the Odds: How Good Policies Can Yield Better Teachers" (2005); Kane, T. John, Rockoff, Johah. E., & Staiger, Douglas O. (2006). *What Does Certification Tell Us About Teacher Effectiveness? Evidence from New York City*. National Bureau for Economic Research Working Paper 12155. Cambridge, MA; Miller, Raegen and Marguerite Roza, *The Sheepskin Effect and Student Achievement: De-emphasizing the Role of Master's Degrees in Teacher Compensation*, Washington D.C. Center for American Progress 2012; Rivkin, Steven, Hanushek, E. A., & Kain, J. F. (2005). *Teachers, Schools, And Academic Achievement*. *Econometrica*, 73, 417–458.

Tenure for teachers who do not clearly prove their incompetence on the first 2-4 years of work

Automatic salary increases as teachers take additional training whether or not it is relevant to the teacher's responsibilities or the school's needs;

Extra pay for Masters' degrees

Strict limits of minutes or days that teachers can be in contact with students<sup>6</sup>;

Requirements that all tenured teachers be placed in jobs before new teachers can be hired, and reductions in force be made on the basis of seniority not performance.<sup>7</sup>

Requirements that senior teachers who are displaced from their schools can "bump" junior teachers from their jobs regardless of the consequences for the schools thus disrupted.<sup>8</sup>

Of all these mandates, there probably isn't one that is crushing all by itself. But mandates accumulate over time, as new ones are encoded in law, regulation, district policies, contracts, and court orders, and old ones stay on unchallenged.

As a result of these mandates:

Funds are tied up in uses whose costs and consequences are not known

Money is spent on things that but satisfy interest groups or keep labor peace have little or nothing to do with student outcomes. (e.g. teacher masters degrees, tiny decrements in class size, job protection for less effective senior teachers)

Uses of funds that might be good in some situations are mandated for situations in which they don't produce any advantage.<sup>9</sup>

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<sup>6</sup> Baker, D. P., Fabrega, R., Galindo, C., & Mishook, J. (2004). Instructional time and national achievement: Cross-national evidence. *Prospects* 34(3), 311-334.

<sup>7</sup> See Sepe, Christina & Marguerite Roza, *The Disproportionate Impact of Seniority Based Layoffs on Poor, Minority Students*, Seattle, Center on Reinventing Public Education 2010. See also Marguerite Roza & Paul T. Hill, *How Within-District Spending Inequities Help Some Schools To Fail*, in *Brookings Papers On Education Policy* 201, 204, 216 (Diane Ravitch ed., 2004).

<sup>8</sup> See Levin, J., Mulhern, J., & Schunck, J. (2005). *Unintended consequences: The case for reforming the staffing rules in urban teachers union contracts*. Brooklyn, NY: The New Teacher Project

<sup>9</sup> For an exhaustive account how funds are now used and the counter-productive effects of regulatory, contractual, and accounting constraints, see Roza, Marguerite,

## **Experimentation, tradeoffs and transfer of funds to more effective uses is difficult**

Mandates do more than tie up funds on uses whose effectiveness is not known. They also prevent experimentation with new methods of instruction and other student services that might be more effective, and movement of money, teachers, and students from less- to more effective and efficient schools and programs. Unless they want to violate express requirements law, contract, or policy, school and district leaders can't:

Change the way students are grouped (e.g. teach some courses in very small classes and others, that need less individualization, in much larger ones).

Shift money from non-instructional to instructional uses (e.g. from transportation, facilities, or rent to more class time, individualized instruction, student access to on-line materials, etc.).

Hire experts to teach subjects that regular teachers are poorly prepared to teach (e.g. advanced physics graduate students to teach physics).

Make tradeoffs between the use of live teachers and on-line resources that may do a better job of teaching some subjects (e.g. advanced math and physics, which are often taught by teachers who have not mastered the subjects themselves)

Trade off between a costly but mandated use of funds and a less costly but equally effective one.

None of these options is proven effective in every case, and there is no reason to suggest that they should be imposed on all schools by mandate. However, they do open up possibilities for much more effective instruction in some cases. Moreover, experimentation with these ideas single and in combination could lead to new approaches that would benefit most or all schools. Experimentation with such ideas – and others that could arise as educators experiment with new forms of instruction and student motivation – is the only way schools can become more effective. However, the rules under which public schools operate assume that there is one best way to teach students, and that existing schools should all use it.

Education, like any other field, can make progress only by exploring new possibilities (which means experimentation with new uses for time and money and methods) adopting what works, rejecting what doesn't, and promoting widespread "uptake" of the most effective known methods. This means that the people

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*Educational Economics: Where do School Funds Go?*, Washington D.C., The Urban Institute Press, 2010.

responsible for producing student outcomes, particularly the heads of schools, must be able to change with they do and make tradeoffs, deciding to spend less on one resource or activity (e.g. the number of administrators in a school) and more on another (e.g. on-line resources that permit individualization).

Also like any other field, education cannot afford to assume that the “state of the art” at any one time is the best possible. It needs instead to assume that today’s state of the art could well become tomorrow’s old news. Unfortunately, education policy discourse often presumes that the best way of promoting student learning are well known and can be encoded in rules. These convictions persist against strong evidence to the contrary, for example that some students learn at a high level despite never setting foot in a school building, and that some students learn well in on-line courses that have effective class sizes in the hundreds.

Pursuing continuous improvement requires levels of flexibility that public education resists. Our current governance system for public education both prevents the tradeoffs necessary for experimentation and discourages schools from picking up good ideas created elsewhere. Such systems clearly fail the efficiency test.

How would Texas create an education system that did not tie up funds in inefficient uses, encouraged constant search for more effective ways to use money and children’s time, and abandoned less efficient methods of instruction in favor of more efficient ones? I will take up those questions next.

## **HOW TO MAKE AN EFFICIENT PUBLIC EDUCATION SYSTEM**

Texas could have an education system that strives for the most efficient use of all resources for the benefit of students. But it would have to be very different from the current system. It would need to have four attributes:

- Transparent about expenditures at all levels as well as outcomes
- Holds schools accountable for their efficiency, not just effectiveness
- Is constantly open to new ideas and encourages competition
- Provides incentives for students and families to maximize their own effort and results
- Encourages schools to use services provided by others when they increase efficiency.

### **Expenditure Transparency**

The need for transparency about expenditures is straightforward: to assess the efficiency of a school or instructional program it is necessary to know everything that is spent on it, as well as its outcomes. Given the likelihood that efficient schools will not all be alike – that the most efficient use of resources for one group of students might not be the most efficient for another – this requires a degree of

granularity of evidence that current public education accounting systems cannot provide.<sup>10</sup>

Use of these data to inform decisions at the system level – about inefficient schools or instructional systems to be closed, efficient ones to be reproduced, and better targeting of schools and programs to particular groups of students – would require that expenditures be followed to the child level and be merged with outcomes data in the same school year that they were generated. The state and school district would also need capacities for detailed analysis to find and take action on evidence of efficiency outliers.

Schools would also need the same data to assess their own efficiency, overall and for particular pupils, and to identify high efficient on-line programs to which they might assign students for whom particular courses offered by the school were not efficient.

These requirements imply significant investment in data and analytic systems at the state and district levels, whether employees or contractors do the work.

### **Accountability for Efficiency, not Just Effectiveness**

In a system built for efficiency, schools would be held accountable for how much students learned per dollar spent. Though highly effective schools would be unlikely to be closed, efficiency would be a tiebreaker. If, for example, two existing schools were serving an area suffering population decline and one had to close, the more efficient one would stay open. The state or a local board could also close a reasonably effective school if a group offering a dramatically more efficient approach challenged its charter renewal.

This requires that both real cost and actual student growth be calculated, for each school each year. A state that controls inputs (e.g. says every class must be of a particular size, mandates schools' administrative structures, controls salaries and use of time) can never know whether it is making the most efficient use of its funds.

Schools would be the entities held accountable for efficiency. Teachers working for a school would gain income and job security, depending on whether the school was so efficient that it could expand or make money selling its services to other schools; they could also lose out if their school was closed for low efficiency or abandoned by parents who found something better. However, no one outside the school could determine who was hired or how much they were paid. That would all depend on the school's success and how central individual teachers were to it.

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<sup>10</sup> For example, in Texas the financial reporting categories are so broad that it is difficult if not impossible to know how much is spent to actually teach any particular subject or any student.

Making the school the accountable unit also means that parents could not get direct access to the money available for their child's education. Families would have choices among schools, and schools would get the whole amount allocated for each child's education. But families could not allocate these funds in detail after choosing a school. Schools could attract parents by offering many options for remediation and enrichment, but they would remain responsible for student outcomes and efficient uses of funds.<sup>11</sup> Schools' incentives to purchase courses and other experiences that are both effective and desired by parents will create enough opportunities for new business to stimulate a rich supply of on-line instruction and enrichment providers.

### **Openness to new Ideas and Competition**

Incumbent educators need freedom to make tradeoffs on behalf of student learning and to experiment with new ideas. But there is no reason to think the group of people now employed in schools and school districts have a corner on ideas about how to accelerate student learning. To the contrary, many ideas about how to make k-12 schools more efficient – and how to match instructional and student services approaches to the needs of definable groups of students – will come from other levels of education and from people with backgrounds in learning theory, on-line instruction, and computer simulation.

Some important ideas might eliminate factors that are now considered basic to public education (e.g. school buildings that house all students 6 hours/day 5 days/week) in favor of much more parsimonious approaches (e.g. blended learning models where students attend school one day/week, so that one building can contain 5 schools). Even if instruction were no more effective in the new schools, they would have lower costs and therefore be more efficient.

In conventional public education, there are many barriers preventing the trial and use of ideas from those sources. Though schools and districts might adopt some ideas for special courses or extracurricular supplementation, they are extremely resistant to changing the ways they use time, people, and money. This means that externally derived innovations are normally kept on the margins and not allowed to invade what conventional educators consider the "core" of their work.

Innovators on the outside can't hope to implement big ideas that will totally transform students' learning experience; to the contrary they know that any use of their ideas in public schools will be marginal and not well funded. For many that

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<sup>11</sup> I have argued elsewhere that parents really can't be held accountable for inefficient uses of public funds – they can't be fined or have their children taken away – but schools can. Thus the insistence on schools serving as the manager of funds and purchaser of services. See Hill, Paul T., *School Finance in the Digital Learning Era*, in Finn, Chester E. and Daniela R. Fairchild, *Education Reform for the Digital Era*, Washington D.C., The Thomas W. Fordham Institute 2012. See especially pp. 91-95.

means that their talents can be used more lucratively elsewhere, particularly in adult training and computer gaming. Thus, education does not get the benefit of all the available ideas that might improve efficiency.

To get full access to all the possibly relevant innovations, public education must be so open to ideas created elsewhere, and so willing to use promising ideas on a large scale that innovators can hope to make a good living from it.

Innovators must be able to start schools that public school students can attend, and receive all of the money that students bring with them. Successful innovative schools should have no limitations on the numbers of schools they serve or the numbers of times they replicate their core ideas. This requires a reliable mechanism for licensing of innovative schools, ensuring that students who want to attend them can do so, and that money will flow directly to innovative school operators.<sup>12</sup>

Today, school chartering meets that broad description, though state caps on the numbers of charter schools allowed, and funding policies that give charters less money per pupil than other schools constitute grave barriers to implementation. However, a state law allowing innovators to apply for a charter, be fairly judged on the plausibility of their plans, admit students without limitations and get the same amounts of money as do neighboring school districts, is a necessary ingredient of an efficiency-oriented public education system.

### **Incentives for Students and Families**

Student and family motivation is the great unsolved mystery of public education. As schools are now organized, students either come motivated or they don't; teachers can reach as few via personal contact, but many are unreachable. A public education system designed for efficiency could give students and families new incentives, and give schools new opportunities to experiment with student motivation.

A public education system meant to optimize efficiency could provide real financial incentives for students to use their time (and thus public funds) as efficiently as

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<sup>12</sup> Inefficient schools would face severe penalties, including loss of students and possible loss of their charters. Should a school also be penalized in lesser ways, e.g. by fines if its students don't do very well, but not badly enough for the local board to revoke its charter? I have argued elsewhere that hair-trigger penalties for schools that run into minor trouble would discourage risk-taking and discourage people with promising but unproven ideas to enter the market. The efficiency perspective does not alter this conclusion. See Hill, Paul T., *School Finance in the Digital Learning Era*, in Finn, Chester E. and Daniela R. Fairchild, *Education Reform for the Digital Era*, Washington D.C., The Thomas W. Fordham Institute 2012. See especially pp. 91-95.

possible; and allow schools to learn about and get access to materials and techniques that have increased the efficiency of students in other schools.

As discussed above, students need incentives to work hard and master necessary material quickly, and parents need incentives to make sure they do. An education funding system could approach this by letting families benefit from student efficiency, letting them share in the savings from courses not taken or months of school not needed. Schools also need to benefit from their students' efficiency, so the savings could be divided equally.

Family incentives could reward students who were able to avoid or cut short course taking by passing rigorous proficiency exams. Then, funds saved could be shared between the school and the student, with the student's share going into an account that could be used to pay for instruction at any time the student chose, for the rest of her life. Students could use the money for elective courses or keep the money to pay for higher education.<sup>13</sup>

This proposal obviously applies to secondary students. However, some parents might see the advantage in sending their children to elementary school in an advanced state of preparation and using the savings for electives or saving for college.

For this to be possible schools would have to be able to realize savings when individual children test out of a course. That might not be possible for conventional courses taught by teachers in classrooms, but it could work for on-line courses or tutorials that schools could buy on a per-capita basis. The fact that both schools and families could benefit financially from this arrangement creates an incentive for schools to organize their courses so that the marginal cost of a student is easy to compute.

One possible problem with these incentives is that privileged families might be more likely to realize savings than disadvantaged families, which have fewer opportunities to build students' skills out of school. However, if the pupil-based funding were weighted for the difficulty of educating children with particular characteristics, families that simply prepared and supported their children better than others like them could also benefit.

Of course schools would also benefit when students who based on their demographic characteristics are expected to need remediation, pass their courses on time. Insofar as student weighted funding takes account of the likelihood of remediation, schools that prevent course failure could have extra money to share

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<sup>13</sup> Today, students who pass AP exams at high enough levels to gain college credits get some form of this reward. However, it is available only to the most advanced students at the best-staffed schools. The incentive proposed could be available for any student who could pass a proficiency exam in any course.

with families. Ultimately schools that do this for their disadvantaged students could avoid the most inefficient possible kind of expenditure, on preventable special education placements.

These incentives would also encourage schools to look for methods to encourage students to attend, do the work, and learn rapidly. Schools that identified ancillary courses that built student skills and motivation could assign students to them and share the benefits with parents.

### **Schools Buying One Another's Services**

All the ideas in the preceding section presume the ability of schools to make available a wide variety of courses and enrichment experiences. This is impossible if a school spends all its money on employees and a fixed curriculum. But it is possible if schools consider themselves gatekeepers between students and the vast number of learning experiences available for per-capita fees on-line and from other schools.

Mike Johnston and I have expanded on this idea of schools as brokers of learning experiences elsewhere.<sup>14</sup> The arrangements suggested here create strong incentives to search for the best way to meet any student's need, and to be indifferent about whether a student takes a course managed by his home school or some other source. Most schools will continue to offer adult supervision, counseling, and tutoring, and some will develop instructional specialties that both keep their students at home and draw students enrolled elsewhere. But to be competitive, especially under an accountability system that takes account of efficiency, schools will need to organize themselves for nimbleness, "making" only those aspects of the student experience at which they are good, and "buying" the rest elsewhere.

Thus, schools will constitute a marketplace for instructional programs and other services, each trying to be an excellent provider (and thus seller) of some things and a buyer of others.

### **CAN ALL THE PARTS COME TOGETHER?**

As presented above, re-orienting our public education system to emphasize rather than ignore efficiency would be a complicated endeavor. This is so largely because being oblivious to efficiency is so deeply engrained in the way we govern, finance, and assess public education today. Changes in the ways schools were funded would have to be integrated with reforms in the ways public officials oversee them. An integrated finance and government system for efficient public education would have the following features:

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<sup>14</sup> Hill, Paul T. and Mike Johnston, *In the Future, Diverse Approaches to Schooling*, *Phi Delta Kappan*, November 2010 vol. 92 no. 3 43-47

- A student-based funding scheme in which every student carries funds – actual dollars – to the schools or on line programs she attends.
- Movement of money moves whenever students transfer schools. The state could hold back small amounts of money for data analysis and oversight.
- Freedom for schools to use their budgets as they choose to support their instructional programs. No deductions from budgets for not renting facilities or employing staff.
- Total freedom for parents to choose any school in the district or state.
- A requirement that all schools would be chartered or run under performance contracts.
- Rigorous student learning standards and state maintained data files that allow tracking of each student's annual learning and how money was spent on her education.
- Openness to charter applicants from any source
- Annual performance review of all schools and withdrawal of the charters of the least efficient schools.<sup>15</sup>
- Acceptance that cyber or blended schools eligible for chartering and funded the same as all other schools, based on enrollment.

