Semi-Annual Utility ReportJuly 2022 to June 2023



Paul Andress – Executive Director of Operations – DISD

Angela Alfonso – Utility Specialist – DISD

Jay Sanchez – Maintenance Coordinator - DISD

Arnoldo Villarreal - Project Manager - TD

Armando Rodriguez – Assistant Project Manager - TD

Brian Lillard – Vice President – TD

Ed Buckley – Senior Director Operations - TD

Daniel Wine - Account Manager - TD

Doug Rodriguez - Account Manager - TD

Brandon Hoke, P.E. - Engineering - TD

Donna Kisor, P.E. – Engineering – TD

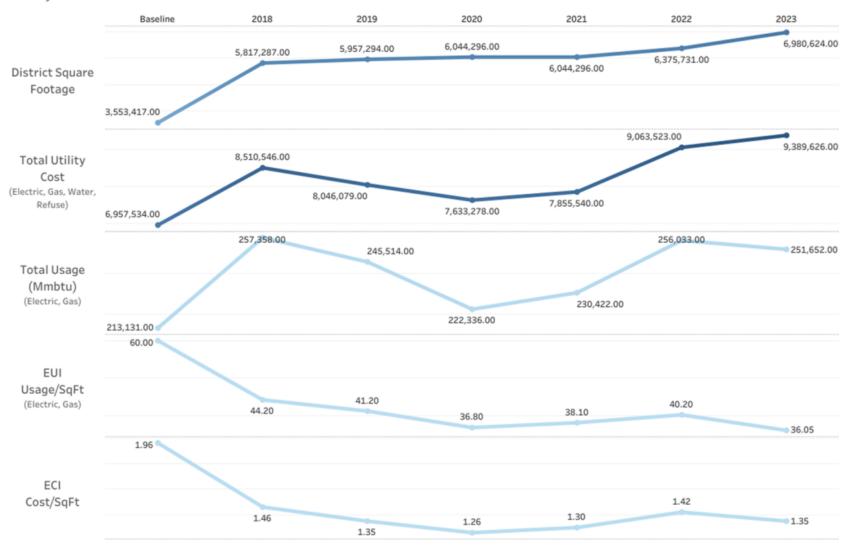


Utility Performance Trends









Comparison by Utility - Cost

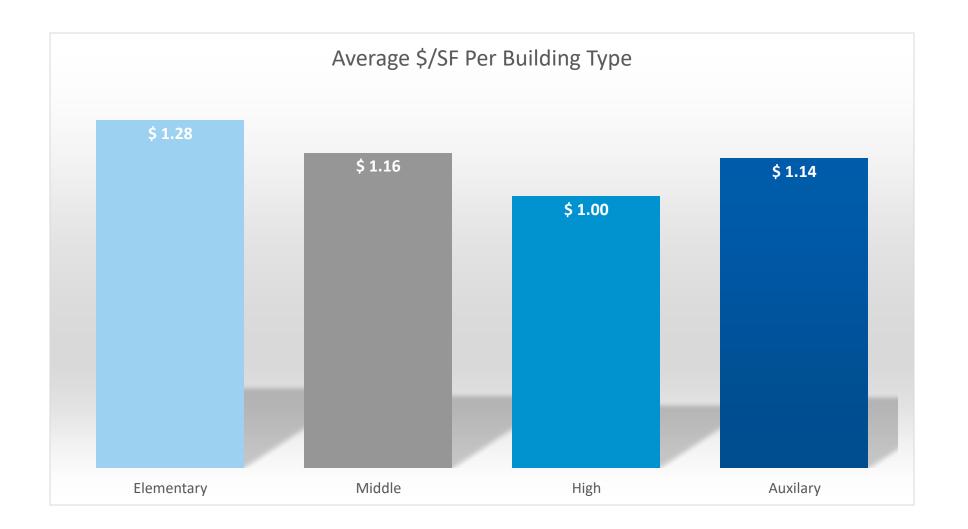


Comparison by Utility

Utility Type	July 2021 - June 2022	July 2022 - June 2023	% Change	Cost Change (\$)
Electric	\$6,022,886	\$6,392,746	5.8%	\$369,860
Gas	\$646,159	\$605,998	-6.6%	(\$40,161)
Water: Irrigation	\$627,531	\$594,380	-5.6%	(\$33,151)
Water: Potable, Sewer, Storm	\$714,790	\$898,398	20.4%	\$183,609
Waste + Recycling	\$871,639	\$898,105	2.9%	\$26,466
Total	\$8,883,005	\$9,389,626	5.4%	\$506,621







