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BENCHMARKING

School Benchmarking Report for

Menasha Joint School District

Menasha Joint School District,

Thank you for participating in Focus on Energy's School Benchmarking Initiative!

Focus on Energy serves K-12 schools across the state through its Agriculture, Schools and Government Program. The following analysis is provided by Focus on Energy as a service to Wisconsin K-12 public and private schools. The primary goals of this analysis are to:

- Help you understand how your buildings are doing relative to similar schools
- Identify and implement opportunities for improving operations and reducing costs in your district so that more of your budget can be spent in the classroom

Our analysis is based on school building descriptions you provided including size, number of students, types of heating and cooling used, cooking facilities, etc. In addition, we used your most recent utility bills to assess your electricity and heating fuel consumption. All of this information was compared against three sets of school energy data:

- B3 Benchmarking – each building is scored based on potential savings relative to the current energy code
- ENERGY STAR® – each building is measured to buildings of similar properties
- Peer Comparison – each building is compared to other Wisconsin schools participating in this benchmarking study

A user account has been created for you at https://focusonenergy.b3benchmarking.com. First time visitors, please visit https://focusonenergy.b3benchmarking.com/Password-Reminder to request a password key and establish your account. Once logged in you will have access to a variety of metrics, along with the ability to adjust your building and meter data.

The following report identifies the magnitude of potential energy savings. If you are interested in pursuing a project or have further questions, visit www.focusonenergy.com/ea-map to find your local Energy Advisor or call the Agriculture, Schools and Government Program at 888.947.7828.

Thank you again for participating. We hope the following information will be helpful to your district for years to come.

Sincerely,

Heather Feigum

Heather Feigum, Program Manager
Focus on Energy Agriculture, Schools and Government Program

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BENCHMARKING

Quick Start Guide

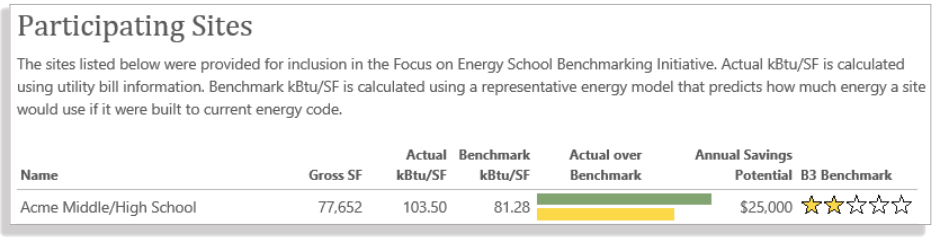
Use this guide to walk you through each item in the report, what it means and how to use the information. In this report you will find a District Summary and a report for each building that is participating in the study.

District Summary

This report details all the buildings you have submitted data for in the benchmarking study. Use this site summary to prioritize the buildings that should be evaluated first for energy savings potential. Focus on buildings with the lowest B3 Benchmark ratings.

Participating Sites

Provides details of the actual energy usage and benchmark energy usage for each building, the B3 Benchmark result, and the energy savings potential at the building.

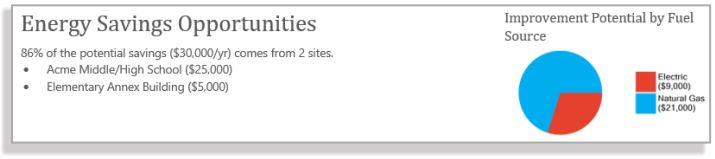

Participating Sites

The sites listed below were provided for inclusion in the Focus on Energy School Benchmarking Initiative. Actual kBtu/SF is calculated using utility bill information. Benchmark kBtu/SF is calculated using a representative energy model that predicts how much energy a site would use if it were built to current energy code.

Name	Gross SF	Actual kBtu/SF	Benchmark kBtu/SF	Actual over Benchmark	Annual Savings Potential	B3 Benchmark
Acme Middle/High School	77,652	103.50	81.28		$25,000	★★☆☆☆

- The 'Actual kBtu/SF' value is a result of all electric and gas usage converted to kBtu and divided by the total square footage provided for the building (represented by the green bar in the Actual over Benchmark graph).
- The 'Benchmark kBtu/SF' estimates the amount of energy a similar building type would use if built to current code, which references ASHRAE 90.1-2013 standards (represented by the yellow bar in the Actual over Benchmark graph).
- The Annual Savings Potential is an estimate of the dollar savings attainable if the building was operating 15% more efficiently than code.
- The B3 Benchmark score is reported in a five-star system. A five-star rating translates to a school using the lowest amount of energy compared to building code. A two-and-a-half-star rating translates to the school using the same amount as code would require, and any less than two and a half stars indicates the school is using more energy than code.

