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Literature Review and Industry Scan of Electric School Buses

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List of Acronyms

AC	Alternate Current
AFDC	Alternative Fuels Data Center
AFLEET	Alternative Fuel Life-Cycle Environmental and Economic Transportation
CNG	Compressed Natural Gas
CO	Carbon Monoxide
DC	Direct Current
EPA	Environmental Protection Agency
EVSE	Electric Vehicle Supply Equipment
GHG	Greenhouse Gas
GVWR	Gross Vehicle Weight Rating
ISD	Independent School District
LPG	Liquified Petroleum Gas
MPDGE	Miles per Diesel Gallon Equivalent
NOx	Nitrogen Oxide
PM	Particulate Matter
SOx	Sulfur Oxide
SP&R	State Planning and Research
TCO	Total Cost of Ownership
TCSB	Texas Clean School Bus
TERP	Texas Emissions Reduction Plan
TTI	Texas A&M Transportation Institute
TxDOT	Texas Department of Transportation
ULSD	Ultra-Low Sulfur Diesel
V2B	Vehicle-to-Building
V2G	Vehicle-to-Grid
VAC	Volt Alternate Current
VEIC	Vermont Energy Investment Corporation
VOC	Volatile Organic Compound

Introduction

According to the American School Bus Council, approximately 480,000 school buses transport nearly 25 million students in the United States each day (1). In Texas, 30,541 school buses were in operation during the 2018–2019 school year (2). School districts have many options when purchasing school buses. This technical memorandum reviews current use and availability of electric school buses on the market and provides valuable information that can assist school districts in making purchasing decisions.

The Texas Department of Transportation (TxDOT) tasked the Texas A&M Transportation Institute (TTI) with conducting this literature review and industry scan of electric school buses to proactively assist school districts in their efforts toward researching and/or implementing electric school bus use. The project was funded through State Planning and Research (SP&R) funds managed by the U.S. Department of Transportation's Federal Highway Administration. Staff from TTI and TxDOT's Research Technology and Implementation Program and Environmental Affairs Division collaborated to produce this memo.

The memo begins with an overview of the current fuel sources for school buses, followed by a more thorough discussion of electric school buses. An inventory of current electric school bus deployments and experiences related to these programs is provided, along with a summary of anticipated electric bus programs. Finally, this memo offers suggestions for consideration to assist school and state officials in making decisions regarding electric school buses.

Overview

Electric school buses are classified as zero-emission vehicles, the adoption of which can reduce the potential for adverse health effects for schoolchildren from exposure to bus tailpipe and engine pollutants. At least 61 electric school buses are currently deployed across the United States, but only one published report exists on an electric school bus deployment. The report is based on the experiences at three school districts in Massachusetts. Limited published information exists on the electric school bus deployments at Twin Rivers Unified School District in California and White Plains City School District in New York. While the published information indicates that some challenges have arisen with the electric school buses, in every case, school districts have continued to use their electric school buses.

The most difficult aspect that schools must overcome related to electric school buses is that the buses are much more expensive compared to those that run on diesel, propane, and compressed natural gas (CNG). The high costs can be mitigated by taking advantage of funding opportunities, such as Volkswagen Settlement funds and Texas Clean School Bus (TCSB) Program funds. Maintenance costs are expected to be lower for electric school buses, but drivers and technicians will need proper training to achieve desired results. Electric school buses also provide benefits through regenerative braking, which can reduce the need for charging due to the gains in kinetic energy when the brakes heat up. Vehicle-to-grid (V2G) and vehicle-to-building (V2B) technologies provide another opportunity that schools could investigate; however, a school would need to procure a large number of electric school buses in order to realize any benefits.

The following suggestions for consideration are intended to help school districts throughout the process of researching and making decisions on electric school bus programs.

- Utilize funding opportunities for alternative-fuel school buses.
- Due to range limitations with electric school buses, be proactive in route planning and deployment.
- Build a strong relationship with the school bus manufacturer and inquire about current price quotes for both buses and chargers.

- If possible, work with utility companies to negotiate stable utility rates.
- Ensure that chargers are in proper locations that will not block access points.
- Investigate V2G and V2B technologies for potential implementation benefits.
- Utilize the Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) Tool to estimate total cost of ownership and emission differences.

Types of School Buses

In general, four types of fuel sources are commonly used to power school buses: diesel, propane or liquified petroleum gas (LPG), CNG, and electric. In 2017, only 8 percent of school bus sales in the country were fueled by propane, CNG, and electric buses (3). The following sections describe the different bus types and fuel sources, bus and fuel costs, and maintenance needs. An overview of the benefits and drawbacks for each bus type is also provided.

The bus and fuel costs are given based on default values used in Argonne National Lab's AFLEET Tool. The most recent version of the tool, AFLEET Tool 2019, was released to the public on March 2, 2020. According to Argonne, the default values are compiled from multiple sources, such as the Clean Cities Alternative Fuel Price Report and the American Recovery and Reinvestment Act awards (4). The default values are given merely to show base comparisons and should not be taken as current bus or fuel costs.

Table 1 shows the default cost, mileage, and fuel efficiency values for each bus type in the AFLEET Tool 2019.

Fuel Type	Annual Mileage	MPDGE	Bus Cost
Diesel	15,000	7.7	\$90,000
Propane	15,000	6.4	\$98,000
CNG	15,000	6.5	\$120,000
Electric	15,000	22.6	\$290,000

Table 1. School Bus Cost and Fuel Efficiency Comparison by Fuel Source

Note: MPDGE = miles per diesel gallon equivalent. Source: (4).

Diesel School Buses

Diesel school buses have been in use since the 1950s and have made notable advancements in safety and emissions during that time (5). Diesel is a petroleum distillate fuel that is refined from crude oil (6) and is the most widely used fuel source for school buses (7). According to the AFLEET Tool 2019 (4), a diesel school bus costs approximately \$90,000 and has a fuel economy of 7.7 MPDGE.

Diesel school buses are durable and reliable sources of transportation. Though diesel school buses can offer benefits in reliability and efficiency, diesel exhaust is a hazardous emission source and is considered a possible cancer agent by the U.S. Environmental Protection Agency (EPA). Those exposed to diesel exhaust could be at higher risk of developing lung or bladder cancer. School-aged children are more susceptible to the risks associated with diesel exhaust because their respiratory systems are continuing to develop and they breathe in more air per pound of body weight compared to adults (7). Since December 1, 2010, diesel fuel sold in the United States has been ultra-low sulfur diesel (ULSD). To achieve compliance with federal regulations, ULSD must have a sulfur content less than 15 parts per million, making it a cleaner diesel fuel source than was used prior to 2010 (8).

Propane School Buses

Propane is an alternative fuel to diesel and has been available since the 1970s. According to the Propane Education & Research Council, Northside Independent School District (ISD) in San Antonio, Texas, began operating a propane school bus as early as 1975 (9). Propane is a domestic fuel that is a byproduct of processing natural gas (10). In 2007, school bus manufacturers began using direct liquid fuel injection instead of vapor fuel injection, which caused propane to become a more reliable fueling option (11). According to AFLEET Tool 2019, a propane school bus costs \$98,000 and has a fuel economy of 6.4 MPDGE (4).

Propane has generally been cheaper than diesel, leading to increased savings by school districts. Propane is a lower-emission fuel, reducing the potential risk for negative health effects that children might face from vehicular emissions. Propane school buses are generally quieter than diesel school buses (12). According to the U.S. Department of Energy's Alternative Fuels Data Center (AFDC), propane school buses account for 2 percent of the school buses in the United States (11).

A 2014 Clean Cities propane case study reported that some school districts were able to achieve fuel and maintenance cost savings of almost 50 percent on propane school buses, compared to diesel. Of the 110 propane school buses evaluated in the case study, 105 were located in Texas. The propane school buses in the study had an average fuel economy of 7.2 MPDGE (13).

CNG School Buses

CNG is another alternative fuel that can be used in school buses. According to a 1992 EPA report, Garland ISD in Garland, Texas, began operating CNG school buses in 1983 (14). CNG is a domestic fuel source generated from oil and gas production (15). According to AFLEET Tool 2019, a CNG school bus costs \$120,000 and has a fuel economy of 6.5 MPDGE (4).

CNG generally has a stable fuel price compared to other fuel sources (see Figure 1). CNG's price stability and history of being a lower-priced fuel option frequently offset the additional capital costs incurred with CNG buses. CNG buses may also offer emissions benefits (16).

Information on maintenance costs for CNG school buses is not widely available, and some industry experts differ on whether there are maintenance cost savings for CNG buses compared to diesel buses. CNG school bus maintenance costs are comparable to diesel school bus maintenance costs.

Electric School Buses

Electric buses are a relatively new alternative for school buses and have been deployed across the United States since 2017. Electric buses operate from batteries that are charged via an electricity source. While electricity generation may produce emissions, the buses are considered zero-emission vehicles because they do not produce any tailpipe emissions directly (17). Electricity is generated by converting energy from non-renewable energy sources, such as natural gas, coal, or nuclear, or from renewable energy sources, such as solar and wind (18). The generation of the electricity itself does produce emissions, but the electric buses themselves do not emit any tailpipe emissions. According to AFLEET Tool 2019, an electric school bus costs \$290,000 and has a fuel economy of 22.6 MPDGE (4).

Electric buses have a high fuel economy, but their range is much lower compared to buses with other fuel types. The fuel economy of electric buses is impacted by total mileage, duty cycle, and weather conditions (19).

Electric buses are more expensive to purchase than traditionally fueled buses, but electric bus manufacturers believe that the up-front costs can be recovered through lower maintenance and fuel costs (3). Electric bus manufacturers also claim maintenance costs will be lower with electric buses since there are fewer moving parts in the vehicle. However, school district and transit agency

experience has yet to show lower maintenance costs. Schools and transit agencies have both experienced issues with motor inverters and charging infrastructure, which in turn have impacted actual maintenance costs. The technology is comparatively new and incurs a learning curve for mechanics and drivers, and as the technology and technical knowledge improve, maintenance costs may be reduced.

The most significant anticipated maintenance cost for electric school buses is battery replacements. As technology has improved in recent years, battery prices have dropped, and some experts have proposed that electric bus costs could be similar to other alternative-fuel buses in the future (3).

As the technology further improves and more market penetration occurs, electric school bus prices are expected to decrease. Any school district pursuing electric school buses and charging infrastructure should inquire about current prices from the bus manufacturers.

Fuel Price Comparison

According to AFDC (20), electricity and CNG fuel prices are relatively stable, whereas diesel and propane show more volatility. Figure 1 shows the average fuel prices for diesel, propane, CNG, and electricity from 2000 through 2019. The flatter the line, the more stable the fuel price.



Figure 1. Average Retail Fuel Prices in the United States

Table 2 shows the national average fuel price between January 1, 2020, and January 15, 2020, according to AFDC. The 15-day average is produced quarterly by the Department of Energy's Clean Cities Program and is based on information provided by Clean Cities coordinators and stakeholders, as well as fuel suppliers. For the January 2020 national average, there were 4,811 fuel data points submitted, but this included prices for other alternative fuel sources, such as ethanol and biodiesel

blends, that are not discussed in this report (21). The data in Table 2 represent the most recently available information.

Fuel Type	Price
Diesel	\$3.05/gal
Propane	\$2.79/gal
CNG	\$2.18/GGE
Electricity	\$0.13/kWh
Courses (01)	

Table 2. National Average Fuel Price from January 1–15, 2020

Source: (21).

According to AFDC, seven electric school bus models are currently on the market in the United States (22). The e-Lion A is expected to enter the market in 2020 (23), so it is also included in this discussion. Table 3 summarizes the manufacturer information for the eight available electric school bus models.

Seating Manufacturer Bus Type **Bus Model** Battery Range Capacity Micro Bird 5G Blue Bird Type A 30 88 kWh Up to 100 mi Electric Blue Bird Type C Vision Electric 77 160 kWh Up to 120 mi All American RE Blue Bird Type D 84 160 kWh Up to 120 mi Electric Synapse 72 Type D 72 GreenPower Bus 194.5 kWh Up to 150 mi School 80 kWh or 160 Lion Type A e-Lion A 26 Up to 150 mi kWh 220 kWh Lion Type C e-Lion C 72 Up to 155 mi Lion Type D e-Lion D 84 220 kWh Up to 150 mi Saf-T-Liner C2 Thomas Built Type C 81 155 kWh Up to 120 mi Jouley

Table 3. Electric School Buses Currently on the Market

Blue Bird

In 1994, Blue Bird became one of the first school bus manufacturers to offer an electric school bus. Blue Bird offers three different electric school buses:

- The Micro Bird G5 Electric bus can carry up to 30 people and has a gross vehicle weight rating (GVWR) up to 14,500 lb. These buses require 6–8 hours to fully charge and have a range of up to 100 mi.
- The Vision Electric bus can carry up to 77 people and has a GVWR up to 33,000 lb. These buses require 6–8 hours to fully charge and have a range of up to 120 mi.
- The All American RE Electric bus can carry up to 84 people and has a GVWR up to 36,200 lb. These buses require 6–8 hours to fully charge and have a range of up to 120 mi.

The Blue Bird electric school buses are all equipped with a Level 2 alternate current (AC) charger with a CCS1 plug. They are powered by Cummins PowerDrive technology and are compatible with V2G infrastructure (24).

Lion Electric Company

The Lion Electric Company offers two models of electric school buses, with a third model available for pre-order:

- The e-Lion A bus is not currently available, but the company plans to have it available in 2020, and it is currently available for pre-order. These buses will be able to carry up to 26 people (23). The buses require 2.5–10 hours to fully charge (depending on charger choice) and will have a range of between 75–150 mi, depending on transmission and motor inverter choices (25).
- The e-Lion C bus can carry up to 72 passengers and has a GVWR up to 30,000 lb. Wheelchair ramps are also available for these buses. These buses have four different range options: 65 mi (88 kWh), 100 mi (132 kWh), 125 mi (176 kWh), and 155 mi (220 kWh). They also have onboard telematics that can be accessed remotely by Lion for help with determining any issues (26). The buses require 4–6 hours to fully charge (27).
- The e-Lion D bus can carry up to 84 people and has a GVWR up to 36,200 lb. These buses require 2.5–16 hours to fully charge (depending on charger choice) and have a range between 100–155 mi, depending on transmission and motor inverter choices (28).

The Lion electric school buses are all equipped with a 19.2 kW J1772 charger, but schools also have the option to purchase an SAE Combo direct current (DC) fast charger manufactured by SAE International. The Lion website touts that it will provide best-in-class customer support, as well as grant/subsidy support, but the website does not mention anything about V2G compatibility (26).

Thomas Built

Thomas Built offers one electric school bus model. The **Saf-T-Liner C2 Jouley** bus can carry up to 81 people. These buses have the J1772 charger, but an additional DC charging station is an option, and they have a range of up to 134 mi. The buses have a 220 kWh battery storage capacity and are compatible with V2G infrastructure (29).

GreenPower Motor Company

GreenPower Motor Company offers one electric school bus model. The **Synapse 72** bus can carry up to 72 people (*30*). The electric school bus has a battery capacity of 194.5 kWh and a range of 150 mi. The company is hoping to increase the range capacity to 200 mi. The standard J1772 charger requires 8 hours to fully charge. GreenPower also offers the DC Fast Charger, which requires 2 hours and 45 minutes to fully charge, for an additional \$32,000–33,000. The bus has onboard telematics that are monitored 24/7 by the manufacturer. The bus and the standard Level 2 charger currently cost approximately \$400,000.¹

Charging Infrastructure

Electric school buses must have access to electric vehicle supply equipment (EVSE) to charge the batteries. Two types of EVSE are available for electric school buses:

- AC Level 2 Chargers: These chargers use a 208/240 volt alternate current (VAC) connection. This connection allows 30–80 amps of current to supply a maximum 19.2 kW of power to the vehicle. AC Level 2 chargers could fully charge an electric school bus in approximately 4– 5 hours. Based on research by the Vermont Energy Investment Corporation (VEIC), in 2015, these chargers cost between \$3,000 and \$10,000 (31).
- DC Fast Chargers: These chargers convert AC power into DC by utilizing an inverter. The chargers use 208–600 VAC for up to 90 kW, resulting in buses being able to be fully charged

¹ Based on a phone interview with Ryne Shetterly, vice president of sales and marketing for GreenPower, on April 17, 2020.

in approximately 20 to 30 minutes. Based on research by VEIC, in 2015, these chargers cost anywhere from \$25,000 to \$35,000, not including installation (*31*).

A standard SAE J1772 plug works with both types of chargers (31). Since vehicle purchase prices are constantly changing, school districts should consult manufacturers regarding current charging infrastructure costs of both the charger and installation.

Another important concept to be aware of regarding electric school bus charging has to do with demand charges. Demand charges are fees placed on heavy electricity users, such as schools, that use large amounts of energy at peak times of the day. These heavy users typically use more than 2,000 kWh each month. The exact fee that is placed on the user is determined by the utility provider. The demand charge is based on the highest 15-minute average usage period from the previous month. Schools can reduce demand charges by charging school buses at night (*31*).

V2G and V2B Technologies

Bi-directional connections allow electric buses to not only receive power but also give power back, either to the grid itself or to a building. The infrastructure is new, and the exact cost for the charging infrastructure is unknown, but it is expected to be much higher than the AC Level 2 or DC Fast Chargers (*31*).

Steward researched the economics of V2G and determined what needs to happen for successful V2G partnerships (*32*). In order for V2G technology to work, stakeholders must balance the infrastructure needs, costs, and benefits. The three stakeholders involved are the bus manufacturers, bus owners, and utility companies. The vehicles must have bi-directional charging capabilities, and the bus manufacturers need to price the vehicles in such a manner that potential owners are able to purchase them. In addition, the bus owner needs to be paid fairly for the use of the bus powering the grid. The bus owner also has to ensure that the bus is available at the times it is needed for transportation use. Moreover, the utility company must receive enough benefit from the entire process because it will need to oversee the process. To see enough benefit, there will need to be several buses; a single bus would not be able to provide enough energy to justify the process (*32*).

Electric school buses have a unique ability to provide power back to the grid. They have limited range and are sitting idle for extensive periods of time, during which they could be collecting revenue (33). Electric buses could be used to help balance the grid, especially during peak periods, by providing power back to the grid in times of high demand. Electric school buses can recover almost three times as much revenue over their lifetime as electric transit buses. School buses are generally parked for almost 21 hours each day throughout the school year and 24 hours each day in the summer, making them a good source of energy supply back to the grid. One of the major downfalls of V2G technology is that it can cause extensive wear on the batteries and even shorten the battery life (32). Utilizing V2G would ultimately require an extremely reliable management program.

Researchers at the University of Delaware found that battery life was not diminished during the V2G process; instead, the battery life actually increased because V2G requires only a medium state of charge. The researchers noted that while utilizing V2G, the electric school buses would save the school up to \$230,000 for each bus over a 14-year lifespan; however, savings would be highly dependent on regulation pricing. An electric school bus utilizing V2G could save up to \$6,072 per seat, whereas a school bus without V2G would cost nearly \$2,000 per seat (33).

Electric providers across the country are beginning to partner with schools to incorporate electric school buses and V2G infrastructure. Torrance Unified School District and San Diego Unified School District, both in California (34), and White Plains School District in New York (35) are all currently utilizing V2G technology. Duke Energy is also planning to incorporate V2G technology on 85 electric school buses in North Carolina (35). DTE Energy in Michigan has partnered with two Michigan school

districts to test V2G. Dominion Energy in Virginia has stated that it plans to have 1,050 electric school buses within the next 5 years for Virginia schools and will incorporate V2G. Because school buses are parked during peak periods, they become an excellent source of power (36).

VEIC, which oversaw an electric school bus deployment at three school districts in Massachusetts, had originally intended to implement V2G technology with the electric school bus deployment, but in the end determined it was not feasible given the immense amount of time needed to manage it (31). More detailed information about the pilot program deployment is provided later in this report.

