



2021-2022 ANNUAL ENERGY REPORT

Buildings & Grounds

Factors Affecting Energy Usage



Weather



Facility Use



Building Envelope



Age of Equipment



Changes in Square
Footage



Changes in Building
Occupancy



Consumer Energy
Habits



Appliances and
Electronics



WEATHER DATA

Heating & Cooling Degree Day Comparisons

Year	2017-2018			2018-2019			2019-2020			2020-2021		2021-2022		
Month	Heating	Cooling	Total	Heating	Cooling	Total	Heating	Cooling	Total	Heating	Cooling	Heating	Cooling	Total
July	0	310	310	0	344	344	0	432	432	0	261	55	190	245
August	4	185	189	0	343	343	0	244	244	0	193	40	218	258
September	58	170	228	65	175	240	0	174	174	233	42	144	87	231
October	252	36	288	407	31	438	369	11	380	656	5	352	19	371
November	745	0	745	874	0	874	881	0	881	698	6	887	0	887
December	1186	0	1186	976	0	976	925	0	925	1156	0	1066	0	1066
January	1196	0	1196	1378	0	1378	1036	0	1036	1286	0	1557	0	1557
February	1093	0	1093	1128	0	1128	1041	0	1041	1392	0	1281	0	1281
March	850	0	850	919	0	919	671	0	671	835	0	991	0	991
April	676	2	676	423	5	428	480	1	481	565	9	727	5	732
May	64	159	223	208	40	248	187	79	266	350	56	292	87	397
June	1	241	242	13	171	184	9	296	305	52	192	116	150	266
Totals	6,125	1,103	7,226	6,391	1,109	7,500	5,599	941	6,836	7,223	764	7,508	756	8,264

Degree days are based on the assumption that when the outside temperature is 65°F, we don't need heating or cooling to be comfortable. Degree days are the difference between the daily temperature mean, (high temperature plus low temperature divided by two) and 65°F. If the temperature mean is above 65°F, we subtract 65 from the mean and the result is **Cooling Degree Days**. If the temperature mean is below 65°F, we subtract the mean from 65 and the result is **Heating Degree Days**.



FACILITY REQUESTS (IN HOURS)

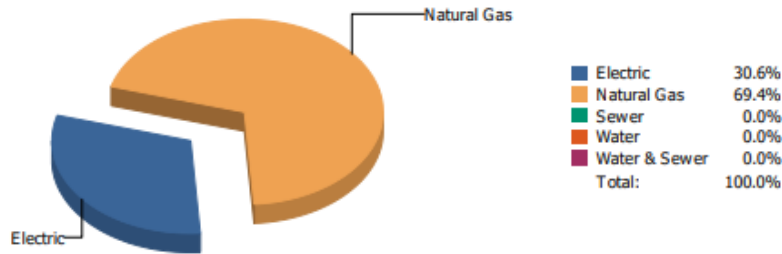
Sites	2019-2020 Totals	2020-2021 Totals	2021-2022 Totals
Greenland	1,390	1,188	1,066
Ixonia	846	800	636
Meadow View	2,670	4,188	3,339
Nature Hill	3,950	4,557	5,034
OHS	11,139	16,698	18,616
Park Lawn	1,071	1,436	1,546
Silver Lake	2,184	3,260	2,637
Summit	1,566	2,254	2,407
OHS East	211	229	130
Total Facility Hours	25,027	34,610	35,411
Percentage of Change from Y to Y		Increase 38%	Increase 2.3%

**Disclaimer – There are many variables that have an effect on facility scheduling requests and reports. This makes it difficult to get an accurate comparison from year to year or even school to school. These reports have been gone through and edited by the B&G Dept. to make them as accurate as possible.*

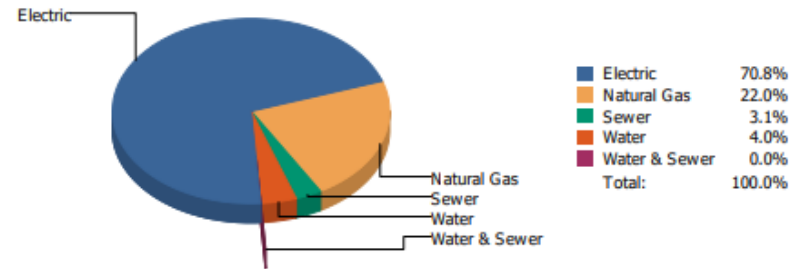
2021-2022 DISTRICT OVERVIEW

Place Summary AN - 07

Energy



Cost



Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place Summary Report						
Area: 1,134,092 SqFt						
ELECTRIC	6,844,603.00 kWh	23,353,785 KBtu	20.592 KBtu/SqFt	\$882,274.58	\$0.129 /kWh	\$0.778 /SqFt
NATURALGAS	528,681.00 THERM	52,868,100 KBtu	46.617 KBtu/SqFt	\$274,140.81	\$0.519 /THERM	\$0.242 /SqFt
SEWER	6,514.00 Kgal			\$38,669.36	\$5.936 /Kgal	\$0.034 /SqFt
WATER	6,943.00 Kgal			\$50,115.59	\$7.218 /Kgal	\$0.044 /SqFt
WATERSEWER	8.50 Kgal			\$327.50	\$38.529 /Kgal	\$0.000 /SqFt
Totals:		76,221,885 KBtu	67.210 KBtu/SqFt	\$1,245,527.84		



2021-2022 Cost Comparisons

Total Cost Per Building: 1 Year

Oconomowoc High School \$385,496	Silver Lake Intermediate School \$142,670	New Meadow View Elementary \$122,818		Summit Elementary School \$79,607		
	Nature Hill Intermediate School \$140,345	Park Lawn Elementary School \$60,607		OCONOMOWOC HIGH SCHOOL EAST CAMPUS \$53,609		Ixonia Elementary School \$51,955
		Greenland Elementary School \$57,064		Old Meadow View Elementary School \$35,353		Athletic Fields \$21,998
						Physical Development Center



FIVE YEAR COMPARISON ELECTRIC USE

Oconomowoc Area School District

Five Year Use Comparison - YY12

Place	Current Floor Area	2018	2019	2020	2021	2022	Change vs. Last Year	Change % vs. Last Year
Usage in: KWH								
Athletic Fields	5,000 SqFt	70,400	103,510	91,960	100,241	57,646	-42,595	-42.5
Greenland Elementary School	63,242 SqFt	355,200	352,410	286,420	299,819	288,092	-11,727	-3.9
Grounds Facility	5,000 SqFt	14,869	15,021	12,371	13,467	12,601	-866	-6.4
Ixonia Elementary School	49,839 SqFt	227,520	245,520	209,280	245,660	280,730	35,070	14.3
Nature Hill Intermediate School	123,017 SqFt	731,813	859,416	720,944	876,419	791,977	-84,442	-9.6
New Meadow View Elementary	117,000 SqFt			447,864	672,033	712,647	40,614	6.0
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt		373,122	378,041	399,933	458,708	58,775	14.7
Oconomowoc High School	352,881 SqFt	2,259,346	2,522,359	2,230,035	2,474,197	2,527,782	53,585	2.2
Old Meadow View Elementary School	89,618 SqFt	326,640	332,760	159,600	164,711	119,307	-45,404	-27.6
Park Lawn Elementary School	74,409 SqFt	335,200	354,424	272,601	339,076	319,605	-19,471	-5.7
Physical Development Center	5,000 SqFt	98,296	104,572	110,645	92,961	95,460	2,499	2.7
Silver Lake Intermediate School	123,017 SqFt	752,882	790,938	666,046	886,685	816,900	-69,785	-7.9
Summit Elementary School	78,069 SqFt	498,710	481,899	404,454	550,660	493,231	-57,429	-10.4
	1,134,092 SqFt	5,670,876	6,535,951	5,990,261	7,115,862	6,974,686	-141,176	-2.0