Energy Savings Opportunities



Each building that is using more energy than code will show energy savings potential. Keep in mind, even if there is no energy savings listed for your site - there is always room for improvement. Work with your energy advisor to help identify savings beyond the "low hanging fruit". Energy Savings Opportunities are reported if the building uses more than 15% less than the current energy code. For example - if your building uses the same amount of energy as the benchmark, there is still 15% energy savings available because it is feasible to achieve 15% better than code with current technologies. The pie chart shows the amount of savings potential by fuel source which can help prioritize which technologies to upgrade.

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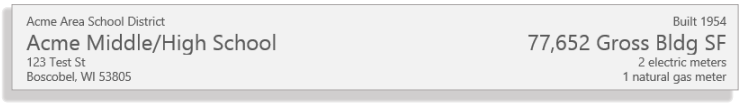
B3 BENCHMARKING

Quick Start Guide

Use this guide to walk you through each item in the report, what it means and how to use the information. In this report you will find a District Summary and a report for each building that is participating in the study.

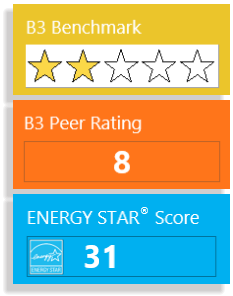
Building Summary

This section details the building information provided to Focus on Energy to analyze the building. If something looks wrong in this section, please contact your energy advisor to get it updated as the data here will change the report and scores.

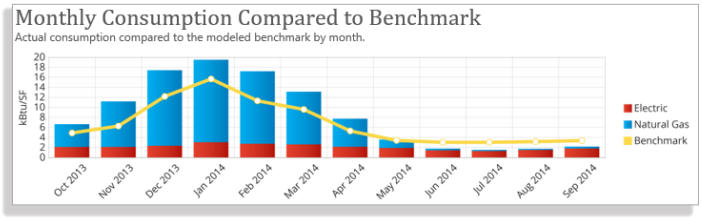


B3 Benchmark, Peer Rating and ENERGY STAR® Score

There are three scores listed for each building. The B3 Benchmark score was also reported on the district summary and compares the building data to the current energy code. The B3 Peer Rating is reported as a number between 1 to 100 with 50 being average of Wisconsin Schools participating in this study. Higher than 50 means your school is using less energy than a typical Wisconsin school and lower than 50 means your school is using more energy than a typical Wisconsin school. The ENERGY STAR score is reported as a number between 1 and 100. A score of 50 translates to using the average amount of energy. Higher than 50 means a customer uses less energy than similar properties and lower than 50 means a customer uses more energy than like properties.



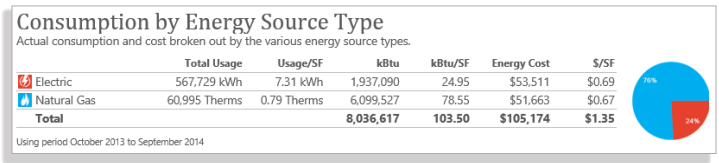
Monthly Consumption Compared to Benchmark



The Monthly Consumption graph shows the amount of energy broken out by fuel type used to heat, cool and operate the building each month of the year. Using an engineered model of yearly consumption of a typical facility built to code, the yellow benchmark line can help you identify which energy source is dominating energy charges and at what time of year you are using too much.

Consumption by Energy Source Type

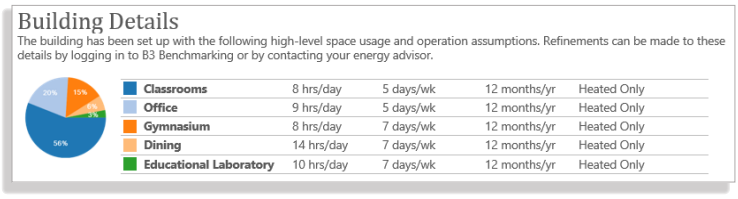
This table details the total energy used by fuel, how much is spent in the previous 12 months on that fuel, and the usage breakdown for that building. Use this section to identify the energy source you should be focusing on for your next upgrade.


Consumption by Energy Source Type
Actual consumption and cost broken out by the various energy source types.

	Total Usage	Usage/SF	kBtu	kBtu/SF	Energy Cost	$/SF
Electric	567,729 kWh	7.31 kWh	1,937,090	24.95	$53,511	$0.69
Natural Gas	60,995 Therms	0.79 Therms	6,099,527	78.55	$51,663	$0.67
Total			**8,036,617**	**103.50**	**$105,174**	**$1.35**

Using period October 2013 to September 2014

Building Details


Building Details
The building has been set up with the following high-level space usage and operation assumptions. Refinements can be made to these details by logging in to B3 Benchmarking or by contacting your energy advisor.