The system sketched here is very different from that present in Texas and elsewhere in the U.S. However, the new system doesn't have to be built from scratch. Many of the system elements described above – pupil based funding and accounting, school level control of spending, public oversight of schools based on performance rather than compliance, schools free to experiment with new modes of staffing and teacher compensation, and openness to new providers and technologies – are present in New Orleans and other "portfolio school districts." State laws, most recently in Ohio, are also being changed to create new freedom to experiment in search of more effective forms of schooling.<sup>16</sup>

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<sup>15</sup> Performance oversight arrangements could include a state recovery district, like those now operating in Louisiana, Tennessee, and New Jersey, that could take control of consistently ineffective schools that the local Board had refused to close or replace. For more on recovery school districts see Hill, Paul and Patrick Murphy, On Recovery School Districts and Stronger State Education Agencies: Lessons from Louisiana, CRPE 2011 [http://www.crpe.org/cs/crpe/view/csr\\_pubs/449](http://www.crpe.org/cs/crpe/view/csr_pubs/449)  
See also Smith, Nelson, The Louisiana Recovery School District: Lessons for the Buckeye State, The Thomas Fordham Institute, downloaded 6/27. 2012 from <http://www.edexcellence.net/publications/the-louisiana-recovery-school-district.html>

<sup>16</sup> A portfolio school district is one that provides families the best choices among schools possible, using a combination of strategies – including traditional direct operation, chartering, and contracting out to private providers and on-line schools – and is willing to close low performing schools no matter who operates them and open the best new school possible no matter what the source.

It is my understanding that the courts in Texas are loathe to mandate specific changes to the educational system. Instead, the courts merely determine the adequacy, suitability, equity and now efficiency of the system. If it is found lacking in any of these, it then goes to the legislature to make the necessary changes. The ideas I have put forth above are proffered as a way of showing what could be in comparison to what is. This highlights the clear inefficiencies in the system.

**Whether Texas can re-focus its public education system on efficiency depends on how strongly leaders outside of education are convinced that every penny of public expenditure must be used to the benefit of children.**

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For a full account of the portfolio district strategy and its main exemplars, see Hill, Paul T., Christine Campbell and Betheny Gross, *Strife and Progress: Portfolio Strategies for Managing Urban Schools*, Washington D.C, the Brookings Press, 2012 (forthcoming).

# **MASTER DEPOSITION**

## **EXHIBIT NO. 1**

**(MARK HURLEY)**

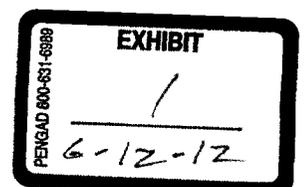
# No Financial Accountability

**Why Texas K-12 public education lacks any real financial accountability and the implications for both the ongoing public school financing litigation and the future of our State.**

Mark P. Hurley  
Yvonne N. Kanner  
Jonathan Yu

***Texas Education Accountability Project***

***March 2012***



**Texas Education Accountability Project**

The authors would like to thank Tom Luce, Jerry Farrington, Lori Fey, Dr. Lori Taylor and Stuart Leaf for their help with this study. While each provided invaluable insights and perspectives, any shortcomings of this report are solely our own.

Mark P. Hurley

Yvonne N. Kanner

Jonathan Yu

Mark P. Hurley, Yvonne N. Kanner and Jonathan Yu are co-founders of the Texas Education Accountability Project.

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***Although Texas spends \$55B per school year on K-12 public education, there is no transparency or financial accountability for how this money is actually used.***

## **Executive Summary**

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**We wanted to understand how Texas K-12 public education dollars are currently used.**

Texas has been embroiled in a multi-decade legal and political battle over the funding of public education. The Texas Supreme Court has concluded that to be constitutional, the system of funding K-12 public education must be “efficient,” “suitable” and “adequate.” However, the Court defined these terms very broadly. It also declined to provide any quantifiable metrics by which to evaluate whether the system meets these criteria.

As outside but interested observers, we at the Texas Education Accountability Project (TEAP)<sup>1</sup> found the ongoing legal battle intriguing because the plaintiffs to date have failed to propose any quantifiable metrics to address the efficiency and suitability of the current system and have offered only very limited ones for evaluating its adequacy. Nor has anyone provided any useable information which would allow either the Legislature or the courts to measure how changes in funding might directly translate into changes in the quality of education provided to students.

Certainly, various parties have pointed to disparities in spending per student as well as the relative performance of students in different school districts on standardized tests.<sup>2</sup> However, the Court has already ruled that per student spending and test scores alone are not dispositive. More importantly, none of the plaintiffs has even attempted to show that they use their current funding efficiently and thus, only if they receive additional resources will they be able to provide a suitable and adequate education for their students.

Consequently, we thought it might be useful if an outside group independently conducted a detailed review of how Texas schools spend the billions of dollars of funding that they receive. Of course we recognize that there is not a perfect correlation between the amount of money spent – or even to some degree how the money is spent – on educating students and the resulting outcomes. But at the same time, a precondition to improving any system of public education (much less making it conform to the State’s constitution) is to first understand how current resources are being used and compare that with the results that they produce.

Our goal was to identify a set of quantifiable metrics that could be used in evaluating the efficiency, suitability and/or adequacy of the current system as well as any new system the Legislature might devise. To do this, we spent two years gathering and analyzing financial data from school districts across our State.

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<sup>1</sup> By way of background, TEAP is a nonprofit, nonpartisan organization. Our goal is to utilize the private sector experience of our members in order to make some small contribution to improving public education in our State. Our members do not directly or indirectly provide any services, supplies or equipment to schools or in any other way financially benefit from K-12 Texas public education. Rather, we earn our livings investing capital into private companies unrelated to education.

<sup>2</sup> In order to support these arguments, some plaintiffs have relied on academic studies that employ macro-econometric models based on aggregate statistical data across many school districts.

## **No real financial accountability in Texas public education**

**We discovered that only those who work for a school district have any idea how it actually uses its funding.**

What we found was startling – namely, there is no real financial accountability for K-12 public education in Texas. In a system of public education that in aggregate spent nearly \$55B<sup>3</sup> in the 2008-2009 school year and which increased spending per student by nearly 63% over preceding decade (almost twice the rate of inflation), it is almost impossible for any average citizen who does not work for a school district to have any idea of how taxpayer funds are used.

To be sure, the current system of reporting generates tremendous amounts of data and each school district is required to publish an annual financial report that has been independently audited. However, for several reasons the system produces little useful information, precluding both transparency and accountability.

First and foremost, the primary financial disclosure document produced by school districts – their annual financial report – does not provide an average citizen with any real insight into how a particular school district uses its funding. These documents uselessly aggregate the overwhelming preponderance of the school district's expenditures into a small number of individual line items, each with comforting-sounding names such as "Instruction" and "School Leadership." In other words, the documents do not tell the reader what the district purchased. Rather, all that is disclosed is the generic purpose of the expenditures.

**More than half of a typical school district's expenditures are disclosed in a single line item of its annual report.**

For example, according to the Comptroller's office on average 56% of Texas school districts' expenditures are incorporated into their annual reports in the single line item of "Instruction." Under current Texas Education Agency rules, school districts are required to include in this line item 29 different categories of expenditures. In addition, they are allowed to add into "Instruction" any expenditure which fits the very broad definition of providing "direct interaction between staff and students to achieve learning." Our review of a group of school districts' supporting documents (general ledgers and check registers) used in preparing their annual reports found that expenditures included in "Instruction" ranged from hotel and travel costs to general supplies to "Xmas Staff Gifts" and even a "Magic Show."<sup>4</sup>

The paucity of the information provided to citizens by school districts on how taxpayer funds are actually used is particularly surprising given that they regularly collect immense amounts of financial data. Their general ledgers track every expenditure made and accompanying these entries are a series of "object codes" that are either very specific (i.e., cell phone allowances, print shop expenditures, water, sick leave, etc.) or extremely broad (general supplies, contracted services, other operating expenses, etc.). In the general ledgers that we reviewed, every expenditure had both a function code (i.e., "Instruction," "Curriculum Development," "School Administration," etc.) and an underlying object code. Much of this information, in turn, is captured in databases maintained by the TEA.

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Financial Allocation Study of Texas

<sup>4</sup> The authors would like to emphasize that in no way are we suggesting that the school districts that we reviewed are misreporting their financial data. Rather, it is the reporting rules that they must follow are what preclude any financial transparency and/or accountability.

**Although there is a great amount of data, there is almost no useful information.**

**It is impossible to improve education in Texas unless we improve financial accountability.**

### **Transparency a precondition to financial accountability**

Unfortunately, no average person has the time or resources necessary to analyze even a fraction of this data. But without such a forensic accounting exercise, it is impossible to determine relatively simple things such as how much of the district's funding is used to pay teachers solely to teach vs. what it costs to insure driver's education vehicles (both of which are classified as "Instruction" expenditures), much less what is the district spending money on that is essential vs. optional.<sup>5</sup>

For many good reasons, our State's system of public education is based on "local control"—that is, local school districts and not some centralized authority determine, given their individual demographics, location, economics and other factors, the best way to educate students. Ideally, local control allows parents input into how their children are educated and how their school districts should best use taxpayer funds. However, a precondition to financial accountability under such a structure is that an average citizen be able to understand exactly how his or her school district spends money, something precluded by the current system of financial reporting.

### **The uninformed being evaluated by the equally uninformed**

Also consider for a moment the larger implications of what we found: The Legislature somehow must design an efficient, suitable and adequate system of funding Texas public education while at the same time possessing no real idea of how school districts currently spend taxpayer money. Equally problematic, the courts somehow must evaluate the constitutionality of whatever the Legislature produces but they have no better information than that on which the Legislature must rely. The resulting process can be best characterized as the uninformed being evaluated by the equally uninformed.

Most importantly, the economic future of our State is dependent on having a well-educated populace. But without any useful information of how we currently spend our education dollars, whatever system the Legislature devises will be at best arbitrary and will likely do little to improve education in Texas.

### **A simple solution**

There is, however, a simple solution to this dilemma: fix the current system of financial reporting. These changes should be guided by one simple, overarching principle: the primary purpose is to produce information that allows an average citizen to easily understand exactly how his or her school district spends taxpayer money.

Only if and when the system meets this standard will there ever be real financial accountability in K-12 public education. Additionally, only with these changes will the system generate the necessary information that will

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<sup>5</sup> In fact, we concluded after nearly two years of research that the only way TEAP – even though we invest in companies for a living – would ever be able to figure out exactly how a school district was spending taxpayer money would be to recreate a new general ledger (and from that an annual financial report) by beginning with the thousands of underlying receipts from all of a district's individual purchases and expenditures.

allow the Legislature to design a system of funding public education that is constitutional.

We would recommend that at a minimum:

- (i) School district annual financial reports must be redesigned in six ways:
  - a. The line items included in the summary pages of the reports should be tied to specific types of expenditures and not simply their general purposes;
  - b. Each of these line items should be accompanied by a schedule with numerous sub-line items which detail precisely how the funds were used;
  - c. The annual report should include key output metrics including the numbers of students taught in different types of classes;
  - d. It should also include a detailed organizational chart for the district;
  - e. It should list any and all agreements with non-district employees and entities as well as the amounts paid and services and/or products received;
  - f. For those districts which share services with other school districts and government agencies, their annual report should have a separate set of detailed disclosures describing what was purchased and how the funds provided were used.
- (ii) The coding in school district's supporting documents (i.e., general ledgers and check registers) should likewise be changed so to create an easy audit trail that ties individual expenditures into the sub-line items of the supporting schedules in the district's annual financial report. Only by doing this can an outsider easily determine not only to whom or to what money was paid but also for what exact purpose; and
- (iii) School districts should be required to make their financial reports, major contracts and supporting documents easily accessible online through the individual district's website.

We have included in this report a series of proposals to address these issues.

**School district annual financial reports must be changed in six ways.**

## **I. Introduction**

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Texas has been engaged in a four decade political and legal battle over how much it must spend on public education, how those monies should be allocated and from where all of this funding is going to come. Poorer districts have argued that the state's historical system of funding K-12 public education is unconstitutional because of its reliance on local property taxes which, in turn, creates a vast disparity in the amounts spent on educating students in public schools in different parts of the state. Their litigation culminated in the landmark *Edgewood* cases which forced the Legislature to materially alter how public education is funded.

The resulting system was and remains – to put it mildly – extremely unpopular and controversial. Relying on a series of formulas that are altered in every Legislative session and that are almost indecipherable, the program nicknamed “Robin Hood” takes funding that would have otherwise been used to educate students in wealthier districts and transfers it to less affluent ones.

Robin Hood spawned a series of additional lawsuits claiming that this system of funding public education violated the State's constitution because it de facto imposed a state property tax. The Court agreed that, as then structured, Robin Hood violated the State's constitution. It also indicated that the K-12 public education system in general required both structural changes and new sources of funding because it was on the cusp of being inadequate.

At the same time, however, the Court's guidance to Legislature was fairly non-specific. It determined that there is a constitutional obligation that Texas' system for providing free public education meets three key standards: (i) efficiency; (ii) suitability; and (iii) adequacy.

The Court defined efficiency as “the meaning of effective or productive of results and connotes the use of resources so as to produce results with little waste.” It explained that in order to be suitable “the public school system be structured, operated and funded so that it can accomplish its purpose for all Texas children” and that an “adequate” education system is “one that achieves a general diffusion of knowledge.” Exactly how the then current system of funding public education must be changed to meet these criteria was left up to the Legislature as the Court claimed that it lacked the basis for “declaring what education or finance systems will *alone* satisfy [the Constitution's] standards.”

### **Court has left it to others to propose quantifiable metrics**

However, these rulings made it clear that the Court decided that it was not its job to redesign the Texas system of public education and that the Court was unwilling to propose any quantifiable metrics by which to measure whether any system would be constitutional. More specifically, the Court provided no guidance as to the types of skills that students must acquire – much less how one should measure whether these skills have been achieved – to meet the constitutional requirement of “achieving a general diffusion of knowledge.” It likewise provided no metrics on how to measure efficiency. Instead, it left it to others to propose their own ideas.

**System of funding public education must be “efficient,” “suitable” and “adequate.”**

Perhaps because the ruling was so broad, the Legislature subsequently elected to only marginally change the structure of funding for public education. The resulting legislation required school districts to gradually lower their maximum property tax rates for school maintenance and operation and (at least theoretically) replaced that revenue through a combination of new state taxes.

**Lack of clarity + less funding + higher standards = more lawsuits**

The non-specificity of the Court's ruling also made it inevitable that, regardless of whatever the Legislature did, there would be additional legal challenges. The potential for more litigation was further enhanced because the Legislature had to cut more than \$5B in public education funding over the next biennium in order to balance the State's budget. In addition, at the same time it substantially raised the education standards for Texas high schools through a program called "College and Career Readiness Standards" (CCRS).

Consequently, late last year and early this year a flurry of new litigation was filed. Although each of these lawsuits rely on different bases for challenging the public system of education, they all claim that it either fails to meet the three criteria outlined by the Court, or that in attempting to meet these criteria, it violates some other aspect of the State's constitution.

**Texas Education Accountability Project (TEAP)**

We at the Texas Education Accountability Project (TEAP) have dared to wade into the middle of this debate. By way of background, TEAP is a nonprofit, nonpartisan organization. Our goal is to utilize the private sector experience of our members in order to make some small contribution to improving public education in our State. Our members do not directly or indirectly provide any services, supplies or equipment to schools or in any other way financially benefit from K-12 Texas public education. Rather, we earn our livings investing capital into private companies unrelated to education.

Our members (like anyone else who has studied the current system of public education) see that it is rife with problems that must be solved and the current quality of education provided to many students in some school districts is abysmal at best. And certainly, the level of resources that school districts have at their disposal to educate students varies immensely across our State, with some school districts clearly having to do a great deal with very little.

As interested observers of the battle being waged in the Legislature and the courts over public education, we were surprised that the participants in this debate have provided to date only very limited quantifiable metrics to support their arguments. No one has proposed any methodology for measuring efficiency and/or suitability. Those who have tried to quantify adequacy have relied on very broad econometric models that purport to correlate education outcomes and different spending levels. More importantly, no plaintiff has even attempted to demonstrate that it uses its current funding efficiently and, therefore, only with additional funding can it provide a suitable and adequate education for their students.

**Multiple new lawsuits have been filed, challenging the constitutionality of current system.**

**None of the plaintiffs have proposed metrics to determine efficiency or suitability.**

Of course, plaintiffs have also pointed to spending per student and the relative performance of students in different school districts on standardized tests. However, the Court has already ruled that per student spending and test scores alone are not dispositive.

### **Independent review of the data**

Consequently, we at TEAP thought it might be constructive to have an outside group independently examine how Texas school districts currently spend taxpayer dollars. We spent almost two years collecting and analyzing financial data across multiple school districts throughout Texas. Our goal was to identify a series of potential metrics or benchmarks that could be used to better measure the efficiency, suitability and adequacy of the current system and, thereby, assist both policymakers and jurists in fashioning a funding mechanism for public education that would meet its constitutional requirements. Ideally, these same metrics could also be used to improve how we educate children in our State.

### **TEAP spent two years reviewing school district financial data.**

Our analysis quickly evolved into an exercise in forensic accounting. We looked at the audited financial reports for individual districts as well as the Texas Education Agency's rules for reporting. We also delved much more deeply into the numbers by comparing the financial reports of several individual school districts with their supporting documents including their general ledgers, check registers, the superintendent's employment agreement, the structure of the district's employee benefit programs and how they accounted for shared services and supplies, etc.