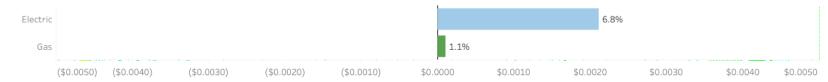
Electric/Gas Comparison to last year





All Schools Energy Performance Change Compared To Last Year

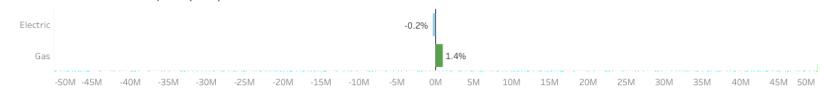
Effective Rate



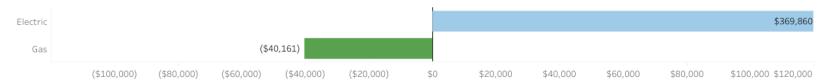
Consumption (kBtu)



Weather Normalized Consumption (kBtu)



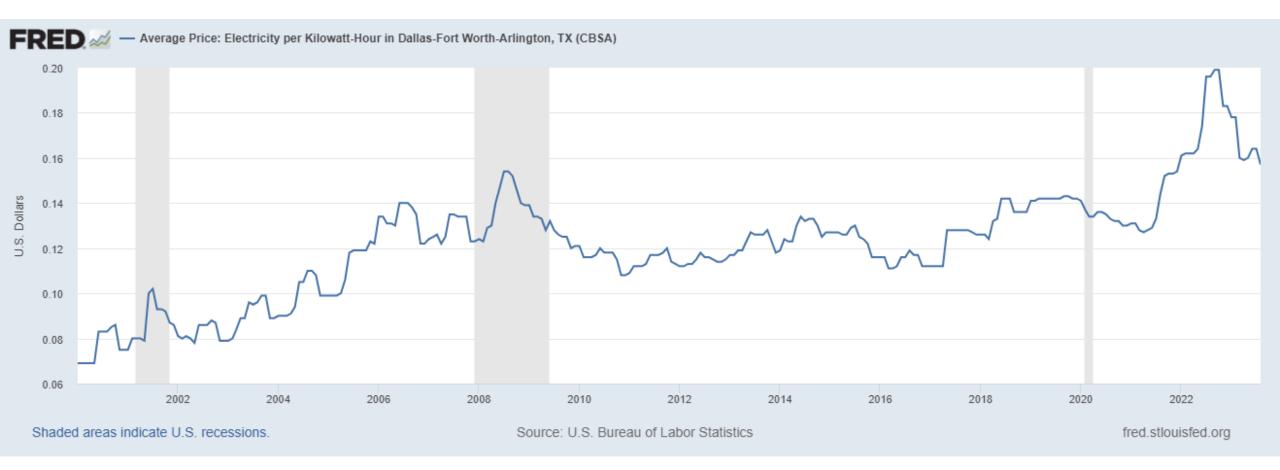
Cost



Texas Electric Rate Trends







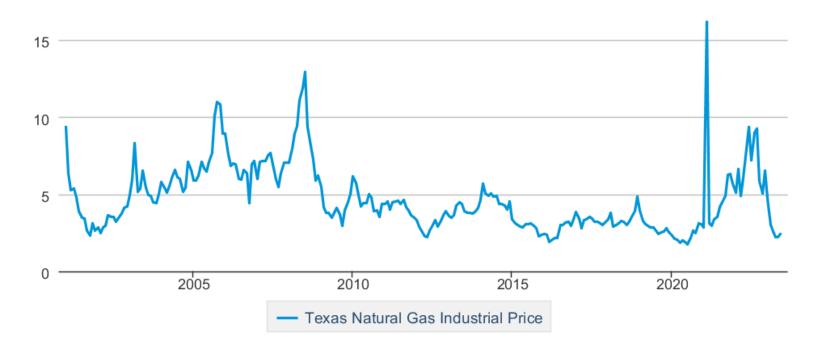




Texas Natural Gas Industrial Price

Dollars per Thousand Cubic Feet

20 —





Data source: U.S. Energy Information Administration

Comparison by Utility - Rate





Electric	\$/kwh
Coserv	0.010
Denton Municipal Utilities	0.009
Direct Energy	0.008
Gas	e/MCE
1000	\$/MCF
Atmos	8.70
Coserv	8.66
Potable Water	\$/Gallon
Lake Cities Municipal Utility Authority	0.019
City of Corinth	0.011
Denton County Fresh Water Supply District no. 11A	0.009
Mustang Special Utility Authority	0.007
Denton Municipal Utilities	0.006
Denton County Fresh Water Supply District 6/7	0.006
Town of Providence Village	0.003
Lucianation Motor	éiCelles