Classrooms	8 hrs/day	5 days/wk	12 months/yr	Heated Only
Office	9 hrs/day	5 days/wk	12 months/yr	Heated Only
Gymnasium	8 hrs/day	7 days/wk	12 months/yr	Heated Only
Dining	14 hrs/day	7 days/wk	12 months/yr	Heated Only
Educational Laboratory	10 hrs/day	7 days/wk	12 months/yr	Heated Only

This section shows the assumptions of space type that are used for calculating the benchmarks for your building. If an assumption is incorrect, please contact your energy advisor and they will assist you in updating it in the B3 software.

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BENCHMARKING

Menasha Joint School District — 712,649 Gross Bldg SF

Participating Sites

The sites listed below were provided for inclusion in the Focus on Energy School Benchmarking Initiative. Actual kBtu/SF is calculated using utility bill information. Benchmark kBtu/SF is calculated using a representative energy model that predicts how much energy a site would use if it were built to current energy code.

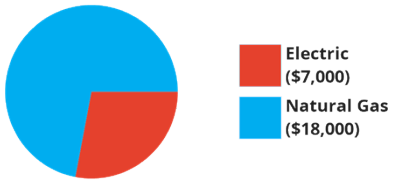
Name	Gross SF	Actual kBtu/SF	Benchmark kBtu/SF	Actual over Benchmark	Annual Pot. Savings	B3 Benchmark
Jefferson Elementary School	39,301	71.69	58.81		$6,000	★★☆☆☆
Clovis Grove Elementary School	86,480	57.54	58.97		$6,000	★★★☆☆
Banta School	36,488	57.56	62.42		$4,000	★★★☆☆
Menasha High School	274,729	56.45	61.53		$9,000	★★★☆☆
Nicolet Elementary School	27,665	57.09	73.18		$1,000	★★★☆☆
Gegan Elementary School	51,480	45.95	62.04		-	★★★½☆
Butte des Morts Elementary School	81,548	40.91	55.66		$1,000	★★★½☆
Maplewood Middle School	114,958	40.47	57.83		-	★★★½☆

Energy Savings Opportunities

93 % of the potential savings ($25,000/yr) comes from 4 sites.

- Menasha High School ($9,000)
- Clovis Grove Elementary School ($6,000)
- Jefferson Elementary School ($6,000)
- Banta School ($4,000)

Improvement Potential by Fuel Source



Even if some or all sites indicate no savings potential compared to code, there's always room for savings. Contact your energy advisor to discuss savings opportunities for your sites.

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BENCHMARKING

Menasha Joint School District
Banta School
328 Sixth St
Menasha, WI 54952

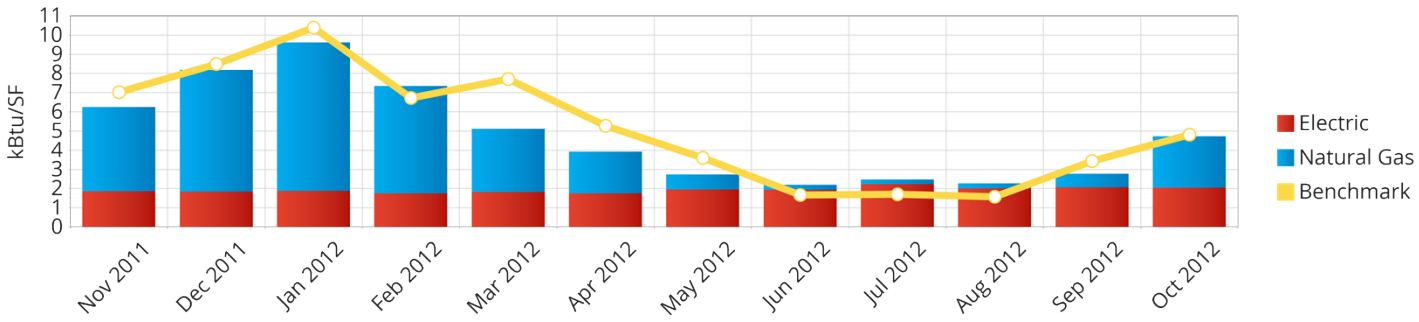
Built 1960
36,488 Gross Bldg SF
2 electric meters
1 natural gas meter

B3 Benchmark
This site is using slightly less energy than the B3 Benchmark.

B3 Peer Rating
46
This site is ranked in the lower 46th percentile amongst 301 similar sites.