Schools could also utilize V2B technology to glean direct benefits. To implement V2B, schools would use the school buses to store energy and could then use the school bus batteries to power school buildings. V2B could be especially beneficial during high-use times or to reduce demand charges (3). To date, V2B has not been fully tested and has no known applications, so benefits cannot yet be determined.

Even though V2B was not implemented, the VEIC study analyzed potential benefits of utilizing V2B technology for the three Massachusetts school districts. VEIC estimated that the electric school buses would need a charge between 10 and 12 percent to successfully charge the school building. VEIC also estimated that schools could earn between \$80 and \$450 each month by reducing their monthly demand charges by 3-19 kWh. Based on these figures, schools could earn approximately \$1,700 to \$2,000 within 2 years. However, since the exact cost of the V2B infrastructure is not known but could be in excess of \$10,000, it was determined that the opportunity was not financially feasible for the school districts to undertake. In order to see financial benefits, a school would need to reduce demand during each 15-minute period during peak hours. It is unlikely that a school district would be able to achieve this rate of demand reduction while still saving enough battery capacity to operate an afternoon route. The oversight required to manage V2B charging would likely be more than a school district would be able to manage (*31*).

In order to see success with V2B technology, there needs to be a strong partnership with a local utility, who likely has better resources to manage and understand the project. VEIC determined that having a large number of buses and utilizing V2B in the summer months would be most beneficial (31).

Regenerative Braking Technology

Regenerative braking is another benefit of electric buses. Regenerative braking occurs when a bus decelerates and the kinetic energy that occurs as the brakes heat up sends the energy back to the motor. This energy, instead of the battery energy, is then used when the bus accelerates. Driving conditions, terrain, and vehicle size all have an impact on how much benefit regenerative braking will have. Electric buses can see increased benefits with regenerative braking because they are constantly stopping, which creates more opportunities for regenerative braking to occur. Going downhill will also produce more opportunity for regenerative braking since braking is used more going downhill than on level surfaces. The exact amount of energy that can be recovered from regenerative braking is not well understood since vehicle load capacity and battery efficiency both play a role (*37*). Electric school buses have great potential for benefiting from regenerative braking. It is important to note that longer periods of braking are better for the regenerative process, and bus driver training can reinforce the benefits of gradual braking.

Financing Opportunities

Volkswagen Settlement Opportunities

The purchase of electric school buses has been aided by the Volkswagen Settlement. Beginning in 2016, Volkswagen was charged with violating the Clean Air Act by having "defeat devices" installed

on as many as 590,000 diesel vehicles. The devices allowed vehicles to pass emissions tests when in reality, the vehicles were emitting much larger amounts of emissions. The Volkswagen Settlement required that a \$2.7 billion trust fund be set up to help improve the emissions violations that occurred across the country. States would be given money based on the number of registered vehicles that had the defeat devices installed. Each state could determine how to use the money to bring cleaner energy vehicles into the state (38). School districts across the country have taken advantage of the funds to purchase electric school buses.

Texas Clean School Bus Program

The TCSB Program is a part of the Texas Emissions Reduction Plan (TERP) and is housed in the Texas Commission on Environmental Quality. The program provides grant opportunities for schools to replace or retrofit pre-2007 diesel school buses with clean fuel source buses in an effort to reduce emissions outputs. The grants will reimburse schools up to 100 percent to retrofit a bus or up to 80 percent to replace a bus. One stipulation of the program is that the replaced bus must be destroyed so that it can no longer be used or must be removed from North America with a guarantee that it will not return (39). For fiscal year 2019, \$3,094,795 was allocated to the TCSB Program (40).

Emissions and Total Cost of Ownership

The AFLEET Tool is a planning tool that can be used to estimate lifetime emissions of vehicles. According to Argonne, the default values are compiled from multiple sources, such as the Clean Cities Alternative Fuel Price Report and the American Recovery and Reinvestment Act awards (4). The tool is used to calculate well-to-wheels petroleum use, greenhouse gases (GHGs), and vehicle operation air pollutants. For the purposes of this report, the default values were used, except in the case of mileage, where the statewide annual mileage for school buses in Texas, 9,000 mi, was used. The values are estimates for comparative purposes only. Table 4 summarizes the inputs that were used to evaluate the lifetime emissions output.

Input	Diesel	Propane	CNG	Electric		
Number of Vehicles		1 sch	nool bus			
Annual Vehicle Mileage		9,0	100 mi			
Fueling Type		Privat	e station			
Fuel Price Sensitivity			No			
Years of Planned		15	years			
Ownership						
Financial Assumptions		No	loans			
Fuel Economy	7.7	6.4	6.5	22.6		
(MPDGE)						
Purchase Price	\$90,000	\$98,000	\$120,000	\$290,000		
(\$/Vehicle)						
Fuel Price (Private	\$3.09	\$2.17	\$1.86	\$0.11		
Station)						

Table 4. AFLEET Input Summary

Table 5 shows the lifetime emissions output based on the AFLEET model, where the inputs in Table 4 are assumed. The model merely provides an estimate of the well-to-wheels petroleum use, GHGs, and vehicle operation air pollutants that one bus would contribute over its lifetime. Electric school buses show a clear advantage when it comes to emissions output.

Fuel Type	Petroleum Use (barrels)	GHG (tons)	CO (lb)	NO _x (Ib)	PM ₁₀ (Ib)	PM _{2.5} (lb)	SO _x (lb)	VOC (lb)
Diesel	437	242	309	967	35	8	3	24
Propane	169	252	6,092	52	36	9	0	69
CNG	2	229	6,803	121	35	8	2	16
Electric	3	128	0	0	30	4	0	0

Table 5. AFLEET Lifetime Emissions Output

Note: GHG = greenhouse gas; CO = carbon monoxide; NO_x = nitrogen oxide; PM = particulate matter; SO_x = sulfur oxide; VOC = volatile organic compound.

The AFLEET total cost of ownership (TCO) calculator evaluates the net present value of operating and fixed costs of owning a new vehicle over the years of planned ownership, as well as lifetime petroleum use, GHG emissions, air pollutant emissions, and externality costs. The AFLEET TCO calculations look at the operating and fixed costs on an annual basis for every year of planned ownership of a new vehicle. TCO uses assumptions for inflation, various costs, and a discount rate to calculate the net present value of a vehicle purchase.

Using the AFLEET Tool, the TCO for the four fuel types of school buses can be compared. The default values in Table 4 are used to generate the TCO estimation. Table 6 displays the TCO output from the AFLEET Tool 2019, which shows an advantage to propane buses.

Table 6. AFLEET TCO Output

	Diesel	Propane	CNG	Electric	
TCO based on 9,000 annual miles (15 years)	\$429,247	\$389,310	\$441,570	\$571,700	
TCO based on 15,000 annual miles (15 years)	\$598,868	\$527,321	\$600,714	\$711,679	

Current School Bus Statistics for Texas

This memo aims to provide state and school officials with pertinent information that can inform the decision-making process regarding school buses. For the 2018–2019 school year, Texas schools were allocated \$1,643,384,567 for transportation needs, which equated to \$303 per student (*41*). During the 2018–2019 school year, the 30,541 school buses in Texas traveled 280,894,699 mi (2). Appendix A includes a listing of the number of school buses for each district in Texas.

According to the Propane Education & Research Council, Texas has been one of the biggest propane school bus users in the country, with over 70 school districts operating over 3,000 propane school buses. Propane school buses produce NO_x , a precursor to ozone and smog, at levels 90 percent lower than diesel school buses. Propane school buses are not required to abide by anti-idling controls because they have lower emissions (42).

Between 2008 and August 31, 2019, \$34,558,623 in grant funding had been awarded and 7,560 buses had been retrofitted through the TCSB Program (43). School buses that are retrofitted reduce PM_{2.5} emissions by at least 50 percent (44). Between 2017 and August 31, 2019, \$6,070,000 in grant funding had been awarded and 125 buses had been replaced through the TCSB Program (45). A complete list of the replacements and retrofits by school district can be found in Appendix B.

Currently, no electric school buses are operating in Texas. Everman ISD, located south of Fort Worth, Texas, is in the process of purchasing three Blue Bird electric school buses, with a planned delivery

date of fall 2020. At the time of the procurement process, Blue Bird was the only available option for purchase.²

Current Electric School Bus Deployments in the United States

As of March 2020, there are 61 electric school buses deployed across the United States. In most cases, schools have purchased only a single bus. One notable exception is the Twin Rivers Unified School District in California, which has continued to purchase additional electric school buses since initial deployment. Its fleet currently consists of 30 electric school buses (46). Table 7 summarizes the active electric school bus deployments across the United States. A listing of school district contact information can be found in Appendix C.

School	State	Number of Buses	Bus
Amherst Regional Public School District (31)	MA	1	Lion
Bay Shore Union Free School District (47)	NY	4	Blue Bird
Calaveras Unified School District (48)	CA	3	Blue Bird
Cambridge Public School District (31)	MA	1	Lion
Concord Public School District (31)	MA	1	Lion
Franklin Pierce School District (49)	WA	1	Blue Bird
Kalamazoo Public Schools (50)	MI	1	Lion
Lakeville School District (51)	MN	1	Lion
Los Angeles Unified School District*	CA	1	GreenPower
Phoenix Union High School District (52)	AZ	1	Blue Bird
Rialto Unified School District*	CA	2	GreenPower
Three Rivers Community Schools (53)	MI	2	Lion
Torrance Unified School Districts and San Diego Unified School District (34)	CA	6	Blue Bird
Twin Rivers Unified School District (46)	CA	30	Lion
West Fargo Public Schools (54)	ND	1	Blue Bird
White Plains School District (35)	NY	5	Lion

Table 7. Current Electric School Bus Deployments

* Based on a phone interview with Ryne Shetterly, vice president of sales and marketing for GreenPower, on April 17, 2020.

Review of Current Electric School Bus Pilot Programs

While many schools across the country have or are planning to deploy electric school buses, there is only one published pilot project evaluation from an electric school bus deployment in Massachusetts. Limited information has been published on the electric school bus deployments at Twin Rivers Unified School District in California and White Plains City School District in New York.

Massachusetts

The published evaluation was performed by VEIC for three school districts in Massachusetts: Amherst Regional Public School District, Concord Public School District, and Cambridge Public School

² Based on an email from Lori Clark, program manager and DFW Clean Cities coordinator for NCTCOG, on April 8, 2020.

District. The electric school buses were deployed in early 2017, and the evaluation period ended in March 2018 (31).

Lion electric school buses were purchased for the three school districts. The buses each cost \$325,000, and each came with four batteries capable of storing 104 kWh of energy, which was designed to have a range of 75 mi. The batteries had a warranty for either 160,000 kWh or 8 years. Lion provided 1.5 days of training for service technicians and 2.5 hours of training for school bus drivers. Lion suggested that the districts purchase either Tesla or Clipper Creek chargers. Two schools chose the Tesla chargers, while one school chose a Clipper Creek charger. Amherst Regional Public School District decided after approximately 6 months to change from the Tesla charger to the Clipper Creek charger due to issues with the connector (*31*).

Amherst Regional Public School District used the electric school bus only for normal morning and afternoon operations, traveling approximately 33 mi each school day. During the 14-month evaluation period, the bus traveled a little more than 5,000 mi. Due to the low mileage each day, the bus was not charged during the day (*31*).

Amherst Regional Public School District experienced reliability issues with the bus and also had challenges with customer support from the manufacturer. During the evaluation period, the school district experienced nine maintenance issues with the bus and charging infrastructure. There were two breakdowns, which resulted in the bus not being in service for over 30 days during the evaluation period. Four of the days that the bus was out of service were a result of issues with the Tesla charger. The district also expressed that it received inadequate training, was provided insufficient supporting documentation, dealt with problems receiving parts from the manufacturer, and had difficulty working with the warranty department. The district sent staff for additional training organized by the manufacturer but faced challenges with the logistics of international travel, with communication from the manufacturer, and with the information provided during the training not being thorough enough. Supporting documentation for the buses was promised in the proposals, but the district faced challenges and delays in receiving helpful documents. The district further expressed that the paperwork required to submit a warranty claim was tedious and challenging and that it faced pushback from the manufacturer regarding reimbursement rates for maintenance performed by the district. The district also experienced challenges with getting parts from the manufacturer due to delays resulting from the parts needing to go through customs because at the time, Lion did not yet have a U.S. presence (31). Lion's first U.S. presence was in Sacramento, California, in November 2018 (55).

Cambridge Public School District used its electric school bus for normal morning and afternoon operations, as well as for field trips, traveling approximately 45 mi each school day. Due to the low mileage each day, the bus was not charged during the day. The district faced challenges on adequately recording data for the bus (31).

Cambridge Public School District uses a private contractor to manage its bus department and chose to not have the contractor manage the electric school bus. An agreement was formed with Concord Public School District to perform maintenance on the electric school bus, ultimately leading to delays in repairs. The electric school bus at Cambridge Public School District was left unplugged during the winter break, which caused problems with the batteries that resulted in the bus being out of service for 10 weeks (31).

Concord Public School District purchased a wheelchair-accessible electric school bus and used it for normal morning and afternoon operations, traveling approximately 90 mi each school day. Concord faced challenges similar to Amherst Regional Public School District with the bus fuel gauge. Concord also faced issues with its Tesla charger, resulting in the bus being out of service for 5 school days. Four battery packs also failed, resulting in the bus being out of service for over a month. The VEIC report did not explain why the battery packs failed, but the batteries were under warranty and were replaced by the manufacturer. Adverse to the experience faced by Amherst Regional Public School District, during the winter break, the Concord bus was left plugged in and did not present any mechanical issues upon return. Concord expressed dissatisfaction with the level of local knowledge and would have preferred to have someone close by that it could turn to when issues arose, instead of having the manufacturer respond from Canada. These issues improved when Lion gained access to the computer and telematics remotely (*31*).

The operating efficiency experienced by the districts was less than expected. Lion reported the operating efficiency would be approximately 1.3-1.4 kWh, but in reality, the districts had 2.38 kWh per mile. It was determined that operating efficiency decreased substantially when the buses were plugged in for more than 10 hours. One possible solution to this would be to implement a managed charging system so that the bus would only charge when needed when it is plugged in (31).

VEIC found that the three schools paid a total of \$7,240 in energy costs over 12 months. Of this total cost, \$2,608 was a result of demand charges. VEIC estimated that for the same number of miles traveled—13,902 mi—diesel buses would have cost \$4,413. If demand charges could have been avoided, the electric school buses would have had an operating efficiency of 1.47 kWh per mile, more in line with the manufacturer's reported efficiency (*31*).

VEIC used the AFLEET model to measure emission outputs from the pilot program. It used the model to show emission outputs for the electric school buses, the diesel school buses, and the electric school buses assuming no demand charges (*31*). Table 8 highlights these emission outputs.

Fuel Type	Mileage	GHG (tons)	CO (lb)	NO _x (Ib)	PM ₁₀ (lb)	PM _{2.5} (Ib)	SO _x (lb)	VOC (lb)
Electric	13,902	12.9	0	0	3.2	0.4	0	0
Diesel	13,902	31.4	31	19.6	3.5	0.7	0.3	2.9
Electric (with managed charging)	13,902	8.7	0	0	3.2	0.4	0	0

Table 8. Emission Outputs Based on Pilot Program Experiences

Source: (31).

When mileage was the same, the electric school buses had lower emissions in every category, compared to the diesel school buses. If demand charges could be avoided, emissions were even further reduced.

Initially, the electric school bus pilot program was intended to implement V2G or V2B technology, but challenges arose that prevented any implementation to occur. It was decided that the buses would be purchased first and V2G or V2B infrastructure would be purchased later. The buses arrived before VEIC could research and purchase any bi-directional chargers, and the districts decided to purchase one-direction AC chargers instead. These challenges prevented VEIC from integrating V2G or V2B technology (31).

Overall, the electric school buses were well received, and each district agreed to continue operating the buses on their routes (31).

California

In 2017, Twin Rivers Unified School District in Sacramento, California, became one of the first districts in the country to deploy an electric school bus. The district has continually added electric school buses to its fleet, now utilizing 30 electric school buses (46). The district has purchased its electric school buses from a variety of manufacturers, including Lion and Blue Bird (7).

Since deploying electric school buses, the district has saved up to \$15,000 each year on fuel and maintenance costs, and those savings are expected to rise (7). The electricity costs were 15–17 cents per mile, compared to diesel at 82–86 cents per mile. Twin Rivers experienced maintenance cost savings of 60–80 percent compared to the other buses in its fleet (3).

As in Massachusetts, Twin Rivers Unified School District also faced challenges with the charging infrastructure. At times, the batteries were unable to sync, but the district noted that Lion has been helpful in addressing any issues that have come up. The Trans Tech buses have presented additional challenges due to their sodium-nickel batteries, which can take days to warm up if they go cold (7). Twin Rivers had plans to implement V2G, but it was still in the development phase at the time of the initial deployment of the buses. It is not known at this time if Twin Rivers has been able to implement V2G. Twin Rivers also collaborated with a local community college to implement courses aimed at electric vehicle maintenance (3).

New York

In 2018, White Plains City School District in New York City deployed five electric school buses. The school bus operations for the school district are contracted out to National Express. The electric school buses have been well received by the community.

The local utility company, Consolidated Edison (Con Ed), contributed \$100,000 for each bus and in return was given the opportunity to utilize V2G. The V2G program began in summer 2019. Due to utility regulations in New York, Con Ed does not benefit directly from V2G; instead, utility customers themselves benefit from the cost savings with lower utility bills (3).

Planned Deployments

More school districts are actively pursuing electric school buses on some level. Table 9 summarizes the information that is currently available (as of March 3, 2020) for planned electric school bus deployments. A listing of school districts with planned deployments can be found in Appendix D.

State	Anticipated Number of Buses Actively Being Pursued
Alabama	2
California	15
Colorado	2
Connecticut	1
Illinois	3
Indiana	4
Maine	1
Massachusetts	1
Michigan	14
Minnesota	2
Missouri	1
North Carolina	85
Tennessee	1
Texas	3
Vermont	6
Virginia	50
Washington	1
Total	192

Table 9. Planned Electric School Bus Deployments

Conclusion

Electric school buses provide many benefits. One of the most valuable benefits is that they reduce emissions, which can provide a safer, cleaner environment for children. The buses are designed to be quieter, and because there are fewer parts, they have the potential for lower maintenance costs. There are several financing opportunities available for school districts, such as the Volkswagen Settlement and TCSB grant opportunities. School districts can also work with utility providers to take advantage of V2G and V2B technology, further reducing school expenditures.

Electric school buses also have potential cost disadvantages when considering acquisition. The purchase costs for electric school buses are still greater than traditional-fuel school buses, though prices are expected to decrease as market penetration increases. School districts with electric buses have experienced maintenance issues with both the buses and their charging infrastructure. In addition, electric school bus deployment is new, and a technology learning curve for both drivers and technicians must be overcome before certain benefits can be realized. Such issues have the potential to affect the costs a school district may face. School districts would do well to get current price quotes on buses, charging infrastructure, and energy costs. It is also important for school districts to review current research and industry literature for more peer experiences and updates since the electric vehicle industry is rapidly changing.

The districts that have deployed electric school buses have all decided to continue using the buses, and many districts have purchased additional electric school buses after their initial experiences.

School District Considerations

To assist school districts in researching and/or making decisions on electric school bus programs, the following suggestions are provided for consideration.

