



Platte County R-III School District

ENERGY EFFICIENCY PROGRAM



Energy Efficiency: The Untapped Resource

All around us, embedded in every school building is a vast untapped energy resource: efficiency. We used this energy efficiency savings to help fund other needs in your District.

- Energy supply
- Building use
- Equipment operation
- Human behaviors
- Building and system commissioning
- Operating plan
- Renewables



Bringing these together in a comprehensive manner is helping us achieve over 30% savings on utilities as well as additional operational and maintenance savings.

Going to school to learn how to take advantage of our untapped energy efficiency resources.



Financial Energy Savings Targets

Program Year		Construction	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Finance Payments	Beginning Balance	\$5,148,451	\$5,148,451	\$4,881,632	\$4,605,475	\$4,319,652	\$4,023,825	\$3,717,644
	Interest	\$0	\$180,196	\$170,857	\$161,192	\$151,188	\$140,834	\$130,118
	Principal	\$0	\$266,819	\$276,158	\$285,823	\$295,827	\$306,181	\$316,897
	Total Finance Payment	\$0	\$447,015	\$447,015	\$447,015	\$447,015	\$447,015	\$447,015
	Ending Balance	\$5,148,451	\$4,881,632	\$4,605,475	\$4,319,652	\$4,023,825	\$3,717,644	\$3,400,747
Total Payments		\$0	\$447,015	\$447,015	\$447,015	\$447,015	\$447,015	\$447,015
Grants and Rebates		\$380,000						
Savings	Energy Savings	\$74,674	\$307,570	\$316,798	\$326,301	\$336,090	\$346,173	\$356,558
	Operational Savings	\$13,883	\$55,530	\$57,196	\$58,912	\$60,679	\$62,500	\$64,375
	Capital Cost Avoidance	\$1,960,951						
	Total Savings	\$2,049,508	\$363,101	\$373,994	\$385,213	\$396,770	\$408,673	\$420,933
Yearly Cash Flow		\$2,429,508	(\$83,914)	(\$73,021)	(\$61,801)	(\$50,245)	(\$38,342)	(\$26,082)
Cumulative Cash Flow		\$2,429,508	\$2,345,593	\$2,272,572	\$2,210,771	\$2,160,526	\$2,122,185	\$2,096,103

Excludes Capital Cost Avoidance

Yearly Cash Flow	\$468,557	(\$83,914)	(\$73,021)	(\$61,801)	(\$50,245)	(\$38,342)	(\$26,082)
Cumulative Cash Flow	\$468,557	\$384,642	\$311,621	\$249,820	\$199,575	\$161,234	\$135,152





Projects Implemented

- Interior Lighting Upgrades
- Exterior Lighting Upgrades
- Replace HVAC Systems
- Implement DDC Temperature Controls
- Commissioning of Mechanical Systems
- Water Efficiency
- Weatherization
- Continued Systems Optimization





Our Utility Savings Goal

Utility Type	Consumption Savings	% Saved
Electric Energy (kWh)	3,018,396	32%
Electric Demand (kW)	6,570	17%
Gas Energy (Therms)	12,507	10%
Water Consumption (kgal)	911	18%

Trying to Achieve \$356,558 in Year 6

Our Results

Utility Type	Consumption Savings	% Saved
Electric Energy (kWh)	3,425,404	37%
Electric Demand (kW)	10,391	27%
Gas Energy (Therms)	15,842	15%
Water Consumption (kgal)	1,257	23%