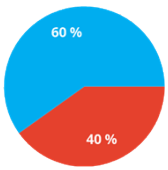
ENERGY STAR® Score
48
This site has received an ENERGY STAR score of 48

Monthly Consumption Compared to Benchmark
Actual consumption compared to the modeled benchmark by month.



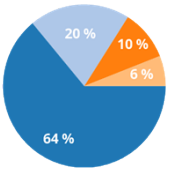
Consumption by Energy Source Type
Actual consumption and cost broken out by the various energy source types.

	Total Usage	Usage/SF	kBtu	kBtu/SF	Energy Cost	$/SF
Electric	246,992 kWh	6.77 kWh	842,738	23.10	$25,429	$0.70
Natural Gas	12,577 Therms	0.34 Therms	1,257,668	34.47	$8,882	$0.24
Total			**2,100,406**	**57.56**	**$34,311**	**$0.94**



Using period November 2011 to October 2012

Building Details
The building has been set up with the following high-level space usage and operation assumptions. Refinements can be made to these details by logging in to B3 Benchmarking or by contacting your energy advisor.



Classrooms	8 hrs/day	5 days/wk	9 months/yr	Heated And Cooled
Office	9 hrs/day	5 days/wk	12 months/yr	Heated And Cooled
Gymnasium	8 hrs/day	5 days/wk	9 months/yr	Heated Only
Dining	14 hrs/day	5 days/wk	9 months/yr	Heated Only

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BENCHMARKING

Menasha Joint School District

Butte des Morts Elementary School

501 Tayco St
Menasha, WI 54952

Built 1927

81,548 Gross Bldg SF

1 electric meter
1 natural gas meter

B3 Benchmark

This site is using slightly less energy than the B3 Benchmark.

B3 Peer Rating

70

This site is ranked in the upper 70th percentile amongst 301 similar sites.

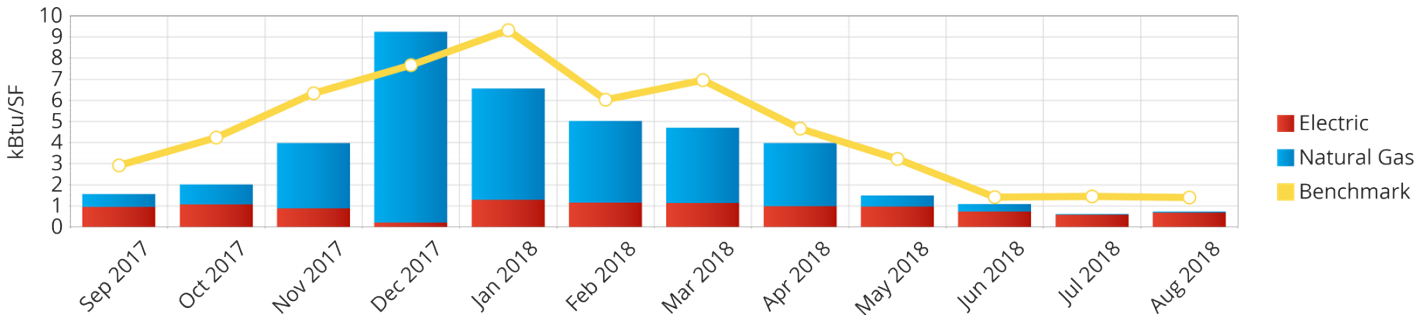
ENERGY STAR® Score

91

This site has received an ENERGY STAR score of 91

Monthly Consumption Compared to Benchmark

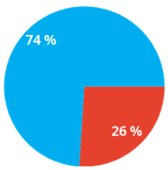
Actual consumption compared to the modeled benchmark by month.



Consumption by Energy Source Type

Actual consumption and cost broken out by the various energy source types.

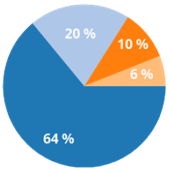
	Total Usage	Usage/SF	kBtu	kBtu/SF	Energy Cost	$/SF
Electric	254,208 kWh	3.12 kWh	867,358	10.64	$27,864	$0.34
Natural Gas	24,687 Therms	0.30 Therms	2,468,651	30.27	$13,950	$0.17
Total			**3,336,009**	**40.91**	**$41,814**	**$0.51**



Using period September 2017 to August 2018

Building Details

The building has been set up with the following high-level space usage and operation assumptions. Refinements can be made to these details by logging in to B3 Benchmarking or by contacting your energy advisor.



Classrooms	8 hrs/day	5 days/wk	9 months/yr	Heated Only
Office	9 hrs/day	5 days/wk	12 months/yr	Heated And Cooled
Gymnasium	8 hrs/day	5 days/wk	9 months/yr	Heated Only
Dining	14 hrs/day	5 days/wk	9 months/yr	Heated Only

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BENCHMARKING

Menasha Joint School District

Clovis Grove Elementary School

974 9th St
Menasha, WI 54952

Built 2002

86,480 Gross Bldg SF

1 electric meter
2 natural gas meters

B3 Benchmark

This site is using slightly less energy than the B3 Benchmark.