Irrigation Water	\$/Gallon
Lake Cities Municipal Utility Authority	0.014
City of Corinth	0.009
Denton County Fresh Water Supply District 6/7	0.007
Denton Municipal Utilities	0.007
Mustang Special Utility Authority	0.009

Water Comparison to last year





Water and Refuse Performance Change Compared To Last Year

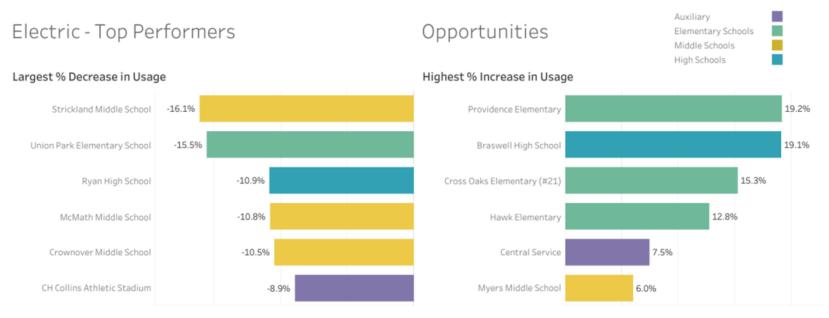
Effective Rate Irrigation Water Potable, Sewer & Storm (\$0.0025) (\$0.0020) (\$0.0015) (\$0.0010) (\$0.0005) \$0.0000 \$0.0015 \$0.0020 \$0.0025 \$0.0030 Consumption Irrigation Water -18% Potable, Sewer & Storm -50M -30M -20M -10M OM 10M 20M 30M 60M Cost Irrigation Water (\$33,151)Potable, Sewer & Storm (\$150,000) (\$100,000) (\$50,000)\$0 \$50,000 \$100,000 \$150,000 Rainfall Rainfall (inches) $-11.0 \ -10.0 \ -9.0 \ -8.0 \ -7.0 \ -6.0 \ -5.0 \ -4.0 \ -3.0 \ -2.0 \ -1.0 \ 0.0 \ 1.0 \ 2.0 \ 3.0 \ 4.0 \ 5.0 \ 6.0 \ 7.0 \ 8.0 \ 9.0 \ 10.0 \ 11.0$ Refuse Refuse \$26,466 (\$300,000) (\$250,000) (\$200,000) (\$150,000) (\$100,000) (\$50,000) \$100,000 \$150,000 \$200,000 \$250,000 \$300,000