- Utilize funding opportunities for alternative-fuel school buses. Many options are available to help alleviate the high costs of electric school buses. The Volkswagen Settlement and the TCSB Program are two such opportunities discussed here, but other opportunities exist as well. Different school bus manufacturers also may be able to lend guidance on funding strategies and opportunities.
- Be proactive in choosing the routes for the electric school buses. Terrain and distance can both have impacts, so it is important to plan early and strategically regarding which routes will be used.
- Build a strong relationship with the school bus manufacturer. Inquire about current price quotes for both buses and chargers. Build specifics into contracts to ensure that the district gets the proper support from the manufacturer. For example, have contracts include stipulations for training of drivers and technicians.
- Be proactive with driver and technician training. A difficult learning curve must be overcome with the new technology, so preparing early and having the proper training regimen will be vital to the success of the electric school bus program.
- Ensure that chargers are in proper locations that will not block access points. Make sure that school buses are charged overnight as much as possible to avoid demand charges. Make sure that chargers are not charging when not needed to avoid any "vampire loads."
- Investigate V2G and V2B technologies and work with utility providers to negotiate stable rates that lower demand charge rates. Ensure that school buses will be available when needed and that the district will benefit from any relationship with a utility provider.
- Utilize the AFLEET Tool to estimate total cost of ownership and emission differences compared to diesel buses.

Appendix A

This appendix presents the 2018–2019 Vehicle Inventory Report that was downloaded from the Texas Education Agency's Foundation School Program on March 14, 2020. The report is in its original format and has not been edited.

Texas Education Agency

Foundation School Program - Transportation, State Funding Division

Vehicle Inventory Report

2018-2019

CDN	District	Buses by	Program	P	uses by	Type		Purchased	Purchased	All	All	All
CDN		Duses Dy	Program	B	uses by	Туре		buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	А	В	С	D					
001902	CAYUGA ISD	15	3	0	0	18	0	2	2	18	3	21
001903	ELKHART ISD	19	2	1	0	20	0	1	1	21	6	27
001904	FRANKSTON ISD	15	3	0	0	15	3	1	1	18	8	26
001906	NECHES ISD	9	1	0	0	10	0	0	0	10	3	13
001907	PALESTINE ISD	34	5	1	0	38	0	6	3	39	1	40
001908	WESTWOOD ISD	28	4	2	0	30	0	2	0	32	0	32
001909	SLOCUM ISD	10	1	11	0	0	0	1	0	11	7	18
002901	ANDREWS ISD	20	2	0	0	22	0	2	2	22	18	40
003903	LUFKIN ISD	52	20	0	0	72	0	10	10	72	6	78
003904	HUNTINGTON ISD	20	6	1	0	25	0	0	0	26	0	26
003905	DIBOLL ISD	25	4	0	0	23	6	1	1	29	0	29
003906	ZAVALLA ISD	10	0	1	0	6	3	0	0	10	4	14
003907	CENTRAL ISD	24	5	29	0	0	0	0	0	29	0	29
004901	ARANSAS COUNTY ISD	27	6	1	0	25	7	3	3	33	0	33
005901	ARCHER CITY ISD	12	0	4	1	5	2	0	0	12	6	18
005902	HOLLIDAY ISD	11	1	4	0	6	2	1	1	12	8	20
005904	WINDTHORST ISD	9	2	0	0	0	11	1	1	11	4	15
006902	CLAUDE ISD	11	0	3	0	5	3	1	1	11	6	17

CDN	District	Buses by	Program	E	Buses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	C	D					
007901	CHARLOTTE ISD	13	1	1	0	11	2	0	0	14	0	14
007902	JOURDANTON ISD	24	2	0	4	20	2	0	0	26	7	33
007904	LYTLE ISD	21	2	0	0	23	0	2	2	23	10	33
007905	PLEASANTON ISD	34	5	0	0	31	8	3	3	39	4	43
007906	POTEET ISD	14	4	1	0	15	2	0	0	18	5	23
008901	BELLVILLE ISD	31	7	1	0	35	2	1	0	38	6	44
008902	SEALY ISD	34	6	0	0	40	0	1	0	40	7	47
008903	BRAZOS ISD	19	1	2	2	16	0	0	0	20	5	25
009901	MULESHOE ISD	18	2	1	1	18	0	2	0	20	7	27
010901	MEDINA ISD	11	1	0	0	12	0	0	0	12	6	18
010902	BANDERA ISD	36	6	0	0	41	1	0	0	42	6	48
011901	BASTROP ISD	85	19	0	0	94	10	0	0	104	1	105
011902	ELGIN ISD	45	9	0	0	54	0	1	1	54	8	62
011904	SMITHVILLE ISD	27	3	0	0	30	0	2	2	30	5	35
012901	SEYMOUR ISD	13	0	6	0	7	0	5	5	13	0	13
013903	PETTUS ISD	6	1	0	1	6	0	0	0	7	0	7
013905	SKIDMORE-TYNAN ISD	15	2	1	0	16	0	1	1	17	0	17
014803	PRIORITY CHARTER SCHOOLS	12	0	0	1	11	0	0	0	12	0	12
014901	ACADEMY ISD	23	3	1	0	14	11	1	1	26	5	31
014902	BARTLETT ISD	11	1	3	0	6	3	0	0	12	4	16
014905	HOLLAND ISD	10	1	0	0	10	1	0	0	11	7	18
014906	KILLEEN ISD	245	99	24	0	300	20	24	24	344	12	356

CDN	District	Buses by	Program	B	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
014908	SALADO ISD	27	4	3	1	23	4	1	1	31	7	38
014909	TEMPLE ISD	63	19	0	3	42	37	3	0	82	4	86
014910	TROY ISD	19	4	1	0	22	0	2	2	23	4	27
015802	GEORGE GERVIN ACADEMY	5	0	0	0	5	0	0	0	5	5	10
015805	NEW FRONTIERS PUBLIC SCHOOLS INC	0	0	0	0	0	0	0	0	0	0	0
015806	SCHOOL OF EXCELLENCE IN EDUCATION	11	0	0	0	8	3	0	0	11	2	13
015807	SOUTHWEST PREPARATORY SCHOOL	1	0	1	0	0	0	0	0	1	5	6
015814	POSITIVE SOLUTIONS CHARTER SCHOOL	0	0	0	0	0	0	0	0	0	0	0
015833	HENRY FORD ACADEMY ALAMEDA SCHOOL FOR ART + DESIGN	0	0	0	0	0	0	0	0	0	0	0
015901	ALAMO HEIGHTS ISD	20	8	28	0	0	0	0	0	28	1	29
015904	HARLANDALE ISD	38	22	2	0	58	0	2	2	60	8	68
015906	RANDOLPH FIELD ISD	14	5	1	0	18	0	0	0	19	5	24
015908	SOUTH SAN ANTONIO ISD	30	17	6	0	41	0	4	4	47	0	47
015909	SOMERSET ISD	46	5	3	0	48	0	0	0	51	5	56
015910	NORTH EAST ISD	339	135	4	0	470	0	15	15	474	0	474
015911	EAST CENTRAL ISD	97	24	0	0	121	0	6	0	121	13	134
015912	SOUTHWEST ISD	92	29	2	0	114	5	4	4	121	7	128
015913	LACKLAND ISD	7	4	0	0	8	3	1	1	11	5	16
015914	FT SAM HOUSTON ISD	14	5	0	0	16	3	1	1	19	8	27
015915	NORTHSIDE ISD	664	257	4	0	917	0	14	14	921	106	1027
015917	SOUTHSIDE ISD	53	10	0	0	63	0	5	5	63	8	71
016901	JOHNSON CITY ISD	18	1	0	0	19	0	3	3	19	7	26

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	Α	В	С	D					
016902	BLANCO ISD	17	3	1	8	11	0	0	0	20	0	20
017901	BORDEN COUNTY ISD	18	0	10	0	6	2	0	0	18	9	27
018901	CLIFTON ISD	18	2	1	0	19	0	3	0	20	4	24
018902	MERIDIAN ISD	12	1	2	0	10	1	0	0	13	3	16
018906	IREDELL ISD	4	1	2	0	3	0	0	0	5	3	8
018907	KOPPERL ISD	6	2	0	0	8	0	0	0	8	1	9
018908	CRANFILLS GAP ISD	5	0	5	0	0	0	0	0	5	2	7
019000	BOWIE COUNTY	236	0	0	0	236	0	60	0	236	0	236
019903	MAUD ISD	0	3	0	0	3	0	0	0	3	0	3
019905	NEW BOSTON ISD	0	10	0	0	10	0	1	1	10	3	13
019906	REDWATER ISD	0	0	0	0	0	0	0	0	0	0	0
019907	TEXARKANA ISD	0	6	0	0	6	0	0	0	6	0	6
019908	LIBERTY-EYLAU ISD	0	4	0	0	4	0	0	0	4	0	4
020901	ALVIN ISD	185	47	0	0	232	0	20	20	232	16	248
020902	ANGLETON ISD	47	17	2	52	0	10	2	2	64	9	73
020904	DANBURY ISD	6	1	0	0	7	0	0	0	7	5	12
020905	BRAZOSPORT ISD	54	17	0	0	71	0	0	0	71	11	82
020907	COLUMBIA-BRAZORIA ISD	29	9	0	0	38	0	4	4	38	1	39
020908	PEARLAND ISD	165	33	0	2	192	4	0	0	198	0	198
020910	DAMON ISD	4	0	4	0	0	0	0	0	4	2	6
021803	BRAZOS SCHOOL FOR INQUIRY & CREATIVITY	2	0	0	0	2	0	0	0	2	0	2
021805	ARROW ACADEMY	3	0	0	0	3	0	0	0	3	0	3

CDN	District	Buses by	Program	B	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
021001		Regular	Special	A	B	C	D		2	110		105
021901	COLLEGE STATION ISD	84	34	0	5	110	3	3	3	118	7	125
022901	ALPINE ISD	13	3	0	0	10	6	0	0	16	10	26
023902	SILVERTON ISD	7	0	0	4	2	1	1	1	7	7	14
024901	BROOKS COUNTY ISD	10	2	1	2	9	0	3	3	12	8	20
025901	BANGS ISD	15	1	2	0	11	3	0	0	16	5	21
025902	BROWNWOOD ISD	23	3	0	0	3	23	2	2	26	8	34
025904	BLANKET ISD	7	1	1	0	5	2	0	0	8	4	12
025905	MAY ISD	10	0	0	0	10	0	0	0	10	0	10
025906	ZEPHYR ISD	8	0	0	0	8	0	0	0	8	2	10
025908	BROOKESMITH ISD	13	0	2	0	11	0	0	0	13	3	16
025909	EARLY ISD	18	1	1	0	18	0	1	1	19	1	20
026902	SOMERVILLE ISD	7	1	8	0	0	0	1	1	8	4	12
026903	SNOOK ISD	12	1	0	0	13	0	0	0	13	5	18
027903	BURNET CISD	43	9	1	0	48	3	1	1	52	10	62
027904	MARBLE FALLS ISD	51	14	0	0	65	0	6	6	65	13	78
028903	LULING ISD	10	0	0	0	7	3	0	0	10	3	13
028906	PRAIRIE LEA ISD	3	0	0	1	2	0	0	0	3	0	3
029901	CALHOUN COUNTY ISD	38	6	4	0	40	0	0	0	44	15	59
030901	CROSS PLAINS ISD	14	1	1	0	12	2	0	0	15	5	20
030902	CLYDE CISD	23	4	2	2	19	4	0	0	27	3	30
030903	BAIRD ISD	8	2	3	0	6	1	1	0	10	5	15
030906	EULA ISD	8	2	1	0	5	4	1	1	10	5	15

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	А	В	С	D					
031901	BROWNSVILLE ISD	201	110	0	0	297	14	34	34	311	0	311
031903	HARLINGEN CISD	105	30	2	21	75	37	18	18	135	9	144
031905	LA FERIA ISD	23	4	1	0	26	0	0	0	27	13	40
031906	LOS FRESNOS CISD	80	19	0	0	99	0	0	0	99	11	110
031909	POINT ISABEL ISD	21	6	27	0	0	0	3	0	27	6	33
031912	SAN BENITO CISD	54	18	0	18	54	0	4	4	72	2	74
031913	SANTA MARIA ISD	7	3	10	0	0	0	0	0	10	6	16
031914	SANTA ROSA ISD	10	1	0	0	11	0	0	0	11	0	11
032902	PITTSBURG ISD	35	5	0	0	40	0	1	1	40	26	66
033901	GROOM ISD	4	0	1	1	0	2	0	0	4	4	8
033902	PANHANDLE ISD	10	1	2	0	5	4	0	0	11	11	22
033904	WHITE DEER ISD	9	0	4	0	5	0	0	0	9	11	20
034901	ATLANTA ISD	40	3	0	3	40	0	1	1	43	28	71
034902	AVINGER ISD	5	0	0	5	0	0	1	1	5	0	5
034905	LINDEN-KILDARE CISD	15	3	3	0	14	1	0	0	18	7	25
034907	QUEEN CITY ISD	20	3	0	0	23	0	1	1	23	17	40
034909	BLOOMBURG ISD	5	0	0	0	5	0	0	0	5	4	9
035902	HART ISD	5	0	5	0	0	0	0	0	5	5	10
035903	NAZARETH ISD	6	0	2	0	2	2	0	0	6	3	9
036901	ANAHUAC ISD	22	2	0	0	24	0	1	1	24	8	32
036902	BARBERS HILL ISD	42	6	0	0	48	0	1	1	48	16	64
037904	JACKSONVILLE ISD	58	9	1	0	53	13	0	0	67	3	70

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
037907	RUSK ISD	30	4	0	0	34	0	2	0	34	9	43
037908	NEW SUMMERFIELD ISD	13	1	1	0	5	8	1	0	14	4	18
037909	WELLS ISD	5	1	1	0	5	0	0	0	6	1	7
038901	CHILDRESS ISD	18	1	5	2	10	2	0	0	19	9	28
039902	HENRIETTA ISD	16	1	3	0	14	0	5	5	17	9	26
039903	PETROLIA CISD	21	1	4	1	16	1	0	0	22	4	26
039904	BELLEVUE ISD	5	0	0	0	2	3	0	0	5	3	8
039905	MIDWAY ISD	6	0	6	0	0	0	0	0	6	0	6
040901	MORTON ISD	7	0	1	0	3	3	0	0	7	8	15
040902	WHITEFACE CISD	8	0	0	0	5	3	0	0	8	9	17
041901	BRONTE ISD	3	2	0	0	5	0	0	0	5	7	12
041902	ROBERT LEE ISD	7	1	0	1	6	1	0	0	8	6	14
042901	COLEMAN ISD	14	1	0	0	15	0	0	0	15	9	24
042903	SANTA ANNA ISD	6	1	4	0	2	1	0	0	7	7	14
042905	PANTHER CREEK CISD	9	0	0	0	7	2	0	0	9	5	14
043901	ALLEN ISD	100	38	0	0	48	90	12	0	138	6	144
043902	ANNA ISD	40	9	6	0	38	5	3	3	49	8	57
043903	CELINA ISD	31	3	0	0	33	1	2	2	34	7	41
043904	FARMERSVILLE ISD	21	2	0	0	23	0	4	4	23	9	32
043905	FRISCO ISD	210	122	4	0	285	43	19	19	332	47	379
043907	MCKINNEY ISD	115	48	0	48	95	20	0	0	163	0	163
043908	MELISSA ISD	25	4	0	0	26	3	3	3	29	9	38

CDN	District	Buses by	Program	B	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	Α	В	C	D		-			
043912	PROSPER ISD	118	29	2	0	145	0	0	0	147	8	155
043917	BLUE RIDGE ISD	13	2	1	1	12	1	1	0	15	4	19
043918	COMMUNITY ISD	28	4	3	0	27	2	2	2	32	18	50
044902	WELLINGTON ISD	9	1	0	0	5	5	0	0	10	8	18
045902	COLUMBUS ISD	17	4	0	0	21	0	1	1	21	18	39
045903	RICE CISD	34	4	4	6	18	10	4	4	38	10	48
045905	WEIMAR ISD	9	2	0	0	11	0	0	0	11	5	16
046901	NEW BRAUNFELS ISD	56	16	1	71	0	0	0	0	72	6	78
046902	COMAL ISD	184	50	1	0	233	0	0	0	234	18	252
047901	COMANCHE ISD	23	4	3	0	24	0	0	0	27	0	27
047902	DE LEON ISD	9	3	2	0	10	0	0	0	12	6	18
047903	GUSTINE ISD	5	0	0	0	5	0	0	0	5	3	8
048901	EDEN CISD	8	0	0	0	8	0	0	0	8	4	12
048903	PAINT ROCK ISD	14	1	3	0	12	0	0	0	15	7	22
049902	MUENSTER ISD	11	2	0	0	9	4	2	2	13	11	24
049905	CALLISBURG ISD	21	11	6	5	21	0	0	0	32	5	37
049907	LINDSAY ISD	9	1	1	0	9	0	1	1	10	2	12
049908	WALNUT BEND ISD	3	0	1	0	2	0	0	0	3	1	4
049909	SIVELLS BEND ISD	3	0	0	0	3	0	0	0	3	2	5
050901	EVANT ISD	9	1	2	0	3	5	0	0	10	6	16
050902	GATESVILLE ISD	31	9	4	0	36	0	2	2	40	10	50
050904	OGLESBY ISD	4	1	0	0	5	0	0	0	5	1	6

CDN	District	Buses by	Program	B	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
050909	JONESBORO ISD	10	2	3	2	7	0	0	0	12	2	14
050910	COPPERAS COVE ISD	69	19	2	17	59	10	3	3	88	0	88
051901	PADUCAH ISD	4	0	1	0	2	1	1	1	4	7	11
052901	CRANE ISD	10	2	6	5	0	1	0	0	12	20	32
053001	CROCKETT COUNTY CONSOLIDATED CSD	10	1	6	0	3	2	0	0	11	2	13
054901	CROSBYTON CISD	9	2	2	0	9	0	0	0	11	3	14
054902	LORENZO ISD	6	0	3	0	3	0	1	1	6	4	10
054903	RALLS ISD	7	1	0	0	7	1	0	0	8	8	16
055901	CULBERSON COUNTY-ALLAMOORE ISD	11	1	4	0	1	7	0	0	12	12	24
056901	DALHART ISD	23	2	9	0	12	4	2	2	25	10	35
056902	TEXLINE ISD	7	0	3	0	0	4	0	0	7	9	16
057802	PEGASUS SCHOOL OF LIBERAL ARTS AND SCIENCES	0	0	0	0	0	0	0	0	0	0	0
057808	UNIVERSAL ACADEMY	22	0	0	0	22	0	0	0	22	0	22
057814	ACADEMY FOR ACADEMIC EXCELLENCE	0	0	0	0	0	0	0	0	0	0	0
057816	A W BROWN LEADERSHIP ACADEMY	4	0	0	0	4	0	0	0	4	1	5
057819	JEAN MASSIEU ACADEMY	9	0	9	0	0	0	0	0	9	0	9
057828	WINFREE ACADEMY CHARTER SCHOOLS	0	0	0	0	0	0	0	0	0	0	0
057834	EVOLUTION ACADEMY CHARTER SCHOOL	1	0	1	0	0	0	0	0	1	0	1
057844	MANARA ACADEMY	6	0	6	0	0	0	0	0	6	0	6
057905	DALLAS ISD	632	294	354	0	556	16	0	0	926	18	944
057907	DUNCANVILLE ISD	50	26	0	3	69	4	14	14	76	0	76
057909	GARLAND ISD	278	83	0	0	361	0	0	0	361	12	373