FIVE YEAR COMPARISON ELECTRIC COST

Oconomowoc Area School District

Five Year Cost Comparison - YY10

Place	Current Floor Area	2018	2019	2020	2021	2022	Change vs. Last Year	Change % vs. Last Year
Athletic Fields	5,000 SqFt	\$8,323	\$17,004	\$17,872	\$20,312	\$18,946	(1,366)	(6.7)
Greenland Elementary School	63,242 SqFt	\$43,024	\$44,740	\$37,891	\$37,212	\$39,776	2,564	6.9
Grounds Facility	5,000 SqFt	\$1,791	\$1,734	\$1,605	\$1,595	\$1,596	2	0.1
Ixonia Elementary School	49,839 SqFt	\$30,887	\$33,485	\$28,956	\$35,325	\$42,402	7,077	20.0
Nature Hill Intermediate School	123,017 SqFt	\$101,314	\$107,435	\$95,106	\$111,902	\$112,894	992	0.9
New Meadow View Elementary	117,000 SqFt			\$57,692	\$95,391	\$105,807	10,417	10.9
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt		\$37,814	\$37,912	\$39,593	\$47,849	8,256	20.9
Oconomowoc High School	352,881 SqFt	\$263,738	\$261,748	\$237,644	\$255,882	\$285,863	29,981	11.7
Old Meadow View Elementary School	89,618 SqFt	\$44,335	\$41,630	\$18,265	\$19,166	\$16,061	(3,105)	(16.2)
Park Lawn Elementary School	74,409 SqFt	\$41,280	\$45,444	\$37,549	\$42,528	\$42,646	118	0.3
Physical Development Center	5,000 SqFt	\$18,760	\$19,103	\$19,319	\$17,483	\$15,603	(1,879)	(10.8)
Silver Lake Intermediate School	123,017 SqFt	\$101,414	\$96,314	\$84,333	\$103,431	\$106,901	3,470	3.4
Summit Elementary School	78,069 SqFt	\$66,919	\$62,912	\$54,336	\$70,289	\$65,809	(4,480)	(6.4)
	1,134,092 SqFt	\$721,785	\$769,364	\$728,480	\$850,108	\$902,153	52,045	6.1



FIVE YEAR COMPARISON NATURAL GAS USE

Oconomowoc Area School District

Five Year Use Comparison - YY12

Place	Current Floor Area	2018	2019	2020	2021	2022	Change vs. Last Year	Change % vs. Last Year
Usage in: THERM								
Greenland Elementary School	63,242 SqFt	25,898	25,437	20,209	25,203	25,421	218	0.9
Grounds Facility	5,000 SqFt	2,645	3,261	3,112	2,946	3,108	162	5.5
Ixonia Elementary School	49,839 SqFt	17,308	21,166	16,548	21,911	25,026	3,115	14.2
Nature Hill Intermediate School	123,017 SqFt	48,490	61,876	52,639	68,957	57,543	-11,414	-16.6
New Meadow View Elementary	117,000 SqFt			50,076	52,815	52,965	150	0.3
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt		9,611	8,798	10,244	10,484	240	2.3
Oconomowoc High School	352,881 SqFt	191,124	206,315	178,396	219,840	193,463	-26,377	-12.0
Old Meadow View Elementary School	89,618 SqFt	42,188	43,553	37,509	41,917	38,669	-3,248	-7.7
Park Lawn Elementary School	74,409 SqFt	20,066	29,037	22,990	26,283	26,207	-76	-0.3
Physical Development Center	5,000 SqFt	3,555	5,009	3,277	2,483	3,317	834	33.6
Silver Lake Intermediate School	123,017 SqFt	57,102	68,140	59,674	74,376	73,828	-548	-0.7
Summit Elementary School	78,069 SqFt	26,559	27,461	22,851	32,159	32,081	-78	-0.2
	1,129,092 SqFt	434,935	500,866	476,079	579,134	542,112	-37,022	-6.4



FIVE YEAR COMPARISON NATURAL GAS COST

Oconomowoc Area School District

Five Year Cost Comparison - YY10

Place	Current Floor Area	2018	2019	2020	2021	2022	Change vs. Last Year	Change % vs. Last Year
Greenland Elementary School	63,242 SqFt	\$12,631	\$12,488	\$10,650	\$14,458	\$13,784	(675)	(4.7)
Grounds Facility	5,000 SqFt	\$1,628	\$1,915	\$1,667	\$2,001	\$2,426	425	21.2
Ixonia Elementary School	49,839 SqFt	\$8,810	\$10,294	\$8,844	\$12,760	\$13,623	863	6.8
Nature Hill Intermediate School	123,017 SqFt	\$22,709	\$27,483	\$25,788	\$36,375	\$29,404	(6,971)	(19.2)
New Meadow View Elementary	117,000 SqFt			\$23,557	\$27,309	\$27,503	194	0.7
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt		\$5,309	\$5,226	\$6,724	\$6,308	(416)	(6.2)
Oconomowoc High School	352,881 SqFt	\$84,328	\$91,116	\$81,761	\$110,421	\$99,091	(11,330)	(10.3)
Old Meadow View Elementary School	89,618 SqFt	\$19,851	\$21,080	\$19,338	\$23,247	\$20,489	(2,757)	(11.9)
Park Lawn Elementary School	74,409 SqFt	\$10,038	\$14,068	\$11,950	\$14,945	\$14,424	(520)	(3.5)
Physical Development Center	5,000 SqFt	\$2,304	\$2,983	\$1,870	\$1,730	\$2,748	1,018	58.8
Silver Lake Intermediate School	123,017 SqFt	\$25,998	\$32,479	\$28,908	\$40,364	\$36,519	(3,845)	(9.5)
Summit Elementary School	78,069 SqFt	\$12,793	\$13,379	\$11,992	\$17,726	\$17,104	(622)	(3.5)
	1,129,092 SqFt	\$201,089	\$232,593	\$231,551	\$308,059	\$283,424	(24,635)	(8.0)



FIVE YEAR COMPARISON WATER USE

Oconomowoc Area School District

Five Year Use Comparison - YY12

Place	Current Floor Area	2018	2019	2020	2021	2022	Change vs. Last Year	Change % vs. Last Year
Usage in: KGAL								
Athletic Fields	5,000 SqFt	1,140	1,115	114	138	505	367	265.9
Greenland Elementary School	63,242 SqFt	846	699	528	553	494	-59	-10.7
Nature Hill Intermediate School	123,017 SqFt	682	715	544	556	678	122	21.9
New Meadow View Elementary	117,000 SqFt			370	520	464	-56	-10.8
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt		179	136	138	188	50	36.2
Oconomowoc High School	352,881 SqFt	3,320	3,098	2,658	2,649	3,308	659	24.9
Park Lawn Elementary School	74,409 SqFt	599	709	519	620	598	-22	-3.5
Physical Development Center	5,000 SqFt	27	21	9	13	56	44	348.0
Silver Lake Intermediate School	123,017 SqFt	593	557	396	450	586	136	30.2
Summit Elementary School	78,069 SqFt	442	421	289	418	434	16	3.8
	989,635 SqFt	7,649	7,514	5,563	6,055	7,311	1,257	20.8



