Arlington
INDEPENDENT SCHOOL DISTRICT
*More Than a Remarkable Education*

**FFC Norms:**
1. Be respectful of others
2. Ask questions when in doubt
3. Don't interrupt a question, statement or answer
4. Be present—both mentally and physically
5. Participate

# Financial Futures Committee
# March 8, 2016
# 6:30 pm, Mac Bernd Professional Development Center

WELCOME …….. David Wilbanks
FFC Chairperson

QUESTIONS FROM PREVIOUS MEETING…….
Cindy Powell, Chief Financial Officer

FFC RECOMMENDATIONS……
David Wilbanks
Cindy Powell

GROUP DISCUSSIONS ON ACADEMIC SERVICES: 2016-17 PRIORITIES……
Dr. Steven Wurtz, Chief Academic Officer
Dr. Kevin Barlow, Executive Director of Research & Accountability
Rick Garcia, Executive Director of Transformational Learning
Dr. Jacqueline Kennedy, Executive Director of Teaching and Learning
Paula Long, Executive Director of Educational Support Services
Dr. Tamela Horton, Senior Director of Transformational Learning
Craig Wright, Director of Career and Technology
Julie Porter, Advanced Academics Coordinator
Amy Gresham, Advanced Academics Specialist

*Prepared by: Finance* *March 7, 2016*

EMA

**Estes, McClure & Associates, Inc.**

**Engineering & Consulting**

February 29, 2016

Mr. Daniel Helm
Energy Manager
Arlington Independent School District
1201 Colorado Lane
Arlington, Texas 76015

RE: Interior Lighting Controls

Dear Mr. Helm:

In an effort to help the Arlington Independent School District with project planning, we submit the following information for your consideration.

Interior lighting controls are now standard equipment due to increased requirements within the International Energy Conservation Code (2012 and 2015 versions). These systems vary in cost depending on their complexity and design.

During the 2014 LoanSTAR projects, there were 8 campuses that received facility-wide interior lighting controls. These controls included vacancy sensors in classrooms and occupancy sensors in all other spaces.

Below is a table of the estimated costs, savings and financial payback of these projects. These values do not include the new and existing campuses that have already received lighting controls. It also does not include administration or auxiliary buildings.

| School Type | Square Footage | Estimated Cost | Estimated Savings | Simple Payback |
|---|---|---|---|---|
| Elementary Schools | 3,750,000 | $1,350,000 | $162,000 | 8.3 |
| Junior High Schools | 1,725,000 | $621,000 | $74,000 | 8.3 |
| High Schools | 2,800,000 | $1,008,000 | $120,000 | 8.3 |
| TOTAL | 8,275,000 | $2,979,000 | $356,000 | 8.3 |

Please contact me if you need additional information or assistance.

Sincerely,

Josh Gentry, P.E.

# Interior Lighting Controls

Lighting controls have advanced greatly over the years. The first device was the simple on/off switch, which dates from the late 1800's. Next came the wall dimmer that allowed users to reduce light output (and energy use) from incandescent lamps. With the time clock came the ability to control large groups of light fixtures on a time schedule. In the 1970's, the first occupancy sensors were introduced. Created more than 30 years ago, dimming ballasts provide reduced light and, consequently, energy from fluorescent lamps. Recently, building-wide digital systems have gained acceptance and popularity. Energy codes often mandate the use of specific control methods.

## Energy Code Requirements

Where the use of lighting controls was previously at the owner's discretion, this is now largely dictated by the energy codes. Since Texas adopted the International Energy Conservation Code (IECC), we will focus on its requirements. The first editions of the IECC required only on/off switching in some spaces. The 2012 edition mandated some use of occupancy sensors. The 2015 IECC requires more extensive use of sensors and other automated controls. The following is a (non-exhaustive) summary of requirements[1].

In the majority of spaces, a method to turn lighting on manually and at not more than 50% of total power must be provided. This can be accomplished by switching alternating fixtures or alternating lamps within fixtures or dimming. In these same areas the ability to automatically turn off lighting when unoccupied is required. Where sensors are not provided, "smart" time-based controls must be utilized. Additionally, photosensor/dimming controls that are responsive to the amount of natural light present are required in areas designated as daylighting zones by the Code.

## Types of controls

The majority of existing spaces already have conventional wall switches. Some may have had automatic controls added. These can turn lights on or off, adjust, or dim them without human intervention. Lighting controls are becoming more and more automated. Whatever the means of control, the idea is to deliver the least amount of light while still providing a comfortable, productive, and safe environment.