B3 Peer Rating

38

This site is ranked in the lower 38th percentile amongst 301 similar sites.

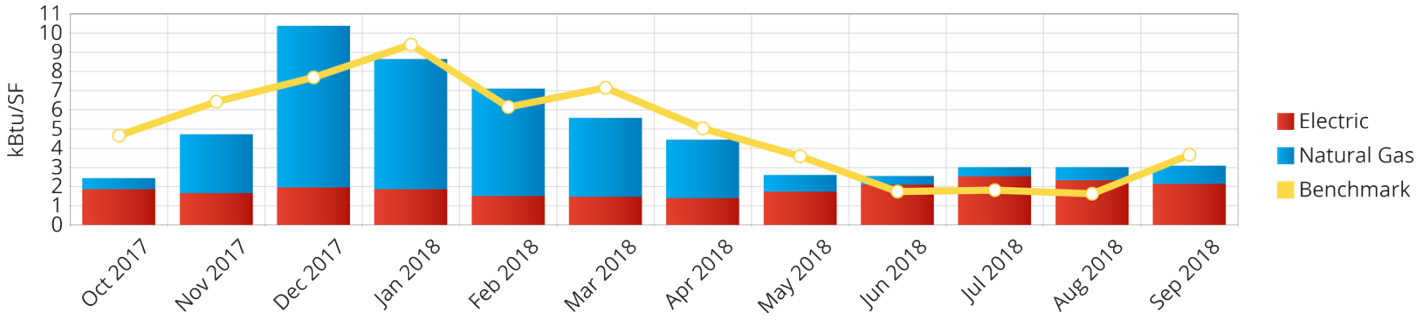
ENERGY STAR® Score

63

This site has received an ENERGY STAR score of 63

Monthly Consumption Compared to Benchmark

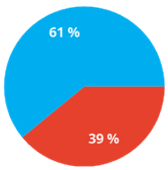
Actual consumption compared to the modeled benchmark by month.



Consumption by Energy Source Type

Actual consumption and cost broken out by the various energy source types.

	Total Usage	Usage/SF	kBtu	kBtu/SF	Energy Cost	$/SF
Electric	569,526 kWh	6.59 kWh	1,943,223	22.47	$69,584	$0.80
Natural Gas	30,325 Therms	0.35 Therms	3,032,500	35.07	$14,633	$0.17
Total			**4,975,723**	**57.54**	**$84,217**	**$0.97**



Using period October 2017 to September 2018

Building Details

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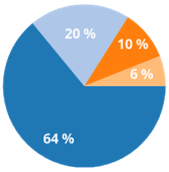

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Dining	14 hrs/day	5 days/wk	9 months/yr	Heated And Cooled

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BENCHMARKING

Menasha Joint School District

Gegan Elementary School

675 W Airport Rd
Menasha, WI 54952

Built 1967

51,480 Gross Bldg SF

1 electric meter
1 natural gas meter

B3 Benchmark

This site is using slightly less energy than the B3 Benchmark.

B3 Peer Rating

69

This site is ranked in the upper 69th percentile amongst 301 similar sites.

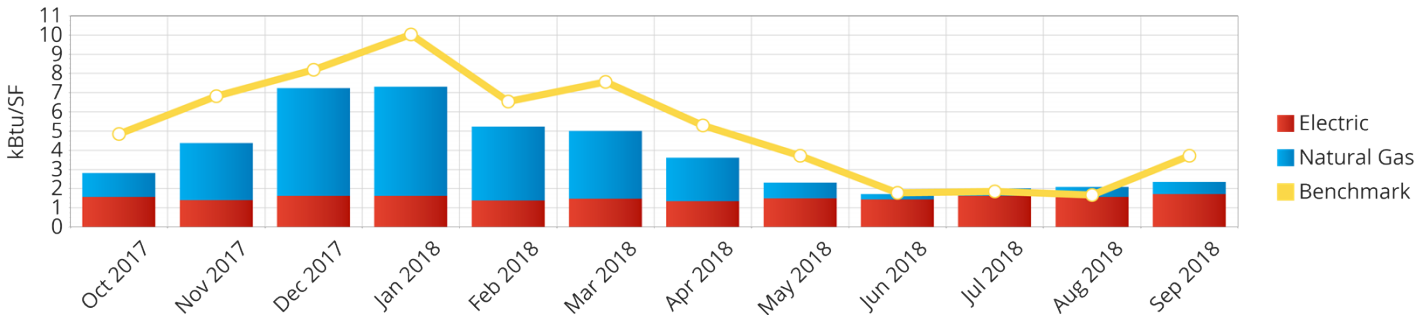
ENERGY STAR® Score

79

This site has received an ENERGY STAR score of 79

Monthly Consumption Compared to Benchmark

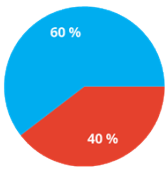
Actual consumption compared to the modeled benchmark by month.