FIVE YEAR COMPARISON WATER COST

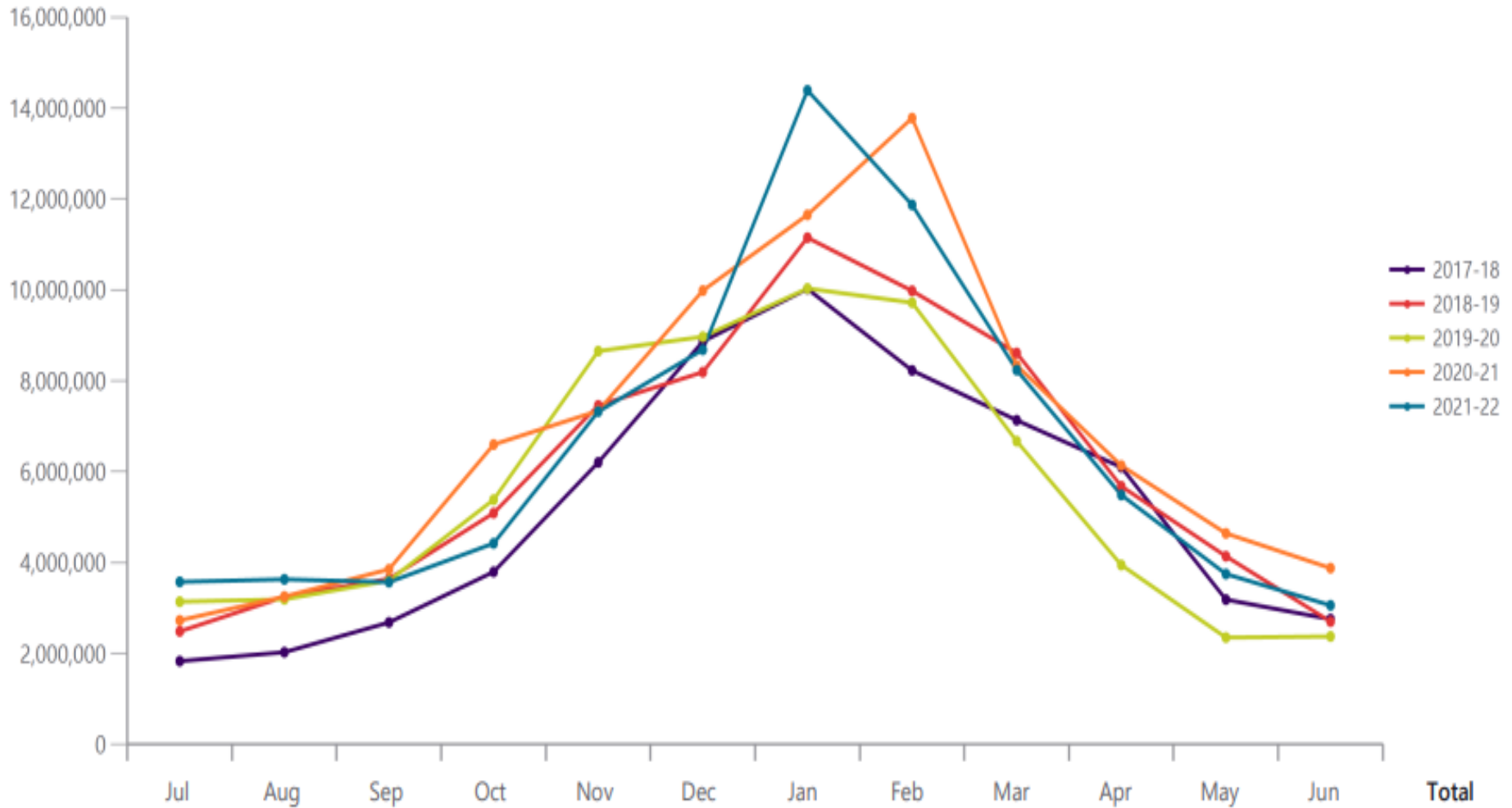
Oconomowoc Area School District

Five Year Cost Comparison - YY10

Place	Current Floor Area	2018	2019	2020	2021	2022	Change vs. Last Year	Change % vs. Last Year
Athletic Fields	5,000 SqFt	\$5,645	\$5,877	\$2,609	\$2,474	\$4,712	2,238	90.4
Greenland Elementary School	63,242 SqFt	\$3,364	\$3,047	\$2,518	\$2,815	\$3,927	1,112	39.5
Nature Hill Intermediate School	123,017 SqFt	\$3,916	\$4,081	\$3,535	\$3,594	\$5,585	1,991	55.4
New Meadow View Elementary	117,000 SqFt			\$2,583	\$3,097	\$4,374	1,277	41.2
OCONOMOWOC HIGH SCHOOL EAST CAMPUS	48,000 SqFt		\$1,475	\$1,521	\$1,537	\$2,482	946	61.5
Oconomowoc High School	352,881 SqFt	\$12,188	\$11,982	\$10,481	\$10,553	\$18,004	7,452	70.6
Park Lawn Elementary School	74,409 SqFt	\$2,805	\$3,096	\$2,491	\$2,830	\$4,353	1,523	53.8
Physical Development Center	5,000 SqFt	\$182	\$162	\$119	\$130	\$376	246	189.6
Silver Lake Intermediate School	123,017 SqFt	\$3,630	\$3,501	\$3,045	\$3,227	\$5,223	1,996	61.8
Summit Elementary School	78,069 SqFt	\$2,527	\$2,456	\$2,020	\$2,455	\$3,386	932	37.9
	989,635 SqFt	\$34,257	\$35,676	\$30,923	\$32,712	\$52,423	19,711	60.3

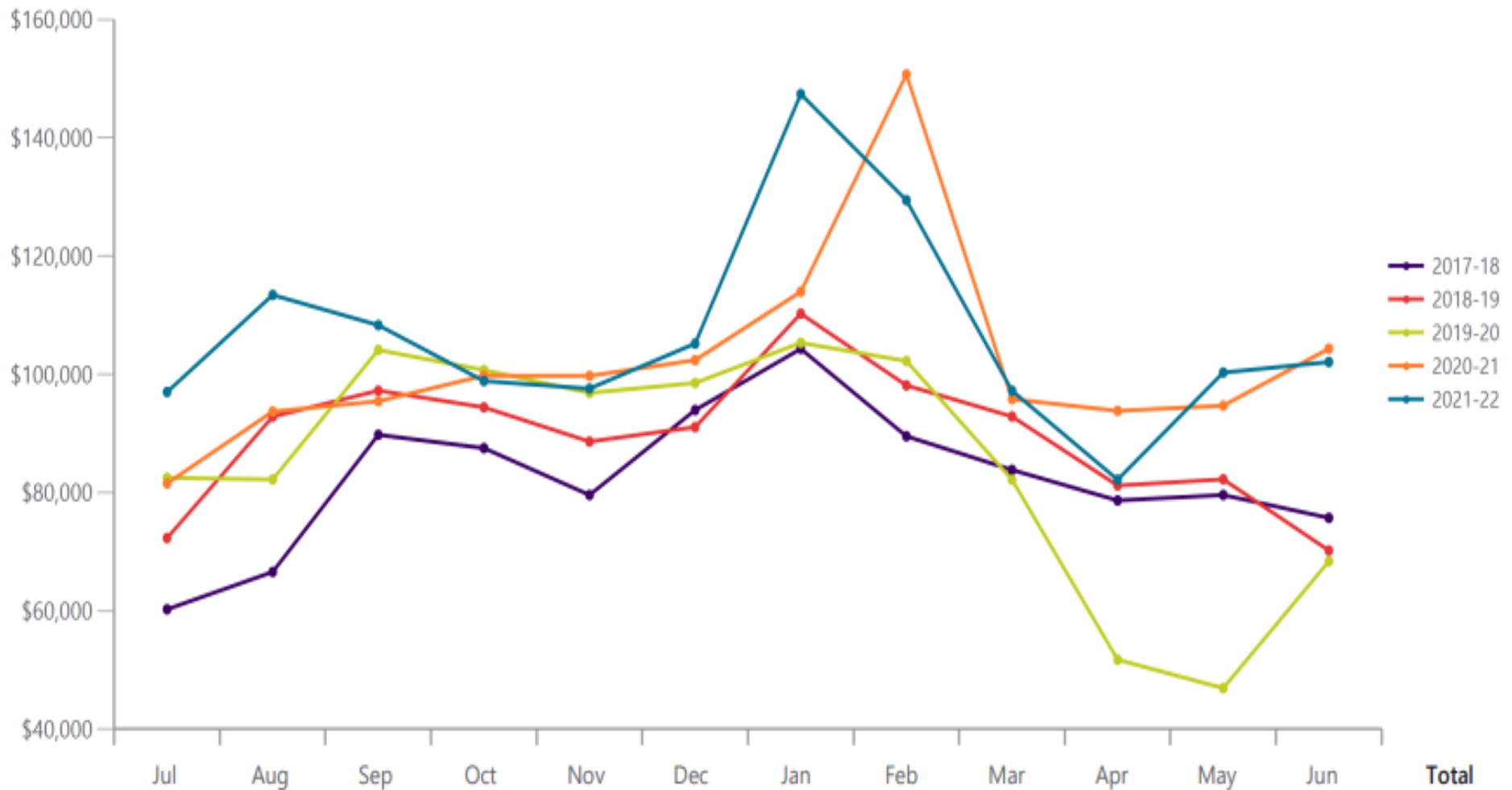
Five Year Energy Use Trend

Monthly Use by Year (Jul - Jun)