Motion sensors are intended to turn lighting on and/or off based on whether or not people are present in a space. Occupancy sensors turn lights on when people enter an area and off after they leave. A variant of the occupancy sensor, the vacancy sensor, requires users to manually turn lights on. The two technologies used are passive infrared (PIR) and ultrasonic. Both equate the detection of motion within a space to occupancy. PIR devices sense motion by perceiving the change in temperature when people move around. Ultrasonic sensors use the reflection of high

[1] The specific type of controls needed to comply is determined by the size and function of a given space.

frequency sound waves they emit. PIR sensors can “see” only within their line of sight, while ultrasonic types can detect motion behind partitions (as long as they are not floor-to-ceiling), around corners, etc. Therefore, ultrasonic sensors are better in restrooms and office cubicles, for example.

Due to the interest in sustainability features, the use of daylighting has greatly increased. Still, electric lighting is needed to supplement natural light when it is inadequate (e.g. cloudy days). Photosensors can be coupled with dimming ballasts to control the amount of electric lighting provided. Reducing electric light output lowers its energy use proportionately, i.e. at 50% output power consumption is about one-half of that at 100% output.

Dimming ballasts permit fluorescent lamps to operate at less than 100% output. Step dimming ballasts have preset output values (e.g. 10%, 50%). With continuous dimming ballasts, any level from 100% down to approximately one percent (depending on the ballast) may be selected. Additionally, energy usage falls proportionately with light output. Dimming ballasts may be controlled by wall-mounted controls, photosensors, or a central lighting system. LEDs can be similarly dimmed, but do not require a special ballast. They are inherently dimmable.

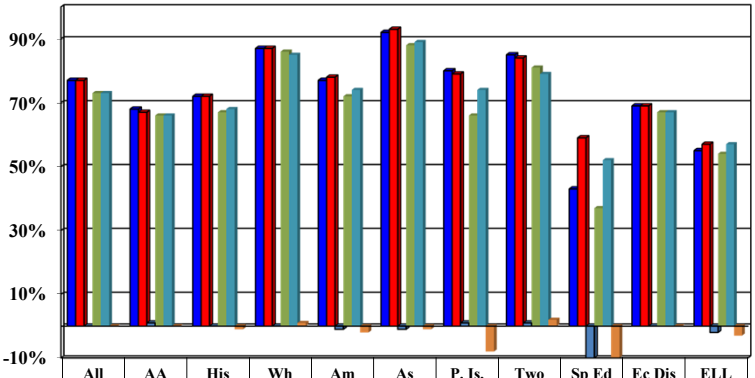
Advanced or “smart” lighting systems are network based and incorporate communication between individual fixtures and a central digital controller (or computer). Each fixture is given a unique network address and can be controlled individually or in groups.

Several energy management strategies can be implemented using these control systems:

- Daylight harvesting – Photosensors adjust light levels based on available daylighting.
- Occupancy sensors –Lighting is controlled based on room occupancy.
- Time scheduling
- Task tuning – Overlighting is eliminated by basing light levels on the type and complexity of the task being performed
- Personal lighting control – Occupants can be given control of lighting in their area via a networked personal computer
- Load shedding – Lighting power can be automatically reduced to lower demand or respond to power emergencies

Lighting controls have changed and advanced over the years, from the simple on/off switch to the computerized central control system. Energy codes now require the use of one or more types of control in most spaces. Owners must choose allowable types based on building occupancy, tasks being performed, and what their budget will permit.