Consumption by Energy Source Type

Actual consumption and cost broken out by the various energy source types.

	Total Usage	Usage/SF	kBtu	kBtu/SF	Energy Cost	$/SF
Electric	274,496 kWh	5.33 kWh	936,580	18.19	$30,036	$0.58
Natural Gas	14,289 Therms	0.28 Therms	1,428,914	27.76	$8,068	$0.16
Total			**2,365,494**	**45.95**	**$38,104**	**$0.74**



Using period October 2017 to September 2018

Building Details

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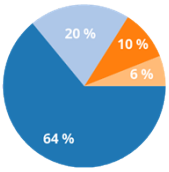

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BENCHMARKING

Menasha Joint School District

Jefferson Elementary School

105 Ice St
Menasha, WI 54952

Built 1932

39,301 Gross Bldg SF

1 electric meter
1 natural gas meter

B3 Benchmark

This site is using slightly more energy than the B3 Benchmark.

B3 Peer Rating

13

This site is ranked in the lower 13th percentile amongst 301 similar sites.

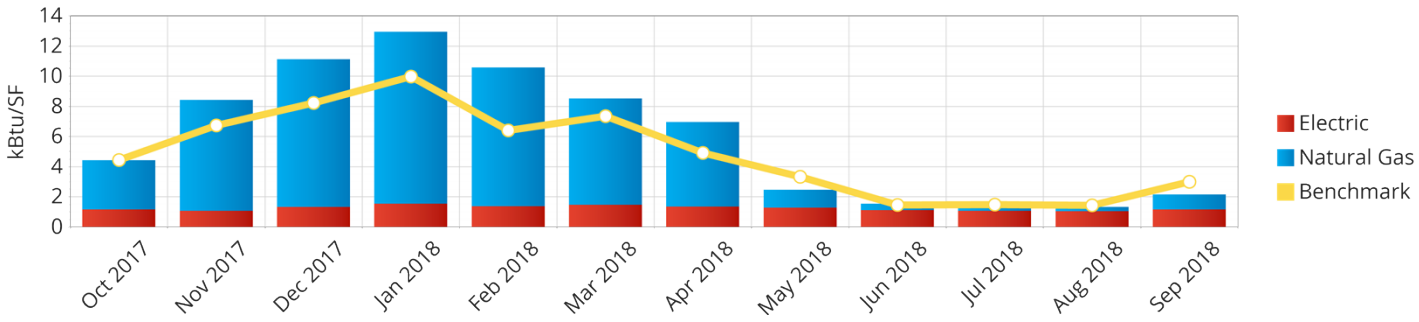
ENERGY STAR® Score

59

This site has received an ENERGY STAR score of 59

Monthly Consumption Compared to Benchmark

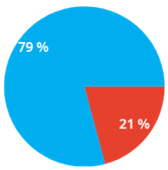
Actual consumption compared to the modeled benchmark by month.



Consumption by Energy Source Type

Actual consumption and cost broken out by the various energy source types.

	Total Usage	Usage/SF	kBtu	kBtu/SF	Energy Cost	$/SF
Electric	171,952 kWh	4.38 kWh	586,700	14.93	$18,462	$0.47
Natural Gas	22,307 Therms	0.57 Therms	2,230,700	56.76	$12,513	$0.32
Total			**2,817,400**	**71.69**	**$30,975**	**$0.79**



Using period October 2017 to September 2018

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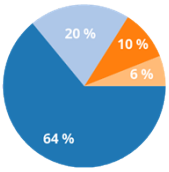

Classrooms	8 hrs/day	5 days/wk	9 months/yr	Heated Only
Office	9 hrs/day	5 days/wk	12 months/yr	Heated And Cooled
Gymnasium	8 hrs/day	5 days/wk	9 months/yr	Heated Only
Dining	14 hrs/day	5 days/wk	9 months/yr	Heated Only

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Partnering with Wisconsin utilities

BENCHMARKING

Menasha Joint School District

Maplewood Middle School

1600 Midway Rd
Menasha, WI 54952

Built 1970

114,958 Gross Bldg SF

1 electric meter
1 natural gas meter

B3 Benchmark

This site is using significantly less energy than the B3 Benchmark.