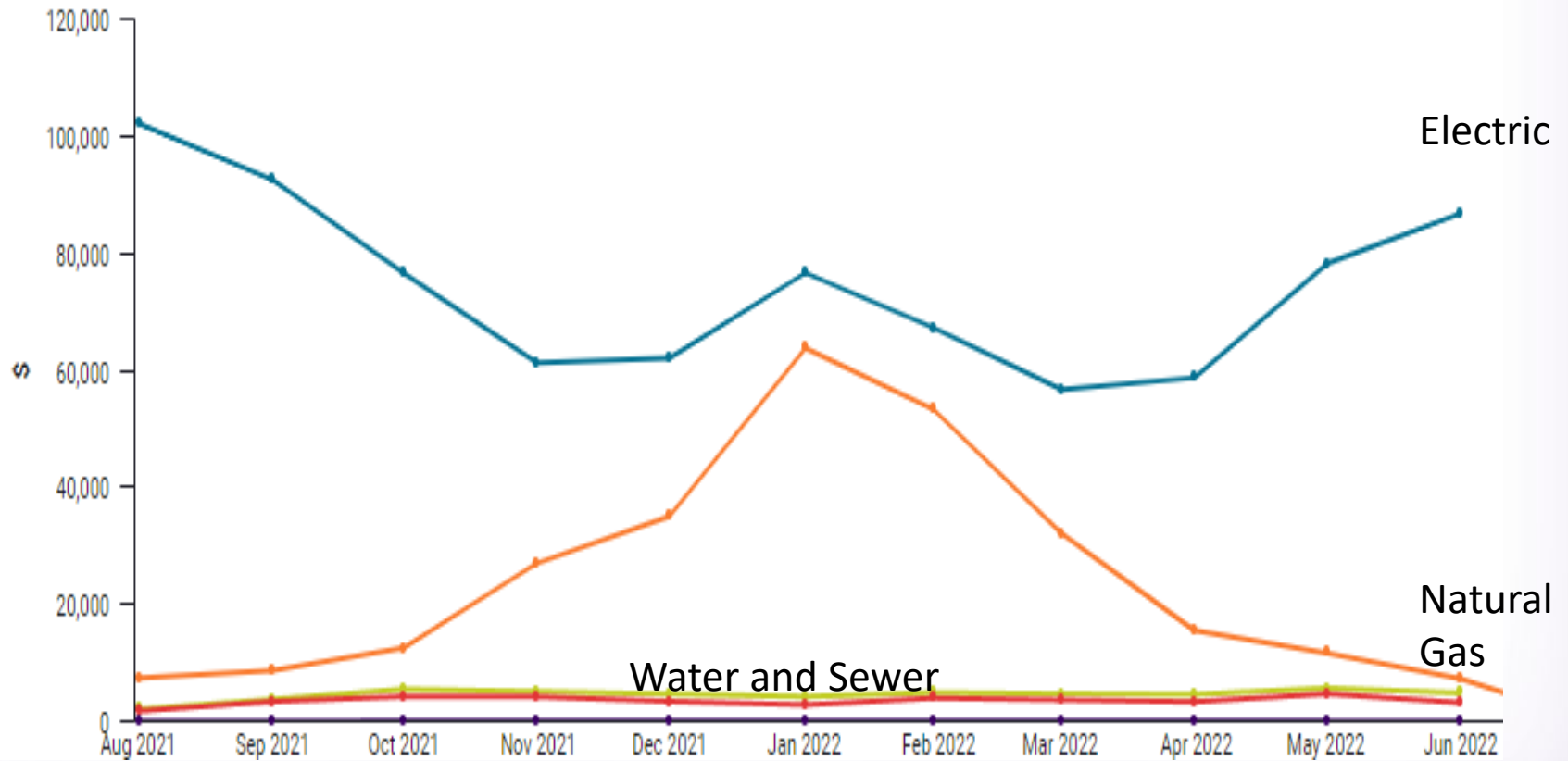
Five Year Energy Cost Trend

Monthly Cost by Year (Jul - Jun)



Commodity Spending Trend

Commodity Spending Trend





TEN YEAR SKYWARD UTILITIES COMPARISON (ACTUAL)

2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
1,032,832	\$1,164,209	\$1,129,218	\$1,041,728	\$1,069,991

2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
\$1,010,991	\$1,145,893	\$1,025,611	\$1,201,430	\$1,314,732

*TOTALS INCLUDE DISTRICT-WIDE NATURAL GAS, ELECTRICITY, WATER, SEWER AND GARBAGE DISPOSAL COSTS FOR THE FISCAL YEAR



2021-2022 Energy Efficiency Projects

- Tune-ups and preventative maintenance on district boilers
- Tune-ups and preventative maintenance on district chillers
- Preventative maintenance on other district equipment
- Cleaning of air handling unit coils
- Incorporated energy efficiency into projects as applicable

Lighting Replacement to LED





Kelly Holtzman and the OHS AP Environment Science students fundraised for purchase of 160 trees to be planted on Earth Day in and around Oconomowoc. Most of the trees were planted around the city by the OHS students with support from the OASD Buildings and Grounds Department and the City of Oconomowoc Parks, Recreation & Forestry Department.

Kelly Holtzman and the AP Environmental Science students won \$2,500 for OHS by winning the Renew Our Schools competition. The students reduced energy usage by 9.2% at OHS during the competition period. The prize money was used to fund new LED lighting being installed in their science room!





THE FUTURE OF OUR ENERGY PROGRAM



Proud to be a
**Sugar
Maple
School**

- Increase visibility of our program
- Continue to identify efficiencies in operations
- Focus on shutdowns to achieve greater savings
- Continue developing an “energy conservation culture”
- Continue to support and collaborate with the OHS Green Team started in 2019-20 by Kelly Holtzman.
- Energy efficiencies in future facility planning, capital projects and site specific projects.
- Continue to investigate future energy savings opportunities and funding options.



TEAM WORK

The success of the program depends on everyone!

Special thanks go to:

- **School Board** for proactively implementing and supporting our program
- **Community** for supporting our energy program
- **Buildings and Grounds Staff** for executing changes in the heating and cooling systems and monitoring our energy use
- **Teachers** for continuing to assist in our efforts for energy conservation
- **Principals and Staff** for coordinating efforts in their schools

Questions?