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
057910	GRAND PRAIRIE ISD	78	37	0	0	115	0	0	0	115	24	139
057911	HIGHLAND PARK ISD	0	5	5	0	0	0	0	0	5	0	5
057914	MESQUITE ISD	114	88	24	0	171	7	6	6	202	7	209
057919	SUNNYVALE ISD	13	2	0	0	15	0	0	0	15	5	20
057922	COPPELL ISD	62	24	4	0	78	4	17	17	86	2	88
058902	DAWSON ISD	6	0	0	0	6	0	0	0	6	9	15
058905	KLONDIKE ISD	12	0	2	0	10	0	0	0	12	6	18
058906	LAMESA ISD	12	2	0	0	14	0	0	0	14	13	27
058909	SANDS CISD	12	0	0	0	12	0	0	0	12	3	15
059901	HEREFORD ISD	31	3	4	0	26	4	0	0	34	21	55
059902	WALCOTT ISD	16	0	16	0	0	0	1	1	16	0	16
060914	FANNINDEL ISD	7	2	0	0	9	0	0	0	9	3	12
061802	NORTH TEXAS COLLEGIATE ACADEMY	3	0	3	0	0	0	0	0	3	2	5
061901	DENTON ISD	137	66	4	0	199	0	2	2	203	0	203
061902	LEWISVILLE ISD	198	90	0	0	260	28	0	0	288	0	288
061903	PILOT POINT ISD	15	3	0	0	13	5	0	0	18	5	23
061905	KRUM ISD	19	3	1	0	20	1	0	0	22	1	23
061906	PONDER ISD	22	2	24	0	0	0	3	0	24	2	26
061907	AUBREY ISD	23	7	0	7	21	2	0	0	30	0	30
061908	SANGER ISD	28	11	7	0	27	5	5	5	39	4	43
061910	ARGYLE ISD	29	5	2	3	29	0	2	2	34	0	34
061912	LAKE DALLAS ISD	39	8	2	0	32	13	1	1	47	5	52

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
061914	LITTLE ELM ISD	45	9	2	0	52	0	12	12	54	0	54
062901	CUERO ISD	28	4	0	0	32	0	2	1	32	10	42
062902	NORDHEIM ISD	4	0	0	0	4	0	0	0	4	3	7
062903	YOAKUM ISD	21	5	0	0	26	0	1	0	26	5	31
062904	YORKTOWN ISD	14	3	0	0	17	0	2	2	17	7	24
062905	WESTHOFF ISD	2	1	3	0	0	0	0	0	3	0	3
062906	MEYERSVILLE ISD	5	0	0	0	5	0	0	0	5	1	6
063903	SPUR ISD	5	0	0	0	4	1	0	0	5	4	9
063906	PATTON SPRINGS ISD	6	0	0	0	5	1	0	0	6	2	8
064903	CARRIZO SPRINGS CISD	27	3	1	0	26	3	0	0	30	9	39
065901	CLARENDON ISD	12	0	3	4	3	2	1	0	12	5	17
065902	HEDLEY ISD	6	0	2	0	4	0	0	0	6	4	10
066005	RAMIREZ CSD	2	0	0	0	1	1	0	0	2	1	3
066901	BENAVIDES ISD	5	1	0	0	6	0	0	0	6	0	6
066902	SAN DIEGO ISD	10	1	0	0	11	0	0	0	11	0	11
066903	FREER ISD	8	0	0	0	6	2	0	0	8	2	10
067902	CISCO ISD	13	3	2	0	13	1	0	0	16	10	26
067903	EASTLAND ISD	14	2	0	0	16	0	1	1	16	6	22
067904	GORMAN ISD	8	0	0	0	7	1	0	0	8	3	11
067907	RANGER ISD	10	2	2	0	10	0	0	0	12	4	16
067908	RISING STAR ISD	6	1	0	0	7	0	0	0	7	3	10
068901	ECTOR COUNTY ISD	162	30	0	0	179	13	11	11	192	12	204

CDN	District	Buses by	Program	В	uses by	Гуре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	А	В	С	D					
069901	ROCKSPRINGS ISD	5	0	0	3	1	1	1	0	5	10	15
069902	NUECES CANYON CISD	11	1	6	0	5	1	0	0	12	3	15
070801	WAXAHACHIE FAITH FAMILY ACADEMY	5	0	5	0	0	0	5	0	5	0	5
070901	AVALON ISD	8	0	0	0	8	0	0	0	8	1	9
070903	ENNIS ISD	45	15	9	51	0	0	2	2	60	12	72
070908	MIDLOTHIAN ISD	77	21	3	0	66	29	7	7	98	17	115
070909	MILFORD ISD	5	0	2	0	3	0	1	1	5	2	7
070910	PALMER ISD	15	1	4	0	12	0	0	0	16	1	17
070912	WAXAHACHIE ISD	55	13	1	0	67	0	0	0	68	6	74
070915	MAYPEARL ISD	17	1	18	0	0	0	0	0	18	4	22
071810	EL PASO LEADERSHIP ACADEMY	0	0	0	0	0	0	0	0	0	0	0
071901	CLINT ISD	107	29	10	0	81	45	20	20	136	4	140
071902	EL PASO ISD	176	133	12	0	297	0	24	24	309	6	315
071904	SAN ELIZARIO ISD	35	6	3	0	38	0	0	0	41	0	41
071905	YSLETA ISD	124	95	49	0	170	0	9	9	219	6	225
071906	ANTHONY ISD	6	2	2	0	4	2	0	0	8	2	10
071909	SOCORRO ISD	185	95	7	88	181	4	10	10	280	18	298
072801	PREMIER HIGH SCHOOLS	0	0	0	0	0	0	0	0	0	0	0
072901	THREE WAY ISD	4	0	1	0	3	0	0	0	4	0	4
072903	STEPHENVILLE ISD	31	9	6	0	34	0	2	2	40	7	47
072904	BLUFF DALE ISD	3	1	0	0	4	0	0	0	4	0	4
072909	LINGLEVILLE ISD	5	0	0	0	5	0	0	0	5	3	8
CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
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								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
073901	CHILTON ISD	8	0	0	0	8	0	0	0	8	3	11
073903	MARLIN ISD	13	4	0	0	16	1	0	0	17	6	23
073904	WESTPHALIA ISD	2	0	0	2	0	0	0	0	2	0	2
073905	ROSEBUD-LOTT ISD	11	3	2	0	12	0	0	0	14	0	14
074903	BONHAM ISD	19	5	3	0	20	1	3	0	24	2	26
074904	DODD CITY ISD	5	1	0	0	5	1	0	0	6	0	6
074905	ECTOR ISD	6	1	1	0	3	3	0	0	7	0	7
074907	HONEY GROVE ISD	11	1	1	0	11	0	0	0	12	1	13
074909	LEONARD ISD	10	2	1	0	10	1	1	1	12	2	14
074911	SAVOY ISD	7	1	0	0	8	0	0	0	8	2	10
074912	TRENTON ISD	13	2	1	0	14	0	0	0	15	5	20
074917	SAM RAYBURN ISD	11	2	0	0	13	0	0	0	13	0	13
075901	FLATONIA ISD	13	2	0	0	15	0	3	3	15	8	23
075902	LA GRANGE ISD	29	7	0	0	36	0	1	1	36	0	36
075903	SCHULENBURG ISD	11	1	0	0	12	0	0	0	12	7	19
075908	ROUND TOP-CARMINE ISD	9	0	0	0	9	0	1	1	9	2	11
076904	ROTAN ISD	6	0	3	0	3	0	0	0	6	4	10
077901	FLOYDADA ISD	17	3	6	0	11	3	0	0	20	9	29
077902	LOCKNEY ISD	11	1	2	0	7	3	0	0	12	6	18
079906	NEEDVILLE ISD	38	4	0	0	28	14	2	2	42	11	53
080901	MOUNT VERNON ISD	22	5	3	0	19	5	0	0	27	7	34
081902	FAIRFIELD ISD	32	3	5	0	29	1	0	0	35	4	39

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
081904	TEAGUE ISD	28	3	1	0	30	0	1	1	31	16	47
081906	DEW ISD	2	1	0	0	3	0	0	0	3	3	6
082902	DILLEY ISD	11	2	4	1	8	0	1	1	13	7	20
082903	PEARSALL ISD	17	3	2	1	17	0	1	1	20	9	29
083901	SEAGRAVES ISD	12	0	4	0	4	4	0	0	12	0	12
083902	LOOP ISD	6	0	0	0	6	0	0	0	6	3	9
083903	SEMINOLE ISD	31	4	3	0	27	5	1	1	35	13	48
084901	DICKINSON ISD	91	26	0	0	117	0	5	0	117	0	117
084903	HIGH ISLAND ISD	4	0	0	0	4	0	0	0	4	3	7
084906	TEXAS CITY ISD	57	13	3	0	67	0	2	2	70	6	76
084909	SANTA FE ISD	38	11	0	1	40	8	1	1	49	2	51
084910	CLEAR CREEK ISD	234	71	0	0	292	13	0	0	305	0	305
084911	FRIENDSWOOD ISD	41	8	0	0	49	0	0	0	49	1	50
085903	SOUTHLAND ISD	5	1	0	0	6	0	0	0	6	3	9
086902	HARPER ISD	16	1	0	0	17	0	1	0	17	7	24
087901	GLASSCOCK COUNTY ISD	9	0	2	0	6	1	2	2	9	1	10
088902	GOLIAD ISD	30	3	0	0	33	0	2	0	33	3	36
089901	GONZALES ISD	28	5	0	0	33	0	0	0	33	5	38
089903	NIXON-SMILEY CISD	17	4	0	2	19	0	1	1	21	0	21
090903	MCLEAN ISD	7	0	6	0	1	0	0	0	7	5	12
090904	PAMPA ISD	25	4	4	0	20	5	2	2	29	10	39
091901	BELLS ISD	12	1	2	0	10	1	2	2	13	3	16

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
091903	DENISON ISD	40	10	1	0	4	45	4	4	50	19	69
091905	HOWE ISD	16	0	2	0	9	5	0	0	16	2	18
091907	TIOGA ISD	5	0	0	0	4	1	0	0	5	4	9
091908	VAN ALSTYNE ISD	17	0	1	0	12	4	1	1	17	4	21
091913	POTTSBORO ISD	24	3	2	2	22	1	0	0	27	0	27
091914	S AND S CISD	20	0	1	0	19	0	1	1	20	7	27
092901	GLADEWATER ISD	26	6	2	0	30	0	0	0	32	5	37
092902	KILGORE ISD	41	4	0	0	45	0	0	0	45	12	57
092903	LONGVIEW ISD	59	11	2	0	68	0	10	0	70	5	75
092904	PINE TREE ISD	53	6	2	0	0	57	0	0	59	10	69
092906	SABINE ISD	19	3	1	0	21	0	0	0	22	3	25
092907	SPRING HILL ISD	16	4	2	0	14	4	0	0	20	5	25
093903	IOLA ISD	14	1	0	0	15	0	0	0	15	5	20
093905	RICHARDS ISD	5	0	0	0	5	0	0	0	5	1	6
094901	SEGUIN ISD	68	16	4	0	80	0	4	4	84	1	85
094902	SCHERTZ-CIBOLO-U CITY ISD	103	34	8	0	129	0	11	5	137	10	147
094904	MARION ISD	18	3	0	0	21	0	1	1	21	9	30
095901	ABERNATHY ISD	11	0	0	0	6	5	0	0	11	9	20
095902	COTTON CENTER ISD	7	0	0	1	6	0	0	0	7	5	12
095903	HALE CENTER ISD	14	0	0	0	14	0	0	0	14	8	22
095904	PETERSBURG ISD	3	1	1	0	2	1	0	0	4	3	7
095905	PLAINVIEW ISD	30	5	0	0	20	15	1	1	35	4	39

CDN	District	Buses by	Program	B	uses by	Туре		Purchased buses Model 2018 or later	Purchased buses Model 2018 or later with 3 point	All Buses	All Others	All Vehicles
		Regular	Special	А	В	с	D		seatbelt			
096904	MEMPHIS ISD	12	1	5	0	4	4	1	1	13	5	18
096905	TURKEY-QUITAQUE ISD	5	0	0	0	5	0	0	0	5	10	15
097902	HAMILTON ISD	16	3	1	0	18	0	2	2	19	9	28
097903	HICO ISD	12	1	3	0	10	0	1	1	13	7	20
098901	GRUVER ISD	14	0	3	0	7	4	1	0	14	11	25
098903	PRINGLE-MORSE CISD	11	0	6	0	0	5	0	0	11	1	12
099902	CHILLICOTHE ISD	10	0	2	0	1	7	1	1	10	8	18
099903	QUANAH ISD	12	1	5	0	8	0	0	0	13	5	18
100905	HARDIN-JEFFERSON ISD	33	9	0	0	33	9	2	2	42	3	45
100907	LUMBERTON ISD	30	8	0	0	38	0	0	0	38	5	43
100908	WEST HARDIN COUNTY CISD	10	2	0	0	12	0	0	0	12	4	16
101804	GEORGE I SANCHEZ CHARTER	4	0	0	0	4	0	2	2	4	2	6
101806	RAUL YZAGUIRRE SCHOOLS FOR	5	0	0	0	5	0	0	0	5	0	5
101814	SUCCESS THE VARNETT PUBLIC SCHOOL	15	0	15	0	0	0	1	1	15	0	15
101837	CALVIN NELMS CHARTER SCHOOLS	6	0	0	0	6	0	0	0	6	0	6
101838	SOUTHWEST SCHOOL	7	0	0	0	7	0	0	0	7	0	7
101845	YES PREP PUBLIC SCHOOLS INC	250	20	1	0	265	4	20	20	270	4	274
101861	THE RHODES SCHOOL	10	0	0	0	10	0	0	0	10	0	10
101902	ALDINE ISD	545	165	0	0	710	0	30	30	710	0	710
101903	ALIEF ISD	257	90	84	0	263	0	7	7	347	0	347
101905	CHANNELVIEW ISD	47	16	0	0	63	0	0	0	63	5	68
101906	CROSBY ISD	58	13	0	0	71	0	4	0	71	7	78

CDN	District	Buses by	Program	E	Suses by	Туре		Purchased buses	Purchased buses	All Buses	All Others	All Vehicles
								Model 2018 or later	Model 2018 or later with 3 point seatbelt	Duses	others	venicles
		Regular	Special	A	В	C	D					
101907	CYPRESS-FAIRBANKS ISD	912	166	0	0	1078	0	0	0	1078	30	1108
101908	DEER PARK ISD	89	34	3	0	120	0	25	0	123	1	124
101910	GALENA PARK ISD	74	55	59	0	70	0	0	0	129	9	138
101911	GOOSE CREEK CISD	164	64	0	0	228	0	0	0	228	1	229
101913	HUMBLE ISD	194	80	0	0	271	3	0	0	274	8	282
101914	KATY ISD	476	212	0	0	637	51	45	45	688	0	688
101915	KLEIN ISD	246	81	0	0	296	31	23	23	327	2	329
101916	LA PORTE ISD	69	14	3	0	80	0	3	0	83	2	85
101917	PASADENA ISD	224	119	0	0	342	1	0	0	343	0	343
101919	SPRING ISD	272	74	1	0	345	0	14	14	346	0	346
101920	SPRING BRANCH ISD	220	51	0	0	271	0	28	22	271	0	271
101924	SHELDON ISD	75	19	0	0	94	0	19	19	94	0	94
102901	KARNACK ISD	6	1	0	0	7	0	0	0	7	2	9
102902	MARSHALL ISD	53	6	0	0	59	0	12	12	59	11	70
102903	WASKOM ISD	15	0	1	0	14	0	0	0	15	6	21
102904	HALLSVILLE ISD	73	9	0	0	82	0	10	0	82	5	87
102905	HARLETON ISD	15	0	0	0	15	0	1	1	15	5	20
102906	ELYSIAN FIELDS ISD	16	3	0	0	19	0	0	0	19	6	25
103902	HARTLEY ISD	8	1	4	0	5	0	1	1	9	3	12
104901	HASKELL CISD	10	0	1	0	9	0	0	0	10	10	20
104907	PAINT CREEK ISD	6	0	1	0	5	0	0	0	6	2	8
105801	KATHERINE ANNE PORTER SCHOOL	2	0	0	0	2	0	0	0	2	7	9

CDN	District	Buses by	Program	B	uses by [.]	Гуре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
105802	TEXAS PREPARATORY SCHOOL	3	0	0	0	3	0	0	0	3	1	4
105902	SAN MARCOS CISD	82	22	0	0	96	8	17	17	104	19	123
105904	DRIPPING SPRINGS ISD	72	14	1	0	85	0	5	5	86	6	92
105905	WIMBERLEY ISD	29	7	3	6	27	0	0	0	36	10	46
105906	HAYS CISD	149	56	0	0	205	0	10	10	205	19	224
106901	CANADIAN ISD	19	0	7	2	3	7	1	1	19	13	32
107901	ATHENS ISD	34	7	0	0	41	0	4	4	41	6	47
107904	CROSS ROADS ISD	11	1	0	0	12	0	0	0	12	7	19
107905	EUSTACE ISD	27	3	0	3	27	0	6	6	30	4	34
107906	MALAKOFF ISD	20	6	0	0	26	0	2	2	26	6	32
107908	MURCHISON ISD	2	0	2	0	0	0	0	0	2	1	3
107910	LAPOYNOR ISD	10	1	1	1	9	0	0	0	11	0	11
108807	IDEA PUBLIC SCHOOLS	255	16	3	13	250	5	0	0	271	74	345
108902	DONNA ISD	86	25	0	1	107	3	0	0	111	0	111
108903	EDCOUCH-ELSA ISD	30	5	0	0	35	0	4	4	35	3	38
108904	EDINBURG CISD	183	43	4	0	220	2	10	10	226	0	226
108905	HIDALGO ISD	26	3	4	3	3	19	0	0	29	0	29
108906	MCALLEN ISD	62	24	0	0	82	4	5	5	86	0	86
108907	MERCEDES ISD	43	7	2	1	46	1	0	0	50	0	50
108908	MISSION CISD	91	24	11	28	67	9	13	13	115	5	120
108911	SHARYLAND ISD	59	14	0	0	73	0	3	3	73	8	81
108912	LA JOYA ISD	215	46	3	0	240	18	0	0	261	0	261

CDN	District	Buses by	Program	E	Buses by	Туре		Purchased buses	Purchased buses	All Buses	All Others	All Vehicles
								Model 2018 or later	Model 2018 or later with 3 point seatbelt			
100010		Regular	Special	A	B	C	D	<u> </u>		07	17	104
108913	WESLACO ISD	70	17	0	0	87	0	63	63	87	17	104
109903	COVINGTON ISD	9	1	2	0	8	0	0	0	10	2	12
109904	HILLSBORO ISD	20	6	2	0	19	5	1	1	26	0	26
109907	ITASCA ISD	9	1	0	0	10	0	2	2	10	5	15
109908	MALONE ISD	6	0	2	0	4	0	1	1	6	3	9
109910	MOUNT CALM ISD	5	0	1	0	2	2	2	2	5	4	9
109911	WHITNEY ISD	18	3	0	0	21	0	0	0	21	8	29
109912	AQUILLA ISD	6	1	0	0	7	0	3	3	7	5	12
109913	BLUM ISD	9	1	1	0	9	0	1	1	10	8	18
110901	ANTON ISD	4	0	4	0	0	0	0	0	4	2	6
110902	LEVELLAND ISD	17	7	0	0	24	0	5	5	24	2	26
110905	ROPES ISD	4	2	6	0	0	0	0	0	6	2	8
110906	SMYER ISD	12	0	3	0	6	3	2	0	12	5	17
111901	GRANBURY ISD	62	18	1	0	77	2	3	3	80	14	94
111902	LIPAN ISD	7	0	0	0	6	1	0	0	7	2	9
112901	SULPHUR SPRINGS ISD	52	13	65	0	0	0	3	1	65	7	72
112905	CUMBY ISD	7	1	8	0	0	0	0	0	8	4	12
112907	MILLER GROVE ISD	8	0	0	0	7	1	0	0	8	0	8
112908	COMO-PICKTON CISD	16	1	1	0	12	4	0	0	17	7	24
112909	SALTILLO ISD	9	4	4	0	9	0	2	2	13	4	17
112910	SULPHUR BLUFF ISD	7	1	8	0	0	0	0	0	8	2	10
113901	CROCKETT ISD	20	2	2	0	20	0	0	0	22	3	25