B3 Peer Rating

77

This site is ranked in the upper 77th percentile amongst 301 similar sites.

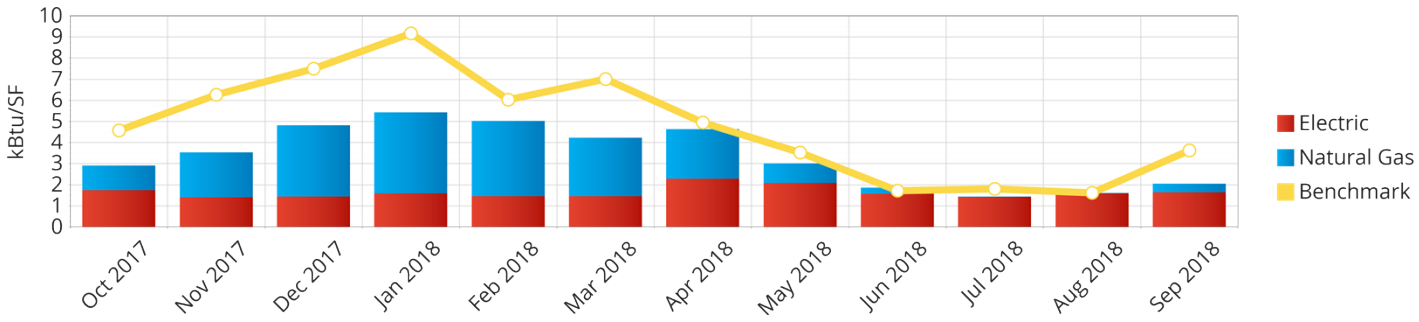
ENERGY STAR® Score

83

This site has received an ENERGY STAR score of 83

Monthly Consumption Compared to Benchmark

Actual consumption compared to the modeled benchmark by month.



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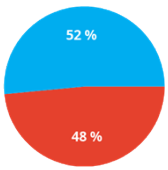
Actual consumption and cost broken out by the various energy source types.

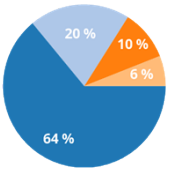
	Total Usage	Usage/SF	kBtu	kBtu/SF	Energy Cost	$/SF
Electric	661,265 kWh	5.75 kWh	2,256,236	19.63	$69,905	$0.61
Natural Gas	23,959 Therms	0.21 Therms	2,395,948	20.84	$13,600	$0.12
Total			**4,652,184**	**40.47**	**$83,505**	**$0.73**



Using period October 2017 to September 2018

Building Details

The building has been set up with the following high-level space usage and operation assumptions. Refinements can be made to these details by logging in to B3 Benchmarking or by contacting your energy advisor.



Classrooms	8 hrs/day	5 days/wk	9 months/yr	Heated And Cooled
Office	9 hrs/day	5 days/wk	12 months/yr	Heated And Cooled
Gymnasium	8 hrs/day	5 days/wk	9 months/yr	Heated And Cooled
Dining	14 hrs/day	5 days/wk	9 months/yr	Heated And Cooled

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Partnering with Wisconsin utilities

BENCHMARKING

Menasha Joint School District

Menasha High School

420 7th St
Menasha, WI 54952

Built 1937

274,729 Gross Bldg SF

1 electric meter
1 natural gas meter

B3 Benchmark

This site is using slightly less energy than the B3 Benchmark.

B3 Peer Rating

34

This site is ranked in the lower 34th percentile amongst 53 similar sites.

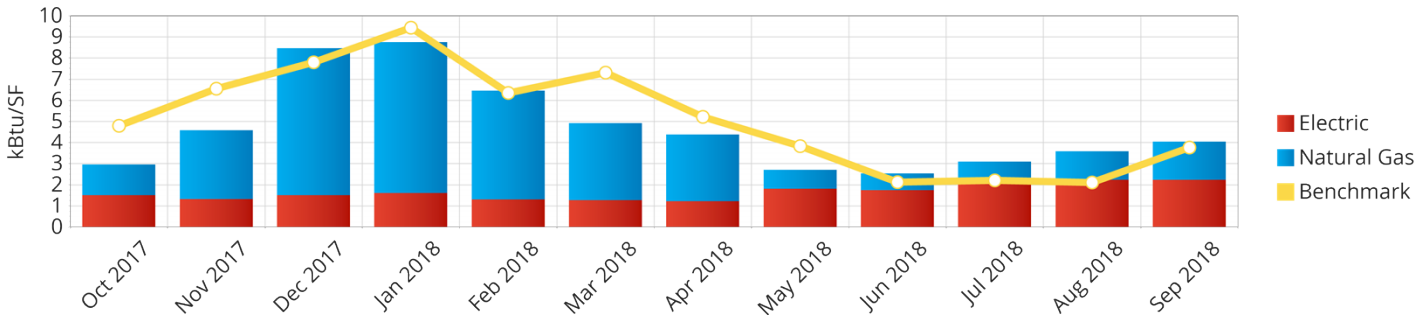
ENERGY STAR® Score

85

This site has received an ENERGY STAR score of 85

Monthly Consumption Compared to Benchmark

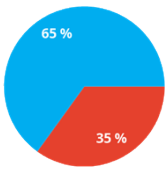
Actual consumption compared to the modeled benchmark by month.