# All Subjects: Satisfactory Standard

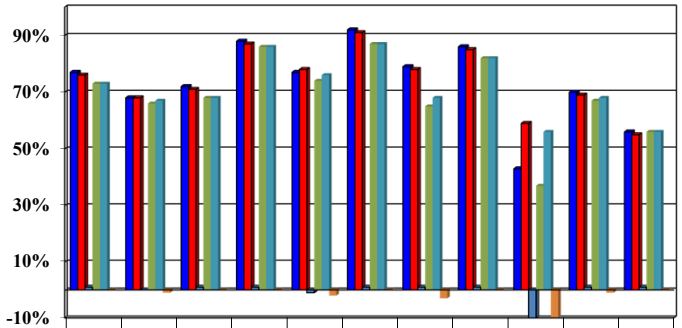



| | All | AA | His | Wh | Am Ind | As | P. Is. | Two Race | Sp Ed | Ec Dis | ELL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| State: All Subjects 2015 | 77% | 68% | 72% | 87% | 77% | 92% | 80% | 85% | 43% | 69% | 55% |
| State: All Subjects 2014 | 77% | 67% | 72% | 87% | 78% | 93% | 79% | 84% | 59% | 69% | 57% |
| Diff | 0% | 1% | 0% | 0% | -1% | -1% | 1% | 1% | -16% | 0% | -2% |
| AISD: All Subjects 2015 | 73% | 66% | 67% | 86% | 72% | 88% | 66% | 81% | 37% | 67% | 54% |
| AISD: All Subjects 2014 | 73% | 66% | 68% | 85% | 74% | 89% | 74% | 79% | 52% | 67% | 57% |
| Diff | 0% | 0% | -1% | 1% | -2% | -1% | -8% | 2% | -15% | 0% | -3% |

Source: 2014-15 Texas Academic Performance Report Published by TEA, Page 2

1

# Reading: Satisfactory Standard

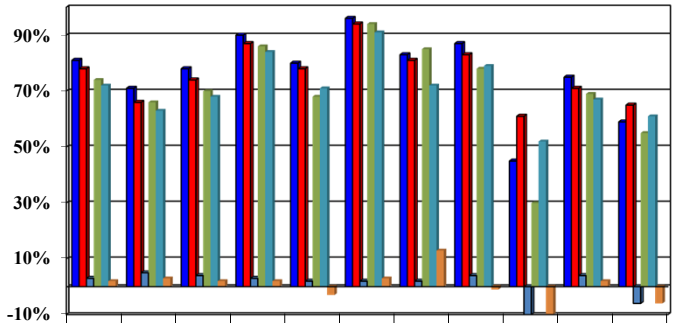



| | All | AA | His | Wh | Am Ind | As | P. Is. | Two Race | Sp Ed | Ec Dis | ELL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| State: Reading 2015 | 77% | 68% | 72% | 88% | 77% | 92% | 79% | 86% | 43% | 70% | 56% |
| State: Reading 2014 | 76% | 68% | 71% | 87% | 78% | 91% | 78% | 85% | 59% | 69% | 55% |
| Diff | 1% | 0% | 1% | 1% | -1% | 1% | 1% | 1% | -16% | 1% | 1% |
| AISD: Reading 2015 | 73% | 66% | 68% | 86% | 74% | 87% | 65% | 82% | 37% | 67% | 56% |
| AISD: Reading 2014 | 73% | 67% | 68% | 86% | 76% | 87% | 68% | 82% | 56% | 68% | 56% |
| Diff | 0% | -1% | 0% | 0% | -2% | 0% | -3% | 0% | -19% | -1% | 0% |

Source: 2014-15 Texas Academic Performance Report Published by TEA, Page 2

2

# Mathematics: Satisfactory Standard

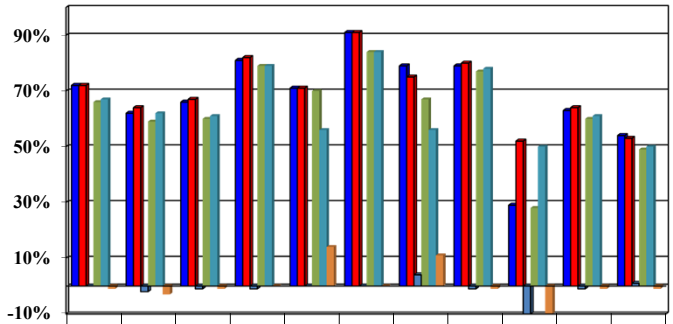



| | All | AA | His | Wh | Am Ind | As | P. Is. | Two Race | Sp Ed | Ec Dis | ELL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| State: Mathematics 2015 | 81% | 71% | 78% | 90% | 80% | 96% | 83% | 87% | 45% | 75% | 59% |
| State: Mathematics 2014 | 78% | 66% | 74% | 87% | 78% | 94% | 81% | 83% | 61% | 71% | 65% |
| Diff | 3% | 5% | 4% | 3% | 2% | 2% | 2% | 4% | -16% | 4% | -6% |
| AISD: Mathematics 2015 | 74% | 66% | 70% | 86% | 68% | 94% | 85% | 78% | 30% | 69% | 55% |
| AISD: Mathematics 2014 | 72% | 63% | 68% | 84% | 71% | 91% | 72% | 79% | 52% | 67% | 61% |
| Diff | 2% | 3% | 2% | 2% | -3% | 3% | 13% | -1% | -22% | 2% | -6% |