### **No real financial accountability for public education in Texas**

What we found was quite different from what we had expected. More specifically, we discovered that there is currently no real financial accountability for K-12 public education in Texas.

Certainly, school districts currently generate oceans of financial data and each school district must prepare an annual financial report which is independently audited. Unfortunately, however, the current system of financial reporting produces no useful information, making it impossible for anyone who does not work in the district to have any real idea of how it spends taxpayer funds.

As we will explain later in greater detail, three findings led us to this conclusion:

- (i) The primary disclosure document produced by school districts – their annual report – tells the average citizen very little on exactly how a particular school district uses its funding;
- (ii) Although school districts regularly track thousands of pieces of financial data in their general ledgers and check registers and much of that data is captured in databases maintained by the Texas Education Agency (TEA), it is just that, raw data. No average person has the time and resources to analyze a fraction of it. But without a detailed forensic accounting analysis this mass of data provides no useful information; and

- (iii) Some – but not all – school districts make it extremely difficult for outsiders to obtain their financial data.

### **The uninformed being evaluated by the equally uninformed**

Consider for a moment some of the consequences of our findings. The Texas system of public education is based on the concept of “local control” – that is, instead of relying on a centralized authority, each district determines the best way to educate its students given its geography, demographics, economics and other factors. Ideally, local control allows parents input into how their children are educated and how their school districts should best use taxpayer funds.

Clearly, a precondition to financial accountability in a system based on local control is that average citizens must be able to understand exactly how their school district spends money. Unfortunately, the current system of financial reporting precludes any such understanding.

Further, the Legislature likewise has no better information with which to (re) design the system of funding public education. However, whatever it devises must “produce results with little waste,” although it lacks any ability to measure or evaluate exactly how the money it appropriates is employed. It also must create a system that “accomplishes its purpose” and produces “a general diffusion of knowledge” without the ability to measure precisely what is being done to educate students with the dollars provided.

Equally problematic, the courts must evaluate the constitutionality of whatever the Legislature designs but has no better information than that on which the Legislature must rely. The resulting process can be best characterized as the uninformed being evaluated by the equally uninformed.

More importantly, whatever the Legislature and the courts arrive at will be at best arbitrary and will likely do little to improve education in Texas. It also will invariably lead to more lawsuits challenging the new system’s constitutionality.

### **A simple solution**

However, there is a simple solution to this dilemma: fix the current system of financial reporting in public education in Texas. It should be redesigned so that the information that it provides allows the average citizen to easily understand how his or her school district spends taxpayer money. Later in this report we will outline a series of proposals to address these issues.

**Both the Legislature and the courts lack the information required to design a constitutional system.**

## **II. A system of financial reporting financial that produces little useful information**

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School districts in Texas report their financial data using the Public Education Information Management System (PEIMS). Designed by the Texas Education Agency (TEA), the system's purpose is to track a wide variety of information from school districts across the state including student demographics and academic performance, personnel, financial and organizational information.

School districts track all of their expenditures in their general ledgers and check registers. The data is used in preparing the district's primary financial disclosure document, an independently audited annual financial report. The manner and format used by school districts to prepare this report is prescribed by the TEA's Financial Accountability Resource Guide (FARG).

As described in the FARG, the goal of all this work and expense is to "communicate adequate information to user groups to enable them to assess the performance of those parties that have been empowered to act in the place of the citizenry." Further, the reporting is not "an end in itself" but, rather "helps fulfill government's duty to be publicly accountable." It also is designed to help "satisfy the needs of users who have limited authority, ability, or resources to obtain information and who therefore rely on the reports as an important source of information."

Finally, the FARG also identifies the three primary target audiences for the districts' annual financial reports:

**Only if citizens can understand how tax dollars are used can school districts be accountable.**

- (i) Citizens of the school district (taxpayers, voters, service recipients, media, advocate groups, and public finance researchers)
- (ii) Direct representatives of the citizens such as legislatures and oversight bodies (state legislatures, school boards)
- (iii) Creditors (individual and institutional investors, bond rating agencies, intergovernmental grantors)

Simply put, the consumers of tax dollars – namely, the school districts – are accountable to their constituents, elected officials and creditors. In order to be accountable, the districts are obligated to provide financial disclosure in such a manner so that someone who does not work in the district on a day to day basis can understand how these tax dollars are being used.

### **Three reasons why the current system fails to meet its own stated objectives**

Unfortunately, for three reasons the current system of public education financial reporting falls far short of meeting these objectives. First, the rules on how school districts are required to prepare their annual financial reports effectively preclude

**Annual financial reports disclose only the general purpose of spending and not what was purchased.**

any transparency on how school districts actually spend their money. Second, although school districts amass large amounts of financial data in their check registers and general ledgers (much of which is captured by databases maintained by the TEA), it is just that, raw data. Absent a detailed forensic accounting analysis – something impractical for most people – the data provides no useful information. Finally, Texas school districts are not required to make their financial data easily accessible to outsiders.

**Issue I – Disclosing only the general purpose of spending and not what exactly was purchased**

If you pick up a copy of a school district’s annual report, you will find many similarities to that of the financial report of any public company. The report includes basic financial statements as well as notes explaining in greater detail some of the data that was incorporated in the summary pages.

But, unlike a public company, school districts do not have income statements because they are not intended to make money. Instead, the basic financials include a “Statement of Revenues, Expenditures and Changes” which both describes the sources of the district’s revenues and its expenditures in that school year.

This page of its annual financial report is the primary way in which school districts disclose how they spent taxpayer money. It is also a key reason why there is no real financial accountability for public education in Texas.

**Vast number of different types of expenditures crammed into individual line items of disclosure**

More specifically, as currently designed, the expenditures listed in this page of the report are crammed into a small number of individual line items with comforting sounding names such as “Instruction”, “School Leadership,” “Curriculum and Staff Development,” etc. But these line items do not tell the reader how the money was spent; rather, they only disclose the general purpose of the spending.

More problematic, they provide only very limited additional information on exactly how the district used its funding, although there are notes and additional schedules to the annual report. Consequently, the reader has no idea of very basic items such as how much is being spent to pay teachers to teach or what are the overhead costs of the district.

In addition, no outsider reading this report has any idea of how to determine which activities that are being funded by the district are necessary and essential to educating students versus those that are nice and useful but, in reality, are optional to getting a good education. Further, the disclosure provided makes it impossible for anyone to measure how efficiently the school district is using its funding.

For example, according to the Comptroller’s office, on average about 56% of school districts’ expenditures were included in a single line

item of their annual financial report. With the ubiquitous title of "Instruction," this line item aggregates, at a minimum, 29 different types of expenditures including:

**29 categories of spending are included in the "Instruction" line item of the report.**

1. Paying regular and/or substitute classroom teachers;
2. Paying teacher aides;
3. Paying classroom assistants;
4. Paying graders;
5. Paying staff working in the classroom on a dedicated basis;
6. Paying adult basic education teachers;
7. Paying teachers that deliver instruction by television or satellite;
8. T-H-N services provided by education service centers;
9. Classes taught to students by education service centers;
10. Special education instructional services, including speech occupational and physical therapy;
11. Upkeep and repairs to instructional materials and equipment in the classroom;
12. Instruction in health;
13. Field trips;
14. Band instruments purchased by the school district or donated by band boosters or other groups;
15. Instructional computer networks;
16. Software;
17. Licensing fees;
18. Maintenance and supplies for instructional computer networks;
19. Paying staff and instructional computer lab teachers;
20. Paying network managers for instructional networks;
21. Paying technology coordinators for instructional networks;
22. Testing materials for tests developed and administered by teachers;
23. Salaries for instruction including that portion of the salary for the regular school day that is for teaching physical education courses for credit when athletic activities are taking place;
24. Instructional supplies including but not limited to classroom supplies, grade books, grade book software, report cards, student handbooks and related costs;
25. Insurance for driver's education vehicles;
26. Graduation expenditures/expenses;
27. Pre/post-employment physicals for personnel classified in this function;
28. Drug testing for personnel classified in this function; and
29. Purchase of vehicles for instructional purposes, including driver education.

**Wide variety of other types of expenditures included in "Instruction"**

"Instruction," however, is not limited to only these kinds of expenditures. So long as any expenditure falls into the category of providing "direct interaction between staff and students to achieve

learning," it qualifies to be lumped into this single line item of a school district's annual report.

Our analysis of general ledgers of a cross section of school districts found that they included all kinds of expenditures in "Instruction" in their annual financial reports. A small sample of the examples that we uncovered included:

**Travel, postage, puppets and magic shows are also included in "Instruction."**

1. "Magic show" (\$2,700.00)
2. "Pictures" (\$250.00)
3. "General Supplies" (\$280,000 in aggregate across multiple entries)
4. "Hyatt Regency" (\$273.20)
5. "Primetime Entertainment Center" (\$143.20)
6. "Agape Tours" (\$3,300)
7. "Radisson Hotel and Suites" (\$502.44)
8. "Hilton Anatole" (\$627.84)
9. "Postage" (\$1,750.00)
10. "Puppets-LIBR-MS" (\$313.17)
11. "Xmas Staff Gifts" (\$138.53)

All of these expenditures may in reality provide "direct interaction between staff and students to achieve learning" and thus, these school districts' reporting is consistent with their rules for financial disclosure. However, what is also clear is that no outsider would have any idea if this was the case.

Further, how could anyone who does not work in the district be able to separate out essential functions such as teachers' salaries versus non-essential items such as cars for drivers' education or even "magic shows" or "Xmas Staff Gifts"? This kind of financial reporting is the antithesis of transparency.

**Most of the remaining expenditures are likewise crammed into only a few line items**

**Most of the remaining expenditures are crammed into a handful of line items.**

TEA's reporting rules require that school districts aggregate most of their remaining expenditures into a relatively small number of other line items in their financial disclosures. For example, the second largest category of expenditures was "Instructional and Media Resources." Under the TEA's rules, there are (at a minimum) sixteen different kinds of expenditures incorporated, including the salaries and costs associated with:

1. Librarians;
2. Library aides and assistants;
3. Media or resource center personnel who work in an audio visual center, television studio or related work study areas;
4. Substitute pay for library staff;
5. Selecting, preparing, cataloging and circulating books and other printed materials;
6. Planning the use of the library by students, teachers and other instructional staff;
7. Building individuals' ability in their use of library books and materials;

**Sixteen categories of spending are included in "Instructional and Media Resources."**

8. Selecting, preparing, maintaining and making available to members of the instructional staff equipment, films, filmstrips, transparencies, tapes, TV programs, software, CD/DVDs and similar materials;
9. Planning, programming, writing, and presenting educational programs or segments of programs by closed circuit or broadcast television;
10. Studio crews that record educational programs or segments of programs by closed circuit or broadcast television including those for T-I-N;
11. Library books, films, video cassettes, CD/DVD disks and, other media that are maintained by a resource center or library;
12. Supplies for binding and repairing books or other media contained in resource centers;
13. Upkeep and repairs to media, library and resource center materials and equipment;
14. Media and Living Science services provided by an education center;
15. Pre-post-employment physicals or drug testing for personnel in this function;
16. Purchase of vehicles for instructional resources and media purposes.

However, this list is not all-inclusive. Also included in this line item are any and all expenses that are "directly and exclusively used for resource centers, establishing and maintaining libraries and other major facilities dealing with educational resources and media."

**With so many types of expenditures mixed together, it is impossible to determine what is necessary vs. optional.**

**How do you determine if an automobile is solely for "staff development"?**

Consider also how school districts report what they spend on developing their curriculums and improving the quality of the staff which provide instruction. Included (but not limited to) in the "Curriculum Development and Instructional Staff Development" line item are: the costs of outside consultants, curriculum coordinators who are not responsible for supervising instructional staff, Assistant/Deputy Superintendents for Curriculum, tuition and fees paid by instructional staff to attend college, upkeep and repairs of equipment used for curriculum development or in-service training, paid sabbatical leaves for instructional staff and even purchases of vehicles for staff development or curriculum development purposes.

Let's put aside for the moment the question of how a school district might determine that the purchase of a vehicle was solely for "staff development" purposes. But when an annual report mixes into a single line item of disclosure everything from the cost of paid sabbaticals for teachers to the maintenance costs of certain types of equipment to the costs drug testing, how can any outsider have any idea as to what exactly are a district's spending priorities?

Also consider the line item ("School Leadership") of the annual financial report that any outsider would likely assume as most associated with overhead – namely the administrators who are not involved in teaching

students. While it is extremely broad, it is not all inclusive. For example, encapsulated in it are the costs of principals, assistant principals and related staff as well as those staff who track student attendance.

However, not included in this line item is that part of the superintendent's salary for performing "administrative duties directly related to the superintendency" as well as "other salaries and expenditures related to the office of the superintendent" and "salaries related to the budgeting, accounting and fiscal affairs" and "related to human resources." This category also excludes the cost of those staff members who prepare "the superintendent's annual report."

Loosely translated, this means that someone must divine how much of a superintendent's time is spent on "school leadership" (and any associated costs) separately from any costs associated with the time that a superintendent spends on administration. We find all of this remarkable given that superintendents are almost by definition administrators who lead their districts and that the necessary time and effort required to parse through these definitions probably could be put to much better use in educating our children.

**There is almost no disclosure about more than one fifth of some districts' expenditures.**

#### **Line item with the least transparency**

As bad as all of these examples of how school districts are required to disclose their non "Instruction" expenditures, they are downright transparent when compared with "Payments to Fiscal Agent/Member Districts of Shared Services Arrangements." This line item is used when a school district outsources any functions to another school district. All of the costs associated with doing so are aggregated into a single line item.

To reiterate – the school district's annual report does not disclose what services it is buying, the other school districts involved and how and for what purpose the money was used. Rather, so long as it shares services with another school district, its annual report simply discloses the total dollars involved.

As innocuous as this may sound, we found that several school districts had about 20% of their aggregate expenditures included in this line item. In other words, the district's financial report simply discloses that it paid another district(s) one out of every five dollars that it spent that year to perform some unknown services for the district. It is unclear how a set of accounting rules could make a school district's financial disclosures less transparent but it would definitely take much imagination and creativity.

#### **Illegal for publicly traded companies**

What all of these examples mean is that a school district's annual financial report – again, its primary financial disclosure document – provides no useful information as to how it actually spends taxpayer dollars. It is also a bit bizarre that the State relies on such an opaque system of financial disclosure for public education when one considers what would happen if the management of a public company tried to likewise aggregate so much of its expenditures into so few line items of its primary financial

**What is illegal for public companies is mandatory for Texas school districts.**

disclosure documents (i.e., annual report, 10K, 10Q, etc.) with no additional detailed disclosure.

It is quite probable that the management of the company would face civil sanctions from the SEC and even potential criminal ones from the Department of Justice. Further, it is also highly likely that the company would quickly find itself in a class action lawsuit for inadequate and misleading financial disclosure. But in the Texas system of public education, making such grossly insufficient financial disclosure is not only acceptable under the current rules for financial reporting, it is required.<sup>6</sup>

**Issue II – Immense amounts of data but no useful information**

It is particularly surprising to us that Texas school districts provide no useful information in their annual reports on how they spend taxpayer dollars given that they regularly track and record immense amounts of data. All of their individual expenditures are captured in their general ledgers and check registers. It is from these supporting documents that the data incorporated into annual reports is drawn.

For example, one smaller school district that we reviewed had about \$6.3M of aggregate expenditures in the 2009 – 2010 school year. But a review of its general ledger only reveals who or what got paid but not what for. A handful of example entries in the ledger included:

1. HITEQ Computer Systems \$870.95
2. Masterscapes \$596.02
3. Roberts Truck Center \$1932.50
4. Roberts Truck Center \$4,550.00
5. Roberts Truck Center \$512.44
6. Webb Electronics \$7,579.00
7. Webb Electronics \$1,670.00
8. John Deere Govmt and Ntl Sales \$3611.94
9. Alton's Sewing Machine \$300.00
10. JRnR Electronics \$68.00
11. Interstate Battery \$84.69
12. School Specialty Supply \$1768.18
13. CDW Government \$3,330.00
14. Future Pro \$3,285.00
15. Academic Superstore \$542.00

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<sup>6</sup> To better understand just how much more publicly-traded companies disclose in their financial statements as compared to Texas school districts, consider the reports provided by a great Texas-based company, Whole Foods. Although it is in a ferociously competitive business and (understandably) wants to provide its competitors with as little information as possible, a small portion of its annual disclosures includes: direct store expenses, G&A expenses, pre-opening expenses, relocation, store closure and lease termination costs, costs of goods and store occupancy costs, average pre-opening expense per store, its average pre-opening rent per store, stores opened, acquired, divested, relocated and closed, remodeled stores with major expansions, total gross square footage in stores, the sales mix between stores, number of stores in development, their average size and the total gross square footage in development, percentage sales by product category (non-perishables, prepared foods and bakery and other perishables), store sales growth by year over the last ten years, advertising as a % of revenues and compared with peers, contributions to not-for-profit organizations as a % of profits, number of stores by state, return to shareholders compared with peer benchmarks, sales growth, identical store sales growth, sales increases from stores acquired over the previous 52 weeks, direct sales expenses as a percentage of sales, wage expenses as a percentage of sales, workers' compensation expense as a percentage of sales, inventory valuation and methodology employed, impairment of long-lived assets, long-lived assets and sales domestically and in foreign countries, construction accruals, intangible asset depreciation, accretion of interest on existing reserves and new closures, rental expenses, deferred tax assets, stock options granted, exercised, expired and forfeited and weighted average exercise price for each and aggregate intrinsic value, restricted stock grants, stock purchase plan shares, 401(k) plan contributions, equity compensation plans and exhibits detailing each of the material contracts that company has entered into. Additionally, it publishes an annual proxy statement that provides detailed information on executive compensation, directors and corporate governance.