Consumption by Energy Source Type

Actual consumption and cost broken out by the various energy source types.

	Total Usage	Usage/SF	kBtu	kBtu/SF	Energy Cost	$/SF
Electric	1,589,063 kWh	5.78 kWh	5,421,883	19.74	$165,108	$0.60
Natural Gas	100,879 Therms	0.37 Therms	10,087,900	36.72	$48,250	$0.18
Total			**15,509,783**	**56.45**	**$213,359**	**$0.78**



Using period October 2017 to September 2018

Building Details

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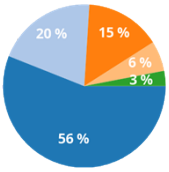

Classrooms	8 hrs/day	5 days/wk	9 months/yr	Heated And Cooled
Office	9 hrs/day	5 days/wk	12 months/yr	Heated And Cooled
Gymnasium	8 hrs/day	5 days/wk	9 months/yr	Heated Only
Dining	14 hrs/day	5 days/wk	9 months/yr	Heated And Cooled
Educational Laboratory	10 hrs/day	5 days/wk	9 months/yr	Heated And Cooled

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BENCHMARKING

Menasha Joint School District

Nicolet Elementary School

449 Ahnaip St
Menasha, WI 54952

Built 1926

27,665 Gross Bldg SF

1 electric meter
1 natural gas meter

B3 Benchmark

This site is using slightly less energy than the B3 Benchmark.

B3 Peer Rating

63

This site is ranked in the upper 63rd percentile amongst 301 similar sites.

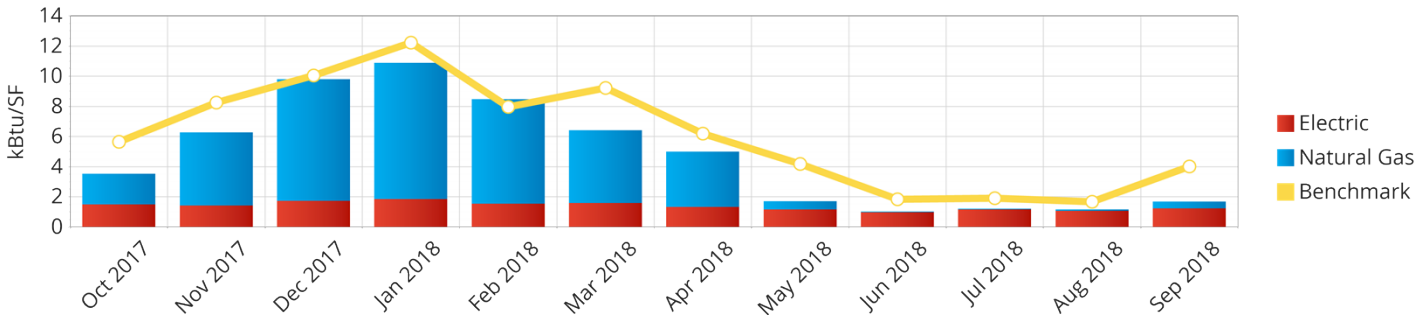
ENERGY STAR® Score

77

This site has received an ENERGY STAR score of 77

Monthly Consumption Compared to Benchmark

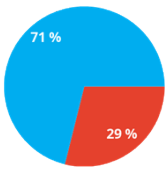
Actual consumption compared to the modeled benchmark by month.



Consumption by Energy Source Type

Actual consumption and cost broken out by the various energy source types.

	Total Usage	Usage/SF	kBtu	kBtu/SF	Energy Cost	$/SF
Electric	133,824 kWh	4.84 kWh	456,607	16.50	$15,822	$0.57
Natural Gas	11,229 Therms	0.41 Therms	1,122,921	40.59	$6,515	$0.24
Total			**1,579,528**	**57.09**	**$22,337**	**$0.81**



Using period October 2017 to September 2018

Building Details

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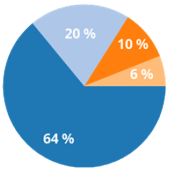

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