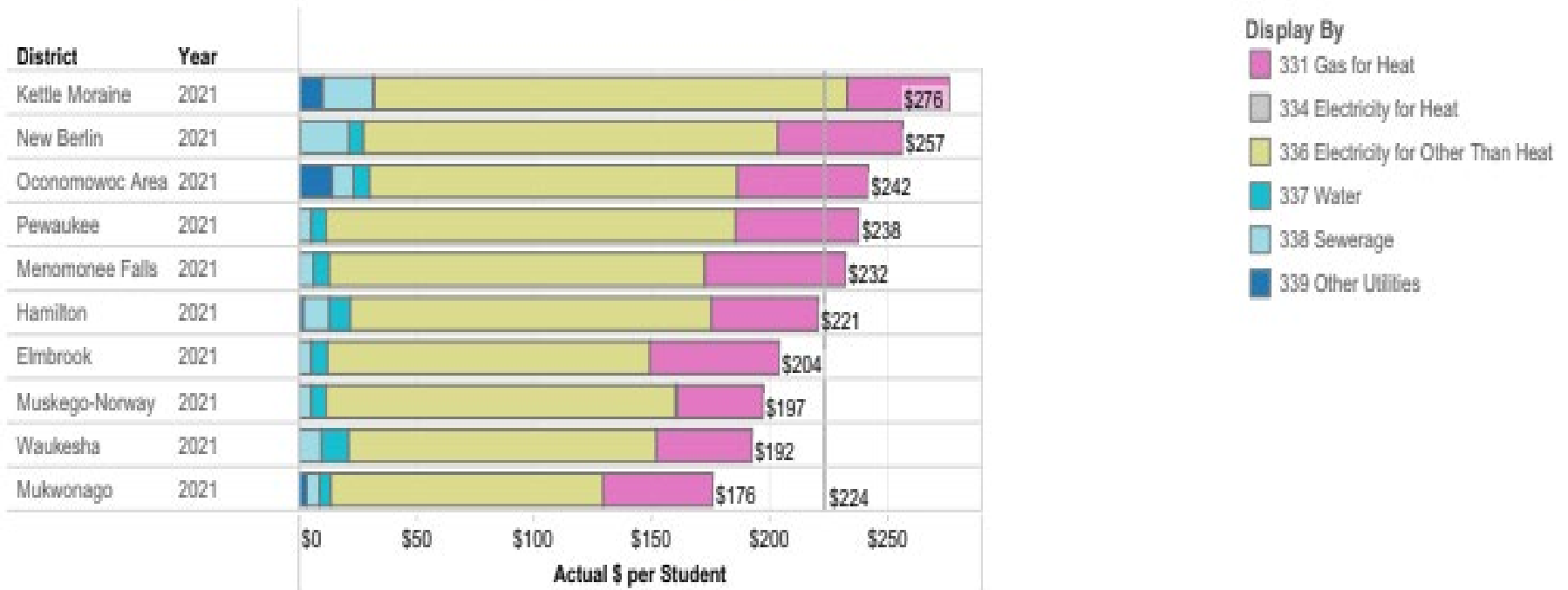


2021-2022 PEER DISTRICTS UTILITY COMPARISONS

Line Item Spending Comparison

Note: "Total Operating Expense" is all expenses from funds 10 & 27

Source: Budget and Annual Reports per DPI

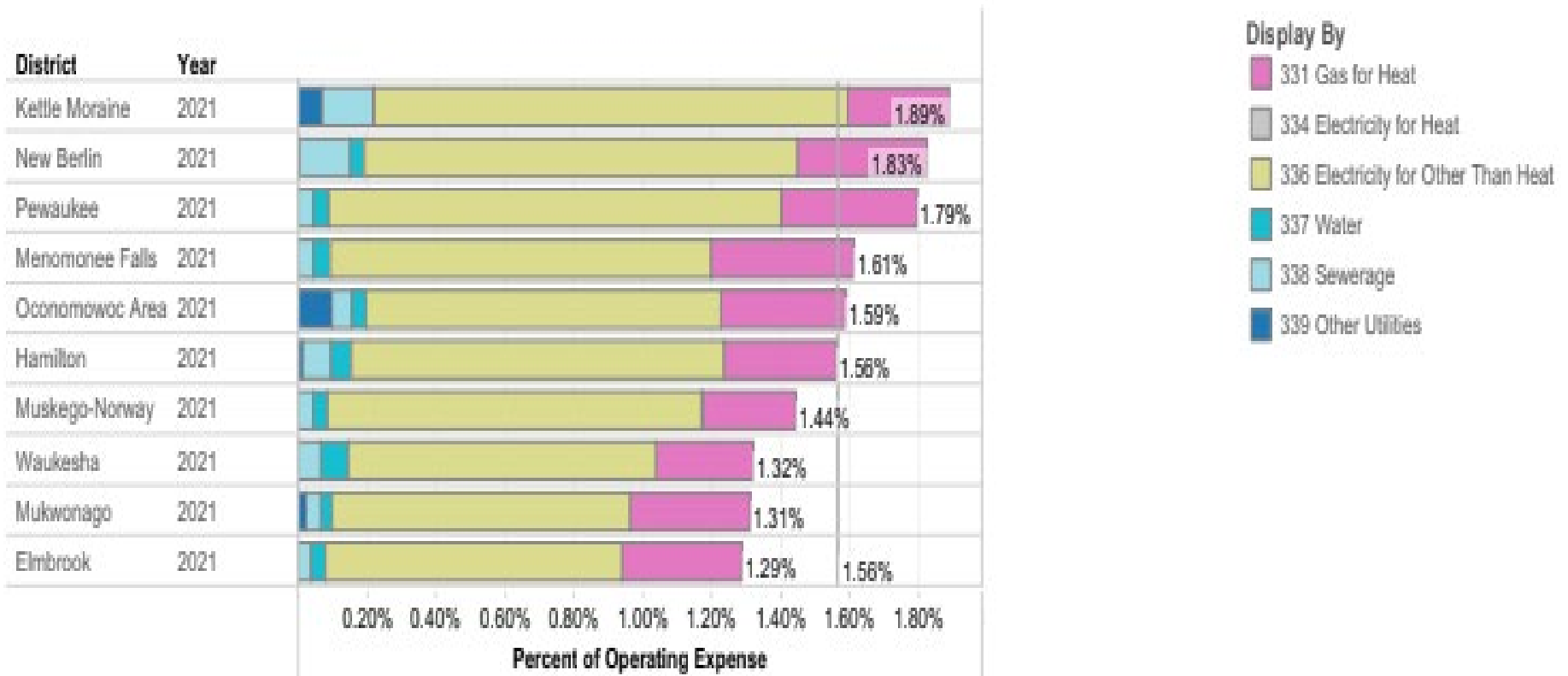


2021-2022 PEER DISTRICTS UTILITY COMPARISONS

Line Item Spending Comparison

Note: "Total Operating Expense" is all expenses from funds 10 & 27

Source: Budget and Annual Reports per DPI





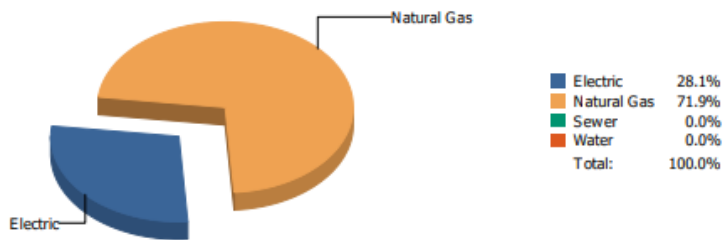
OASD HISTORICAL COST PER SQUARE FOOT

Historical Cost/Sq. Ft (Electric & Gas)	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Oconomowoc High School Main Campus	\$1.09	\$1.04	\$0.91	\$1.00	\$0.90	\$1.03	\$1.08
Oconomowoc High School East Campus	N/A	N/A	N/A	\$0.90	\$0.91	\$0.96	\$1.06
Nature Hill Intermediate School	\$0.98	\$0.94	\$1.00	\$1.09	\$0.98	\$1.21	\$1.15
Silver Lake Intermediate School	\$0.96	\$0.94	\$1.03	\$1.04	\$0.92	\$1.17	\$1.16
Meadow View Elementary School (New)	N/A	N/A	N/A	N/A	\$0.69	\$1.05	\$1.03
Meadow View Elementary School (Old)	\$0.79	\$0.75	\$0.71	\$0.70	\$0.42	\$0.47	\$0.40
Ixonia Elementary School	\$1.03	\$1.01	\$1.09	\$0.87	\$0.76	\$0.97	\$1.06
Summit Elementary School	\$1.12	\$1.05	\$1.02	\$0.98	\$0.84	\$1.13	\$1.04
Greenland Elementary School	\$0.79	\$0.79	\$0.88	\$0.90	\$0.77	\$0.82	\$0.84
Park Lawn Elementary School	\$0.69	\$0.66	\$0.68	\$0.80	\$0.66	\$0.77	\$0.84
OASD	\$1.00	\$0.98	\$0.94	\$0.98	\$0.85	\$1.02	\$1.02
OASD Square Footage	955,477	955,477	955,477	1,017,788	1,134,788	1,134,788	1,134,788

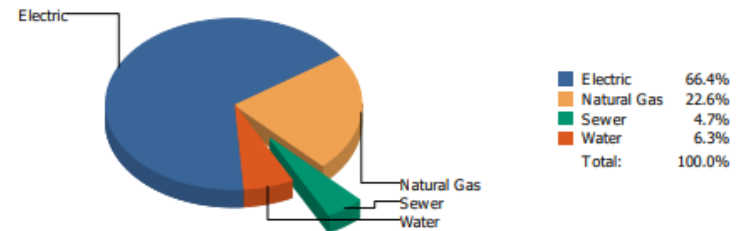
2021-2022 GREENLAND ELEMENTARY

Place Summary AN - 07

Energy



Cost



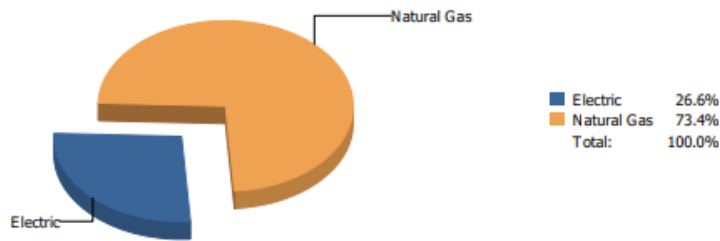
Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [GRN] Greenland Elementary School [BUILDING]						
Area: 63,242 SqFt						
ELECTRIC	288,092.00 kWh	982,970 KBtu	15.543 KBtu/SqFt	\$39,776.08	\$0.138 /kWh	\$0.628 /SqFt
NATURALGAS	25,098.00 THERM	2,509,800 KBtu	39.686 KBtu/SqFt	\$13,529.21	\$0.539 /THERM	\$0.213 /SqFt
SEWER	472.00 Kgal			\$2,801.06	\$5.934 /Kgal	\$0.044 /SqFt
WATER	472.00 Kgal			\$3,788.98	\$8.028 /Kgal	\$0.059 /SqFt
Totals:		3,492,770 KBtu	55.229 KBtu/SqFt	\$59,895.33		