16. Curriculum Support \$3,581.42
17. Group Logic \$2,695.50
18. Loews Home Center \$515.99
19. Loews Home Center \$887.07
20. Wireless Generation \$2,562.50
21. CDW Government \$1,400.00
22. CDW Government \$2,818.60
23. HP Direct \$2,267.00

However, as with all of the general ledgers and check registers that we reviewed, each of these expenditures recorded in these documents were accompanied by two types of codes. The first, a "Functional" code, indicated the general purpose of the spending, tying it to the corresponding line item of the district's annual financial report. The expenditure also had an "Object" code, that is either very specific (i.e., cell phone allowances, print shop expenditures, water, sick leave, etc.) or extremely broad (general supplies, contracted services, other operating expense, etc.). Much of this information, in turn, is captured in databases maintained by the TEA.

**It is impossible for an average citizen to determine what a school district pays its teachers solely to teach.**

As noted earlier, the school districts and TEA combined gather an immense amount of financial data but it provides non-experts with little useful information for two reasons. First, the average citizen lacks the time or resources necessary to analyze even a fraction of it. But absent such a forensic accounting exercise, it is impossible to determine relatively simple things such as how much of the district's funding is used to pay teachers solely to teach vs. what it costs to insure driver's education vehicles (both of which are classified as "Instruction" expenditures), much less what is the district spending money on that is essential vs. optional.

Second, even if someone had the time and resources to wade through all of this data, the codes currently used in tracking expenditures are on one hand too specific and in other instances are too broad to allow a non-expert to formulate a coherent understanding of the school district's spending. In other words, one may be able to tell that this school district paid Group Logic \$2,695.50 for something that is classified in the district's annual financial report as "Instruction" and has an object code of "other expense." However, knowing this tells you very little as to what the district purchased and why.

In fact, we concluded after nearly two years of research that the only way TEAP – even though we invest in companies for a living – would ever be able to figure out exactly how a school district was spending taxpayer money would be to recreate a new general ledger (and from that an annual financial report) by beginning with the thousands of underlying receipts from all of a district's individual purchases and expenditures. But if someone is going to have to do all of this in order to understand how a district spends money, why even bother to produce the current reports?

**Issue III – It can be very difficult for outsiders to access school district financial data**

In researching this report we requested financial information from many school districts across the State. As part of this, we filed numerous Texas Open Records requests.

Our experience in collecting this information was that the response that we received from the school districts was somewhat binary. Several school districts were extremely responsive and helpful. At the same time, getting financial data from about half of the school districts that we contacted was quite difficult.

**Some school districts either ignore requests for financial data or make getting it very expensive.**

The latter group of school districts typically employed one of two tactics: (i) simply ignore the Open Records request or (ii) make a determination that providing this data (which it likely already has on a hard drive on one of its computers) will take many, many hours to produce. Thus, if the requesting party wants the information it must pay as much as \$10,000 to get it.

In either case, the only way to get them to comply with our information requests would have been for TEAP to hire an attorney and formally file a complaint. Fortunately, we never had to resort to doing so because we requested information from so many different school districts that eventually we were able to get a large enough sample of data to write this report.

However, it is somewhat outrageous that some school districts are allowed to make it difficult for outsiders to access their financial information. Imagine if you are an average citizen trying to figure out how your local school district is spending your money and for what purpose. It is unlikely that you would fully understand how the Texas Open Records requests work and even less likely that you could afford to hire an attorney to force the school district to comply with the request.

School districts are spending someone else's (i.e. the taxpayers') money. It is their duty to make their financial data as easily accessible as possible to their constituents.

### III. Potential solutions

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Although the current system of financial reporting for Texas K-12 public education is problematic, fixing it is not a Herculean task. As noted earlier, school districts already regularly collect immense amounts of data. The key challenge is synthesizing this data in a manner so that it is useful information that would allow an average citizen to understand in detail how his or her school district uses taxpayer dollars.

We would recommend that three steps be taken to fix the current system of financial reporting:

#### **The structure of school district annual financial reports must be revamped.**

**A. The format and data included in the annual financial reports published by each school district must be changed.** School districts should be required to disclose substantially more detailed information on how they spend taxpayer funds. As part of this,

- (i) The line items in the summary pages of their annual financial reports should be altered to reflect the specific type of expenditure involved instead of just a general purpose such as "Instruction";
- (ii) Accompanying each of these line items should be a schedule with numerous sub-line items that provide much greater detail as to how and why the money was spent;
- (iii) Annual financial reports should also include key school district output metrics in terms of the numbers of students educated by types of classes by grade;
- (iv) An organization chart should also accompany the annual report that would provide an overview of the structure of the school district, a list of teachers by school and the non-teaching professionals (by position) who work in the school district;
- (v) A list of all contracts with school district vendors and non-employees, the amounts paid to each and the specific services and/or products received should be included in a separate schedule of the annual financial report; and
- (vi) For those districts which share services with other school districts and government agencies, their annual report should be accompanied by disclosures which provide similar information as described in (i), (ii), (iii), (iv) and (v) above detailing what was purchased and how the funds provided were used.

We have included in Appendix A detailed recommendations of what should be incorporated into school district annual reports.

**B. The coding currently used by Texas school districts with their general ledgers and check registers should be modified.** In lieu of the current function and object codes should be coding which ties individual expenditures into both the major line items of the school's annual report but also into its sub line items. Doing so will create a clearer audit trail that, in turn, would allow a parent

to more easily understand the specific purpose of an individual expenditure if he or she wants to research the school district's spending in greater detail. It will also make it easier to compare how individual districts use their funding.

- C. Texas school districts should be required to post their key financial data (annual reports, general ledgers, check registers, financial source data, contracts with outside vendors and with senior district and school staff, etc.) for the trailing three years on their websites.** Virtually every school district already has a website. It should not be controversial that they be required to provide their financial data so that outsiders can easily access it.

## **IV. Conclusion**

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We began this study assuming that the financial data currently generated by school districts could be used to help improve education in our State. As we have described, what we found was both surprising and alarming.

Texas currently has a K-12 education system which consumes (according to the Comptroller's office) in excess 43% of Texas' general revenues and in aggregate spent nearly \$55B in the 2008-2009 school year. But no one who does not work for any individual school district has any real idea of exactly how that district spent its part of this money. Consequently, we have no way to determine whether that money was used intelligently, much less efficiently. It is likewise impossible for someone to determine whether what we currently spend money on are things that are essential to "the diffusion of knowledge" rather than optional or unnecessary.

Fixing the current system of financial reporting so as to create true financial accountability should not be controversial for either the property-rich or property-poor school districts. For the latter, they need to be able to clearly demonstrate and quantify that they are using the funds they currently receive in an efficient manner and that absent additional funding they will never be able to properly educate their students. Otherwise, the only financial metric that they can point to is aggregate dollars spent per student, something that is very limited in describing the quality of education being provided.

**Fixing the current system of financial reporting is in the best interests of both property-poor and wealthy districts.**

More importantly, the Texas Supreme Court has already ruled that the State's constitution does not include a requirement of "equality of funding." Instead, "the constitutional standard of efficiency requires substantially equivalent access to revenue *only up to a point*" and that individual school districts can and must be able to take steps to "enrich" the education of their students. Thus, although disparities between school districts in the money spent per student on education is a factor that the Court will consider when determining the constitutionality of a system for funding public education, it is by far not the only factor.

On the other hand, the primary outcome to date for the property-rich school districts from this decades-long legal battle has been that large amounts of money that they would have received otherwise have been transferred to property-poor districts through Robin Hood and its successors. And there is a real possibility that the in some future ruling the Court could accelerate this trend.

Consequently, the wealthier districts likewise have a compelling interest to find a way to address the constitutionality of the system that goes beyond just dollars spent per student. They need to be able to frame the argument from the context of what precisely is needed to be done to educate students in a constitutional manner and what specific funding is required to provide these services. However, the current system of financial accountability for Texas public education does not produce the necessary information to make this case.

**Creating a consensus to spend more money on education is predicated on demonstrating that current funding is being used intelligently and efficiently**

### **More lawsuits ahead**

Regardless of whether either the property-rich or property-poor districts are willing to embrace real financial accountability, anyone worried about our State's system of public education has a compelling interest that these changes be made. Without any useful information of how taxpayer funds are used to educate students, the Legislature will be unable to devise a system that is efficient, suitable and adequate and the courts likewise will be unable to determine if it is constitutional. Thus, if and until the current system of financial reporting is fixed, any future mechanisms for funding public education in our State will remain in constant limbo, subject to repeated legal challenges.

More importantly, our State has finite resources and it must allocate them across a wide set of priorities. Consequently, it will be quite difficult for any elected official to build a consensus that we need to spend more money on public education if there is no way of accurately and clearly demonstrating that we are using the current dollars allocated to K-12 public education in an intelligent manner.

Finally, beyond just the legal and political questions, the future economic vibrancy of our state in no small way depends on having a well-educated populace. In order to do this we have to find a way to get the maximum benefit from the dollars spent on public education. But until we know exactly how the money is being used, we will never be able to determine what needs to be done to improve the system.

## **Appendix A. Recommended Changes to the Format and Structure of School District Annual Financial Reports**

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In thinking about how to best redesign the current reporting and disclosure rules which Texas school districts must follow, we at TEAP began with what the Texas Education Agency (TEA) claims should be the standards that any system of financial reporting should meet. More specifically, TEA's own manual points to "accountability as the paramount objective of financial reporting by state and local governments." But to be accountable "financial reporting should communicate adequate information to user groups to enable them to assess the performance" of the governmental entity such as a school district. Moreover, the TEA argues that "financial reporting is not an end in itself but is intended to provide information useful for many purposes" that "helps to satisfy the needs of users who have limited authority, ability, or resources to obtain information and who therefore rely on the reports as an important source of information."

**The goal: Can an average citizen understand exactly how a school district uses taxpayer dollars?**

In other words, any rational system of financial reporting for Texas school districts should be designed so that it provides sufficient information to allow its three primary constituencies – namely, the citizens of our State, direct representatives of our citizens such as members of the Legislature and oversight bodies and creditors of the school districts – to fully evaluate the financial performance of these governmental entities.

However, we would propose an even simpler standard: An average citizen should, after reading his or her school district's annual financial report, have a clear understanding of exactly how it is spending taxpayer dollars.

### **Six structural changes to school district annual reports**

With this in mind, we propose six changes to the school district annual report format. First, the report should include a list of major spending categories with titles tied to the specific type of expenditure (as opposed to its general purpose) such as "Compensation Expenses," "Teacher, Administrator and Staff Professional Development," "Costs Associated with Oversight of the School District", etc. In Exhibit 1 to this Appendix A, we have provided our recommendations as what should be included in the major spending categories.

Second, each these major spending categories should be accompanied by a separate schedule that has numerous sub-line items, each reflecting a specific type of financial expenditure. For example the "Compensation Expenses" line item should be broken into multiple sub-line items ranging from salaries paid to teachers solely for teaching to benefits for school district support staff. Our recommended sub-line items for each major spending category are also shown in Exhibit 1 to this Appendix A.

Third, every annual report should include an organizational chart and narrative that allows outsiders to understand the operating structure of the school district. The narrative should provide an overview of the number of students per school by district, teachers by school, non-teaching professionals by school, non-teaching support staff by school, the number of professional staff at the district level and the number of support staff at

**Annual financial reports should include an organizational chart, lists of classes taught and disclose both agreements with outside contractors and other school districts.**

the district level. The organization chart should include a list of teachers and administrators by position by school as well as a list of all of the professional staff by position at the school district level.

Fourth, every school district should have separate disclosure pages in its annual report listing every agreement with non-district employee contractors, the expenditures involved, the specific services and/or products provided to the district, when the contract was most recently awarded or renewed, whether at the time of the most recent award or renewal it was competitively bid and any and all political contributions made by the contractor to the election campaigns of any school board members of the district.

Fifth, the annual financial report should include detailed lists of the core outputs of the district – namely, the courses taught that year by grade; the number of each taught; and the number of students who successfully completed each. These classes should be divided by type, grade, and category (i.e., core curriculum, college preparatory, advanced placement courses, vocational, etc.). Additionally, this set of disclosures should include how many students were tutored either individually or in small groups outside of the normal school curriculum. Finally, the narrative should provide detailed information on the performance of students in the school district on standardized tests.

Lastly, the annual financial reports of those school districts which employ shared services agreements with other school districts or governmental agencies should include an additional set of disclosures. As part of this, the entity providing these services should be required to provide the same information (i.e., general categories of spending, accompanying schedules, organizational chart, detailed description of outputs and all contracts with outsiders, their cost and the services provided) that is included for the district's other expenditures.

**Exhibit 1 to Appendix A**

**Major Spending Categories**

1. Compensation Expenses
2. Teacher, Administrator and Staff Professional Development Expenditures
3. Expenditures for Equipment and Facilities Used Directly in Teaching Students and Associated Maintenance Costs
4. Expenditures for Equipment and Acquisition Not Used Directly in Teaching Students and Associated Maintenance Costs
5. Athletic Facility Acquisition and Maintenance Costs
6. Student Transportation and Healthcare Costs
7. Expenditures on School-Provided Meals
8. Purchases of Supplies and Materials Directly Used for Teaching Students
9. Purchases of Supplies and Materials Not Directly Used for Teaching Students
10. Costs Associated with Oversight of the School District
11. Services Provided By Outside Contractors
12. Expenditures on Athletics and Extracurricular Activities
13. Long-Term Funding Costs
14. Expenditures from Shared Services with Other School Districts and Governmental Agencies
15. Costs Resulting From Other Governmental Agencies

## Schedule A – Compensation Expenses

### Specific disclosure line items:

1. Salaries paid to teachers for teaching classes. (This line item should exclude any compensation paid to teachers for non-teaching activities — e.g., coaching sports, supervising extracurricular activities, etc. – any compensation for tutoring or examination preparatory classes, as well as any performance bonuses.)
2. Benefits paid to teachers. (This line item should likewise exclude that portion of any benefits paid to teachers for non-teaching activities including as well as any expenditure for professional development.)
3. Salaries paid to teachers for tutoring students.
4. Salaries paid to teachers for examination preparatory classes.
5. Salaries paid to teaching assistants and teachers' aides.
6. Benefits paid to teaching assistants and teachers' aides.
7. Salaries paid to guidance counselors.
8. Benefits paid to guidance counselors.
9. Salaries paid to coaches of athletic teams.
10. Benefits paid to coaches of athletic teams.
11. Salaries paid to librarians.
12. Benefits paid to librarians.
13. Salaries paid to school nurses and health staff.
14. Benefits paid to school nurses and health staff.
15. Compensation paid to individuals for their work in student extra-curricular activities, not including coaching athletic teams.
16. Salary paid to the District Superintendent.
17. Benefits paid to the District Superintendent.
18. Salaries paid to District Assistant Superintendents.
19. Benefits paid to District Assistant Superintendents.
20. Salaries paid to School Principals by individual.
21. Benefits paid to School Principals by individual.
22. Salaries paid to School Assistant Principals.

**Schedule A – Compensation Expenses**  
*(Continued)*

23. Benefits paid to School Assistant Principals.
24. Salaries paid to District-level administrative staff.
25. Benefits paid to District-level administrative staff.
26. Salaries paid to School-level administrative staff.
27. Benefits paid to School-level administrative staff.
28. Salaries paid to District-level support (e.g., janitorial, security, etc.) staff.
29. Benefits paid to District-level support staff.
30. Salaries paid to School level support staff, not including any compensation to individuals for their work in the preparation and delivery of school-provided meals to students.
31. Benefits paid to School-level support staff, not including any benefits provided to individuals for their work in the preparation and delivery of school-provided meals to students.
32. Performance bonuses paid to teachers by individual.
33. Performance bonuses paid to teaching assistants and teachers' aides by individual.
34. Performance bonuses paid to guidance counselors by individual.
35. Performance bonuses paid to coaches of athletic teams by individual.
36. Performance bonuses paid to librarians by individual.
37. Performance bonuses paid to school nurses and health staff by individual.
38. Performance bonuses paid to individuals for their work in non-athletic extra-curricular activities by individual.
39. Performance bonuses paid to District Superintendent.
40. Performance bonuses paid to District Assistant Superintendents by individual.
41. Performance bonuses paid to School Principals by individual.
42. Performance bonuses paid to School Assistant Principals by individual.
43. Performance bonuses paid to District-level administrative staff by individual.
44. Performance bonuses paid to District-level support staff by individual.
45. Performance bonuses paid to School-level administrative staff by individual.
46. Performance bonuses paid to School-level support staff by individual.