Source: 2014-15 Texas Academic Performance Report Published by TEA, Page 2

3

# Writing: Satisfactory Standard

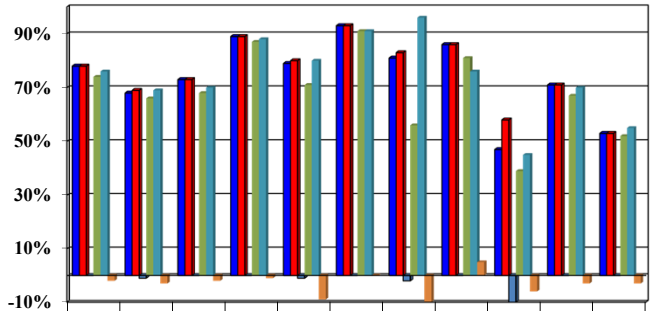



| | All | AA | His | Wh | Am Ind | As | P. Is. | Two Race | Sp Ed | Ec Dis | ELL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| State: Writing 2015 | 72% | 62% | 66% | 81% | 71% | 91% | 79% | 79% | 29% | 63% | 54% |
| State: Writing 2014 | 72% | 64% | 67% | 82% | 71% | 91% | 75% | 80% | 52% | 64% | 53% |
| Diff | 0% | -2% | -1% | -1% | 0% | 0% | 4% | -1% | -23% | -1% | 1% |
| AISD: Writing 2015 | 66% | 59% | 60% | 79% | 70% | 84% | 67% | 77% | 28% | 60% | 49% |
| AISD: Writing 2014 | 67% | 62% | 61% | 79% | 56% | 84% | 56% | 78% | 50% | 61% | 50% |
| Diff | -1% | -3% | -1% | 0% | 14% | 0% | 11% | -1% | -22% | -1% | -1% |

Source: 2014-15 Texas Academic Performance Report Published by TEA, Page 2

4

# Science: Satisfactory Standard

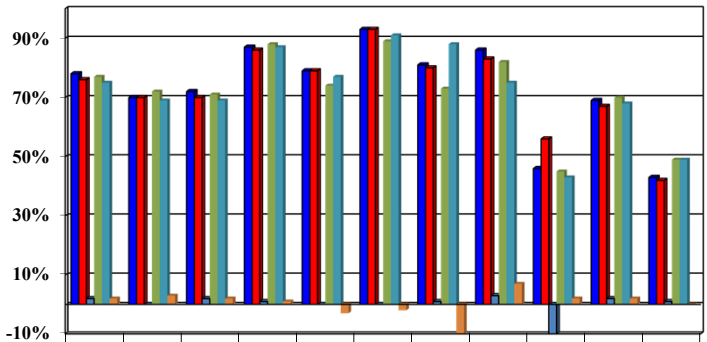



| | All | AA | His | Wh | Am Ind | As | P. Is. | Two Race | Sp Ed | Ec Dis | ELL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| State: Science 2015 | 78% | 68% | 73% | 89% | 79% | 93% | 81% | 86% | 47% | 71% | 53% |
| State: Science 2014 | 78% | 69% | 73% | 89% | 80% | 93% | 83% | 86% | 58% | 71% | 53% |
| Diff | 0% | -1% | 0% | 0% | -1% | 0% | -2% | 0% | -11% | 0% | 0% |
| AISD: Science 2015 | 74% | 66% | 68% | 87% | 71% | 91% | 56% | 81% | 39% | 67% | 52% |
| AISD: Science 2014 | 76% | 69% | 70% | 88% | 80% | 91% | 96% | 76% | 45% | 70% | 55% |
| Diff | -2% | -3% | -2% | -1% | -9% | 0% | -40% | 5% | -6% | -3% | -3% |