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
113903	LOVELADY ISD	15	0	15	0	0	0	0	0	15	4	19
113905	LATEXO ISD	7	1	1	0	7	0	0	0	8	6	14
113906	KENNARD ISD	7	1	0	0	8	0	0	0	8	1	9
114901	BIG SPRING ISD	30	5	0	0	33	2	1	1	35	14	49
114904	FORSAN ISD	23	1	0	0	20	4	0	0	24	15	39
115901	FT HANCOCK ISD	10	1	2	1	6	2	0	0	11	4	15
115902	SIERRA BLANCA ISD	2	0	0	0	2	0	0	0	2	3	5
115903	DELL CITY ISD	6	0	6	0	0	0	0	0	6	5	11
116901	CADDO MILLS ISD	20	3	0	0	23	0	3	3	23	3	26
116902	CELESTE ISD	9	1	2	0	8	0	0	0	10	2	12
116905	GREENVILLE ISD	34	7	0	0	40	1	1	1	41	0	41
116906	LONE OAK ISD	19	1	1	0	19	0	3	3	20	3	23
116908	QUINLAN ISD	34	5	1	0	34	4	0	0	39	6	45
116910	CAMPBELL ISD	8	0	0	0	8	0	0	0	8	0	8
116915	BLAND ISD	12	2	1	0	1	12	0	0	14	0	14
116916	BOLES ISD	6	0	0	0	6	0	0	0	6	0	6
117901	BORGER ISD	29	3	0	0	30	2	0	0	32	11	43
117903	SANFORD-FRITCH ISD	17	1	3	0	13	2	0	0	18	4	22
117904	PLEMONS-STINNETT-PHILLIPS CISD	18	0	5	0	10	3	0	0	18	10	28
119903	PERRIN-WHITT CISD	11	0	0	0	11	0	3	3	11	5	16
120901	EDNA ISD	16	2	0	0	18	0	0	0	18	1	19
120902	GANADO ISD	12	2	2	0	10	2	0	0	14	9	23

CDN	District	Buses by	Program	B	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	Α	В	C	D					
120905	INDUSTRIAL ISD	18	1	0	0	19	0	1	1	19	4	23
121902	BROOKELAND ISD	8	2	0	0	10	0	1	1	10	4	14
121903	BUNA ISD	23	3	0	0	26	0	5	5	26	9	35
121904	JASPER ISD	19	4	0	0	23	0	0	0	23	11	34
121905	KIRBYVILLE CISD	22	4	26	0	0	0	2	2	26	9	35
121906	EVADALE ISD	8	1	0	1	4	4	0	0	9	5	14
122902	VALENTINE ISD	2	0	0	0	2	0	0	0	2	5	7
123803	TEKOA ACADEMY OF ACCELERATED STUDIES STEM SCHOOL	4	0	0	2	2	0	0	0	4	0	4
123905	NEDERLAND ISD	22	9	4	0	20	7	1	1	31	0	31
123907	PORT ARTHUR ISD	65	14	3	0	71	5	5	5	79	0	79
123913	SABINE PASS ISD	7	1	0	0	6	2	1	0	8	6	14
123914	HAMSHIRE-FANNETT ISD	21	4	0	3	22	0	0	0	25	0	25
125901	ALICE ISD	28	9	5	4	28	0	3	0	37	3	40
125902	BEN BOLT-PALITO BLANCO ISD	6	1	7	0	0	0	0	0	7	0	7
125903	ORANGE GROVE ISD	19	5	0	0	24	0	0	0	24	9	33
125905	PREMONT ISD	6	1	0	0	7	0	0	0	7	4	11
125906	LA GLORIA ISD	3	0	1	0	2	0	0	0	3	3	6
126901	ALVARADO ISD	46	10	0	0	53	3	3	3	56	5	61
126902	BURLESON ISD	44	13	0	0	55	2	1	1	57	4	61
126903	CLEBURNE ISD	51	10	7	0	51	3	0	0	61	9	70
126904	GRANDVIEW ISD	18	0	4	0	14	0	2	2	18	4	22
126905	JOSHUA ISD	44	5	0	0	49	0	1	1	49	4	53

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
126908	VENUS ISD	43	4	8	0	39	0	5	5	47	5	52
126911	GODLEY ISD	35	16	18	0	25	8	0	0	51	7	58
127901	ANSON ISD	12	1	2	0	11	0	1	1	13	5	18
127903	HAMLIN ISD	7	0	2	0	4	1	0	0	7	4	11
127904	HAWLEY ISD	10	1	0	0	11	0	0	0	11	6	17
127905	LUEDERS-AVOCA ISD	6	0	6	0	0	0	0	0	6	2	8
127906	STAMFORD ISD	11	2	2	0	9	2	0	0	13	6	19
128903	RUNGE ISD	5	0	1	0	3	1	0	0	5	2	7
128904	FALLS CITY ISD	8	1	9	0	0	0	0	0	9	0	9
129901	CRANDALL ISD	42	4	2	0	44	0	3	3	46	3	49
129902	FORNEY ISD	61	21	2	0	65	15	4	4	82	0	82
129903	KAUFMAN ISD	41	5	0	0	46	0	9	0	46	2	48
129904	KEMP ISD	28	2	30	0	0	0	0	0	30	9	39
129905	MABANK ISD	44	12	3	0	27	26	0	0	56	11	67
129910	SCURRY-ROSSER ISD	12	2	1	0	13	0	0	0	14	7	21
130902	COMFORT ISD	23	3	3	0	23	0	4	4	26	5	31
133901	CENTER POINT ISD	9	1	0	0	10	0	2	2	10	4	14
133902	HUNT ISD	5	0	0	0	5	0	0	0	5	2	7
133903	KERRVILLE ISD	39	5	2	0	42	0	0	0	44	0	44
133904	INGRAM ISD	17	2	2	2	10	5	0	0	19	3	22
134901	JUNCTION ISD	10	2	0	0	12	0	3	3	12	5	17
135001	GUTHRIE CSD	4	0	1	0	2	1	0	0	4	12	16

CDN	District	Buses by	Program	E	Suses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
136901	BRACKETT ISD	14	1	5	0	9	1	1	1	15	9	24
137903	RIVIERA ISD	9	0	0	0	9	0	0	0	9	5	14
138902	KNOX CITY-O'BRIEN CISD	8	0	3	0	5	0	0	0	8	4	12
138903	MUNDAY CISD	7	0	1	0	6	0	0	0	7	4	11
139905	CHISUM ISD	20	0	0	0	20	0	0	0	20	10	30
139908	ROXTON ISD	6	0	0	0	6	0	0	0	6	0	6
139911	NORTH LAMAR ISD	35	10	5	0	38	2	0	0	45	6	51
139912	PRAIRILAND ISD	27	0	0	0	27	0	0	0	27	10	37
140904	LITTLEFIELD ISD	15	1	0	0	13	3	5	5	16	2	18
140905	OLTON ISD	10	0	3	1	4	2	0	0	10	6	16
140908	SUDAN ISD	15	0	4	0	8	3	0	0	15	5	20
141902	LOMETA ISD	5	0	0	0	5	0	1	1	5	6	11
143901	HALLETTSVILLE ISD	21	1	2	0	20	0	2	2	22	5	27
143903	SHINER ISD	13	2	1	0	14	0	1	1	15	1	16
143904	VYSEHRAD ISD	3	0	0	0	3	0	0	0	3	0	3
144901	GIDDINGS ISD	23	2	0	0	25	0	1	1	25	6	31
144902	LEXINGTON ISD	17	3	0	0	20	0	3	0	20	3	23
144903	DIME BOX ISD	6	0	0	0	6	0	0	0	6	0	6
145901	BUFFALO ISD	13	0	0	0	13	0	1	1	13	6	19
145902	CENTERVILLE ISD	18	0	0	0	17	1	0	0	18	6	24
145906	NORMANGEE ISD	9	1	1	0	9	0	0	0	10	4	14
145907	OAKWOOD ISD	7	0	0	0	7	0	0	0	7	3	10

CDN	District	Buses by	Program	E	Suses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
145911	LEON ISD	22	2	0	0	24	0	0	0	24	4	28
146901	CLEVELAND ISD	49	11	0	0	60	0	7	7	60	9	69
146902	DAYTON ISD	48	8	0	0	55	1	2	2	56	7	63
146903	DEVERS ISD	3	0	0	0	3	0	0	0	3	0	3
146904	HARDIN ISD	19	4	1	0	22	0	0	0	23	4	27
146905	HULL-DAISETTA ISD	11	2	0	13	0	0	0	0	13	8	21
146907	TARKINGTON ISD	24	5	0	0	29	0	0	0	29	2	31
147901	COOLIDGE ISD	5	2	7	0	0	0	0	0	7	0	7
147903	MEXIA ISD	26	4	2	2	25	1	1	1	30	6	36
148902	FOLLETT ISD	6	0	3	0	1	2	0	0	6	5	11
148903	HIGGINS ISD	1	0	1	0	0	0	0	0	1	2	3
148905	DARROUZETT ISD	5	0	5	0	0	0	0	0	5	3	8
149901	GEORGE WEST ISD	11	2	1	0	12	0	0	0	13	10	23
149902	THREE RIVERS ISD	9	2	0	0	11	0	0	0	11	0	11
150901	LLANO ISD	40	4	0	0	44	0	0	0	44	13	57
152903	SLATON ISD	14	4	0	0	14	4	2	0	18	5	23
152906	LUBBOCK-COOPER ISD	41	6	0	0	37	10	1	1	47	15	62
152907	FRENSHIP ISD	43	13	0	0	40	16	0	0	56	0	56
152908	ROOSEVELT ISD	19	3	1	0	21	0	5	5	22	10	32
152909	SHALLOWATER ISD	19	8	6	5	12	4	1	0	27	15	42
152910	IDALOU ISD	6	1	0	5	0	2	0	0	7	0	7
153903	O'DONNELL ISD	12	0	12	0	0	0	0	0	12	4	16

CDN	District	Buses by	Program	E	Buses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
153904	TAHOKA ISD	6	2	0	0	8	0	0	0	8	9	17
153905	NEW HOME ISD	3	0	0	0	3	0	0	0	3	0	3
153907	WILSON ISD	3	1	1	1	1	1	0	0	4	2	6
154901	MADISONVILLE CISD	28	3	1	0	28	2	0	0	31	0	31
155901	JEFFERSON ISD	26	2	1	2	24	1	1	1	28	9	37
156902	STANTON ISD	22	0	0	0	22	0	2	2	22	6	28
156905	GRADY ISD	11	0	0	0	9	2	2	2	11	7	18
157901	MASON ISD	21	2	0	6	17	0	0	0	23	0	23
158901	BAY CITY ISD	26	4	1	0	29	0	1	1	30	8	38
158902	TIDEHAVEN ISD	23	3	0	0	26	0	1	1	26	7	33
158904	MATAGORDA ISD	3	0	3	0	0	0	0	0	3	0	3
158905	PALACIOS ISD	24	2	2	2	22	0	0	0	26	11	37
158906	VAN VLECK ISD	17	3	1	18	0	1	1	1	20	1	21
159901	EAGLE PASS ISD	82	14	1	15	80	0	4	4	96	7	103
160901	BRADY ISD	21	2	2	0	21	0	1	1	23	14	37
160904	ROCHELLE ISD	4	0	0	0	4	0	0	0	4	4	8
160905	LOHN ISD	6	0	1	0	5	0	0	0	6	4	10
161903	MIDWAY ISD	57	16	1	0	66	6	2	2	73	5	78
161907	LORENA ISD	32	10	9	0	12	21	0	0	42	4	46
161908	MART ISD	14	0	1	0	8	5	0	0	14	3	17
161909	MCGREGOR ISD	13	5	5	0	10	3	0	0	18	4	22
161910	MOODY ISD	14	2	0	0	13	3	1	1	16	3	19

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
161912	RIESEL ISD	15	0	3	0	8	4	1	1	15	0	15
161914	WACO ISD	55	25	0	0	77	3	7	7	80	0	80
161919	BRUCEVILLE-EDDY ISD	13	7	20	0	0	0	0	0	20	0	20
161920	CHINA SPRING ISD	43	5	5	0	2	41	0	0	48	11	59
161921	CONNALLY ISD	32	3	9	0	26	0	2	2	35	3	38
161922	ROBINSON ISD	20	4	0	0	24	0	0	0	24	0	24
161923	BOSQUEVILLE ISD	10	2	2	0	5	5	1	1	12	5	17
161924	HALLSBURG ISD	4	0	1	0	3	0	1	1	4	0	4
161925	GHOLSON ISD	6	0	1	0	5	0	0	0	6	0	6
162904	MCMULLEN COUNTY ISD	12	0	5	0	7	0	0	0	12	8	20
163901	DEVINE ISD	24	2	0	10	16	0	0	0	26	10	36
163902	D'HANIS ISD	14	0	2	0	12	0	0	0	14	0	14
163904	HONDO ISD	24	3	0	0	27	0	0	0	27	2	29
164901	MENARD ISD	5	0	1	0	3	1	0	0	5	0	5
165902	GREENWOOD ISD	29	1	0	0	28	2	2	2	30	11	41
166901	CAMERON ISD	27	0	1	0	26	0	1	1	27	12	39
166903	MILANO ISD	15	0	0	0	13	2	1	1	15	1	16
166904	ROCKDALE ISD	16	5	0	0	19	2	0	0	21	1	22
166905	THORNDALE ISD	8	2	0	0	4	6	1	1	10	9	19
167901	GOLDTHWAITE ISD	21	2	4	1	18	0	1	1	23	6	29
167904	PRIDDY ISD	8	1	4	0	3	2	1	1	9	4	13
168901	COLORADO ISD	19	1	2	0	18	0	0	0	20	0	20

CDN	District	Buses by	Program	В	uses by	Туре		Purchased buses	Purchased buses	All	All Others	All Vehicles
								Model 2018 or later	Model 2018 or later with 3 point seatbelt	Buses	Others	venicies
		Regular	Special	А	В	С	D					
168902	LORAINE ISD	6	0	2	0	4	0	0	0	6	1	7
168903	WESTBROOK ISD	8	0	0	0	6	2	1	1	8	4	12
169901	BOWIE ISD	21	2	1	0	22	0	2	2	23	1	24
169902	NOCONA ISD	9	4	2	0	11	0	0	0	13	7	20
169906	GOLD BURG ISD	7	0	3	4	0	0	0	0	7	2	9
169908	MONTAGUE ISD	4	0	0	0	4	0	0	0	4	2	6
169909	PRAIRIE VALLEY ISD	7	0	0	0	7	0	0	0	7	2	9
169910	FORESTBURG ISD	5	1	5	1	0	0	0	0	6	0	6
169911	SAINT JO ISD	9	1	4	0	6	0	0	0	10	1	11
170902	CONROE ISD	459	111	22	0	548	0	10	10	570	14	584
170903	MONTGOMERY ISD	105	15	3	0	117	0	1	1	120	2	122
170904	WILLIS ISD	70	14	1	0	83	0	5	5	84	3	87
170906	MAGNOLIA ISD	102	32	1	133	0	0	10	3	134	3	137
170907	SPLENDORA ISD	43	8	2	0	49	0	2	2	51	8	59
170908	NEW CANEY ISD	127	22	5	0	142	2	6	6	149	6	155
171901	DUMAS ISD	36	5	5	0	33	3	2	2	41	10	51
172902	DAINGERFIELD-LONE STAR ISD	19	3	0	0	22	0	0	0	22	4	26
172905	PEWITT CISD	20	2	1	0	21	0	0	0	22	2	24
173901	MOTLEY COUNTY ISD	6	0	1	0	3	2	0	0	6	6	12
174901	CHIRENO ISD	7	1	8	0	0	0	1	1	8	6	14
174903	GARRISON ISD	15	2	3	0	14	0	1	1	17	6	23
174904	NACOGDOCHES ISD	57	9	0	0	57	9	0	0	66	0	66

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	C	D					
174906	WODEN ISD	15	1	1	0	14	1	0	0	16	3	19
174908	CENTRAL HEIGHTS ISD	15	1	0	0	16	0	0	0	16	3	19
174910	ETOILE ISD	5	0	0	0	5	0	0	0	5	1	6
174911	DOUGLASS ISD	8	1	1	0	8	0	3	0	9	4	13
175902	BLOOMING GROVE ISD	16	2	2	0	13	3	1	1	18	6	24
175903	CORSICANA ISD	36	17	12	0	40	1	4	4	53	8	61
175904	DAWSON ISD	12	2	1	0	13	0	1	1	14	6	20
175911	RICE ISD	14	2	3	0	10	3	0	0	16	4	20
176901	BURKEVILLE ISD	6	0	0	0	6	0	0	0	6	2	8
176902	NEWTON ISD	27	4	4	0	27	0	0	0	31	2	33
176903	DEWEYVILLE ISD	13	1	0	0	14	0	1	1	14	3	17
177901	ROSCOE COLLEGIATE ISD	7	0	0	0	7	0	0	0	7	10	17
177902	SWEETWATER ISD	24	5	5	0	24	0	0	0	29	0	29
178903	CALALLEN ISD	28	6	2	0	31	1	4	4	34	0	34
178904	CORPUS CHRISTI ISD	108	79	20	0	167	0	18	18	187	0	187
178908	PORT ARANSAS ISD	7	1	0	1	7	0	0	0	8	4	12
178909	ROBSTOWN ISD	13	5	0	0	18	0	0	0	18	0	18
178912	TULOSO-MIDWAY ISD	29	6	3	0	32	0	2	2	35	2	37
178914	FLOUR BLUFF ISD	48	13	61	0	0	0	0	0	61	0	61
180903	ADRIAN ISD	8	0	4	0	2	2	2	0	8	8	16
180904	WILDORADO ISD	6	0	1	0	5	0	0	0	6	0	6
181905	ORANGEFIELD ISD	23	4	27	0	0	0	0	0	27	5	32

CDN	District	Buses by	Program	B	uses by	Туре		Purchased buses	Purchased buses	All Buses	All Others	All Vehicles
								Model 2018 or later	Model 2018 or later with 3 point seatbelt	Buses	Others	vencies
		Regular	Special	A	В	C	D					
181906	WEST ORANGE-COVE CISD	23	7	0	0	30	0	0	0	30	6	36
181908	LITTLE CYPRESS-MAURICEVILLE CISD	33	6	0	0	39	0	7	7	39	7	46
182901	GORDON ISD	6	0	4	0	2	0	0	0	6	2	8
182902	GRAFORD ISD	13	1	1	3	6	4	0	0	14	4	18
182903	MINERAL WELLS ISD	32	10	7	0	14	21	0	0	42	9	51
182904	SANTO ISD	13	3	3	0	13	0	0	0	16	3	19
182906	PALO PINTO ISD	4	0	3	0	1	0	0	0	4	0	4
183901	BECKVILLE ISD	12	1	13	0	0	0	2	0	13	5	18
183902	CARTHAGE ISD	45	7	0	0	44	8	6	0	52	11	63
183904	GARY ISD	7	1	1	0	7	0	0	0	8	4	12
184901	POOLVILLE ISD	11	1	1	0	10	1	2	2	12	5	17
184902	SPRINGTOWN ISD	38	8	0	0	46	0	2	2	46	8	54
184903	WEATHERFORD ISD	45	10	0	0	55	0	0	0	55	0	55
184904	MILLSAP ISD	18	1	2	1	14	2	0	0	19	5	24
184908	PEASTER ISD	17	3	1	0	5	14	0	0	20	10	30
184909	BROCK ISD	20	0	20	0	0	0	3	3	20	2	22
185901	BOVINA ISD	8	1	9	0	0	0	0	0	9	8	17
185902	FARWELL ISD	11	0	2	0	7	2	0	0	11	6	17
185904	LAZBUDDIE ISD	6	0	1	0	5	0	0	0	6	3	9
186901	BUENA VISTA ISD	8	0	0	2	5	1	1	1	8	6	14
186902	FORT STOCKTON ISD	30	4	1	0	26	7	2	2	34	13	47
186903	IRAAN-SHEFFIELD ISD	9	0	6	0	2	1	2	2	9	7	16