## **Schedule B – Teacher, Administrator and Staff Professional Development Expenditures**

### Specific disclosure line items:

1. Tuition and fees paid for teacher continuing education.
2. Travel costs associated with teacher continuing education.
3. Tuition and fees paid for teacher undergraduate and/or post-graduate education.
4. Travel costs associated with teacher undergraduate and/or post-graduate education.
5. Tuition and fees paid for teacher aide and teaching assistant continuing education.
6. Travel costs associated with teacher aide and teaching assistant continuing education.
7. Tuition and fees paid for teacher aide and teaching assistant undergraduate and/or post-graduate education.
8. Travel costs associated with teacher aide and teaching assistant undergraduate and/or post-graduate education.
9. Tuition and fees paid for guidance counselor continuing education.
10. Travel costs associated with guidance counselor continuing education.
11. Tuition and fees paid for guidance counselor undergraduate and/or post-graduate education.
12. Travel costs associated with guidance counselor undergraduate and/or post-graduate education.
13. Tuition and fees paid for athletic team coach professional development.
14. Travel costs associated with athletic team coach professional development.
15. Tuition and fees paid for librarian continuing education.
16. Travel costs associated with librarian continuing education.
17. Tuition and fees paid for librarian undergraduate and/or post-graduate education.
18. Travel costs associated with librarian undergraduate and/or post-graduate education.
19. Tuition and fees paid for nurse and health staff continuing education.
20. Travel costs associated with nurse and health staff continuing education.
21. Tuition and fees paid for nurse and health staff undergraduate and/or post-graduate education.
22. Travel costs associated with nurse and health staff undergraduate and/or post-graduate education.
23. Tuition and fees paid for staff for professional development related to extracurricular activities.
24. Travel costs associated for professional development related to extracurricular activities.

**Schedule B – Teacher, Administrator and Staff Professional Development Expenditures**  
*(Continued)*

25. Tuition and fees paid for District Superintendent continuing education.
26. Travel costs associated with District Superintendent continuing education.
27. Tuition and fees paid for District Superintendent undergraduate and/or post-graduate education.
28. Travel costs associated with District Superintendent undergraduate and/or post-graduate education.
29. Tuition and fees paid for Assistant Superintendent continuing education.
30. Travel costs associated with Assistant Superintendent continuing education.
31. Tuition and fees paid for District Assistant Superintendent undergraduate and/or post-graduate education.
32. Travel costs associated with District Assistant Superintendent undergraduate and/or post-graduate education.
33. Tuition and fees paid for School Principal continuing education.
34. Travel costs associated with School Principal continuing education.
35. Tuition and fees paid for School Principal undergraduate and/or post-graduate education.
36. Travel costs associated with School Principal undergraduate and/or post-graduate education.
37. Tuition and fees paid for School Assistant Principal continuing education.
38. Travel costs associated with School Assistant Principal continuing education.
39. Tuition and fees paid for School Assistant Principal undergraduate and/or post-graduate education.
40. Travel costs associated with School Assistant Principal undergraduate and/or post-graduate education.
41. Tuition and fees paid for District-level administrative staff continuing education.
42. Travel costs associated with District-level administrative staff continuing education.
43. Tuition and fees paid for District-level administrative staff undergraduate and/or post-graduate education.
44. Travel costs associated with District-level administrative staff undergraduate and/or post-graduate education.
45. Tuition and fees paid for School-level administrative staff continuing education.
46. Travel costs associated with School-level administrative staff continuing education.
47. Tuition and fees paid for School-level administrative staff undergraduate and/or post-graduate education.

**Schedule B – Teacher, Administrator and Staff Professional Development Expenditures**

*(Continued)*

48. Travel costs associated with School-level administrative staff undergraduate and/or post-graduate education.
49. Tuition and fees paid for District-level support staff continuing education.
50. Travel costs associated with District-level support staff continuing education.
51. Tuition and fees paid for District-level support staff undergraduate and/or post-graduate education.
52. Travel costs associated with District-level support staff undergraduate and/or post-graduate education.
53. Tuition and fees paid for School-level support staff continuing education.
54. Travel costs associated with School-level support staff continuing education.
55. Tuition and fees paid for School-level support staff undergraduate and/or post-graduate education.
56. Travel costs associated with School-level support staff undergraduate and/or post-graduate education.

**Schedule C – Expenditures for Equipment and Facilities Used Directly in Teaching and Associated Maintenance Costs**

Specific disclosure line items:

1. Purchases, leases, and/or licenses for computers and software used directly in teaching students.
2. Expenditures (other than compensation for district employees) associated with computer hardware and software maintenance and support used directly in teaching students.
3. Purchases and/or leases of audio visual equipment and software used directly in teaching students.
4. Expenditures (other than compensation for district employees) associated with audio visual equipment and software maintenance and support used directly in teaching students.
5. Purchases and/or leases of other electronic equipment and software used directly in teaching students.
6. Expenditures (other than compensation for district employees) associated with the maintenance and support of other electronic equipment and software used directly in teaching students.
7. Purchases and/or leases of non-electronic classroom equipment.
8. Expenditures (other than compensation for district employees) associated with the maintenance and support of non-electronic classroom equipment.
9. Purchases and/or leases of vehicles used in driver's education.
10. Expenditures (other than compensation for district employees) associated with the maintenance and support of vehicles used in driver's education.
11. Fuel costs associated with vehicles used in driver's education.
12. Purchases of band and orchestra instruments.
13. Expenditures (other than compensation for district employees) associated with the maintenance and support of band and orchestra instruments.
14. Purchases of other band and orchestra equipment including uniforms.
15. Expenditures (other than compensation for district employees) associated with the maintenance and support of band and orchestra equipment including uniforms.
16. Capital expenditures on classroom facilities.
17. Non-compensation expenditures associated with classroom maintenance and upkeep provided by district employees.

**Schedule D – Expenditures for Equipment and Facilities Not Used Directly in Teaching Students and Associated Maintenance Costs**

Specific disclosure line items:

1. Purchases, leases, and/or licenses for computers and software not used directly in teaching students.
2. Expenditures (other than compensation for district employees) associated with computer hardware and software maintenance and support not used directly in teaching students.
3. Purchases and/or leases of audio visual equipment and software not used directly in teaching students.
4. Expenditures (other than compensation for district employees) associated with audio visual equipment and software maintenance and support not used directly in teaching students.
5. Purchases and/or leases of other electronic equipment and software not used directly in teaching students.
6. Expenditures (other than compensation for district employees) associated with the maintenance and support of other electronic equipment and software not used directly in teaching students.
7. Purchases and/or leases of non-electronic equipment not directly used in teaching students.
8. Expenditures (other than compensation for district employees) associated with the maintenance and support of non-electronic equipment not used directly in teaching students.
9. Purchases and/or leases of vehicles other than those used in driver's education or those used in transporting students to and from school.
10. Expenditures (other than compensation for district employees) associated with the maintenance and support of vehicles other than those used in driver's education and in transporting students to and from schools.
11. Fuel costs associated with the use of vehicles other than those used in driver's education and transporting students to and from schools.
12. Capital expenditures on administrative facilities.
13. Capital expenditures on all other non-athletic facilities.
14. Non-compensation expenditures associated with administrative and all other non-athletic facility maintenance and upkeep provided by district employees.

**Schedule E – Athletic Facility Acquisition and Maintenance Costs**

Specific disclosure line items:

1. Capital expenditures on athletic facilities by sport.
2. Non-compensation expenditures by sport associated with athletic facility maintenance and upkeep provided by district employees.

## **Schedule F – Student Transportation and Healthcare Costs**

### Specific disclosure line items:

1. Capital expenditures on vehicles used in transporting students to and from schools.
2. Non-compensation expenditures associated with maintenance of vehicles used in transporting students to and from schools.
3. Fuel costs associated with transporting students to and from school.
4. Non-compensation expenditures associated with healthcare services provided to students.

## Schedule G – Expenditures on School-Provided Meals

### Specific disclosure line items:

1. Salaries paid to individuals for their work in the preparation and delivery of school-provided meals to students.
2. Benefits paid to individuals for their work in the preparation and delivery of school-provided meals to students.
3. Expenditures on food used in school-provided breakfast programs.
4. Expenditures on food used in school-provided lunch programs.
5. Expenditures on food used in any school-provided meals other than breakfasts or lunches.
6. Costs from the acquisition of equipment used in the preparation of school-provided meals.
7. Expenditures on the maintenance and upkeep of equipment used in school-provided meals.
8. Costs from the acquisition of non-food supplies used in the preparation of school-provided meals.
9. Number of students participating in school-provided breakfast program.
10. Number of meals served in school-provided breakfast program.
11. Number of students participating in school-provided lunch program.
12. Number of meals provided in school-provided lunch program.
13. Number of students participating in school-provided meals excluding lunches and breakfasts.
14. Number of meals served excluding breakfasts and lunches.

**Schedule H – Purchases of Supplies and Materials Directly Used for Teaching Students**

Specific disclosure line items:

1. Expenditures on consumable classroom supplies and materials.
2. Expenditures on durable classroom supplies and materials.
3. Expenditures on textbooks.
4. Expenditures on electronic education materials used directly in teaching students.
5. Expenditures on other, non-electronic education materials used directly in teaching students.

**Schedule I – Purchases of Supplies and Materials Not Directly Used for Teaching Students**

Specific disclosure line items:

1. Expenditures on consumable supplies and materials not directly used in teaching students.
2. Expenditures on durable supplies and materials not directly used in teaching students.
3. Expenditures on district-prepared publications.
4. Costs associated with operation, upkeep and maintenance of district website.

## **Schedule J – Costs Associated with Oversight of the School District**

### Specific disclosure line items:

1. School Board member travel for attendance at School Board meetings.
2. School Board member stipends for attendance at School Board meetings.
3. Other costs of School Board meetings.
4. School Board member travel for reasons other than attendance at School Board meetings.
5. School Board member stipends for reasons other than attendance at School Board meetings.
6. School Board costs other than those directly occurring from participation in School Board meetings.
7. Expenditures on annual audit.
8. Outside accounting costs not directly tied to annual audit.
9. Expenditures on legal services provided to School Board.
10. Expenditures on legal services provided to District other than legal services provided to School Board.
11. Expenditures associated with lobbying activities.
12. Expenditures associated with applications for grants.
13. Costs associated with liability insurance for School Board members.
14. Costs associated with liability insurance for school district and its employees.
15. Non-compensation costs associated with preparation and submission of required data to the Texas Education Agency.

**Schedule K – Services Provided by Outside Contractors**

Specific disclosure line items:

1. List of all agreements with outside service providers.
2. Expenditures associated with each contractor by each agreement.
3. Specific services provided by each contractor by each agreement.
4. Date by agreement of most recent award or renewal.
5. Whether each agreement was competitively bid at its most recent award or renewal.
6. List by contractor of all political contributions made to any school board members of the district.

**Schedule L – Expenditures on Athletics and Extracurricular Activities**

Specific disclosure line items:

1. Expenditures (excluding compensation for district employees and capital expenditures for facilities and maintenance) for athletics, by sport.
2. Expenditures (excluding compensation for district employees and capital expenditures for facilities and maintenance) for non-athletic extracurricular activities, by activity.

### **Schedule M – Long-Term Funding Costs**

Specific disclosure line items:

1. Interest on long-term debt associated with classroom facilities.
2. Interest on long-term debt associated with non-classroom facilities.
3. Interest on long-term debt associated with athletic facilities.
4. Interest on long-term debt associated with facilities for non-athletic extracurricular activities.

**Schedule N – Expenditures from Shared Services with Other School Districts and Governmental Agencies**

Specific disclosure line items:

1. List of all services provided to the District as part of shared service agreement.
2. Expenditures for each individual shared services agreement.
3. Accompanying annual report for each entity providing shared services. At a minimum each report should include similar disclosure to that of school districts including general categories of spending, accompanying schedules, organizational chart, detailed description of outputs and all contracts with outsiders, their cost and the services provided.

**Schedule O – Costs Resulting from Other Governmental Agencies**

Specific disclosure line items:

1. List all payments made to other governmental agencies by agency.
2. Purpose of each expenditure.

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For additional copies of this paper, please contact us at the addresses listed below.

Texas Education Accountability Project

Mark P. Hurley: [mhurley@texedap.com](mailto:mhurley@texedap.com)  
Yvonne N. Kanner: [ykanner@texedap.com](mailto:ykanner@texedap.com)  
Jonathan Yu: [jyu@texedap.com](mailto:jyu@texedap.com)

[www.texedap.com](http://www.texedap.com)



## Public Education Productivity Improvement: The Path Forward for Texas Policymakers

Donald R. McAdams and Lynn Jenkins

July 3, 2012

### Introduction

Few can doubt that significant improvements in Texas public education productivity are needed. Performance standards and accountability requirements continue to rise, and resources continue to be scarce. With increasing standards and limited resources, school districts are going to have to do more, perhaps with less. Productivity is likely to be the new watchword in public education.

Improving quality without significantly increasing resources will require significant innovation. And in order for schools and school districts to innovate, policymakers are going to have to effectively link clear goals and performance metrics, performance accountability, new state requirements for financial reporting, and significant deregulation, especially in the area of human resources management. We have written this paper for the Texas Institute for Education Reform (TIER) and the Institute for Productivity in Education to briefly describe these foundational requirements for productivity management, demonstrate their interdependence, and suggest to policymakers the steps required to start Texas down the productivity improvement path.

### Trends and Challenges

Public education productivity has always been a state priority. To quote the Texas Constitution, Article 7, Section 1, SUPPORT AND MAINTENANCE OF SYSTEM OF PUBLIC FREE SCHOOLS: "A general diffusion of knowledge being essential to the preservation of the liberties and rights of the people, it shall be the duty of the Legislature of the State to establish and make suitable provision for the support and maintenance of an efficient system of public free schools."

Whatever else courts have determined this sentence to mean, it clearly requires the Texas public school system to be productive, for efficient and effective—specifically, cost effective—are the defining objectives of productivity management. An *effective* system of public free schools would widely diffuse the knowledge essential to the preservation of liberties and rights, and an *efficient* one would do this at the lowest reasonable cost. Surely this is what those who wrote and ratified the Texas Constitution intended.

Texans have always wanted effective and efficient government, but now, more than ever, productivity improvements are required. As government has grown, so too has taxpayers' interest in how their tax

*TIER's mission is for every child in Texas to graduate from high school fully prepared for higher education and the 21st century workplace as well as responsible citizenship. Our intermediate goal is that, by 2020, 80% of Texas high school graduates will achieve postsecondary readiness. We believe that this goal can be met through higher standards for teaching and learning; higher standards for academic and financial accountability; better assessments; more effective educators; intensive efforts to attack the reading crisis; and deregulation, innovation, and competition. This TIER policy paper focuses on education productivity, deregulation, and innovation. Policy papers on related topics are available on TIER's website: [www.texaseducationreform.org](http://www.texaseducationreform.org).*

dollars are spent. And as entitlement spending has increased, not only has government gotten bigger, but the public treasury has also been left with less money to fund essential government services such as public education.

In this political and fiscal environment, public education is under considerable pressure to explain what it has done with the increased funding it has been receiving and justify why it needs more. From 1988 to 2008, annual per-pupil costs in constant dollars increased from \$6,659 to \$11,024—a 66 percent increase. (The comparative national figure is 54 percent.) And over the past decade, Texas public education spending has increased almost five times as fast as enrollment (95 percent versus 20 percent), increasing from \$28 billion to nearly \$55 billion.<sup>1</sup>

Despite this growth in spending, student achievement gains have been disappointing. We will not rehash Texas performance data here, because it is well known and extensively reported elsewhere. (For example, see TIER's recent publication, *The State of Public Education in Texas*, available at [www.texaseducationreform.org](http://www.texaseducationreform.org).) Overall, there have been steady gains, and we believe that public education in Texas is performing better than it ever has. The world is changing even faster than our education system is improving, however, and far too few students are on track for postsecondary success. The challenges are significant, and the stakes, as everyone acknowledges, are high.

### **Definitions**

Before describing the foundational requirements for productivity management, we should first clearly define the word. Productivity is simply output divided by input. All work is a process, with inputs and outputs. To measure productivity for a specific process, the work of a team (including multiple processes), or an entire organization, inputs and outputs must be clearly defined and measured. It is typically easier to measure inputs, the unit of measurement frequently being hours of labor (labor productivity, the more common measure) or money (total factor productivity). Outputs, sometimes measured as outcomes—a distinction that is often useful—are more difficult, but clarity is required.

Let us start with a simple example: analyzing the production of ball bearings. Inputs include all the costs related to making a certain number of ball bearings, such as raw materials, machines, space, capital, insurance, time, and of course labor. The output is ball bearings, but not just any ball bearings. Quality as well as quantity matter. The only ball bearings that count are those that fall within specifications for size, weight, roundness, hardness, smoothness, etc.

One can see that improving productivity (acceptable ball bearings per dollar) is complex and challenging, even for work as conceptually simple as making ball bearings. Yet throughout all sectors of American business—agriculture, energy, mining, manufacturing, transportation, communication, and services of every conceivable type, including the arts, entertainment, and healthcare—productivity management is at the core of profitability and one of management's highest priorities.

### **Productivity Improvement in Public Education**

Some may argue that productivity management is a very good thing for everyone else to do, but that only minimal productivity improvements in K-12 are possible. Educating children, they will say, is not making ball bearings. Educators cannot control their "inputs;" they do not choose the children they are asked to educate and have no control over home environments. Also, the educational process itself has natural limitations.