Source: 2014-15 Texas Academic Performance Report Published by TEA, Page 2

5

# Social Studies: Satisfactory Standard




| | All | AA | His | Wh | Am Ind | As | P. Is. | Two Race | Sp Ed | Ec Dis | ELL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| State: Social Studies 2015 | 78% | 70% | 72% | 87% | 79% | 93% | 81% | 86% | 46% | 69% | 43% |
| State: Social Studies 2014 | 76% | 70% | 70% | 86% | 79% | 93% | 80% | 83% | 56% | 67% | 42% |
| Diff | 2% | 0% | 2% | 1% | 0% | 0% | 1% | 3% | -10% | 2% | 1% |
| AISD: Social Studies 2015 | 77% | 72% | 71% | 88% | 74% | 89% | 73% | 82% | 45% | 70% | 49% |
| AISD: Social Studies 2014 | 75% | 69% | 69% | 87% | 77% | 91% | 88% | 75% | 43% | 68% | 49% |
| Diff | 2% | 3% | 2% | 1% | -3% | -2% | -15% | 7% | 2% | 2% | 0% |

Source: 2014-15 Texas Academic Performance Report Published by TEA, Page 2

6

# Financial Futures Committee

March 8, 2016

# FFC Overview

| Meeting Date | Topic |
|---|---|
| January 28, 2016 | Draft Committee Norms<br>2015-16 Budget Overview<br>School Finance System<br>School Finance Lawsuit<br>Enrollment Projections |
| February 9, 2016 | Vote on Committee Norms<br>Operating Costs Related to Bond Projects<br>Operations<br>Group Discussions |
| February 23, 2016 | Strategic Plan<br>Performance Data<br>Academic Services Priorities |
| **March 8, 2016** | **Group Discussions on Academic Services Priorities** |
| March 22, 2016 | Staffing<br>Compensation<br>Group Discussions |
| April 5, 2016 | Develop Recommendations |

# FFC Charge

- Gather external and internal data on issues relating to Texas public education, including school finance and accountability, to understand how those issues affect AISD's general operating budget.
- Review the 2016-2021 strategic plan to understand the impact that the strategic plan may have on the general operating budget.
- Review the current general operating budget to gain an understanding of cost drivers.

# FFC Charge

- Review each of the following in order to assess the impact that each item has on the 2016-17 general operating budget and provide input on each, as appropriate:
  - Academic Services priorities and operational efficiency priorities presented to the Committee by the District.
  - Current staffing methods in relation to state education law and current administration protocol
  - Compensation and benefits, including available salary market information, health insurance and wellness plan
  - Operating costs associated with bond projects that will be completed prior to or during the 2016-17 fiscal year

# FFC Charge

- Formalize recommendations for the 2016-17 budget, as appropriate, including possible additions, reductions or deletions to the budget. Recommendations should be aligned with the strategic plan, priorities and budget considerations presented by Administration and should consider operational efficiencies. Committee may recommend that budget items/initiatives be: (1) deferred to a future year budget or possible future bond election, (2) eliminated, or (3) outsourced.

# FFC Charge

- Report advisory, consensus recommendations to the administration and Board regarding the 2016-17 AISD budget at the Board meeting on April 21, 2016.

# 2015-16 FFC Recommendations

| No. | Recommendation | Approved By Board |
|---|---|---|
| 1 | **Study the possibility of moving to a block schedule at the Junior High campuses** (not able to estimate financial impact) | |
| 6 | **Recommend the district differentiate annual salary increases between employees whose salaries are below market and those whose salaries are above market district-wide** (financial impact depends on the raise approved & the manner in which it is applied) | |
| 7 | **Recommend the Board concentrate compensation increases on salaries rather than health insurance** (financial impact depends on raise approved) | ✓ |
| 8 | **Recommend the district incentivize the wellness program with cash** (assuming one-half of employees join wellness plan & incentive is $500, estimated cost = $2,013,750) | |

# 2015-16 FFC Recommendations

| No. | Recommendation | Approved By Board |
|---|---|---|
| 12 | **Research, evaluate and develop options available to reward staff with either salary, bonus structure or some other equitable system based on performance (**not able to estimate financial impact as presented) | |
| 13 | **Establish upper limit of 27 students per class in the core classes at the high school level** (est. that 15 additional teachers would be required at total estimated cost of $859,395) | |
| 14 | **Increase staffing of full-time security personnel at each high school campus to meet the unique security needs of each campus** (not able to estimate financial impact as presented) | ✓ |