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	Α	В	С	D					
187901	BIG SANDY ISD	12	2	14	0	0	0	2	0	14	0	14
187903	GOODRICH ISD	6	1	0	0	4	3	0	0	7	2	9
187904	CORRIGAN-CAMDEN ISD	16	2	18	0	0	0	2	2	18	8	26
187906	LEGGETT ISD	6	0	6	0	0	0	0	0	6	0	6
187907	LIVINGSTON ISD	50	16	16	0	50	0	6	6	66	7	73
187910	ONALASKA ISD	16	1	1	0	16	0	2	2	17	5	22
188901	AMARILLO ISD	51	32	0	0	83	0	0	0	83	0	83
188902	RIVER ROAD ISD	20	2	1	11	4	6	0	0	22	4	26
188903	HIGHLAND PARK ISD	19	2	2	0	16	3	4	4	21	8	29
188904	BUSHLAND ISD	25	3	2	0	22	4	0	0	28	7	35
190903	RAINS ISD	28	4	2	0	30	0	2	2	32	3	35
191901	CANYON ISD	55	16	5	1	58	7	3	3	71	11	82
193801	BIG SPRINGS CHARTER SCHOOL	4	0	4	0	0	0	0	0	4	4	8
193902	LEAKEY ISD	9	0	1	0	8	0	0	0	9	4	13
194902	AVERY ISD	9	0	0	0	8	1	1	1	9	1	10
194903	RIVERCREST ISD	20	0	1	0	19	0	0	0	20	6	26
194904	CLARKSVILLE ISD	17	3	0	0	20	0	0	0	20	0	20
194905	DETROIT ISD	16	0	0	0	16	0	0	0	16	3	19
195902	BALMORHEA ISD	5	0	1	1	1	2	0	0	5	9	14
196901	AUSTWELL-TIVOLI ISD	4	0	4	0	0	0	0	0	4	3	7
197902	MIAMI ISD	6	1	0	5	2	0	0	0	7	7	14
198901	BREMOND ISD	12	1	1	0	12	0	0	0	13	6	19

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All Others	All Vehicles
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	venicies
		Regular	Special	A	В	С	D					
198902	CALVERT ISD	6	0	1	0	5	0	0	0	6	0	6
198903	FRANKLIN ISD	20	1	21	0	0	0	0	0	21	0	21
198906	MUMFORD ISD	9	0	0	0	9	0	0	0	9	0	9
199901	ROCKWALL ISD	99	29	1	0	123	4	16	16	128	4	132
199902	ROYSE CITY ISD	48	8	4	0	52	0	7	7	56	7	63
200902	MILES ISD	12	0	0	0	12	0	0	0	12	2	14
200906	OLFEN ISD	8	0	3	0	5	0	0	0	8	9	17
201902	HENDERSON ISD	40	4	0	0	44	0	0	0	44	1	45
201903	LANEVILLE ISD	6	0	0	0	6	0	0	0	6	2	8
201904	LEVERETTS CHAPEL ISD	4	0	0	0	4	0	0	0	4	4	8
201908	OVERTON ISD	8	0	0	0	7	1	0	0	8	1	9
201913	CARLISLE ISD	13	1	1	0	13	0	0	0	14	4	18
201914	WEST RUSK COUNTY CONSOLIDATED ISD	27	4	3	1	20	7	0	0	31	2	33
202903	HEMPHILL ISD	20	2	0	0	22	0	1	1	22	0	22
202905	WEST SABINE ISD	13	1	2	0	10	2	0	0	14	4	18
203901	SAN AUGUSTINE ISD	18	2	2	0	18	0	5	5	20	5	25
204901	COLDSPRING-OAKHURST CISD	27	4	0	0	31	0	2	2	31	6	37
204904	SHEPHERD ISD	33	5	0	0	38	0	3	3	38	7	45
205901	ARANSAS PASS ISD	16	3	0	0	16	3	0	0	19	2	21
205902	GREGORY-PORTLAND ISD	25	9	4	0	29	1	0	0	34	2	36
205903	INGLESIDE ISD	15	7	1	1	12	8	2	2	22	4	26
205904	MATHIS ISD	10	10	0	0	19	1	3	0	20	13	33

CDN	District	Buses by	Program	E	Buses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	C	D					
205906	SINTON ISD	17	5	2	0	14	6	1	1	22	7	29
206901	SAN SABA ISD	15	1	7	0	9	0	0	0	16	9	25
206903	CHEROKEE ISD	4	0	3	0	1	0	0	0	4	3	7
207901	SCHLEICHER ISD	12	0	1	0	10	1	1	1	12	7	19
208901	HERMLEIGH ISD	7	0	7	0	0	0	1	1	7	6	13
208902	SNYDER ISD	20	3	2	0	21	0	0	0	23	11	34
209901	ALBANY ISD	10	1	0	0	9	2	0	0	11	1	12
209902	MORAN ISD	5	1	0	2	4	0	0	0	6	0	6
210902	JOAQUIN ISD	13	1	1	0	5	8	0	0	14	8	22
210903	SHELBYVILLE ISD	22	0	0	0	22	0	0	0	22	4	26
210904	TENAHA ISD	11	2	4	0	7	2	0	0	13	10	23
210905	TIMPSON ISD	19	3	22	0	0	0	0	0	22	5	27
210906	EXCELSIOR ISD	4	0	0	0	3	1	0	0	4	0	4
211901	TEXHOMA ISD	4	0	0	0	3	1	0	0	4	0	4
211902	STRATFORD ISD	11	0	6	0	3	2	2	2	11	6	17
212901	ARP ISD	14	1	0	0	6	9	1	0	15	4	19
212902	BULLARD ISD	26	3	0	0	28	1	4	4	29	8	37
212903	LINDALE ISD	46	15	4	0	50	7	4	4	61	7	68
212904	TROUP ISD	14	3	0	0	5	12	0	0	17	7	24
212906	WHITEHOUSE ISD	49	6	1	7	46	1	3	0	55	3	58
212909	CHAPEL HILL ISD	44	8	0	0	39	13	3	0	52	2	54
212910	WINONA ISD	16	3	0	3	16	0	0	0	19	6	25

CDN	District	Buses by	Program	E	Suses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	А	В	С	D					
213901	GLEN ROSE ISD	34	0	0	0	0	34	1	1	34	14	48
214901	RIO GRANDE CITY CISD	85	18	7	0	91	5	0	0	103	1	104
218901	SONORA ISD	24	0	2	0	16	6	1	1	24	18	42
219901	HAPPY ISD	8	2	0	0	10	0	0	0	10	3	13
219903	TULIA ISD	13	3	0	3	11	2	0	0	16	9	25
220901	ARLINGTON ISD	135	117	0	0	252	0	15	15	252	43	295
220902	BIRDVILLE ISD	56	45	2	0	43	56	6	6	101	3	104
220906	GRAPEVINE-COLLEYVILLE ISD	50	19	4	0	61	4	2	2	69	14	83
220907	KELLER ISD	168	60	0	0	228	0	0	0	228	12	240
220908	MANSFIELD ISD	188	64	25	0	92	135	20	20	252	12	264
220910	LAKE WORTH ISD	37	7	0	0	44	0	0	0	44	7	51
220912	CROWLEY ISD	136	44	1	0	170	9	12	12	180	0	180
220914	KENNEDALE ISD	24	4	0	0	28	0	0	0	28	0	28
220916	HURST-EULESS-BEDFORD ISD	93	37	11	43	76	0	5	5	130	7	137
220917	CASTLEBERRY ISD	15	5	1	0	19	0	1	1	20	2	22
220918	EAGLE MT-SAGINAW ISD	99	20	0	0	97	22	0	0	119	0	119
220920	WHITE SETTLEMENT ISD	28	9	1	0	29	7	0	0	37	7	44
221801	TEXAS COLLEGE PREPARATORY	0	0	0	0	0	0	0	0	0	0	0
221901	ACADEMIES ABILENE ISD	97	31	11	0	111	6	3	3	128	25	153
221904	MERKEL ISD	24	5	0	0	29	0	0	0	29	0	29
221905	TRENT ISD	6	0	0	0	4	2	0	0	6	2	8
221911	JIM NED CISD	23	1	2	0	22	0	1	1	24	8	32

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	B	C	D					
221912	WYLIE ISD	76	7	17	0	59	7	4	4	83	11	94
222901	TERRELL COUNTY ISD	4	2	2	0	3	1	0	0	6	6	12
223902	MEADOW ISD	4	0	1	0	1	2	0	0	4	7	11
223904	WELLMAN-UNION CISD	9	0	2	0	6	1	0	0	9	4	13
224902	WOODSON ISD	6	0	1	0	5	0	0	0	6	2	8
225902	MOUNT PLEASANT ISD	51	9	0	47	13	0	0	0	60	0	60
225907	HARTS BLUFF ISD	8	0	0	0	7	1	0	0	8	0	8
226901	CHRISTOVAL ISD	13	1	2	0	9	3	2	2	14	4	18
226903	SAN ANGELO ISD	60	31	2	0	89	0	7	7	91	10	101
226906	WALL ISD	21	9	5	0	25	0	2	0	30	11	41
226908	VERIBEST ISD	7	0	0	1	6	0	0	0	7	5	12
227819	UNIVERSITY OF TEXAS ELEMENTARY CHARTER SCHOOL	0	0	0	0	0	0	0	0	0	0	0
227825	AUSTIN ACHIEVE PUBLIC SCHOOLS	13	0	0	0	13	0	0	0	13	0	13
227901	AUSTIN ISD	312	186	43	0	455	0	60	60	498	0	498
227904	PFLUGERVILLE ISD	102	51	5	0	144	4	153	153	153	0	153
227906	TEXAS SCH FOR THE DEAF	0	16	0	0	16	0	1	1	16	12	28
227907	MANOR ISD	81	22	0	0	103	0	0	0	103	7	110
227909	EANES ISD	50	11	3	0	51	7	3	3	61	19	80
227910	DEL VALLE ISD	72	25	2	0	80	15	5	5	97	17	114
227912	LAGO VISTA ISD	13	2	0	0	15	0	2	2	15	0	15
227913	LAKE TRAVIS ISD	102	23	3	0	121	1	0	0	125	0	125
228901	GROVETON ISD	15	1	0	0	16	0	2	2	16	5	21

CDN	District	Buses by	Program	E	uses by	Гуре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	А	В	С	D					
229903	WOODVILLE ISD	17	4	0	0	21	0	1	1	21	2	23
229904	WARREN ISD	22	5	3	6	18	0	2	2	27	7	34
229905	SPURGER ISD	11	1	0	10	1	1	1	1	12	4	16
230901	BIG SANDY ISD	14	1	1	0	14	0	1	1	15	12	27
230902	GILMER ISD	30	7	1	2	34	0	0	0	37	9	46
230903	ORE CITY ISD	17	4	2	0	12	7	2	2	21	5	26
230904	UNION HILL ISD	9	1	3	0	7	0	0	0	10	3	13
230905	HARMONY ISD	19	2	2	0	4	15	0	0	21	4	25
230906	NEW DIANA ISD	16	2	1	0	15	2	0	0	18	7	25
231902	RANKIN ISD	12	0	5	0	6	1	4	4	12	12	24
232901	KNIPPA ISD	8	0	0	0	8	0	1	1	8	3	11
232904	UTOPIA ISD	11	0	0	0	11	0	1	1	11	5	16
233901	SAN FELIPE-DEL RIO CISD	51	8	3	0	53	3	2	2	59	5	64
233903	COMSTOCK ISD	7	0	1	0	6	0	1	1	7	4	11
234902	CANTON ISD	28	4	1	1	30	0	1	1	32	4	36
234903	EDGEWOOD ISD	11	3	0	0	12	2	0	0	14	11	25
234904	GRAND SALINE ISD	16	3	1	0	18	0	0	0	19	10	29
234905	MARTINS MILL ISD	8	4	3	0	8	1	0	0	12	7	19
234906	VAN ISD	33	6	2	0	25	12	2	2	39	7	46
234907	WILLS POINT ISD	33	4	1	0	28	8	0	0	37	7	44
234909	FRUITVALE ISD	6	2	1	0	7	0	1	0	8	5	13
235902	VICTORIA ISD	57	19	0	0	76	0	0	0	76	22	98

CDN	District	Buses by	Program	E	uses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
235904	NURSERY ISD	0	0	0	0	0	0	0	0	0	1	1
236901	NEW WAVERLY ISD	13	1	0	0	14	0	0	0	14	2	16
236902	HUNTSVILLE ISD	77	15	0	0	92	0	4	4	92	0	92
237902	HEMPSTEAD ISD	19	5	0	5	19	0	0	0	24	4	28
237905	ROYAL ISD	27	5	0	0	31	1	2	2	32	8	40
238902	MONAHANS-WICKETT-PYOTE ISD	16	2	0	0	18	0	3	3	18	2	20
238904	GRANDFALLS-ROYALTY ISD	4	0	0	0	3	1	0	0	4	5	9
239903	BURTON ISD	13	0	0	0	13	0	0	0	13	2	15
240901	LAREDO ISD	43	30	0	0	69	4	2	0	73	11	84
240903	UNITED ISD	265	86	2	0	342	7	50	0	351	26	377
240904	WEBB CISD	12	1	3	2	6	2	0	0	13	6	19
241901	BOLING ISD	21	3	21	0	0	3	1	1	24	6	30
241902	EAST BERNARD ISD	12	2	0	1	13	0	1	1	14	6	20
241903	EL CAMPO ISD	40	5	0	0	42	3	3	3	45	3	48
241904	WHARTON ISD	25	5	5	0	25	0	4	4	30	6	36
241906	LOUISE ISD	9	0	0	0	9	0	0	0	9	5	14
242902	SHAMROCK ISD	10	0	0	0	6	4	0	0	10	0	10
242903	WHEELER ISD	9	1	0	0	6	4	0	0	10	8	18
242906	FORT ELLIOTT CISD	10	2	5	4	1	2	0	0	12	6	18
243901	BURKBURNETT ISD	29	9	5	0	31	2	5	5	38	0	38
243902	ELECTRA ISD	6	1	2	0	5	0	0	0	7	5	12
243903	IOWA PARK CISD	18	3	0	0	21	0	1	1	21	5	26

CDN	District	Buses by	Program	E	Suses by	Туре		Purchased	Purchased	All	All	All
								buses Model 2018 or later	buses Model 2018 or later with 3 point seatbelt	Buses	Others	Vehicles
		Regular	Special	A	В	С	D					
243905	WICHITA FALLS ISD	42	24	0	0	66	0	8	8	66	7	73
243906	CITY VIEW ISD	8	1	0	1	8	0	0	0	9	6	15
244901	HARROLD ISD	5	0	2	0	3	0	0	0	5	0	5
244903	VERNON ISD	24	4	2	0	26	0	2	2	28	9	37
245901	LASARA ISD	5	1	1	5	0	0	0	0	6	0	6
245902	LYFORD CISD	18	3	1	0	20	0	0	0	21	3	24
245903	RAYMONDVILLE ISD	15	5	1	0	19	0	4	0	20	7	27
246902	FLORENCE ISD	17	3	2	3	15	0	3	3	20	6	26
246904	GEORGETOWN ISD	97	29	6	0	120	0	0	0	126	4	130
246905	GRANGER ISD	7	3	0	0	10	0	0	0	10	2	12
246906	HUTTO ISD	52	14	2	0	62	2	7	7	66	7	73
246907	JARRELL ISD	25	4	1	0	28	0	1	1	29	7	36
246908	LIBERTY HILL ISD	38	8	0	0	46	0	1	1	46	13	59
246909	ROUND ROCK ISD	140	103	243	0	0	0	55	55	243	42	285
246911	TAYLOR ISD	27	9	2	0	28	6	0	0	36	9	45
246912	THRALL ISD	12	2	2	0	12	0	0	0	14	3	17
246914	COUPLAND ISD	3	0	0	0	3	0	0	0	3	0	3
247903	LA VERNIA ISD	30	7	0	0	37	0	3	3	37	4	41
247906	STOCKDALE ISD	8	2	10	0	0	0	0	0	10	0	10
248902	WINK-LOVING ISD	2	0	0	2	0	0	0	0	2	11	13
249902	BOYD ISD	10	2	0	0	12	0	0	0	12	0	12
249904	CHICO ISD	9	2	3	0	8	0	0	0	11	4	15

CDN	District	Buses by	Program	B	uses by	Туре		Purchased buses	Purchased buses	All Buses	All Others	All Vehicles
		Regular	Special	А	В	с	D	Model 2018 or later	Model 2018 or later with 3 point seatbelt	Duses	others	venicles
249906	PARADISE ISD	17	1	0	0	16	2	0	0	18	0	18
250902	HAWKINS ISD	13	0	1	0	0	12	0	0	13	6	19
250903	MINEOLA ISD	24	9	3	0	30	0	0	0	33	6	39
250904	QUITMAN ISD	13	0	0	0	13	0	0	0	13	4	17
250905	YANTIS ISD	7	0	7	0	0	0	0	0	7	3	10
250906	ALBA-GOLDEN ISD	17	0	0	0	17	0	0	0	17	8	25
251901	DENVER CITY ISD	22	1	3	0	14	6	1	1	23	10	33
251902	PLAINS ISD	5	1	1	0	5	0	0	0	6	8	14
252901	GRAHAM ISD	25	5	2	0	24	4	0	0	30	8	38
252902	NEWCASTLE ISD	4	0	0	0	4	0	0	0	4	1	5
252903	OLNEY ISD	9	2	3	2	6	0	1	1	11	5	16
253901	ZAPATA COUNTY ISD	31	5	2	0	34	0	3	3	36	7	43
254901	CRYSTAL CITY ISD	18	4	2	0	20	0	1	1	22	4	26

Appendix B

This appendix consists of two reports from TCSB projects. The first five pages include the TCSB Retrofit Project List for the period 2008 through August 31, 2019. The last page presents the TCSB Replacement Project List for the period 2017 through August 31, 2019. Both documents contain the most recently available information and were downloaded on March 23, 2020. The pages are in their original format and have not been edited.