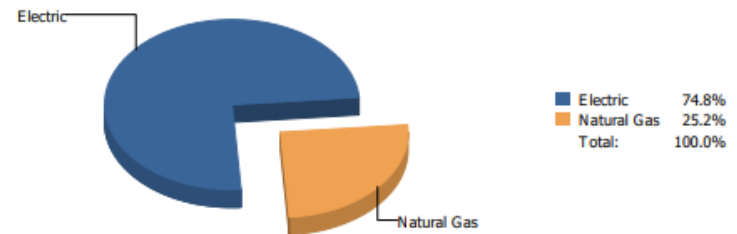
2021-2022 IXONIA ELEMENTARY

Place Summary AN - 07

Energy



Cost

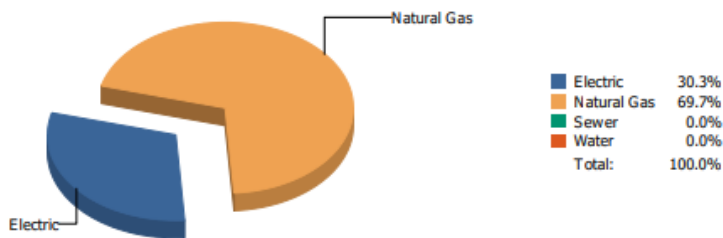


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [IXO] Ixonia Elementary School [BUILDING]						
Area: 49,839 SqFt						
ELECTRIC	261,617.00 kWh	892,637 KBtu	17.910 KBtu/SqFt	\$39,432.10	\$0.151 /kWh	\$0.791 /SqFt
NATURALGAS	24,607.00 THERM	2,460,700 KBtu	49.373 KBtu/SqFt	\$13,319.06	\$0.541 /THERM	\$0.267 /SqFt
Totals:		3,353,337 KBtu	67.283 KBtu/SqFt	\$52,751.16		

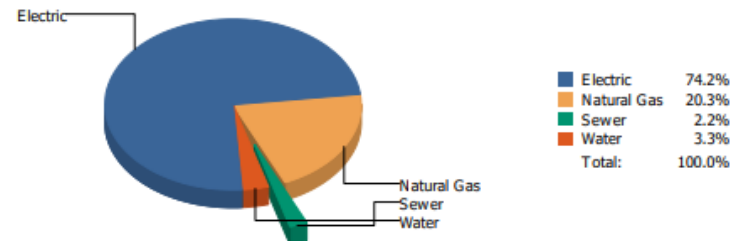
2021-2022 NEW MEADOW VIEW ELEMENTARY

Place Summary AN - 07

Energy



Cost

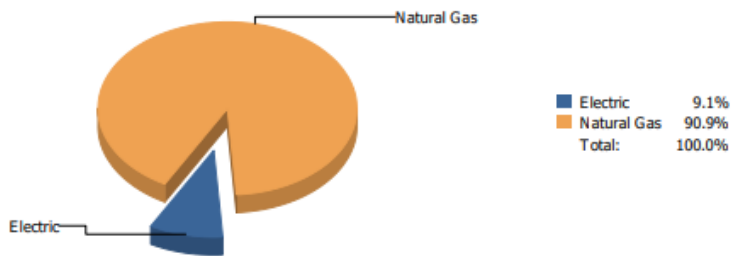


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [MDV_NEW] New Meadow View Elementary [BUILDING]						
Area: 117,000 SqFt						
ELECTRIC	640,601.00 kWh	2,185,731 KBtu	18.681 KBtu/SqFt	\$94,696.54	\$0.148 /kWh	\$0.809 /SqFt
NATURALGAS	50,236.00 THERM	5,023,600 KBtu	42.937 KBtu/SqFt	\$25,951.89	\$0.517 /THERM	\$0.221 /SqFt
SEWER	443.00 Kgal			\$2,785.54	\$6.288 /Kgal	\$0.023 /SqFt
WATER	443.00 Kgal			\$4,188.03	\$9.454 /Kgal	\$0.035 /SqFt
Totals:		7,209,331 KBtu	61.618 KBtu/SqFt	\$127,622.00		

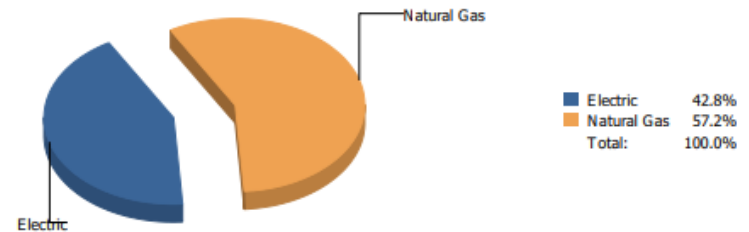
2021-2022 OLD MEADOW VIEW ELEMENTARY

Place Summary AN - 07

Energy



Cost

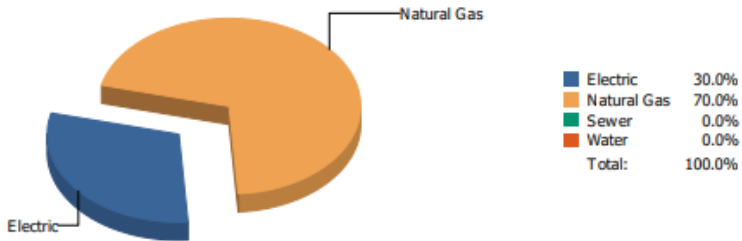


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [MDV_OLD] Old Meadow View Elementary School [BUILDING]						
Area: 89,618 SqFt						
ELECTRIC	113,107.00 kWh	385,921 KBtu	4.306 KBtu/SqFt	\$15,208.58	\$0.134 /kWh	\$0.169 /SqFt
NATURALGAS	38,563.00 THERM	3,856,300 KBtu	43.030 KBtu/SqFt	\$20,340.21	\$0.527 /THERM	\$0.226 /SqFt
Totals:		4,242,221 KBtu	47.337 KBtu/SqFt	\$35,548.79		

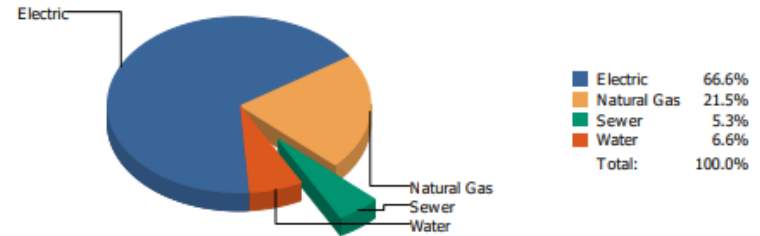
2021-2022 PARK LAWN ELEMENTARY

Place Summary AN - 07

Energy



Cost

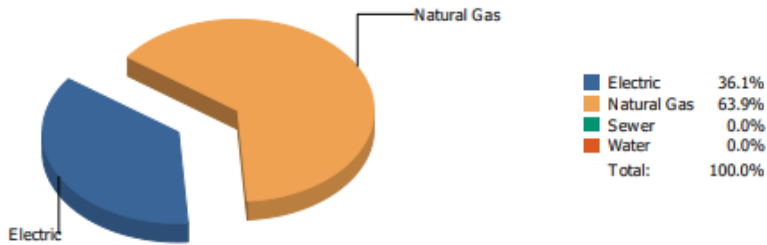


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [PKL] Park Lawn Elementary School [BUILDING]						
Area: 74,409 SqFt						
ELECTRIC	319,605.00 kWh	1,090,492 KBtu	14.655 KBtu/SqFt	\$42,645.60	\$0.133 /kWh	\$0.572 /SqFt
NATURALGAS	25,438.00 THERM	2,543,800 KBtu	34.187 KBtu/SqFt	\$13,768.97	\$0.541 /THERM	\$0.185 /SqFt
SEWER	575.00 Kgal			\$3,389.18	\$5.894 /Kgal	\$0.045 /SqFt
WATER	575.00 Kgal			\$4,211.90	\$7.325 /Kgal	\$0.056 /SqFt
Totals:		3,634,292 KBtu	48.842 KBtu/SqFt	\$64,015.65		