Indeed, public school educators are asked to educate all comers regardless of ability, readiness to learn, and home environment. We do not believe this expectation is unreasonable. Except for a very small percentage of children who have severe learning disabilities, all children—no matter what their background—have sufficient ability to graduate from high school, college and workplace ready.

Even if some children are not ready to learn at age six and come from non-supportive home environments, which indeed makes them more difficult to educate, schools control their learning up to 30 hours a week, over eight months of the year, for up to 13 years. Furthermore, taxpayers do not expect “A” grades from every child, nor do they really expect every child to be college and workplace ready at age 18. They would be happy to see 80 to 85 percent graduate to this standard. Consider the revolution that would be for the Texas economy and the quality of life for all Texans.

Though we recognize the challenges that educators face and applaud them for the important and difficult work they have chosen, we reject the idea that public expectations for public school performance are unreasonable and that educators face unique challenges that make significant improvements in productivity impossible. Educators are not the only ones with challenging work and limited control over inputs. Consider almost any professional in health and human services, all of whom are expected to obtain the best possible results and to do so productively.

Another objection to productivity management in education is the claim that the core educational processes—group instruction and individual study—are relatively fixed, making process improvements difficult. Since Socrates interacted in the Agora with the youth of Athens, teachers have provided instruction to students in groups, and solitary study and practice have been the keys to mastery. Just as the talent, labor, and time required to perform a Beethoven string quartet has not changed much since Beethoven, and men’s hair is no more productively cut today than in the 1950s, just so, claim many, educating a child is still educating a child; it takes talent, labor, and time, just as it always has, and schools, like symphony orchestras, are about as productive as they are ever going to get.

Paul Hill and Marguerite Roza have examined this issue, referencing the work of 1960s economist William Baumol, who observed that productivity in labor-intensive business sectors lagged behind manufacturing.<sup>2</sup> This occurred primarily because labor-intensive services, like all business sectors, were faced with ever-higher salary and benefits costs; but unlike capital-intensive business sectors, they could not easily cut staffing without reducing output quantity or quality.

Baumol’s disease, as it was called, was thought by many to be incurable. As Hill and Roza point out, however, in recent years, productivity growth in most labor-intensive services has outpaced productivity growth in manufacturing—but not so in education. Instead, labor costs in education have been steadily increasing, and productivity has declined. Nationally, since 1960, the number of instructional positions in public education has jumped from near 40 per 1,000 students to more than 100. The ratio of students to instructional positions is now 10 to 1.

How have other labor-intensive services “cured” Baumol’s disease? Primarily through deregulation, information technology, and process innovation. Hill and Roza advocate understanding the key cost drivers in the current schooling model, focusing on learning systems outside of schools to identify alternative production processes that could yield higher productivity, and creating a policy agenda for identifying and replicating productivity-enhancing strategies.

Failure to tackle Baumol’s disease in education in a systematic way, they believe, would be devastating, resulting in more layoffs, hiring freezes, furloughs, and wage and benefits cuts—with extremely negative consequences for students. If, on the other hand, “depressed revenues are used as a rallying cry for innovation,” they emphasize, “the current fiscal crisis could ultimately strengthen public education by opening the door to improved processes that have the potential to do more with less.”<sup>3</sup>

### **Productivity in District Business Systems**

The business operations of every school district are foundational, for without effective business systems, nothing happens. For many school districts, business operations are really big business; and for all school districts, the business side of the house is the obvious starting point for productivity management. This

work is conceptually simple, though not necessarily easily done, because the statistical tools needed to understand, control, and improve processes can be quite sophisticated.

There should be no internal resistance to this work, however, and no changes in state policy are required. School districts simply need to apply the experience of business to the challenge of improving productivity for all of their business operations. Metrics can be established by clearly identifying outputs for every business function—and sub outputs for departments, teams, and even individuals—and dividing these outputs by controllable inputs. After metrics come targets, then process improvements to hit those targets.

With the guidance and support of the Council of the Great City Schools (CGCS), this has already been done by many of the nation's best-managed urban districts. In 2004, CGCS launched the Performance Measurement and Benchmarking Program with the following goals:

- Establish key performance indicators (KPIs) in various areas of school district operations.
- Benchmark and compare the performance of the nation's largest urban public school systems on these KPIs.
- Document effective management practices of top-performing districts to help other districts improve their operations.
- Automate the performance data so that districts can improve decisionmaking and resource deployment over time.<sup>4</sup>
- Develop standards of excellence on each of the indicators.

To accomplish the above, district managers and technical advisors with expertise in budget and finance, human resources, business services (transportation, food services, maintenance and operations, safety and security, and procurement), and information technology worked together to define KPIs and conduct benchmarking. Three types of KPIs were defined for each area: 1) "power indicators" for use at the strategic or policy level by superintendents, school boards, and chiefs, 2) "essential few" indicators for use by senior managers or directors, and 3) more technical "performance indicators" for use by managers and directors. Data required to calculate each of the indicators were then collected from a large number of school districts, analyzed, used to create dashboards and other graphic displays for the various indicators, and made available online.

As a result of this extensive work, CGCS has benchmarked 343 KPIs for all major operating and functional areas, including 68 power indicators for boards and superintendents.

The level of detail is impressive. In the Finance category, for example, KPIs were defined for Accounts Payable, Cash Management, Compensation, Financial Management, Grants Management, Procurement, and Risk Management. To illustrate further, in the Risk Management category, the following indicators were defined:

- *Power Indicators:*
  - Average workers' compensation claim duration (in days)
  - Workers' compensation costs as a percentage of payroll
- *"Essential Few" Indicators:*
  - Cost of risk per 1,000 students (adjusted for cost of living)
  - Workers' compensation litigated claims
  - Average cost per liability claim (adjusted for cost of living)
  - Liability claims per 1,000 students
  - Liability claims litigated
  - Workplace incident corrective action

- Employee incident rate
- Average cost per workers' compensation claim
- Annual workers' compensation cost per employee

Such information in the risk management area, for example, enables district leaders to see that the median value for the cost of risk per 1,000 students is roughly \$79,000 among urban districts overall but ranges widely, from less than \$12,000 in a few districts to more than \$184,000 in others. A district with risk costs at the high end of the spectrum can then study what districts at the low end are doing and replicate their successful practices, thus not only reducing costs but also potentially improving other aspects of district operations, such as employee safety.<sup>5</sup>

### **Productivity in Teaching and Learning**

Productivity management of a school district's core business, teaching and learning, is even more difficult than productivity management of its business operations, both conceptually and practically. For purposes of illustration, let us consider a relatively simple example: a summer school program in a small district (with two high schools) for high school students who have failed one or more state end-of-course examination. To keep it straightforward, let's stipulate two performance metrics: 1) the percentage of students who failed an examination who enroll in the program, and 2) the number and percentage of students who, at the end of the program, pass the exam for which they enrolled. The cost is easily calculated: additional building maintenance, such as custodial and utility costs, materials, direct labor, management, etc. A simple efficiency measurement would be cost-per-test-program-student. A simple quality measure would be cost-per-passing-test-program-student.

These numbers would be interesting, but because productivity is always relative, they would shed little light on the actual efficiency or effectiveness of the program. Trend data over three summers—along with innovations to improve productivity and quality by teachers and on-site administrators—would show whether or not productivity was improving. Benchmarking the programs' productivity numbers with similar programs in other districts would provide evidence of the program's actual efficiency and effectiveness. Productivity management usually starts with trend data but must always progress to benchmark data; both longitudinal and comparative data are required.

This simple example introduces the real complexity of productivity management in teaching and learning and illustrates a major point. Productivity measures linked to process improvements are most easily done at the micro level—for example, measuring and improving the productivity of a debate program. Productivity is also fairly easy to calculate at the macro level—for example, the total cost per on-time college and workplace ready graduate (number of graduates divided by sum of per-pupil, per-year costs for four years for entire cohort). Linking macro productivity measurements with specific innovations to improve processes is difficult, however, because so many processes contribute to the complex systems required to produce this result.

The most fruitful arena for productive management is mid-level systems—for example, measuring and improving the productivity of professional development, or elementary school reading and math, or a summer school program (our example above). Consider the challenge to our summer school program providers: to improve productivity, teachers and administrators would have to either enroll more students (in other words, increase class sizes) or reduce labor costs by using technology, or plan and execute more effective instructional approaches to improve passing rates, or all of the above.

We will not attempt to show just how all of this might be done. This paper is not and cannot be a manual on how to redesign major educational processes to improve productivity, though we will later identify the high-leverage points for productivity improvements and provide some examples of innovative districts and schools. Clearly, productivity management to improve the productivity of America's public schools is the lifetime work of educators, especially those with responsibility and authority, just as it is the lifetime

work of American workers in every other business and public sector to improve the productivity of their workplace.

### **Leadership and Foundational Requirements**

The responsibilities and foundational requirements for productivity management are the same in every business and public sector. Those who do the work must manage it for productivity improvement; and those who own, govern, and lead must provide the goals and metrics, incentives, tools, and opportunities.

Productivity management in education is the work of educators. They are the ones who must redesign public education to improve efficiency and effectiveness. Reluctant as many may be to redesign the systems within which they have worked their entire professional lives, and as hard as this work may be, educators are the only ones who can do it, and do it they will if policymakers give them the incentives, the tools, and the freedoms they need to do so.

It is for these reasons that public education productivity improvement in Texas must start with the Texas Legislature, but it is also a school board responsibility, because elected officials—with the need to follow public opinion but also the responsibility to shape it—are ultimately in charge. They set the standards, they provide the resources, and they make the rules.

The five foundational requirements for productivity management in the public sector are:

1. Clear goals and performance metrics
2. Performance accountability
3. Comprehensive and transparent financial information linking costs to outputs
4. Deregulation
5. Innovation<sup>6</sup>

The first four foundational requirements for productivity management make it clear that only state and local policymakers—to be specific, legislators, school board members, and senior appointed officials—can create the environment required for this work to happen. Policymakers set goals, select assessments, establish accountability systems, mandate financial reporting systems, and regulate. The only thing they cannot do is innovate.

In some of these areas, state policymakers have made a good start. But in two areas, financial reporting and regulations, significant changes are required. To put it succinctly, educators will be more productive only if policymakers give them the incentives, the tools, and the freedom to be so. Although some educators may be resistant to the work, it is not educators who are holding back productivity improvements in K-12. It is policymakers. Legislators and school boards have, by design or absence of mind, created the inefficiencies and waste that today characterize public education.

#### *Clear Goals and Performance Metrics*

Let us start with outcome measures. Who decides the purpose and desired outcomes of public education? Legislators and school boards, or at least they should. Of course they should be guided in this work by educators, but in a democracy, as representatives of the people, elected officials have the responsibility to decide if high school graduation is the goal for all students, to define graduation standards, and to determine how students, parents, and the public will know if graduates meet these standards. From these policy decisions flow standards and assessments, designed with the help of senior appointed officials, for what children should know and be able to do at each major step on their path to graduation.

Goals, standards, and assessments are not easily chosen, for public education has been placed under the heavy burden of doing almost everything. Schools are expected to prepare children for success in college and the workplace; for informed and active citizenship in a large, diverse democracy; for understanding

of the natural world and appreciation of the human experience; and for much more. How can any district or school deliver all the outcomes expected by a diverse public that frequently changes its mind?

It cannot—unless policymakers discipline themselves, stick to priority goals, and understand the principles of local control and parental choice. Legislatures should limit themselves to academic standards and assessments in core subjects: English language arts, mathematics, science, and history. School boards should add additional goals, standards, and performance metrics for local priorities, such as upper level high school courses that build on core subjects and requirements or opportunities in liberal arts, languages, music, and sports. And schools, in the context of public school choice, should—to the greatest extent possible—provide additional foci on areas of interest to parents and students.

We know this prescription lacks specificity, but this is a short paper, and our views on specifics are unimportant. The key point is that productivity management requires clearly defined outputs and outcomes, that the state should clearly specify core outcomes and expect districts to productively produce these outcomes, that school boards should be equally clear about defined outcomes as they add desired goals to address their constituents' priorities, and that boards should apply this same standard to programs they authorize and fund at schools. In short, school districts do not establish all output or outcome measures but are nevertheless the unit with responsibility for productivity management.

#### *Performance Accountability*

Following immediately on goals, standards, and assessments is accountability for results, because productivity management without accountability is little more than wishful thinking.

In the private sector, the marketplace provides accountability. Organizations that cannot equal or exceed the value provided by competitors lose money and eventually disappear from the market. And what is value? It is customer-driven productivity and quality management.

The public sector is an almost total monopoly. State, county, city, and school district employees have few competitors. What is their incentive to deliver the highest possible value at the lowest possible cost? Without discounting honorable intentions, professional pride, and even passionate commitment, would anyone rely on just these qualities among managers and workers to provide value in healthcare, manufacturing, transportation, or communication?

Like their counterparts in the private sector, public sector managers need incentives to help them use resources wisely, make tough decisions, and put the customer's needs ahead of the wants of the organization. Moreover, workers' evaluations must include metrics that measure organizational effectiveness. Accountability systems provide these metrics and incentives. Public education needs accountability systems at every level. In Texas, the state has done this work far better than have school districts.

A second form of accountability is choice. Schools with a special focus (for example, magnet schools), along with district-wide public school choice and charter schools, generate partial marketplace forces within the public school system. Choice has its limits, though, since school location has such a powerful influence on the choices that parents make. Moreover, choice brings with it the uneven distribution of children, creating overcrowding in one school and underutilization in another. Nevertheless, creative solutions are available, and it is clear that more public school choice—including more appropriately regulated and funded charters and inter-district choice—would contribute to improvements in quality and productivity, not to mention parent satisfaction.

#### *Comprehensive and Transparent Financial Information Linking Costs to Outputs*

With outputs or outcomes clearly defined, and working accountability systems, the first two foundational requirements for productivity management are in place. The third requirement is fine-grained

knowledge of all necessary inputs. Specifically, what is required is the cost of every input used to produce an output and clarity on why the input is required and how it is used. Currently, Texas policymakers and interested taxpayers who want to understand just how much money is required to adequately fund public education to meet state standards do not have this knowledge.

The problem is not a lack of data, for districts keep excellent financial records, and many even post all of their checks online. Furthermore, the Texas Education Agency maintains large databases that store detailed information on district expenditures, coded by object and function. The problem is the way in which districts categorize and report their expenditures.

After almost two years of intensive research and analyses, the nonprofit and nonpartisan Texas Education Accountability Project, in a recently published paper entitled *No Financial Accountability*, reached the following conclusion:

Even though we invest in companies for a living, [we concluded that] the only way we would ever be able to figure out exactly how a district was spending taxpayer money would be to recreate a new general ledger, and from that an annual financial report, by beginning with the thousands of underlying receipts from all of a district's individual purchases and expenditures.<sup>7</sup>

The primary problem with the current financial reporting system, continues the report, is that districts aggregate their expenditures into a small number of very generic functional areas defined by purpose (for example, "Instruction"). Because each functional area contains a hodge-podge of expenditures, it is nearly impossible for anyone other than an in-house district financial expert to link specific expenditures with specific outputs. Even for the district financial team, the work would be difficult and time consuming.

Consider the example of "Instruction." More than half (56 percent) of school districts' expenditures, on average, are bundled together into this line item, and the majority of this money is spent on teacher salaries. But many other items also find their way into this functional area, including staff gifts, and one would go almost crazy trying to identify the loaded salary costs for specific outputs, such as third grade reading proficiency, at a given elementary school.

District financial reporting must be transformed so that policymakers at the state and local level and interested parents and taxpayers can see how tax dollars are being spent and make judgments about effectiveness and efficiency. More specifically, disaggregation (or "unbundling") of financial data and financial reports linking expenditures to the educational outputs of schools and programs are urgently needed. We call this financial accountability. Without financial accountability and the absolutely essential information provided by performance metrics, it is almost impossible to know how much money state and local policymakers should ask taxpayers to provide for public education.

For productivity management, school districts will have to dig even deeper in order to analyze costs linked to specific outputs that are parts of larger systems. But a new financial reporting system will make unbundling for specific productivity improvement projects much easier and become the platform on which productivity management can rest.

What are the essential requirements for a new school district financial reporting system that provides financial accountability for policymakers and taxpayers and the necessary foundation for productivity management? The Texas Education Accountability Project has proposed the following six changes:

1. Include a list of major spending categories with titles capturing the specific type of expenditure (not the general purpose), such as compensation expenses; teacher, administrator, and staff professional development; purchases of supplies and materials directly used for teaching students; athletic facility acquisition and maintenance costs; etc.

2. Include a separate schedule that contains sub-line items that provide detail for each of the major spending categories.
3. Include an organizational chart and narrative explaining the district's operating structure (including the number of students per school, the number of teachers and non-teaching staff by school, etc.).
4. Provide disclosures regarding all agreements with non-district employee contractors, including expenditures and services for each, details on competitive bidding and contract renewals, contributions to school board member campaigns, etc.
5. Include detailed lists of the district's core outputs, including courses taught by grade, number of students who successfully completed each, number of students tutored, standardized test results, etc.
6. Provide additional disclosures regarding shared services agreements with other districts or governmental entities.

"Anyone worried about our State's system of public education," conclude the study's authors, "has a compelling interest that these changes be made."<sup>8</sup> We agree!