	PROJECT ID	SCHOOL DISTRICT	COUNTY	AREA	NUMBER OF BUSES RETROFITTED	TERP FUNDS	FEDERAL FUNDS ²	ACTIVITY LIFE (Years)	GRANT AMOUNT
4	582-8-89240-011	Alamo Heights ISD	Bexar	San Antonio	12	\$23,651	\$0	5	\$23,651
2	582-8-89240-013	Alief ISD	Harris	Houston-Galveston-Brazoria	12	\$90,203	\$0\$0	5	\$90,203
2	582-8-89240-013	Allen ISD	Collin	Dallas-Fort Worth	31	\$151,540	\$0\$0	5	\$151,540
1	582-8-89240-010	Azle ISD	Tarrant/Parker	Dallas-Fort Worth	22	\$15,072	\$0 \$0	5	\$15,072
5		Big Spring ISD	Howard	Other	17	\$6,290	<u>\$0</u> \$0	5	\$6,290
6	582-8-89240-040	Birdville ISD	Tarrant	Dallas-Fort Worth	5	\$3,839	\$0	5	\$3,839
7	582-8-89240-004	Callisburg ISD	Cooke	Other	6	\$6,618	<u>\$0</u>	5	\$6,618
8	582-8-89240-044	Chester ISD	Tyler	Tyler-Longview	7	\$39,888	\$0	5	\$39,888
9	582-8-89240-007	Clear Creek ISD	Galveston	Houston-Galveston-Brazoria	78	\$249,300	\$0	5	\$249,300
10	582-8-89240-029	Conroe ISD	Montgomery	Houston-Galveston-Brazoria	136	\$249,046	\$0	5	\$249,046
11	582-8-89240-020	Crandall ISD	Kaufman	Dallas-Fort Worth	14	\$109.581	\$0	5	\$109.581
12	582-8-89240-039	Cypress-Fairbanks ISD	Harris	Houston-Galveston-Brazoria	240	\$168,000	\$0	5	\$168,000
13	582-8-89240-028	Dickinson ISD	Galveston	Houston-Galveston-Brazoria	38	\$27,360	\$0	5	\$27,360
14	582-8-89240-005	Dripping Springs ISD	Hays	Austin	16	\$78,429	\$0	5	\$78,429
15	582-8-89240-043	Eanes ISD	Travis	Austin	12	\$61,503	\$0	5	\$61,503
16	582-8-89240-009	Fort Worth ISD	Tarrant	Dallas-Fort Worth	239	\$147.063	\$0	5	\$147.063
17	582-8-89240-047	Freer ISD	Duval	Other	8	\$16,161	\$0	5	\$16,161
18	582-8-89240-008	Galveston ISD	Galveston	Houston-Galveston-Brazoria	11	\$73,488	\$0	5	\$73,488
19	582-8-89240-038	Goose Creek Consolidated ISD	Harris	Houston-Galveston-Brazoria	24	\$196,500	\$0	5	\$196,500
20	582-8-89240-002	Hays Consolidated ISD	Hays	Austin	83	\$247,723	\$0	5	\$247,723
21	582-8-89240-025	Houston ISD	Harris	Houston-Galveston-Brazoria	312	\$249,460	\$0	5	\$249,460
22	582-9-89240-097	Huffman ISD	Harris	Houston-Galveston-Brazoria	10	\$7,000	\$0	5	\$7,000
23	582-8-89240-016	Jarrell ISD	Williamson	Austin	10	\$49,456	\$0	5	\$49,456
24	582-8-89240-036	Judson ISD	Bexar	San Antonio	43	\$243,638	\$0	5	\$243,638
25	582-8-89240-015	Lake Travis ISD	Travis	Austin	29	\$83.879	\$0	5	\$83,879
26	582-8-89240-012	Longview ISD	Gregg/Harrison	Tyler-Longview	47	\$44,008	\$0	5	\$44,008
27	582-8-89240-032	Marion ISD	Guadalupe	San Antonio	13	\$5,884	\$0	5	\$5,884
28	582-8-89240-050	Marshall ISD	Harrison	Tyler-Longview	27	\$160,704	\$0	5	\$160,704
29	582-8-89240-023	Mesquite ISD	Dallas	Dallas-Fort Worth	15	\$145,320	\$0	5	\$145,320
30	582-8-89240-014	Nederland ISD	Jefferson	Beaumont-Port Arthur	1	\$8,300	\$0	5	\$8,300
31	582-8-89240-006	New Deal ISD	Lubbock	Other	12	\$12,000	\$0	5	\$12,000
32	582-8-89240-027	Nordheim ISD	DeWitt	Other	2	\$3,558	\$0	5	\$3,558
33	582-8-89240-042	Northside ISD	Bexar	San Antonio	145	\$241,570	\$0	5	\$241,570
34	582-8-89240-037	Odem-Edroy ISD	San Patricio	Corpus Christi	4	\$4,257	\$0	5	\$4,257
35	582-8-89240-024	Pasadena ISD	Harris	Houston-Galveston-Brazoria	89	\$70,421	\$0	5	\$70,421
36	582-8-89240-051	Pearland ISD	Brazoria	Houston-Galveston-Brazoria	85	\$48,799	\$0	5	\$48,799
37	582-8-89240-049	Pharr-San Juan-Alamo ISD	Hidalgo	Other	42	\$87,630	\$0	5	\$87,630
38	582-8-89240-034	Pine Tree ISD	Gregg/Harrison	Tyler-Longview	36	\$131,221	\$0	5	\$131,221
39	582-8-89240-053	Seguin ISD	Guadalupe	San Antonio	21	\$34,804	\$0	5	\$34,804
40	582-8-89240-055	Sheldon ISD	Harris	Houston-Galveston-Brazoria	38	\$18,240	\$0	5	\$18,240
41	582-8-89240-054	Skidmore-Tynan ISD	Bee	Other	6	\$12,006	\$0	5	\$12,006
42	582-8-89240-045	Snyder ISD	Scurry	Other	9	\$47,091	\$0	5	\$47,091
43	582-8-89240-048	Southwest ISD	Bexar	San Antonio	50	\$88,279	\$0	5	\$88,279
44	582-8-89240-030	Springtown ISD	Parker	Dallas-Fort Worth	25	\$12,319	\$0	5	\$12,319
45	582-8-89240-021	Tom Bean ISD	Grayson	Other	5	\$4,000	\$0	5	\$4,000
46	582-8-89240-022	United ISD	Webb	Other	33	\$48,948	\$0	5	\$48,948
47	582-8-89240-035	Valley View ISD	Hidalgo	Other	35	\$99,280	\$0	5	\$99,280
48	582-8-89240-056	West Oso ISD	Nueces	Corpus Christi	7	\$14,210	\$0	5	\$14,210
49	582-8-89240-018	Wichita Falls ISD	Wichita	Other	45	\$53,513	\$0	5	\$53,513
50	582-8-89240-033	Winona ISD	Smith	Other	8	\$77,504	\$0	5	\$77,504
51	582-9-89240-139	Alief ISD	Harris	Houston-Galveston-Brazoria	54	\$247,680	\$0	5	\$247,680

ſ	PROJECT ID	SCHOOL DISTRICT	COUNTY	AREA	NUMBER OF BUSES RETROFITTED	TERP FUNDS	FEDERAL FUNDS ²	ACTIVITY LIFE (Years)	GRANT AMOUNT
52	582-9-89240-111		Cherokee	Other	9	\$61,172	\$0	5	\$61.172
53		Aransas County ISD	Nueces	Corpus Christi	24	\$111.860	\$0	5	\$111.860
54	582-9-89240-124		Nueces	Corpus Christi	10	\$57,900	\$0	5	\$57,900
55	582-9-89240-109		Smith	Other	12	\$82,703	\$0	5	\$82,703
56		Austin ISD	Travis	Austin	93	\$63,581	\$0	5	\$63,581
57	582-9-89240-142	Bay City ISD	Matagorda	Other	16	\$92,640	\$0	5	\$92,640
58	582-9-89240-107	Belton ISD	Bell	Other	39	\$161,470	\$0	5	\$161,470
59	582-9-89240-084	Bowie County Schools Trans. Dept.	Bowie	Other	36	\$248,109	\$0	5	\$248,109
60	582-9-89240-095	Calallen ISD	Nueces	Corpus Christi	8	\$46,320	\$0	5	\$46,320
61	582-9-89240-102	Cameron ISD	Milam	Other	11	\$62,435	\$0	5	\$62,435
62	582-9-89240-122	Carrizo Springs ISD	Dimmit	Other	22	\$0	\$108,909	5	\$108,909
63	582-9-89240-081	Carthage ISD	Panola	Other	36	\$214,095	\$0	5	\$214,095
64	582-9-89240-148	Chapel Hill ISD	Smith	Other	21	\$100,343	\$27,188	5	\$127,531
65		Corpus Christi ISD	Nueces	Corpus Christi	43	\$248,970	\$0	5	\$248,970
66		Crandall ISD	Kaufman	Dallas-Fort Worth	3	\$2,279	\$0	5	\$2,279
67	582-9-89240-090	Crosby ISD	Harris	Houston-Galveston-Brazoria	42	\$0	\$243,180	5	\$243,180
68		Cypress-Fairbanks ISD	Harris	Houston-Galveston-Brazoria	200	\$139,100	\$0	5	\$139,100
69		Daingerfield ISD	Morris	Other	24	\$159,426	\$0	5	\$159,426
70		Donna ISD	Hidalgo	Other	13	\$0	\$25,751	5	\$25,751
71	582-9-89240-121		Nueces	Corpus Christi	5	\$30,026	\$0	5	\$30,026
72		Eanes ISD	Travis	Austin	16	\$81,431	\$0	5	\$81,431
73		Edinburg ISD	Hidalgo	Other	31	\$50,224	\$0	5	\$50,224
74		Edna ISD	Jackson	Other	7	\$45,990	\$0	5	\$45,990
75		El Paso ISD	El Paso	El Paso	15	\$0	\$86,374	5	\$86,374
76	582-9-89240-132		Bastrop	Austin	38	\$170,676	\$0	5	\$170,676
77		Florence ISD	Williamson	Austin	11	\$43,583	\$0	5	\$43,583
78		Flour Bluff ISD	Nueces	Corpus Christi	26	\$156,138	\$0	5	\$156,138
79		Ganado ISD	Jackson	Other	4	\$23,160	\$0	5	\$23,160
80	582-9-89240-069	Garland ISD	Dallas	Dallas-Fort Worth	150	\$101,036	\$0	5	\$101,036
81	582-9-89240-113	George West ISD	Live Oak	Other	9	\$52,110	\$0	5	\$52,110
82		Gladewater ISD	Gregg/Upshur	Tyler-Longview	24	\$165,406	\$0	5	\$165,406
83	582-9-89240-108	Glen Rose ISD	Somervell	Other	7	\$5,373	\$0	5	\$5,373
84		Hallsville ISD	Harrison	Tyler-Longview	40	\$18,660	\$51,010	5	\$69,670
85		Harlingen CISD	Cameron	Other	24	\$0	\$40,179	5	\$40,179
86		Houston ISD	Harris	Houston-Galveston-Brazoria	49	\$249,410	\$0	5	\$249,410
87		IDEA Public Schools	Hidalgo	Other	16	\$0	\$74,108	5	\$74,108
88		Industrial ISD	Victoria	Victoria	9	\$59,130	\$0	5	\$59,130
89	582-9-89240-077	Jacksonville ISD	Cherokee	Other	32 44	\$220,541	\$0	5	\$220,541
90	582-9-89240-089	Judson ISD	Bexar	San Antonio		\$249,304	\$0	5	\$249,304
91		Katy ISD	Harris	Houston-Galveston-Brazoria	79	\$63,121 \$220,541	\$0 \$0	5	\$63,121
92 93		Kilgore ISD Killeen ISD	Gregg/Rusk Bell	Tyler-Longview Other	32 36	\$220,541	\$0 \$244,493	5 5	\$220,541 \$244,493
						\$0 \$0			
94 95		La Feria ISD La Joya ISD	Cameron Hidalgo	Other Other	11 41	\$0 \$107,700	\$21,505 \$0	5 5	\$21,505 \$107,700
95 96	582-9-89240-075 582-9-89240-104		Wilson	San Antonio	21	\$107,700	\$0 \$0	5	\$107,700 \$118,304
90 97	582-9-89240-104		Hidalgo	Other	3	\$110,304	\$0 \$17,370	5	\$17,370
97 98		La villa ISD Lake Travis ISD	Travis	Austin	20	\$99,700	<u>\$17,370</u> \$0	5	\$99,700
90 99		Leander ISD	Williamson	Austin	40	\$93,700		5	\$152,187
100		Lindale ISD	Smith	Other	15	\$68,919	\$0	5	\$68,919
100		London ISD	Nueces	Corpus Christi	6	\$32,074	\$0\$0	5	\$32,074
102		Los Fresnos ISD	Cameron	Other	76	\$0	\$180.075	5	\$180,075

ſ	PROJECT ID	SCHOOL DISTRICT	COUNTY	AREA	NUMBER OF BUSES RETROFITTED	TERP FUNDS	FEDERAL FUNDS ²	ACTIVITY LIFE (Years)	GRANT AMOUNT
103		Lubbock ISD	Lubbock	Other	33	\$244,200	\$0	5	\$244.200
103		Marshall ISD	Harrison	Tyler-Longview	14	\$96,487	\$0 \$0	5	\$96.487
104		Mathis ISD	San Patricio	Corpus Christi	5	\$28,950	\$0 \$0	5	\$28,950
105		Mesquite ISD	Dallas	Dallas-Fort Worth	72	\$48,375	\$0 \$0	5	\$48,375
100		Mt. Pleasant ISD	Gregg	Tyler-Longview	31	\$213.649	\$0 \$0	5	\$213.649
108		New Braunfels ISD	Comal	San Antonio	36	\$196,357	\$0	5	\$196,357
109		New Diana ISD	Upshur	Tyler-Longview	5	\$33,985	\$0 \$0	5	\$33,985
110		North East ISD	Bexar	San Antonio	136	\$208,899	\$0 \$0	5	\$208,899
111		Northside ISD	Bexar	San Antonio	77	\$44,990	\$0 \$0	5	\$44,990
112		Ore City ISD	Upshur	Tyler-Longview	8	\$55,135	\$0 \$0	5	\$55,135
112		Palestine ISD	Anderson	Other	25	\$0 \$0	\$169,923	5	\$169,923
114		Pasadena ISD	Harris	Houston-Galveston-Brazoria	66	\$52,223	\$0	5	\$52,223
115		Pittsburg ISD	Gregg	Tyler-Longview	24	\$165,406	\$0 \$0	5	\$165,406
116		Plano ISD	Collin	Dallas-Fort Worth	19	\$115,881	\$0 \$0	5	\$115,881
117		Point Isabel ISD	Cameron	Other	8	\$36,019	\$3,502	5	\$39,521
118		Ricardo ISD	Kleberg	Other	8	\$44,085	\$3,502 \$0	5	\$44,085
119		Rio Hondo ISD	Cameron	Other	9	\$0	\$45,732	5	\$45,732
120		Riviera ISD	Kleberg	Other	5	\$22,111	\$0	5	\$22,111
120		Robstown ISD	Nueces	Corpus Christi	13	\$26.620	\$0 \$0	5	\$26.620
121		Round Rock ISD	Williamson	Austin	66	\$239,258	\$0 \$0	5	\$239,258
122		Sabine ISD	Harrison	Tyler-Longview	7	\$41,693	\$0 \$0	5	\$41,693
123		San Antonio ISD	Bexar	San Antonio	55	\$76.515	\$0 \$0	5	\$76,515
124		San Marcos ISD	Hays	Austin	17	\$76,515	\$0 \$0	5	\$96,205
125		Santa Rosa ISD	· · ·	Other	7	\$90,205 \$0	\$0 \$42.037	5	\$96,205
126	582-9-89240-086 582-9-89240-061	Santa Rosa ISD Sinton ISD	Cameron Nueces	Corpus Christi	12	\$0 \$28.530	\$42,037 \$0	5	\$28,530
127		Somerset ISD	Bexar	San Antonio	12	\$20,530	\$0 \$0	5	\$20,530
128		Somerset ISD Southwest ISD	Bexar	San Antonio San Antonio	15	\$31,231 \$25,530	\$0 \$0	5	\$25,530
129		Sulphur Springs ISD	Hopkins	Other	36	\$25,530	\$0 \$0	5	\$173,395
130		Taylor ISD	Williamson	Austin	25	\$173,395	\$0 \$0	5	\$137,352
131		Three Rivers ISD	Nueces	Corpus Christi	25	\$137,352 \$40,530	\$0 \$0	5	\$40,530
		Troup ISD	Smith	Other	9	\$40,530 \$61.172	\$0 \$0	5	\$40,530 \$61,172
133		Tuloso-Midway ISD			9		\$0 \$0		
134 135		Tyler ISD	Nueces Smith	Corpus Christi Other	36	\$40,530 \$46,352	\$0 \$0	5 5	\$40,530 \$46,352
					10	\$46,352 \$67,969	\$0 \$0	5	\$46,352 \$67,969
136		Union Grove ISD	Gregg/Upshur	Tyler-Longview					
137		United ISD Van ISD	Webb	Other Other	76	\$52,198	\$60,054	5	\$112,252
138 139			Van Zandt	Other	28	\$188,715	\$0 ©	5	\$188,715
139		Van Vleck ISD Victoria ISD	Matagorda		9 18	\$51,140	\$0 \$0	5	\$51,140
-			Victoria	Victoria Other	4	\$118,260 \$23,160	4 -	5 5	\$118,260
141		Woodsboro ISD	Refugio		4 68	, , ,	\$0	-	\$23,160
142	582-10-10577-022		Travis	Austin		\$0	\$70,334	5	\$70,334
143	582-10-89240-156		Nueces	Corpus Christi	7	\$0	\$13,975	5	\$13,975
144	582-10-10577-018		Henderson	Other	14	\$0	\$21,000	5	\$21,000
145	582-11-10577-021		Calhoun	Other	16	\$31,954	\$0	5	\$31,954
146	582-10-10577-010		Montgomery	Houston-Galveston-Brazoria	18	\$0	\$33,480	5	\$33,480
147	582-10-10577-019		Navarro	Other	16	\$0	\$24,000	5	\$24,000
148		Cypress Fairbanks ISD	Harris	Houston-Galveston-Brazoria	171	\$0	\$199,111	5	\$199,111
149	582-10-89240-157		Medina	Other	8	\$14,851	\$0	5	\$14,851
150	582-10-10577-005		Maverick	Other	17	\$0	\$40,269	5	\$40,269
151	582-10-10577-007		Henderson	Other	12	\$0	\$18,000	5	\$18,000
152	582-10-10577-016		Bell	Other	9	\$0	\$143,430	5	\$143,430
153	582-10-10577-002	Hudson ISD	Angelina	Other	14	\$0	\$32,186	5	\$32,186

	PROJECT ID	SCHOOL DISTRICT	COUNTY	AREA	NUMBER OF BUSES RETROFITTED	TERP FUNDS	FEDERAL FUNDS ²	ACTIVITY LIFE (Years)	GRANT AMOUNT
154	582-10-10577-011		Walker	Other	36	\$0	\$532,833	5	\$532,833
155	582-10-10577-011		Hidalgo	Other	16	\$0 \$0	\$211.515	5	\$332,833 \$211.515
155	582-10-10577-023		Tarrant	Dallas-Fort Worth	47	\$0 \$43,232	\$211,515 \$0	5	\$43,232
157	582-10-10577-012		Bell	Other	72	\$43,232 \$0	\$165,600	5	\$165,600
157	582-10-10577-012		Bell	Other	10	\$0 \$0	\$23,000	5	\$23,000
159	582-10-10577-017		Real	Other	4	\$0 \$0	\$8,988	5	\$8,988
160	582-10-10577-009		Williamson	Austin	25	\$0 \$0	\$57,500	5	\$57,500
161	582-10-10577-014		Burnet	Other	25	\$0 \$0	\$59,800	5	\$59,800
162	582-10-89240-159		Hidalgo	Other	14	\$0 \$0	\$27,950	5	\$27,950
163		New Summerfield ISD	Cherokee	Other	6	\$0 \$0	\$9,000	5	\$9,000
164	582-10-10577-003		Bexar	San Antonio	32	\$0 \$0	\$69,860	5	\$69,860
165	582-10-10577-006		Morris	Other	6	\$0 \$0	\$9,000	5	\$9,000
166	582-10-89240-152		Duval	Other	6	\$0 \$0	\$11,978	5	\$9,000
167	582-10-89240-132		Gregg	Tyler-Longview	6	\$0 \$0	\$9,000	5	\$9,000
167	582-10-10577-004		Harris	Houston-Galveston-Brazoria	48	\$0 \$0	\$108,620	5	\$9,000
169	582-10-10577-001		Shelby	Other	40	\$00	\$100,620	5	\$108,620
170	582-10-89240-155			Tyler-Longview	7	\$000 \$0		5	\$800 \$12,897
170	582-10-89240-153		Gregg	Other	6	\$0 \$0	<u>\$12,897</u> \$9,000	5	\$12,897 \$9,000
			Wood	Other	2	\$0 \$3.000		5	
172 173	582-10-10577-025 582-11-10577-024		Angelina	Dallas-Fort Worth	5	\$3,000 \$0	\$0 \$12,671		\$3,000 \$12,671
-			Tarrant					5	
174		Aldine ISD	Harris	Houston-Galveston-Brazoria	416	\$479,660	\$0	5	\$479,660
175		Athens ISD	Henderson	Other	19	\$23,655	\$0	5	\$23,655
176	582-11-12889	Bishop CISD	Nueces	Corpus Christi	11	\$21,178	\$0	5	\$21,178
177	582-11-13006	Canyon ISD	Randall	Other	12	\$18,374	\$0	5	\$18,374
178		Cleveland ISD	Liberty	Houston-Galveston-Brazoria	19	\$21,908	\$0	5	\$21,908
179	582-11-12994	Houston ISD	Harris	Houston-Galveston-Brazoria	50	\$181,230	\$236,164	5	\$417,394
180	582-11-13452	Idea Public Schools	Hidalgo	Other	3	\$22,195	\$11,829	5	\$34,024
181	582-11-13075	Jourdanton ISD	Atascosa	Other		\$9,310	\$0	5	\$9,310
182	582-11-13755	Kerens ISD	Navarro	Other	5	\$7,825	\$0	5	\$7,825
183	582-11-13163	Kerrville ISD	Kerr	Other	24	\$39,061	\$0	5	\$39,061
184	582-11-13754	Killeen ISD	Bell	Other	8	\$0	\$16,360	5	\$16,360
185	582-11-13260	Lackland ISD	Bexar	San Antonio	4	\$4,537	\$0	5	\$4,537
186	582-11-12823	Livingston ISD	Polk	Other	32	\$39,840	\$0	5	\$39,840
187	582-11-13468	Mercedes ISD	Hidalgo	Other	14	\$170,814	\$0	5	\$170,814
188	582-11-12824	Midlothian ISD	Ellis	Dallas-Fort Worth	5	\$5,787	\$0	5	\$5,787
189	582-11-12985	Paris ISD	Lamar	Other	33	\$39,840	\$0	5	\$39,840
190	582-11-13162	Pleasanton ISD	Atascosa	Other	19	\$31,101	\$0	5	\$31,101
191	582-11-12984	Ponder ISD	Denton	Dallas-Fort Worth	8	\$9,259	\$0	5	\$9,259
192	582-11-13004	Poteet ISD	Atascosa	Other	11	\$15,445	\$0	5	\$15,445
193		Spring ISD	Harris	Houston-Galveston-Brazoria	11	\$20,376	\$0	5	\$20,376
194		Tatum ISD	Panola/Rusk	Tyler-Longview	13	\$14,940	\$0	5	\$14,940
195		Aldine ISD	Harris	Houston-Galveston-Brazoria	37	\$736,528	\$0	5	\$736,528
196		Bandera ISD	Bandera	Other	21	\$137,619	\$0	5	\$137,619
197		Big Sandy ISD	Angelina	Other	6	\$8,229	\$0	5	\$8,229
198		Boerne ISD	Kendall	Other	7	\$11,533	\$0	5	\$11,533
199	582-12-22603	Brownsville ISD	Cameron	Other	129	\$1,459,991	\$278,100	5	\$1,738,091
200	582-12-21950	Central ISD	Angelina	Other	7	\$9,758	\$0	5	\$9,758
201	582-12-22622	Duncanville ISD	Dallas	Dallas-Fort Worth	23	\$479,104	\$0	5	\$479,104
202	582-12-22321	Greenville ISD	Hunt	Other	20	\$27,513	\$0	5	\$27,513
203	582-12-21712	Kaufman ISD	Kaufman	Dallas-Fort Worth	13	\$38,955	\$0	5	\$38,955
204	582-12-22318	North Lamar ISD	Lamar	Other	23	\$31,565	\$0	5	\$31,565