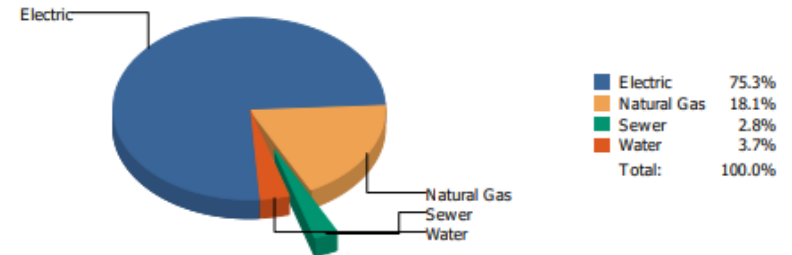
2021-2022 SUMMIT ELEMENTARY

Place Summary AN - 07

Energy



Cost

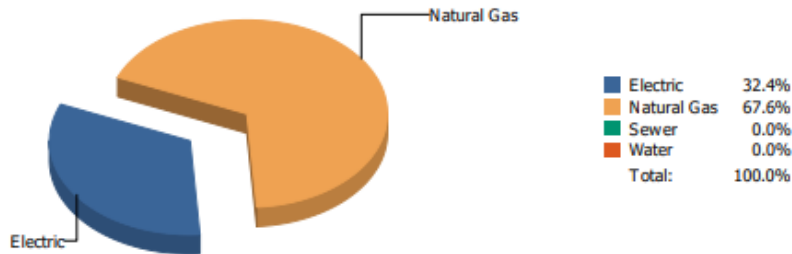


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [SUM] Summit Elementary School [BUILDING]						
Area: 78,069 SqFt						
ELECTRIC	493,231.00 kWh	1,682,904 KBtu	21.557 KBtu/SqFt	\$65,808.86	\$0.133 /kWh	\$0.842 /SqFt
NATURALGAS	29,827.00 THERM	2,982,700 KBtu	38.206 KBtu/SqFt	\$15,854.29	\$0.532 /THERM	\$0.202 /SqFt
SEWER	414.00 Kgal			\$2,466.12	\$5.957 /Kgal	\$0.031 /SqFt
WATER	414.00 Kgal			\$3,233.28	\$7.810 /Kgal	\$0.041 /SqFt
Totals:		4,665,604 KBtu	59.763 KBtu/SqFt	\$87,362.55		

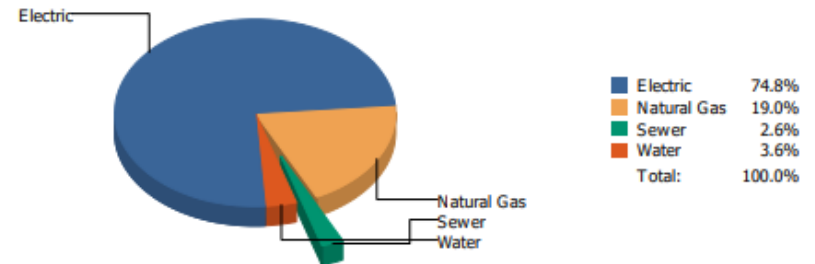
2021-2022 NATURE HILL INTERMEDIATE

Place Summary AN - 07

Energy



Cost

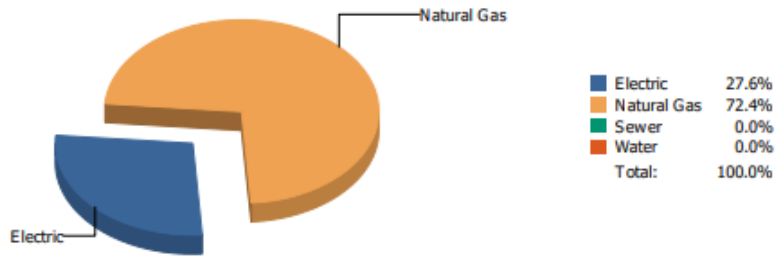


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [NHI] Nature Hill Intermediate School [BUILDING]						
Area: 123,017 SqFt						
ELECTRIC	791,977.00 kWh	2,702,226 KBtu	21.966 KBtu/SqFt	\$112,894.21	\$0.143 /kWh	\$0.917 /SqFt
NATURALGAS	56,376.00 THERM	5,637,600 KBtu	45.828 KBtu/SqFt	\$28,601.48	\$0.507 /THERM	\$0.232 /SqFt
SEWER	670.00 Kgal			\$3,960.62	\$5.911 /Kgal	\$0.032 /SqFt
WATER	670.00 Kgal			\$5,412.97	\$8.079 /Kgal	\$0.044 /SqFt
Totals:		8,339,826 KBtu	67.794 KBtu/SqFt	\$150,869.28		

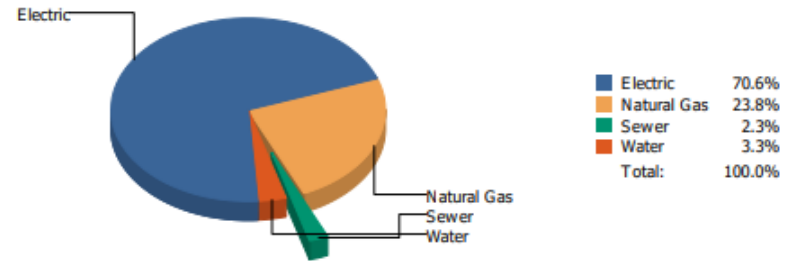
2021-2022 SILVER LAKE INTERMEDIATE

Place Summary AN - 07

Energy



Cost

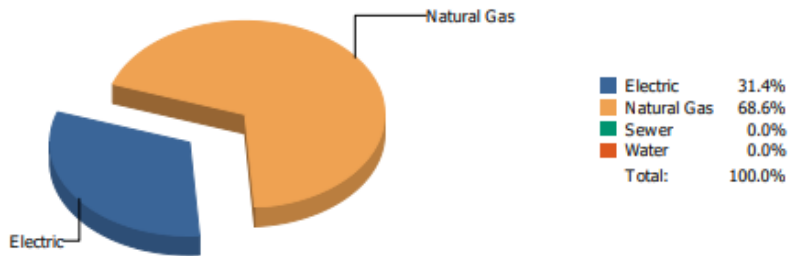


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [SLI] Silver Lake Intermediate School [BUILDING]						
Area: 123,017 SqFt						
ELECTRIC	816,900.00 kWh	2,787,263 KBtu	22.658 KBtu/SqFt	\$106,900.52	\$0.131 /kWh	\$0.868 /SqFt
NATURALGAS	73,141.00 THERM	7,314,100 KBtu	59.456 KBtu/SqFt	\$35,944.66	\$0.491 /THERM	\$0.292 /SqFt
SEWER	581.00 Kgal			\$3,431.73	\$5.907 /Kgal	\$0.027 /SqFt
WATER	582.00 Kgal			\$5,065.73	\$8.704 /Kgal	\$0.041 /SqFt
Totals:		10,101,363 KBtu	82.114 KBtu/SqFt	\$151,342.64		

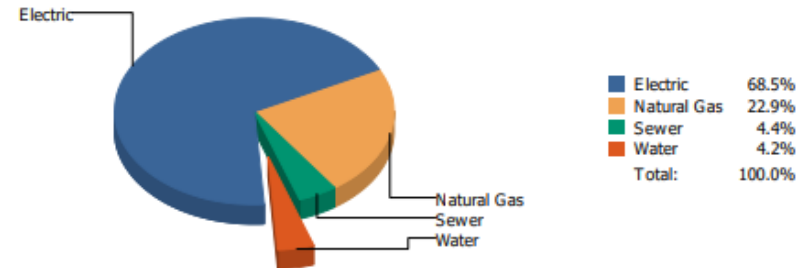
2021-2022 OCONOMOWOC HIGH SCHOOL

Place Summary AN - 07

Energy



Cost

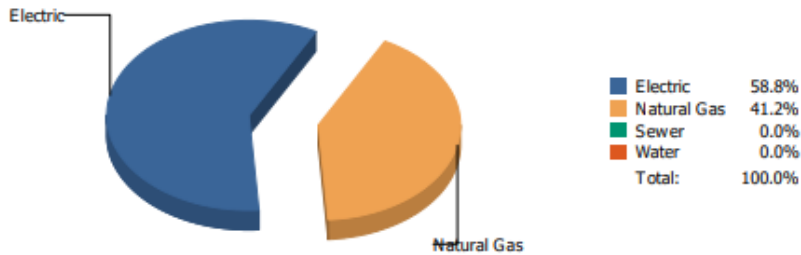


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [OHS_1] Oconomowoc High School [BUILDING]						
Area: 352,881 SqFt						
ELECTRIC	2,527,782.00 kWh	8,624,792 KBtu	24.441 KBtu/SqFt	\$285,862.67	\$0.113 /kWh	\$0.810 /SqFt
NATURALGAS	188,578.00 THERM	18,857,800 KBtu	53.440 KBtu/SqFt	\$95,590.33	\$0.507 /THERM	\$0.270 /SqFt
SEWER	3,156.00 Kgal			\$18,290.92	\$5.796 /Kgal	\$0.051 /SqFt
WATER	3,156.00 Kgal			\$17,310.60	\$5.485 /Kgal	\$0.049 /SqFt
Totals:		27,482,592 KBtu	77.881 KBtu/SqFt	\$417,054.52		