# 2014-15 FFC Recommendations

| No. | Recommendation | Apprvd. by Board |
|---|---|---|
| 25 | Response to Intervention (RTI) Specialists for Secondary Schools - 3 for jr. high and 2 for high school (Budget: $272,636) | |
| 1 | Funding for student academic competitions (Budget: $100,000; included in strategic plan budget) | ✓ |
| 33 | Advanced Academics Specialist for secondary schools. Add one specialist to work with AVID & Advanced Academics (Budget: $86,364) | ✓ |
| 32 | Lead GT Teacher/Coordinator at each elementary school (Budget: $53,040) | ✓ |

# 2014-15 FFC Recommendations

| No. | Recommendation | Apprvd by Board |
|---|---|---|
| 4 | Funding for marketing for summer camp opportunities (Budget: $5,000) | ✓ |
| 2 & 13 | Add Counselors to secondary campuses. Needs-based formula yields 18 additional counselors – 12 at high school, 6 at jr. high. (Budget: $1,145,743) | ✓ |
| 26 & 27 | Funding for an objective universal screener (Budget: $350,000) | ✓ |
| 3 | Advanced Academics Coordinator at each high school campus. Assign one teacher FTE to Seguin so school can arrange duties based on campus need. Remaining high schools arrange through existing IB Coordinator and/or special duty assignments (Budget: $53,894) | ✓ |

# 2014-15 FFC Recommendations

| No. | Recommendation | Apprvd by Board |
|---|---|---|
| 8 | Parent orientation on graduation requirements (not able to est. financial impact) | ✓ |
| 10 | Additional programming for implementation of Strategic Plan. Included in strategic plan activity to develop appraisal instrument in 2014-15 (Budget: $0) | ✓ |
| 18 | Implement class size accountability mechanism for classes that exceed 30 students (Budget: $0) | ✓ |

# 2014-15 FFC Recommendations

| No. | Recommendation | Apprvd by Board |
|---|---|---|
| 12 | Create family engagement function at the 29 campuses that do not already have one. Assign a $750 stipend for one professional at each non-title 1 campus to be a parent contact & coordinate family engagement events. (Budget: $21,750) | ✓ |
| 31 | Funding for Student Council leadership training (Budget: $30,000) | ✓ |
| 16 | Uniformed police officers eat for free. Operate as a pilot project in 2014-15. (Budget: $57,525) | |

# 2014-15 FFC Recommendations

| No. | Recommendation | Apprvd by Board |
|---|---|---|
| 11 | Add Teacher Leader/Interventionist positions at Bailey, Boles and Young Junior High Schools. Requires 3 new positions. (Budget: $181,295) | ✓ |
| 34 | .5% Equity adjustment for teachers with 20-29 years experience (Budget: $181,926) | |
| 30 | Increase District's contribution towards employee health insurance. (Budget: $1,365,384) | ✓ |

# 2014-15 FFC Recommendations

| No. | Recommendation | Apprvd by Board |
|---|---|---|
| 17 & 20 | Salary increase for all teachers & non-teacher personnel of not less than an appropriate cost of living increase. (Budget: $6,743,868) | ✓ |
| 35 | Recommend Board review entire health care program (Not able to est. financial impact) | ✓ |
| 34 | Funding for SAT online course (Budget: $25,629) | ✓ |

# Academic Services Discussions

# District Comparison

| District | Index 1 | Index 2 | Index 3 | Index 4 | SAT/ACT % At/Above Class of 2014 |
|---|---|---|---|---|---|
| State | 77 | 37 | 40 | 75 | 25.1% |
| Arlington ISD | 73 | 36 | 38 | 69 | 26.9% |
| Aldine ISD | 67 | 31 | 37 | 69 | 7.8% |
| Birdville ISD | 81 | 36 | 43 | 72 | 30.5% |
| El Paso ISD | 74 | 37 | 41 | 76 | 17.7% |
| Fort Bend ISD | 83 | 40 | 43 | 79 | 38.0% |
| Fort Worth ISD | 68 | 35 | 38 | 69 | 11.3% |
| Garland ISD | 77 | 33 | 41 | 74 | 26.1% |
| Grand Prairie ISD | 74 | 36 | 41 | 73 | 15.3% |
| Katy ISD | 90 | 42 | 50 | 78 | 46.2% |
| Mansfield ISD | 84 | 37 | 43 | 76 | 27.5% |
| North East ISD | 84 | 39 | 45 | 77 | 33.1% |
| Northside ISD | 82 | 39 | 45 | 79 | 25.2% |
| Pasadena ISD | 75 | 36 | 42 | 75 | 13.5% |

7