	PROJECT ID	SCHOOL DISTRICT	COUNTY	AREA	NUMBER OF BUSES RETROFITTED	TERP FUNDS	FEDERAL FUNDS ²	ACTIVITY LIFE (Years)	GRANT AMOUNT
205	582-12-21962	Sherman ISD	Grayson	Other	25	\$35.105	\$0	5	\$35,105
206	582-12-22473	Socorro ISD	El Paso	El Paso	10	\$199.062	\$0	5	\$199.062
207	582-13-31694	Bartlett ISD	Bell	Other	6	\$72,160	\$0	5	\$72,160
208	582-13-31781	Bryan ISD	Brazos	Other	17	\$338,405	\$0	5	\$338,405
209	582-13-32577	College Station ISD	Brazos	Other	14	\$282,018	\$0	5	\$282,018
210	582-13-31556	Edcouch Elsa ISD	Hidalgo	Other	31	\$100,955	\$241,295	5	\$342,250
211	582-13-31576	Garland ISD	Dallas	Dallas-Fort Worth	71	\$1,457,275	\$0	5	\$1,457,275
212	582-14-42256	Austin ISD	Travis	Austin	5	\$127,663	\$0	5	\$127,663
213	582-14-42008	Bryan ISD	Brazos	Other	4	\$97,999	\$0	5	\$97,999
214	582-14-42110	Dallas County Schools	Dallas	Dallas-Fort Worth	58	\$1,365,607	\$115,278	5	\$1,480,885
215	582-14-42163	San Benito CISD	Cameron	Other	52	\$658,440	\$0	5	\$658,440
216	582-14-41615	Sheldon ISD	Harris	Houston-Galveston-Brazoria	33	\$808,489	\$0	5	\$808,489
217	582-15-52383	Cypress Fairbanks ISD	Harris	Houston-Galveston-Brazoria	71	\$1,739,477	\$0	5	\$1,739,477
218	582-15-56028	Harlingen CISD	Cameron	Other	30	\$265,434	\$136,688	5	\$402,122
219	582-15-51746	Kaufman ISD	Kaufman	Dallas-Fort Worth	8	\$195,997	\$0	5	\$195,997
220	582-15-51745	Rio Grande City CISD	Starr	Other	63	\$808,562	\$0	5	\$808,562
221	582-15-51742	Rio Hondo ISD	Cameron	Other	2	\$19,940	\$0	5	\$19,940
222	582-16-61524	Eagle Pass ISD	Maverick	Other	20	\$277,751	\$223,604	5	\$501,355
223	582-16-62164	Fort Bend ISD	Fort Bend	Houston-Galveston-Brazoria	119	\$1,604,027	\$0	5	\$1,604,027
224	582-16-61554	Georgetown ISD	Williamson	Austin	16	\$407,487	\$0	5	\$407,487
225	582-16-62132	Ingleside ISD	San Patricio	Corpus Christi	6	\$110,448	\$0	5	\$110,448
226	582-16-62214	New Caney ISD	Montgomery	Houston-Galveston-Brazoria	30	\$738,071	\$0	5	\$738,071
227	582-16-61346	Sharyland ISD	Hidalgo	Other	29	\$529,557	\$0	5	\$529,557
228	582-17-71744	Cypress Fairbanks ISD	Harris	Houston-Galvaston-Brazoria	31	\$759,490	\$0	5	\$759,490
229	582-17-71743	Klein ISD	Harris	Houston-Galvaston-Brazoria	15	\$367,495	\$0	5	\$367,495
230	582-17-72094	Angleton ISD	Brazoria	Houston-Galvaston-Brazoria	17	\$418,560	\$0	5	\$418,560
	TOTAL				7,560	\$29,864,522	\$4,694,101		\$34,558,623

¹Does not include projects funded and subsequently canceled.

²Federal Funds include: State Clean Diesel, American Recovery and Reinvestment Act, Border, Blue Skyways.

Texas Clean School Bus (TCSB) Program Replacement Project List 2017 through August 31, 2019

	PROJECT ID	APPLICANT	AREA	PROJECT TYPE	EMISSION SOURCE	NUMBER OF ACTIVITIES	PROJECT DESCRIPTION	PROJECT	FUEL	GRANT AMOUNT	TOTAL NO _X REDUCED (TONS)	COST PER TON OF NO _X REDUCED
1	2018-15-0001-CB	Knox City-O'Brien CISD	Other-Knox	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$200,500	3.22	\$62,180
2	2018-15-0003-CB	Munday CISD	Other-Knox	Replacement	On-Road	1	Replace 1 On-Road School Bus	Gasoline	5	\$41,500	0.67	\$61,802
3	2018-15-0004-CB	Austin ISD	Austin	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$233,500	1.69	\$138,166
4	2018-15-0005-CB	Bowie ISD	Other-Montague	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$250,000	2.68	\$93,127
5	2018-15-0006-CB	Seymour ISD	Other-Baylor	Replacement	On-Road	2	Replace 2 On-Road School Buses	Diesel	5	\$89,000	1.18	\$75,360
6	2018-15-0007-CB	Henrietta ISD	Other-Clay	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$221,500	2.96	\$74,793
7	2018-15-0008-CB	Mount Calm ISD	Other-Hill	Replacement	On-Road	2	Replace 2 On-Road School Buses	Diesel	5	\$100,000	1.34	\$74,822
8	2018-15-0009-CB	Georgetown ISD	Austin	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$245,000	3.64	\$67,234
9	2018-15-0010-CB	Lovejoy ISD	Dallas/Fort Worth	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$250,000	2.95	\$84,674
10	2018-15-0011-CB	Nederland ISD	Beaumont/Port Arthur	Replacement	On-Road	1	Replace 1 On-Road School Bus	Diesel	5	\$50,000	0.67	\$74,294
11	2018-15-0012-CB	Valley View ISD	Other-Hidalgo	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$250,000	2.95	\$84,674
12	2018-15-0013-CB	Roosevelt ISD	Other-Lubbock	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$277,500	1.62	\$171,827
13	2018-15-0014-CB	Junction ISD	Other-Kimble	Replacement	On-Road	4	Replace 4 On-Road School Buses	Diesel	5	\$187,000	1.86	\$100,700
14	2018-15-0015-CB	Hartley ISD	Other-Hartley	Replacement	On-Road	1	Replace 1 On-Road School Bus	Gasoline	5	\$28,000	0.55	\$50,496
15	2018-15-0016-CB	Spring Branch ISD	Houston/Galveston/Brazoria	Replacement	On-Road	5	Replace 5 On-Road School Buses	LPG	5	\$275,000	1.68	\$163,690
16	2018-15-0017-CB	Sanger ISD	Dallas/Fort Worth	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$250,000	3.13	\$79,847
17	2018-15-0018-CB	Buna ISD	Other-Jasper	Replacement	On-Road	5	Replace 5 On-Road School Buses	Gasoline	5	\$220,000	2.94	\$74,766
18	2018-15-0019-CB	Eanes ISD	Austin	Replacement	On-Road	2	Replace 2 On-Road School Buses	Diesel	5	\$111,000	0.68	\$164,201
19	2018-15-0020-CB	Evolution Academy Charter School	Houston/Galveston/Brazoria	Replacement	On-Road	2	Replace 2 On-Road School Buses	Diesel	5	\$89,000	1.18	\$75,360
20	2018-15-0021-CB	Ricardo ISD	Other-Kleberg	Replacement	On-Road	3	Replace 3 On-Road School Buses	Diesel	5	\$150,000	1.67	\$89,579
21	2018-15-0022-CB	San Antonio ISD	San Antonio	Replacement	On-Road	5	Replace 5 On-Road School Buses	LPG	5	\$255,000	2.69	\$94,796
22	2018-15-0023-CB	Burton ISD	Other-Washington	Replacement	On-Road	3	Replace 3 On-Road School Buses	Gasoline	5	\$128,000	1.51	\$84,600
23	2018-15-0024-CB	Aransas County ISD	Other-Aransas	Replacement	On-Road	3	Replace 3 On-Road School Buses	CNG	5	\$198,000	1.77	\$111,959
24	2018-15-0025-CB	Bonham ISD	Other-Fannin	Replacement	On-Road	3	Replace 3 On-Road School Buses	LPG	5	\$157,500	1.98	\$79,727
25	2018-15-0026-CB	Sheldon ISD	Houston/Galveston/Brazoria	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$250,000	2.16	\$115,527
26	2018-15-0027-CB	Fruitvale ISD	Other-Van Zandt	Replacement	On-Road	1	Replace 1 On-Road School Bus	Diesel	5	\$55,500	0.59	\$93,988
27	2018-15-0028-CB	Kerrville ISD	Other-Kerr	Replacement	On-Road	2	Replace 2 On-Road School Buses	Diesel	5	\$100,000	1.31	\$76,599
28	2018-15-0029-CB	Azle ISD	Dallas/Fort Worth	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$245,000	2.70	\$90,741
29	2018-15-0030-CB	Broaddus ISD	Other-San Augustine	Replacement	On-Road	2	Replace 2 On-Road School Buses	Diesel	5	\$100,000	1.18	\$84,674
30	2018-15-0031-CB	Littlefield ISD	Other-Lamb	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$242,500	3.40	\$71,250
31	2018-15-0032-CB	Lometa ISD	Other-Lampasas	Replacement	On-Road	1	Replace 1 On-Road School Bus	Diesel	5	\$50,000	0.75	\$67,024
32	2018-15-0033-CB	Paducah ISD	Other-Cottle	Replacement	On-Road	1	Replace 1 On-Road School Bus	Diesel	5	\$41,500	1.46	\$28,366
33	2018-15-0034-CB	South San Antonio ISD	San Antonio	Replacement	On-Road	3	Replace 3 On-Road School Buses	Gasoline	5	\$129,500	1.51	\$85,592
34	2018-15-0035-CB	San Augustine ISD	Other-San Augustine	Replacement	On-Road	5	Replace 5 On-Road School Buses	Diesel	5	\$245,000	2.45	\$100,102
35	2018-15-0036-CB	Palestine ISD	Other-Anderson	Replacement	On-Road	3	Replace 3 On-Road School Buses	Diesel	5	\$150,000	1.99	\$75,245
36	2018-15-0037-CB	Hughes Springs ISD	Other-Morris	Replacement	On-Road	5	Replace 5 On-Road School Buses	Gasoline	5	\$204,000	2.21	\$92,433
	TOTAL					125				\$6,070,000	68.94	\$88,042

Appendix C

Contact Information for School Districts with Active Electric School Bus Deployments

School	Transportation Contact	School Mailing Address	Number of Buses	Bus
Amherst Regional Public School District	Peter Crouse Transportation Director (413) 362-1852 <u>CrouseP@arps.org</u>	170 Chestnut Street Amherst, MA 01002	1	Lion
Bay Shore Union Free School District	Richard Gallagher Transportation Contact (631) 968-1118	75 West Perkal Street Bay Shore, NY 11706	4	Blue Bird
Calaveras Unified School District	Tessie Reeder Transportation Supervisor (209) 754-2326 <u>treeder@calaveras.k12.ca.us</u>	P.O. Box 788 3304 Highway 12 San Andreas, CA 95249	3	Blue Bird
Cambridge Public School District	Tina Fisher Transportation Supervisor (617) 349-6862 <u>tfisher@cpsd.us</u>	135 Berkshire Street Cambridge, MA 02141	1	Lion
Concord Public School District	John Arena Transportation Manager (978) 461-3981 <u>transportation@concordps.org</u>	Transportation Office 37 Knox Trail Acton, MA 01720	1	Lion
Franklin Pierce School District	Tim Bridgeman Director of Transportation (253) 298-3865 <u>transportation_staff@fpschools.org</u>	Transportation Dept. 10824 18 th Ave E Tacoma, WA 98445	1	Blue Bird
Kalamazoo Public Schools	Terri Aman Transportation Executive Supervisor (269) 337-0500 amantl@kalamazoopublicschools.net	1220 Howard Street Kalamazoo, MI 49008	1	Lion
Lakeville School District	Susie Jackson Transportation Contact (952) 232-2030 <u>transportation@isd194.org</u>	17630 Juniper Path, Suite A Lakeville, MN 55044	1	Lion
Los Angeles Unified School District	Transportation Services Division 1-800-LA-BUSES transportation.branch@lausd.net	Transportation Services Division 115 North Beaudry Avenue Los Angeles, CA 90012	1	GreenPower

Phoenix	Bryan Henderson	Transportation	1	Blue Bird
Union High			-	DIUE DIIU
	Director of Transportation	Dept.		
School	(602) 764-1612	2526 W. Osborn		
<u>District</u>	bhenderson@phoenixunion.org	Rd.		
		Phoenix, AZ 85017		-
<u>Rialto</u>	Dora Parham	625 West Rialto	2	GreenPower
<u>Unified</u>	Garage & Transportation Manager	Avenue		
School	(909) 820-7862	Rialto, CA 92376		
<u>District</u>	DPARHAM@rialto.k12.ca.us			
Three Rivers	Transportation Department	851 Sixth Ave.	2	Lion
Community	(269) 279-1148	Three Rivers, MI		
Schools		49093		
Torrance	lan Kempton	Torrance USD	6	Blue Bird
Unified	Director of Facilities/Transportation	2335 Plaza Del		
School	& Operations	Amo		
District and	(310) 972-6310	Torrance, CA		
San Diego	kempton.ian@tusd.org	90501		
Unified	Gene Robinson	San Diego USD		
School	Transportation Services Director	4100 Normal		
District	(858) 496-8710	Street		
	grobinson@sandi.net	San Diego, CA		
		92103		
Twin Rivers	Linda Lemon	Transportation	30	Lion
Unified	Administrative Secretary—	Services	00	LIOIT
School	Transportation	1400 B Grand Ave		
District	(916) 566-3405 ext. 37001	Sacramento, CA		
District	(310) 300-3403 EXt. 37001	95838		
West Fargo	Brad Redmond	207 Main Avenue	1	Blue Bird
Public	Director of Transportation	West	–	
Schools	(701) 356-2120			
SCHOOLS	(101) 330-2120	West Fargo, ND 58078		
	Carrie Alfance		F	Lion
White Plains	Sergio Alfonso	5 Homeside Lane	5	Lion
<u>School</u>	Supervisor of Transportation	White Plains, NY		
District	(914) 422-2056	10605		

Appendix D

Contact Information for School Districts with Planned Electric School Bus Deployments

School	Location	Anticipated Number of Buses
Fort Payne City Schools	DeKalb County, AL	2
La Mesa-Spring Valley School District	San Diego, CA	9
Cajon Valley School District	San Diego, CA	1
Durham Unified School District	Durham, CA	
Baldwin Park Unified School District	Baldwin Park, CA	
Boulder Valley School District	Boulder County, CO	1
West Grand School District	Grand County, CO	1
DATTCO	Middleton, CT	1
Triad Community Unit School District #2	Troy, IL	3
Bartholomew Consolidated School Corp.	Columbus, IN	1
Monroe, Carroll, and Hamilton Counties	Monroe, Carroll, and Hamilton Counties, IN	3
Mount Desert Island High School	Bar Harbor, ME	1
Beverly Public Schools	Beverly, MA	1
Zeeland, Gaylord, Oxford	Western Michigan	8
Ann Arbor Public Schools	Ann Arbor, MI	4
Roseville Community Schools	Roseville, MI	2
Lakeville School District	Lakeville, MN	1
Rochester Independent Public School District	Rochester, MN	1
Knox County School District	Knox County, MO	1
North Carolina school districts	North Carolina	85
Washington County Department of Education	Washington County, TN	1
Barre Unified Union School District, Champlain Valley School District, and Franklin West Supervisory Union	Vermont	6 (2 each)
Alexandria Arlington Charles City Chesapeake Chesterfield Fairfax Hampton Louisa Middlesex Norfolk Pittsylvania Powhatan Prince William Richmond City Virginia Beach Waynesboro	Virginia	50
Franklin Pierce School District	Tacoma, WA	1

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- 4 Argonne National Laboratory. AFLEET Tool 2019. <u>https://greet.es.anl.gov/afleet_tool</u> (Accessed March 26, 2020).
- 5 Decade by Decade: 50 Years of Pupil Transportation History. School Bus Fleet, September 1, 2006. <u>https://www.schoolbusfleet.com/article/611146/decade-by-decade-50-years-of-pupil-transportation-history</u> (Accessed April 14, 2020)
- 6 U.S. Energy Information Administration. Diesel Fuel Explained. Last Updated June 2019. https://www.eia.gov/energyexplained/diesel-fuel/ (Accessed April 14, 2020).
- 7 Horrox, J., and M. Casale. *Electric Buses in America: Lessons from Cities Pioneering Clean Transportation*. U.S. PIRG Education Fund, Environment America Research and Policy Center, and Frontier Group, October 2019. <u>https://uspirg.org/sites/pirg/files/reports/ElectricBusesInAmerica/US_Electric_bus_scrn.pdf</u> (Accessed March 6, 2020).
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