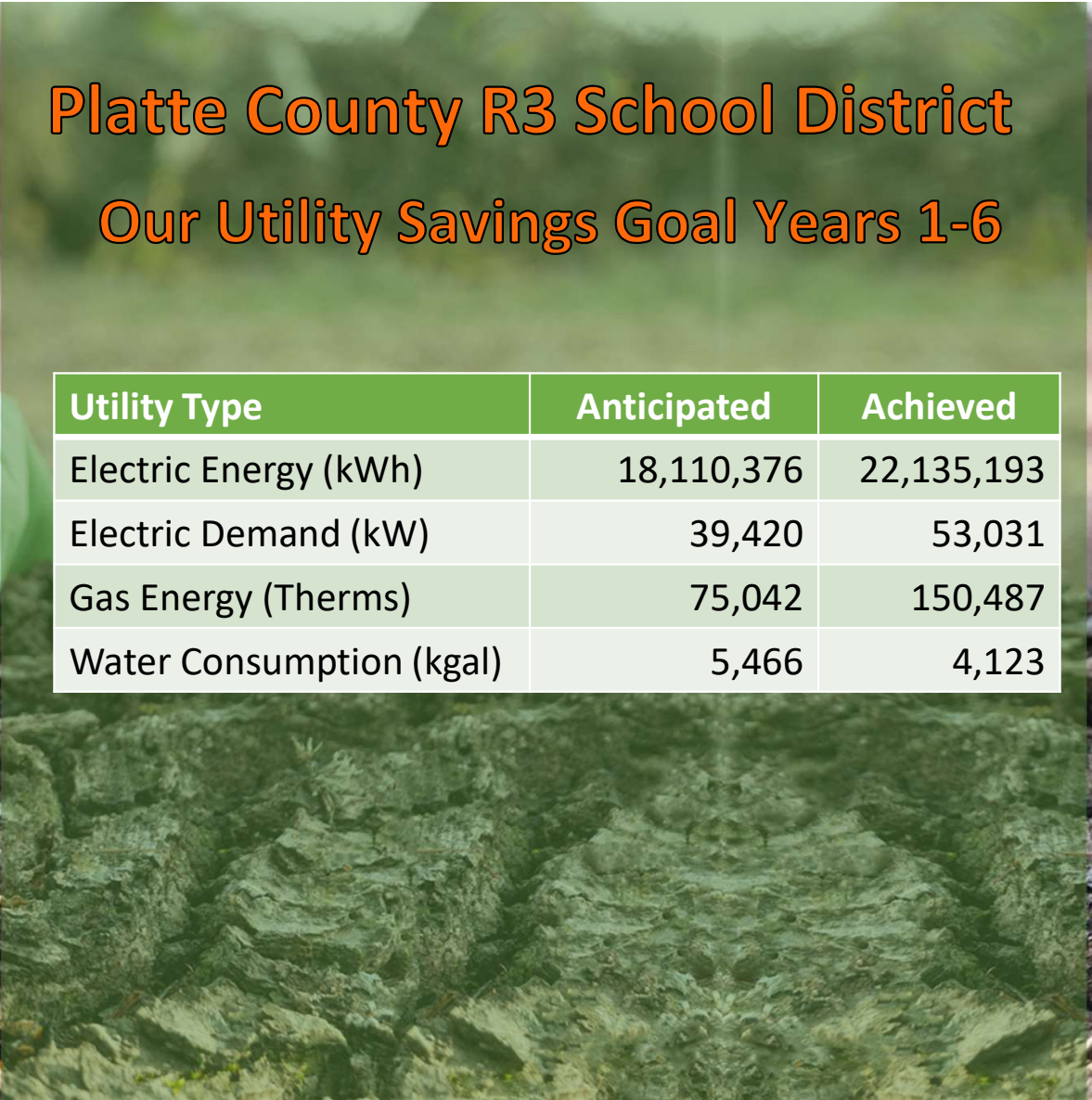
Achieved \$429,505





Platte County R3 School District Our Utility Savings Goal Years 1-6

Utility Type	Anticipated	Achieved
Electric Energy (kWh)	18,110,376	22,135,193
Electric Demand (kW)	39,420	53,031
Gas Energy (Therms)	75,042	150,487
Water Consumption (kgal)	5,466	4,123



Program....Financial Review

Annual Utility Cost Savings	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Expected	\$307,571	\$316,798	\$326,301	\$336,090	\$346,172	\$356,558
Verified	\$383,244	\$415,637	\$415,250	\$557,125	\$505,772	\$429,505
Resulting Surplus	\$75,674	\$98,889	\$88,949	\$221,035	\$159,600	\$72,947

Total Project Utility Savings	\$1,989,490
Total Verified Savings	\$2,706,533
Total Surplus	\$717,043

**Construction operation not included



You have done a great job of conserving your energy and financial resources



Platte County

TRADITION. PRIDE. VISION.