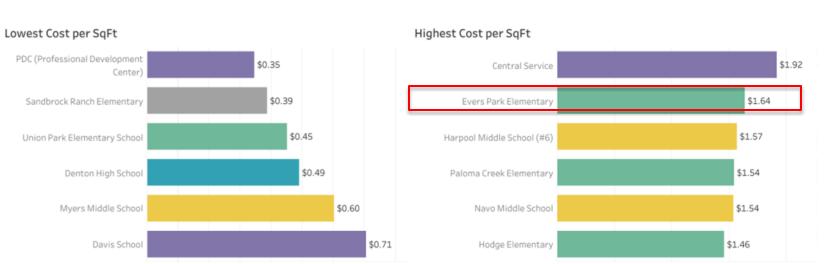
Electric Overview

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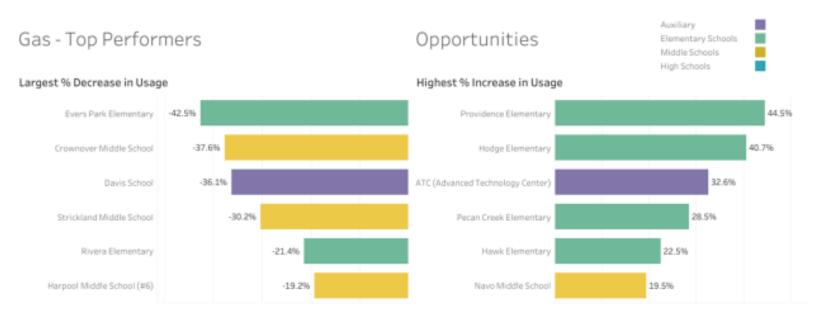




Gas Overview









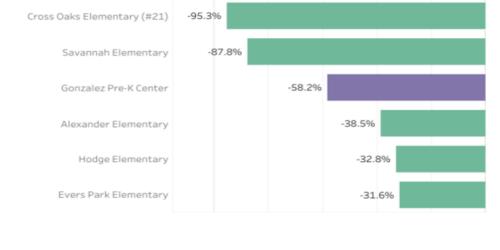
Potable Overview





Potable Water - Top Performers

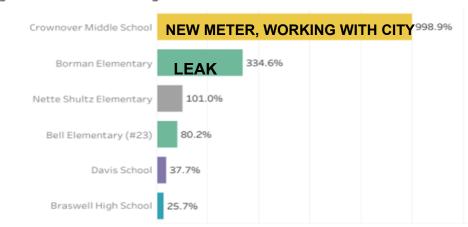
Largest % Decrease in Usage



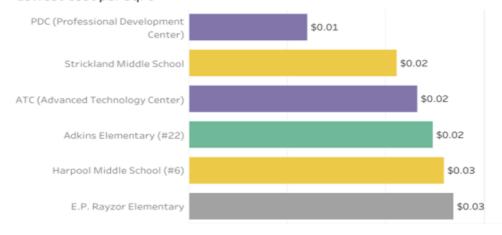
Opportunities



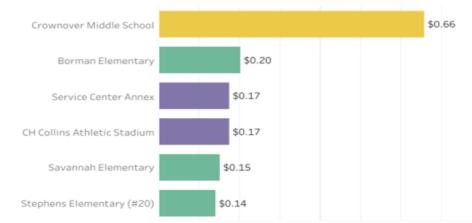
Highest % Increase in Usage



Lowest Cost per SqFt



Highest Cost per SqFt



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Irrigation Overview







Solar Update – Union Park





- Running Cost Avoidance
 - **\$58,612.61**
- Simple Payback
 - 16.86 years



Solar Update – Sandbrock Ranch Elementary





- Running Cost Avoidance
 - **\$32,013.20**
- Simple Payback
 - **14.29**



Solar Update – Nette Shultz Elementary





- Running Cost Avoidance
 - **\$13,048.64**
- Simple Payback
 - **28.76**







Things We are Doing to Reduce Costs

District Setpoint Audit of:

- Temperature
- Outside Air
- Operating Schedules





Recent Accomplishments

2023-2024 School Year Started Without Any Negative News Coverage

Evers Park Energy Audit

Summer Break Energy Audits





Evers Park Elementary (est. 1985)

Low-Cost Opportunities:

- Optimal Start of HVAC: night setback, deadband, static pressure reset, reset leaving heating water and chilled water temperatures, run exhaust fans during operating hours.
- 2. LED lighting: more efficient than fluorescent lighting.



High-Cost Opportunities:

1. Variable flow heating water and chilled water systems.





Looking Ahead

Irrigation Improvement Study

- For landscape, trees, and foundation protection.
- Check automated controllers
- Redistribute manpower
- Verify meters.

Energy Audit Walks at Harpool and Paloma