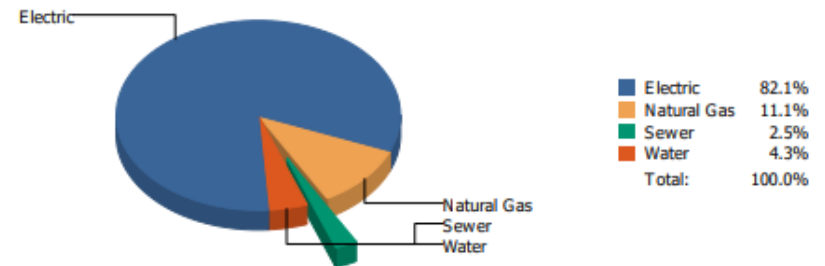
2020-2021 OHS East Campus

Place Summary AN - 07

Energy



Cost

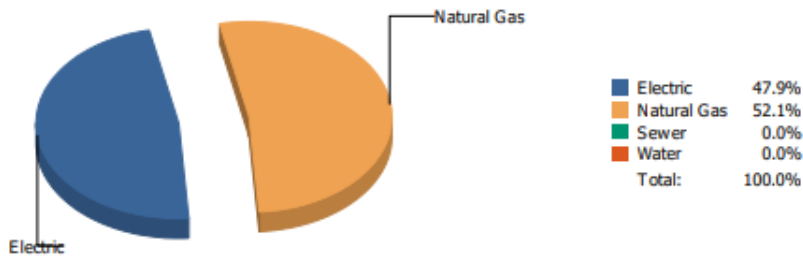


Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [OHS_EC] OCONOMOWOC HIGH SCHOOL EAST CAMPUS [BUILDING]						
Area: 48,000 SqFt						
ELECTRIC	435,181.00 kWh	1,484,838 KBtu	30.934 KBtu/SqFt	\$45,040.12	\$0.103 /kWh	\$0.938 /SqFt
NATURALGAS	10,383.00 THERM	1,038,300 KBtu	21.631 KBtu/SqFt	\$6,069.85	\$0.585 /THERM	\$0.126 /SqFt
SEWER	184.00 Kgal			\$1,368.32	\$7.437 /Kgal	\$0.028 /SqFt
WATER	184.00 Kgal			\$2,379.84	\$12.934 /Kgal	\$0.049 /SqFt
Totals:		2,523,138 KBtu	52.565 KBtu/SqFt	\$54,858.13		

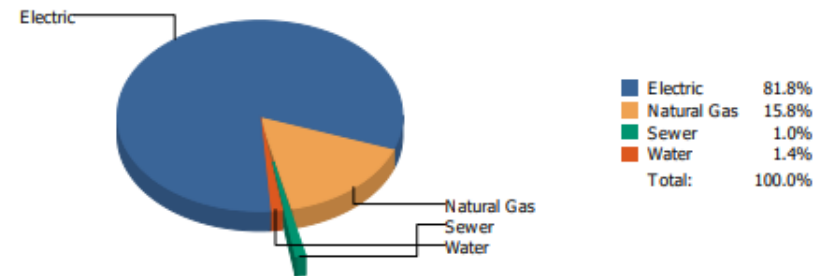
2021-2022 PHYSICAL DEVELOPMENT CENTER

Place Summary AN - 07

Energy



Cost



Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [PDC] Physical Development Center [BUILDING]						
Area: 5,000 SqFt						
ELECTRIC	89,354.00 kWh	304,876 KBtu	60.975 KBtu/SqFt	\$14,196.09	\$0.159 /kWh	\$2.839 /SqFt
NATURALGAS	3,317.00 THERM	331,700 KBtu	66.340 KBtu/SqFt	\$2,736.83	\$0.825 /THERM	\$0.547 /SqFt
SEWER	19.00 Kgal			\$175.87	\$9.256 /Kgal	\$0.035 /SqFt
WATER	19.00 Kgal			\$246.41	\$12.969 /Kgal	\$0.049 /SqFt
Totals:		636,576 KBtu	127.315 KBtu/SqFt	\$17,355.20		

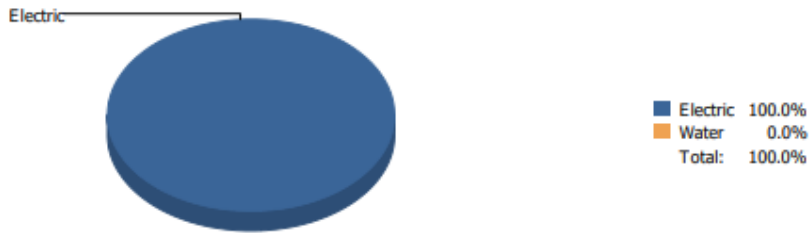


2020-2021 ATHLETIC FIELDS FOREVER

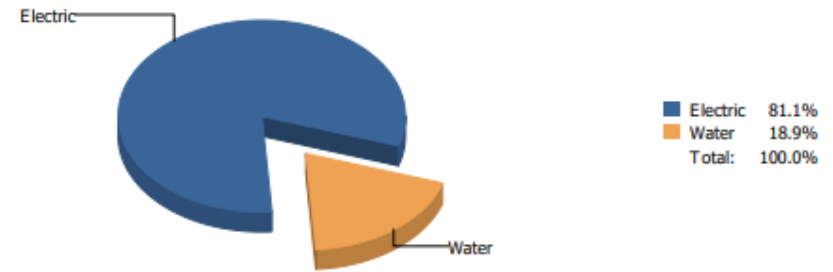
Oconomowoc Area School District

Place Summary AN - 07

Energy



Cost



Commodity	Common Use	Energy Use	Energy Use / Area	Total Cost	Cost / Unit	Cost / Area
Place: [AFF] Athletic Fields [BUILDING]						
Area: 5,000 SqFt						
ELECTRIC	55,413.00 kWh	189,069 KBtu	37.814 KBtu/SqFt	\$18,331.60	\$0.331 /kWh	\$3.666 /SqFt
WATER	428.00 Kgal			\$4,277.85	\$9.995 /Kgal	\$0.855 /SqFt
Totals:		189,069 KBtu	37.814 KBtu/SqFt	\$22,609.45		



POTENTIAL ENERGY REDUCTION PROJECT COST ESTIMATES

Potential Project	Site	Expected Cost	Expected Grants and/or Rebates	Net Cost	Payback Period (Years)	Notes:	Estimated Annual Savings	Life of Product	Warranty
Solar Array (433.2 kW-DC System) Option #1 (Field House & PDC Roofs)	OHS Main Campus	\$676,658.40	\$100,000.00	\$576,658.40	12.8	Installed on roof of Field House and PDC only. Age of roofing a concern. 14 years of life expectancy remain. Roof replacement costs estimated at \$325,000.	\$40,120.00	25+ years	5 years on workmanship. 10 years on modules.
Solar Array (1130.8 kW-DC System) Option #2 (Max System)	OHS Main Campus	\$1,649,837.20	\$100,000.00	\$1,549,837.20	13.6	Max system that can fit on OHS. Age of roofing a concern. Life expectancy remaining range from 2-14 years. Roof replacements estimated at \$3.0M.	\$100,885.00	25+ years	5 years on workmanship. 10 years on modules.
Solar Array (71.6 kW-DC System)	OHS East Campus	\$138,044.80	\$41,740.00	\$96,304.80	12.4	Roof life expectancy 27+ years.	\$6,986.00	25+ years	5 years on workmanship. 10 years on modules.
Solar Array (146.4 kW-DC System)	Meadow View ES	\$260,738.40	\$61,568.00	\$199,170.40	12.9	Roof life expectancy 28+ years.	\$13,787.00	25+ years	5 years on workmanship. 10 years on modules.
Retro-Door-Kit LED Lighting Replacement (Interior Lighting)	OHS Main Campus	\$398,257.69	\$54,399.00	\$343,858.69	13.2		\$26,054.41	35 years	5 years
Retro-Door-Kit LED Lighting Replacement (Interior Lighting)	Nature Hill Intermediate	\$249,894.49	\$31,706.48	\$218,188.01	7.47		\$28,305.59	35 years	5 years
Retro-Door-Kit LED Lighting Replacement (Interior Lighting)	Silver Lake Intermediate	\$249,894.49	\$31,706.48	\$218,188.01	7.47		\$28,305.59	35 years	5 years

**Please be aware that the budgetary numbers were provided in early March before covid caused changes to many product and material costs.*