### *Innovation*

With clear output metrics in mind and deep knowledge of linked inputs, productivity management can begin. And the focus is always on process—because the key insight of productivity management is that all work is a process, with inputs and outputs; and that productivity improvement is process control to reduce variability, and process innovation to reduce the cost of inputs, time requirements, and output quality and quantity. Only those with deep knowledge of the work, those actually doing it, can redesign work to improve productivity.

Given the purpose of this paper, going deeper into the work of productivity management is unnecessary, and indeed it would be almost impossible to do, because it entails a body of knowledge as rich and deep as other major business disciplines, such as planning, communication, accounting, and human resource management, and in fact includes within it all of the above. However, we would like to indicate what we believe are the major leverage points for productivity improvement in public education.

There are six key and interrelated leverage points for improving productivity in education's core business, teaching and learning. Let us frame these as questions:

- How should students be grouped for instructional purposes, and how frequently should groups be reconfigured?
- How much time should be scheduled for instruction, and how often should time requirements change?
- How much work should be assigned to individual students, and what specific work should be done in class, outside of class, and online?
- How should teachers be chosen, trained, grouped, and deployed?
- How should districts contract for instructional services?
- How should technology be used?

We all know how it currently works. In elementary school, one teacher is assigned to a group of children, about 20 to 25 per class, and the class membership is fixed for the semester. As rigid as this appears, however, there is a fair amount of flexibility. Other teachers come to the class from time to time to teach in their specialty, and the homeroom teacher has significant freedom to create smaller, flexible groups of

children for specific instructional purposes and devote more or less time to subjects and individual children. Presently, technology has not significantly changed the instructional process in most elementary schools.

Though there is more variety in course offerings and more teacher specialization, middle and high school are far less flexible, by comparison. Students and teachers are assigned to classes with fixed times, with freshman and sophomore classes tending to be larger and junior and senior classes tending to be smaller. And for the entire semester, not much changes. The teacher must cover the subject matter. Some students learn quickly and are bored; others learn more slowly and fall behind. No matter, they all share the same time and experience. Presently, technology is used somewhat, and a small percentage of students take entire courses online.

And as for the teachers, aside from substitute teachers and some rare exceptions, all teachers are full-time salaried employees, receiving the same health and retirement benefits, the same rights and job security, and the same salary, depending on degrees and years of service.

This may have been the best way to educate our grandparents, but does anyone believe that this factory model, adapted for education by administrative progressives almost 100 years ago, is still the most productive way to educate children? In today's technology- and information-rich environment, when every other business sector has been transformed and productivity has multiplied again and again, does it still make sense—no matter what the subject or learning readiness of the student—to fix student groups and learning time for an entire semester? To use technology as supplemental instead of integrating it into the core of teaching and learning processes? Or to fail to engage the enormous intellectual and cultural talent embedded in our communities and leave all teaching to a rigidly managed workforce?

Perhaps, from time to time, some teachers should be assigned to feeder patterns, not schools. Perhaps, from time to time, some instruction should be contracted to colleges, museums, hospitals, or professional or trade associations. Perhaps, from time to time, four elementary teachers—reading and language arts, math, social studies, and science—should be placed in a team and assigned 100 or even 120 students (within a two-year age band) with the freedom to configure the students into ever-changing groups: some large and some small, some with longer classes and some with shorter classes, so that the children with the greatest needs receive the most intense instruction, all children reach mastery, and no-one is bored. And perhaps, from time to time, online learning should be blended into the curriculum, especially at the middle and high school level. With expanded online learning options, small high school classes might no longer be needed.

The old paradigm that assigns students to schools and groups them into classes, with a solo teacher at the front of the room, and stair-steps children up through the grades from elementary to middle to high school should be reexamined with an open mind. The current system is built on the assumption that time is the constant and quality is the variable, and that grades, classes, and teachers assigned to classes is the only way schools can be organized. This assumption is no longer valid, and it has not been for quite some time.

#### Deregulation

Why have schools not innovated more aggressively in some of the ways suggested above? For three key reasons: most school people have not wanted to innovate; most parents have not wanted schools to innovate; and, responding to these wishes, legislators have regulated school districts so that it is difficult to innovate, even if boards and superintendents want to do so.

Some explanation is required. First, school people. We do not believe that educators are significantly more resistant to change than professionals in other business sectors. Like most of us, they are more comfortable doing things the tried and trusted ways they have always done them. The prevailing model—

the so-called “One Best System”<sup>9</sup>—is relatively easy to manage, fairly effective, and remarkably impervious to change.

For generations, teachers have been assigned to semester-long, fixed groups of grade-level children in the lower grades and subject-matter classes in middle and high school. Teachers are more comfortable teaching the way they were taught, and the same goes for parents. They are more comfortable having their children taught the way they were taught. Change always comes with risk, and why take risks with children? The larger society agrees. After all, everyone has gone to school and remembers how they were educated. And for middle class professionals, who have political influence beyond their number, the memories are mostly positive. The One Best System served them well.

What school people, parents, and many active citizens have wanted over recent decades is not innovation to improve productivity. What they have wanted are smaller classes, increased special services, and enrichment. In addition, most teachers have wanted limited entry into the profession, job security, predictable salary increases, and healthy pensions.

The Texas Legislature has obliged, giving teachers and parents what they want. It has also responded to various reports about something gone wrong, or some problem not resolved, with mandates. Some of the mandates make sense, but many do not. The result is a long and extremely complex education code that regulates way more than it should, frequently requires additional administrative staff, and stifles innovation. The number and detail of state regulations will overwhelm anyone who examines all of the mandates in the Texas Education Code, as the Texas Association of School Board does periodically.<sup>10</sup>

Few, if any, of these regulations are designed to improve productivity, and in fact most have the opposite effect. Most are designed to bestow and protect teacher rights, as if the elected Texas Legislature is any more concerned about teacher rights than elected school board members, who have to hire and retain highly qualified professionals in a competitive marketplace and stand for re-election in low turnout elections where most teachers and their families vote. Rather than encouraging changes in how work is done, these mandates encourage hiring more people to do the work and restrict the ability of school districts to effectively and efficiently manage them.

TIER has previously outlined these challenges and proposed statutory changes that would significantly reduce the negative impact of onerous state regulations on the productivity and quality of public education in Texas. Specifically, TIER has recommended changes in Chapter 21 of the Texas Education Code that would give school districts significantly more freedom to manage human resources in the spirit of the core management principle that authority must be commensurate with responsibility and accountability.<sup>11</sup>

### **Productivity Improvements Benefit Children and Taxpayers**

Productivity in public education is already attracting the attention of researchers. Even though state policymakers and school boards are not yet engaged in creating the necessary policy framework for deep work in productivity management, there is sufficient variation in productivity among school districts to show the potential benefits to children and taxpayers if policymakers and school district leaders made productivity improvement a high priority.

A groundbreaking study published by the Center for American Progress (CAP)<sup>12</sup> compared the educational productivity of different school districts in various states and revealed a number of eye-opening findings:

1. Many school districts could reap large gains in student achievement if they spent existing funds more productively. In California, for example, a “low-productivity” school district could see as much as a 25 percent increase in student achievement if it improved its efficiency from the lowest

level to the highest. Overall, CAP found that 41 states have the potential for double-digit percentage increases in achievement without necessarily spending more money.

2. Low productivity is costing the nation an estimated \$175 billion annually, which is equivalent to 1 percent of the gross domestic product. After adjusting for variables beyond districts' control, school districts with below-average productivity spent nearly \$1,000 more per student than above-average districts did.
3. Additional funding corresponded to higher student achievement in only 16 states. In five states, including Texas, additional dollars predicted slightly lower achievement. The CAP authors emphasized that this does not mean that money has no impact on student achievement; it means that money matters only if it is spent in effective ways.
4. School district efficiency varies widely within states. Some districts spent thousands more per student to obtain similar student achievement results. In California, for example, the range of spending among districts in the highest third of student achievement was more than \$8,000 per student.
5. High-spending districts are often not high-achieving. In Florida, for example, only 17 percent of the state's highest-spending districts were also in the highest-achieving tier.
6. Low income and minority students are far more likely to be enrolled in school districts with low levels of educational productivity. The least efficient districts tended to have significantly larger percentages of black students (18 percent versus 5 percent) and Hispanic students (14 percent versus 7 percent) than the most efficient districts.
7. The low quality of education data impedes the study of educational productivity. Crucial data on school finance, operations, and outcomes are often unavailable, making it hard to accurately measure districts' outcomes relative to expenditures. When states and districts do gather key education data, they often use inconsistent definitions and weak data collection practices.
8. The most inefficient districts in the country spend (on average) an extra 3 percentage points of their budgets on administration, operations, and other non-instructional expenditures, which translates into large per-student spending differences. "This does not mean that high administrative costs cause low productivity, since inefficiencies are often 'buried deep' within the operation of school systems," the CAP report explained. "The problem may be large expenses on programs or salaries that have little impact on student achievement. Moreover, districts with lower achievement are often subject to increased state regulations, causing increased administrative burdens."<sup>13</sup>
9. There is significant variation in educational productivity across large urban districts in different states. Some urban districts far more per student than others but nevertheless had weaker results on the National Assessment of Educational Progress (NAEP) math and reading assessments.

What distinguished the most productive districts from the least? The CAP study identified a number of characteristics, including a sharp focus on academic outcomes; a priority on high-quality instruction; smart use of data and data-mining practices to reduce inefficiencies; strong community relations; and a willingness to make tough choices.

If, as the above examples indicate, districts have been able to make significant productivity improvements within the One Best System just by taking the first steps in productivity management—controlling

variability and adopting best practices—consider the productivity improvements that would be possible by ongoing innovation in redesigned systems.

## Conclusion

Earlier in this paper, we defined the five foundational requirements for productivity management in the public sector as follows:

- Clear goals and performance metrics
- Performance accountability
- Comprehensive and transparent financial information linking costs to outputs
- Deregulation
- Innovation

Currently in Texas, much work remains to be done to clarify goals and align accurate and reliable performance metrics with them. Performance accountability is well underway but remains a work in progress. Indeed this work will never end, because goals, metrics, and accountability are moving targets. Revising and improving them will be an ongoing priority for succeeding generations of state policymakers.

Creating financial reporting systems that will provide transparency to policymakers and taxpayers as well as facilitate productivity management within school districts, and the deregulation that will make meaningful productivity management possible, is work that has not yet begun. This work should be a high priority for the next session of the Texas Legislature and for the Texas Education Agency.

Austin cannot innovate. This is work for school districts. But districts need not wait for Austin to give them all the tools they need for productivity management. They can and should start now by developing district goals and performance metrics, district accountability systems, and accounting systems that enable them to clearly link outputs with inputs. In fact, school boards should demand that they do so.

In the end, as it should be in a democracy, it is up to the people. But elected officials have an obligation to understand basic productivity principles and put them into practice. The Texas Constitution and the public interest of the state demand that they do so. This may require them from time to time to resist the pressure of special interest groups and the wishes of uninformed voters and push back with education to shape public opinion. That, after all, is the definition of leadership.

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<sup>1</sup> We believe these summary statistics are a valid representation of Texas spending patterns, but for those who wish to dig deeper, see: State Comptroller's Financial Allocation Study for Texas (FAST), available at <http://fastexas.org/study/exec/spending.php#ex9>. Also see: Brooke Rollins Terry, Brittany Wagner, and Bill Peacock, Texas Public Policy Foundation, June 2010, available at <http://www.texaspolicy.com/pdf/2010-06-RR07-EducationGrowth-BT-BW-BP.pdf>.

<sup>2</sup> Paul Hill and Marguerite Roza, *Curing Baumol's Disease: In Search of Productivity Gains in K-12 Schooling*, Center on Reinventing Public Education, CRPE White Paper # 2010-1, p. 11.

<sup>3</sup> Ibid.

<sup>4</sup> Now fully mature, the CGCS system (available at <http://www.manage4results.org/perf>) features online data collection instruments, automated analyses of performance-indicator data, data displays (e.g., dashboards, graphics) that compare member district operations on uniform benchmarks, and Business Intelligence tools that allow districts to conduct predictive modeling to validate improvement plans.

<sup>5</sup> Council of the Great City Schools, *Managing for Results in America's Great City Schools: A Report of the Performance Measurement and Benchmarking Project*, October 2011, p. 6.

<sup>6</sup> In the private sector, customer requirements drive performance metrics; the marketplace provides accountability; comprehensive financial information that links costs to outputs are still required; and the freedom to innovate in every area of the business is assumed. However, private sector businesses must operate within governmental regulatory structures, which are not always trivial. We consider innovation before deregulation in this paper, because in public education, innovation issues make clear why deregulation is required.

<sup>7</sup> Mark P. Hurley, Yvonne N. Kanner, and Jonathan Yu, *No Financial Accountability: Why Texas K-12 public education lacks any real financial accountability and the implications for both the ongoing public school financing litigation and the future of our state*, Texas Education Accountability Project, March 2012; available at <http://www.texedap.com>

<sup>8</sup> Ibid.

<sup>9</sup> The phrase "one best system" refers to historian David Tyack's definitive book, *The One Best System: A History of American Urban Education*, 1974.

<sup>10</sup> Texas Association of School Administrators and Texas Association of School Boards, *Report on School District Mandates: Cost Drivers in Public Education*, October 2010.

<sup>11</sup> Donald R. McAdams, *Local Control with Accountability for Results, Flexible Workforce Management for Performance and Productivity*, Texas Institute for Education Reform Special Report, March 2011.

<sup>12</sup> Ulrich Boser, *Return on Educational Investment: A District-by-District Evaluation of U.S. Educational Productivity*, Center for American Progress, January 2011; available at <http://www.americanprogress.org/issues/2011/01/pdf/dwwroi.pdf>

<sup>13</sup> Boser, pp. 31-33.

#### *About the Authors*

*Donald R. McAdams, chairman and founder of the Center for Reform of School Systems, is a former Houston Independent School District board member and president, professor, college president, and quality management consultant. Lynn Jenkins is an education researcher and writer with Houston-based consulting firm Sterling Associates*

# Let the Dollars



# Follow the Child

By GROVER J. WHITEHURST

Washington is at a crossroads on K–12 education policy. Policymakers can 1) continue down the path of top-down accountability; 2) devolve power to states and districts, thereby returning to the status quo of the mid-1990s; or 3) rethink the fundamentals, do something different, and empower parental choice.

The federal government's involvement in K–12 education has accelerated through the Clinton, Bush, and Obama administrations. The best evidence indicates that this substantially heightened federal role has had only modest impact on student achievement, far short of what had been hoped. It might be that further centralization would yield more benefits, but it is doubtful that more federal control is politically possible, and, in any case, any additional yield is uncertain.

The second option—devolving recently accumulated federal power to the states—underlies recent reauthorization proposals for the Elementary and Secondary Education Act (ESEA) that allow each state to establish its own accountability system and that require teeth only for the very lowest-performing schools. It is unclear to us how releasing states and school districts from federal accountability and granting them maximum flexibility is anything more than a return to the status quo. It is the regrettable consequence of that approach that motivated increased federal involvement in the first place.

## How the federal government can achieve equity

The Koret Task Force at the Hoover Institution (see sidebar, page 16), of which I am a member, believes that an evolved form of the ESEA that retains rigorous accountability is preferable to returning control of public schooling to local public-school monopolies and states, which will fall into old habits all too quickly. But we believe that the best interests of the nation require something other than either a return to the happy days of local school governance or evolutionary improvements to the type of top-down accountability found in No Child Left Behind.

We need a fundamentally new approach.

We propose to reform the nation's schools on the basis of two principles that have served the nation exceedingly well throughout its history: federalism and choice. The federal structure of our government offers an opportunity to specify the role of Washington strategically, to leverage what it clearly can do best, while allocating to states and locales what they are best suited to do.

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Our particular view of federalism is disciplined by the laws of economics and empirical experience, a perspective known as fiscal federalism. The second organizing principle is choice. Much has been written and studied regarding choice in education—on charter schools, vouchers, choice among district schools, and much more—but the idea, so powerful in our economy and in other enterprises, including higher education, has rarely been examined

on schools. We propose instead to create real competition for students and the public funding that accompanies them among the providers of K–12 education services. Considerable research indicates that schools respond to competitive pressure. In a systematic review of 41 empirical studies on this topic through 2002, Columbia University researchers Clive Belfield and Henry Levin found that “a sizable majority report beneficial effects of competition.”



## **Funding must follow students and be weighted to compensate for the extra costs associated with high-need students if schools are to compete for students and if parents are to have real choice.**

in the context of federalism and the appropriate roles of Washington and lower levels of government.

### **A New Framework**

What is fiscal federalism? Fiscal federalism argues that government services are most efficiently delivered if provided closest to the taxpayers or consumers receiving them, and that competition among local governments for residents and taxpayers will improve those services. In the context of public education, the challenge is to identify the areas of constraint for local providers of education services, determine which can be best addressed by state government, and assign the remainder to Washington.

But there is a fundamental flaw in fiscal federalism theory as it applies to education: the ability of taxpaying parents of school-age children to vote with their feet (leave school districts with which they are dissatisfied) is severely constrained for the low-income populations that are most likely to find themselves served by low-performing schools. This lack of geographical mobility for large segments of the population undermines the competitive pressure that low-performing schools and school districts would otherwise expect to face. This leaves those districts vulnerable to the interests of whoever is powerful at the local level, more often than not organizations that represent teachers who are employed by school districts, rather than to the influence of parents and taxpayers.

One way to correct the strong tendency of local school bureaucracies to cater more to adult than student interests is to intervene from above, the course of action taken by Washington over the last 15 years. We argue that this has been only weakly effective while imposing a heavy regulatory burden

In our proposal, funding must follow students and be weighted to compensate for the extra costs associated with high-need students if schools are to compete for students and if parents are to have real choice. Parents must have the widest possible choice of schools for their children and be armed with good information on the performance of schools. Informed choice that is accompanied by financial consequences for schools will create a marketplace for schooling that will evolve toward greater responsiveness to what parents want, will be more innovative, and will become more productive.

### **A Role for Washington**

The federal government currently funds a wide range of K–12 education initiatives (see Table 1). The task force has identified just four functions that are essential to its role in education: creating and disseminating information on school performance in each classroom and program effectiveness, including information on individual student performance; enforcing civil rights laws; providing financial support to high-need students; and enhancing competition among providers.

Information: The provision of information on the condition of education and on the results of education research is primarily a public service. In such situations, a serious free-rider problem exists: because it is impossible to prevent a class of consumers who have not paid for the information from consuming it, far too little evidence will be produced if it is not supported by an organization with the entire nation’s interests at heart. The free-rider problem is one reason that state and local authorities cannot be entrusted with the task of knowledge production. Furthermore, evidence does not merely need to be produced; it needs to be based

## feature

### K-12 EDUCATION WHITEHURST

#### Where the Federal Dollars Go (table 1)

*Most of the money allocated for K-12 education goes for compensatory and special education, but minor programs also absorb many millions.*

#### U.S. Department of Education K-12 Expenditures, 2010

Program *	(In Millions)
Office of Elementary and Secondary Education State Fiscal Stabilization Fund, Recovery Act (included funding for Race to the Top and the Investing in Innovation Fund) †	\$48,408
College and Career Ready Students (Compensatory Education)	14,492
Special Education State Grants (Special Education)	12,319
Special Education, Recovery Act †	11,447
Compensatory Education for the Disadvantaged, Recovery Act †	9,948
Excellent Instructional Teams	3,505
Impact Aid	1,276
21st Century Community Learning Centers	1,166
English Learner Education	750
School Improvement Programs, Recovery Act †	595
School Turnaround Grants	546
Title I State Agency Programs	445
Effective Teaching and Learning: Literacy	413
Assessing Achievement	411
Expanding Educational Options	409
Successful, Safe, and Healthy Students	365
Special Education National Activities (Special Education)	268
Effective Teaching and Learning for a Well-Rounded Education	226
Effective Teaching and Learning: Science, Technology, Engineering, and Mathematics	181
Rural Education	175
Indian Student Education	127
Fund for the Improvement of Education	126
College Pathways and Accelerated Learning	103
Magnet Schools Assistance	100
Educational Technology State Grants	100
Impact Aid, Recovery Act †	81
Homeless Children and Youth Education	65
Innovation and Improvement, Recovery Act †	62
Comprehensive Centers	56
Native Hawaiian Student Education	34
Alaska Native Student Education	33
Supplemental Education Grants	18
Troops-To-Teachers	14
Promise Neighborhoods	10
Training and Advisory Services (Title IV, Civil Rights Act)	7
Women's Educational Equity	2

\* While the Department of Education administers programs in addition to those listed in the table above, this table attempts to capture only those programs targeted at K-12 education.

† These items were funded under the American Recovery and Reinvestment Act of 2009; this funding was to be spent over more than just the 2010 fiscal year.

Sources: <http://www2.ed.gov/about/overview/budget/budget11/summary/edlite-section3a.html>; <http://www.recovery.gov/Transparency/fundingoverview/Pages/contractsgrantsloans-details.aspx#Education>

on high-quality data. Gathering and auditing data are almost pure public services. Thus, it is easy to justify federal support for research, data gathering, and dissemination of information. Without valid information on the performance of students at each school relative to that of their peers across the country, the entire education enterprise flies blind, leaving parents, teachers, school managers, and policymakers with nothing more than intuition and consensus as the basis for making decisions.

**Civil Rights:** When state and local actions in education are discriminatory, the federal government should step in to enforce civil rights laws. Acts of unjust discrimination, such as those that would deny a student an educational experience for which the student is qualified based solely on race, gender, disability, or other protected status, are costly to society. Students who fail to be educated may need cash transfers as adults; they might take up crime or engage in other antisocial behaviors. Owing to mobility and society-wide redistribution, we all suffer in these cases. Thus, the federal government, and not merely state and local governments, has an obligation to curb discrimination.

**Compensatory Funding:** Regardless of whether the underlying cause is disability, lack of English proficiency, or poverty, high-need students are more expensive to educate than other students. Failure to provide additional resources can provide an incentive for other students to move to another school if they are able. The burden that the high-need student produces will thus be disproportionately borne by those who are too immobile to avoid it, most likely other high-need students. The federal government can counteract these inequities through cash transfers. The difficulty is figuring out the right financial supplement and the best mechanism for distributing it.

Title I of the ESEA and the Individuals with Disabilities Education Act (IDEA) are designed to disburse funds to states and school districts for the education of high-need students. Rather than the complicated federal schemes under which funds are currently disbursed to districts, funds should be attached to the student. Individual schools would receive federal funds based on student counts, with a weighting formula to adjust for factors such as the increased burden of educating high-need students and for regional differences in costs. Sometimes called “backpack funding,” weighted funding that follows the student has been shown to direct proportionally more funds to schools that serve needy students than traditional distribution schemes.

**Choice and Competition:** The federal government can and should restrict education monopolies and support school choice for parents and students. The current system, which relies on residential mobility to drive school districts to improve education services, does not work well enough to improve education outcomes or to ensure equity. Such a

system consigns the poor and immobile to inferior schools and leaves the control of schools in the hands of those who benefit most from the status quo. The simple feature of eliminating a default school assignment by the school district—thus requiring every parent to engage in school choice—eliminates socioeconomic differences in the likelihood that parents will shop for schools. Further, if parents could exercise school choice through web-based portals that highlight the important variables of school performance, socioeconomic differences in knowledge could be muted. Here, again, the federal government has a role to play, for example, by funding open competitions for designers and implementers of school-choice portals.

**Market-based competition cannot prevail in public education unless the consumers of public education can choose where to be schooled.** We propose that as a condition of the receipt of federal funds to support the education of individual students, schools be required to participate in an open enrollment process conducted by a state-sanctioned authority. Such a process would maximize the matches between school and student preferences. Unified open-enrollment systems that encompass as many choices as possible from the regular public, charter, private, and virtual school universes are essential to the expansion of choice and competition in K–12 education. These systems have to be designed so that all schools have the same time frame for applications and admission decisions, and so that they cannot be gamed by either schools or applying families.

The federal government has a legitimate role in overseeing the marketplace for schooling, including the architecture of parental choice systems. It is in the interest of society that the concentration of high-need students not increase in particular schools. Choice systems have to be carefully and explicitly designed to avoid students being sorted by race, economic background, and other conditions. Several options exist for ensuring that schools cannot discriminate against groups of students, including a lottery system (currently required in federal regulations for start-up charter schools), controlled choice (in which algorithms are used to maintain balanced enrollment), and a financial or fee supplement attached to students in protected classes.

## Charter Schools

To ensure a supply of schools from which families may choose, states should establish a system for authorizing charter schools that enables the charter sector to expand to meet demand; that provides funding under the same weighted formula that applies to all other publicly supported schools; and that offers charter schools access to capital commensurate with district school funding. Where there are charter schools, they are frequently the only alternative to regular public

schools for low- and moderate-income families. Relative to statewide averages, charter schools tend to attract a disproportionate number of students eligible for free or reduced-price lunch as well as minority students, especially African Americans. Initial test scores of students at charter schools are usually well below those of the average public-school student in the state in which the charter school is located.

Research on the effectiveness of charter schools in raising student achievement presents a mixed picture. In general, charter schools that serve low-income and minority students in urban areas are doing a better job than their traditional public-school counterparts in raising student achievement, whereas that is not true of charter schools in suburban areas. Charter schools do require careful oversight through appropriately funded authorizing bodies, equitable funding via a backpack model, and the opportunity to grow based on their ability to attract students. Fulfilling the latter condition means that states that do not allow charter schools, or that arbitrarily cap their growth, or that turn their authorization over to the very school districts with which charters compete should reform their practices. The Obama administration included these conditions in Race to the Top. They should be incorporated into the reauthorization of ESEA.

that such schools are allowed to operate at all, they typically do so in the context of charter school laws. These laws include conditions such as a minimum number of hours of daily instruction that do not make sense for courses that are delivered over the Internet, can be taken at a student's own pace, and frequently define completion in terms of mastery rather than seat time. Further, there is currently no provision in any state's laws or at the federal level for students to attend cybercharter schools that are out of state in the sense of having no physical place of business within a state. States and school districts should be prohibited from establishing policies that unreasonably interfere with the provision of education services by out-of-state or out-of-district providers, including online charter schools and distance learning providers. They should, instead, make enrollment in such schools readily available.

The federal government has a long history of promoting interstate markets through its authority under the U.S. Constitution's commerce clause. As the judicial interpretation of the commerce clause has evolved over time, it has come to include the federal authority to nullify state or municipal laws whose object is local economic protectionism (the so-called dormant or hidden commerce clause). The dormant

## **States and school districts should be prohibited from establishing policies that unreasonably interfere with the provision of education services by out-of-state or out-of-district providers, including online charter schools and distance learning providers.**

### **Cybercharters and Other Choice Schools**

Bringing the provision of K-12 education services into the 21st century by unfettering technology as a delivery mechanism will substantially enhance competition and productivity. Unfortunately, virtual courseware and distance learning providers often must make their sales to school districts rather than to individuals. School districts are likely to be reluctant customers because their operations are disrupted by distance learning. The result is that market demand is suppressed and investment in new technologies for K-12 education curtailed.

Much of the anticompétitive force of local school districts is exercised through requirements that link publicly supported education services to geographical constraints. A leading example is restrictions on cybercharter schools, i.e., schools that offer most or all of their instructional programs over the Internet and do not have brick-and-mortar physical locations where students assemble. To the extent

commerce clause could be applied to the provision of education services through the Internet, that is, the federal government could take legal action or support legal claims against states and local school districts that restrict or prohibit access to Internet-based education services that are provided outside district or state borders.

In cybereducation, as in many areas of school administration and performance, it is useful to compare K-12 with postsecondary education. In 2006, the most recent year for which national data are available, postsecondary institutions reported more than 12 million separate distance-learning course enrollments. Two-thirds of all postsecondary institutions offered distance learning courses, and there were more than 11,000 individual programs of study that could be completed entirely online. The contrasts with K-12 education are stark; there were only about 1 million distance-learning enrollments in K-12 in 2007.

Cybereducation for postsecondary students is a national rather than a local marketplace. A student can take a distance learning course from the University of Arizona, and the course credit can apply to graduation requirements at a large number of colleges and universities, without geographical restrictions. Further, if the student has qualified for federal student grants or loans, those are attached to the student, i.e., backpacked. The federal government is indifferent to distance learning

versus place-based learning and to geographical boundaries in the provision of financial aid to high-need postsecondary students, whereas in K–12, that aid is funneled through local public-service monopolies that hold captive the students in their geographical catchment area. The federal government also recognizes regional and national accrediting bodies for higher education institutions. By simply shifting its policies on K–12 education to match those it has adopted for postsecondary education, the federal government could provide to parents something nearly every parent wants—the right and opportunity to choose where their child is schooled—and create a powerful engine for innovation and productivity.

Although the promise and potential of parental choice is nowhere more evident than in the realm of technology, the arguments for allowing students ready access to cyberschools extend to interdistrict school choice, charter schools, private schools, and vouchers as well. When combined with the availability of good information on school performance to parents and backpack funding, these options could create a dramatically different landscape for schooling than is currently available in the United States.

## **Koret Task Force on K–12 Education**

*Hoover Institution, Stanford University*

### **Chester E. Finn Jr.**

Task Force Chair  
President and Trustee, Thomas B. Fordham Foundation  
Senior Fellow, Hoover Institution

### **John E. Chubb**

Founder and CEO, Leeds Global Partners  
Distinguished Visiting Fellow, Hoover Institution

### **Williamson M. Evers**

Research Fellow, Hoover Institution

### **Eric Hanushek** *(not a signatory of the report)*

Senior Fellow, Hoover Institution

### **Paul T. Hill**

Professor of Public Affairs and Director,  
Center on Reinventing Public Education,  
University of Washington-Bothell  
Distinguished Visiting Fellow, Hoover Institution

### **Caroline M. Hoxby**

Professor of Economics, Stanford University  
Senior Fellow, Hoover Institution

### **Tom Loveless**

Senior Fellow, Brown Center on Education Policy,  
Brookings Institution

### **Terry M. Moe**

Professor of Political Science, Stanford University  
Senior Fellow, Hoover Institution

### **Paul E. Peterson**

Professor of Government and Director,  
Program on Education Policy and Governance,  
Harvard University  
Senior Fellow, Hoover Institution

### **Herbert J. Walberg**

Distinguished Visiting Fellow, Hoover Institution

### **Grover J. "Russ" Whitehurst**

Director, Brown Center on Education Policy,  
Brookings Institution

## **Moving Forward**

The approach we recommend places the federal government in a central role in providing information and compensatory funding and in promoting a competitive and information-rich marketplace for education services. Mechanisms we espouse, such as student-based funding, open enrollment systems, charter schools, and virtual education, are having some success in breaking open the current system, but they require very special circumstances at the state and local level. We understand that our proposals, if adopted, would represent a fundamental shift in the federal government's role in K–12 education. An attempt to reauthorize ESEA, IDEA, and Head Start to conform to our recommendations may well fail, in part because what we propose will appeal more to some states than to others. There is nothing wrong with such differences. Indeed, the federalism we espouse is built on the advantage that is conferred to citizens by having government policies and services determined as close to home as possible. There is a legislative way forward consistent with our proposal and federalism, one with a rich legislative history and experience of success at the federal level:

Let states opt out of the statutory and regulatory requirements of ESEA, IDEA, Head Start, and other relevant federal laws in exchange for creating a marketplace of informed choice and competition. Some states will find throwing off the federal yoke in exchange for providing maximum education choice for their citizens politically attractive and viable. Those states can serve as the laboratory for the proposals we

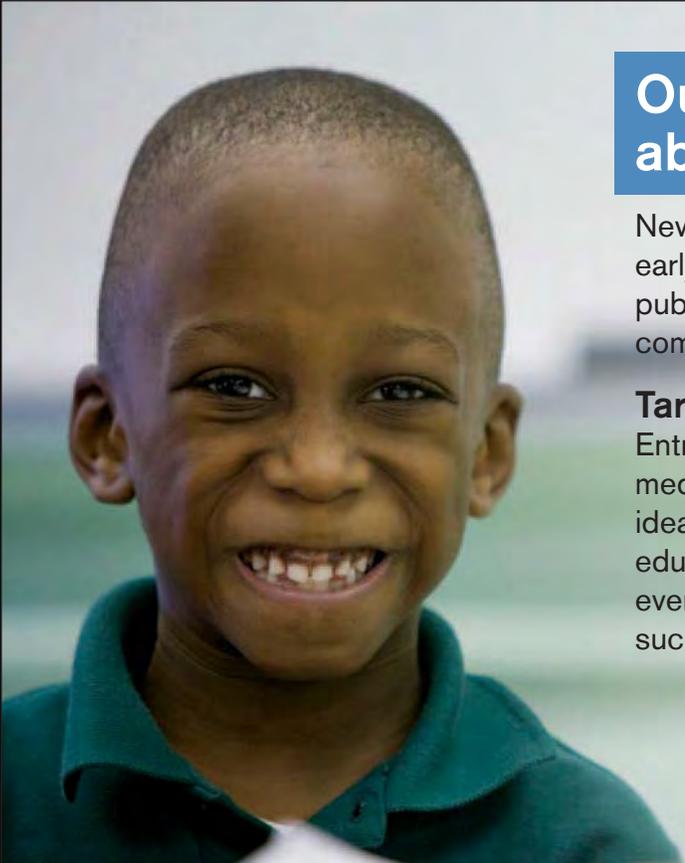
**Let states opt out of the statutory and regulatory requirements of ESEA, IDEA, Head Start, and other relevant federal laws in exchange for creating a marketplace of informed choice and competition.**

have put forward. If these initiatives fail to advance student achievement, social equity, and education productivity, and if they lose the support of a state's electorate, they will be abandoned, and the state will return to the federal fold. If, instead, some states experience the success we think is likely, other states would find the risk of coming onboard manageable and, we think, face escalating demand from their citizens.

The education system clearly has vast consequences for this nation's economy, society, and world leadership. The federal government has a crucial role to play in protect-

ing and promoting precisely those national interests that lower levels of government cannot. We believe the most promising approach is to move decisionmaking closer to the consumers of K-12 public education by unleashing pent-up demand and empowering parents to choose schools for their children.

*Grover J. "Russ" Whitehurst is a member of the Koret Task Force on K-12 Education and director of the Brown Center on Education Policy at the Brookings Institution.*



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