

## Stats at a Glance

	2018	2019	2020	
<b>Electric</b>	<b>Electric Revenues - Retail</b>	\$43,399,364	\$41,008,980	\$37,116,359
	<b>Electric Revenues - Wholesale</b>	\$22,570,316	\$21,850,894	\$22,123,972
	<b>Number of Electric Customers</b>	18,009	18,092	18,312
	<b>Megawatt-hours Sold - Retail</b>	537,314	518,927	504,540
	<b>Megawatt-hours Sold - Wholesale</b>	148,097	133,206	141,418
	<b>Peak Electric System Demand</b>	105	100	106
	<b>Miles of Distribution Line</b>	235	234	236
	<b>Average Net Investment</b>	\$87,575,036	\$88,410,823	\$86,874,301
	<b>Water</b>	<b>Water Revenues - Retail</b>	\$4,671,993	\$4,643,352
<b>Water Revenues - Wholesale</b>		\$2,031,317	\$1,999,274	\$2,046,522
<b>Number of Water Customers</b>		13,773	13,776	13,808
<b>Gallons of Water Sold ( X 1000) - Retail</b>		1,626,298	1,617,325	1,644,772
<b>Gallons of Water Sold ( X 1000) - Wholesale</b>		2,473,087	2,436,517	2,437,213
<b>Miles of Water Main</b>		186	186	186
<b>Number of Hydrants</b>		1,378	1,394	1,400
<b>Average Net Investment</b>		\$45,988,481	\$45,911,126	\$46,276,204

## Glossary

### Administrative

Salaries and benefits paid to employees in administrative roles, along with administrative expenses such as supplies and insurance.

### Annual Return on Investment

Operating earnings divided by Average Net Investment.

### Customer Account

Cost of meter reading, billing, collection, and uncollectible accounts.

### Depreciation

The decline in value of plant and equipment due to wear and tear of normal use and obsolescence, measured year by year through the charging of a portion of the asset's original cost against income.

### Electric Distribution

Cost of distributing electricity to customers including routine and emergency maintenance of poles, wires, underground facilities, street lighting, substations, and metering.

### Net Operating Income

These are the dollars available after all expenses are paid. This amount is used to finance system improvements and expansion projects.

### Power Generation

Cost of energy generated at MPU power plants. Includes the cost of fuel, maintenance, and operation of the facility.

### Pumping Expense

Cost of energy to operate pumps to deliver water to the distribution system and maintenance of pumping equipment.

### Purchased Power

Energy purchased from other utilities.

### Taxes

MPU is exempt from state and federal income tax, but other taxes are incurred. The majority of tax paid is referred to as "Payment in Lieu of Taxes" to city government, which is based on property value. MPU is the largest tax payer to city government.

### Water Distribution

Cost of delivering water to consumers including routine and emergency maintenance of water mains and hydrants, storage tanks, and metering.

### Water Supply

Cost of maintaining water intakes and wells.

### Water Treatment

Cost of treating water delivered to the water distribution systems including operation as cost of the water treatment plant, such as energy, maintenance, chemicals, and laboratory expenses.

### Average Net Investment

The beginning of year and ending year average depreciated value of the utility system plus inventory less regulatory liabilities.

## Key Accomplishments for 2020

- Received regulatory approval for a 5.6% electric rate decrease, the fourth consecutive decrease for customers.
- Awarded the American Public Power Association's 'Diamond' designation for reliability, safety, workforce development and system improvement.
- Upgraded all City and MPU equipment with Microsoft Office 2019.
- Implemented a SCADA to AMI interface to allow SCADA monitoring of system voltages on all distribution circuits.
- Repaired 'in place' leaks in the Wastewater Treatment Facility 80 foot diameter, 100 ton secondary digester floating cover.
- Replaced 384 of 4800 HPS street lighting fixtures with LED fixtures. The initial focus of this five-year project was the ornamental fixtures in the downtown area with remaining HPS street lights to be replaced over the next four years.
- Replaced approximately 6100 feet of 10" watermain, 1930's era, along with 45 lead service lines on Waldo Boulevard in conjunction with WisDOT reconstruction.
- Replaced the turbine hall windows and siding at the power plant to eliminate asbestos and allow natural light in to reduce artificial lighting costs.
- Completed the deconstruction project at the power plant removing old stoker boilers 5, 6, &7, diesel units 1 & 2 and associated equipment.
- Completed the design and construction of fuel bunker separation walls. These walls increase the percentage of renewable paper pellets used in Boiler 9 up to approximately 40%. Paper burning results in less limestone use and ash generation.

## 2021 Planned Activities

- Implement a MultiSpeak interface between the new AMI system, Yukon, and the Customer Information System to allow for real time on-demand reads, disconnects and improved billing process flow.
- Install small pilot solar facility with a residential energy storage system to gain operational experience for a storage facility and determine how well the facility can be used to offset power supply costs.
- File a water rate case with the PSCW as required and to ensure financial stability of the water utility.
- Convert North Ash Silo from ash storage to limestone storage. This will increase on-site storage capacity to improve boiler operation resiliency in compliance with the air permit.
- Begin multi-year project to seek regulatory approval and install a diesel engine generator and distribution express line to provide emergency power for Boiler 9 in the event of a grid outage.
- Complete a major maintenance inspection and overhaul of Unit 9 Turbine Generator to ensure continued operational reliability.
- Continue replacement of HPS street lights with LED equivalents as part of the 5 year LED conversion project.
- Replace 6500' of water main throughout the City in conjunction with street restoration projects.
- Administer the new 2021 WDNR Lead Service Line Replacement program, which provides funds to help customers replace their lead service lines (LSLs). MPU qualified for \$1,500,000 for the replacement of customer-owned LSLs in 2021.
- Complete the automation project and SCADA system upgrades started in 2020 at the WWTF to enable unmanned operations for third shift.



**Manitowoc  
Public Utilities**

**FORWARD TOGETHER**



**ANNUAL REPORT**

**2020**



*Community Owned...Customer Focused*

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## Purpose of this Report

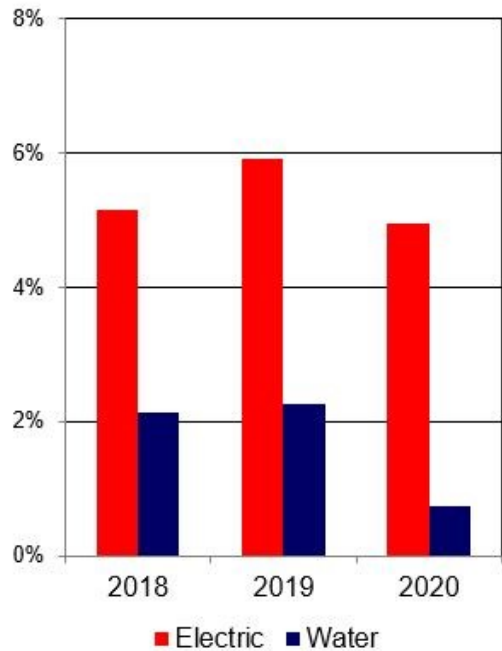
The purpose of this report is to help you understand where and how your utility payments are used. This annual report details MPU's revenue and expenses, as well as our key accomplishments from 2020, and our plans for 2021.

If you have any questions concerning this report or operation of your electric and water utility, please call our customer service department at 683-4600.

## Mission Statement

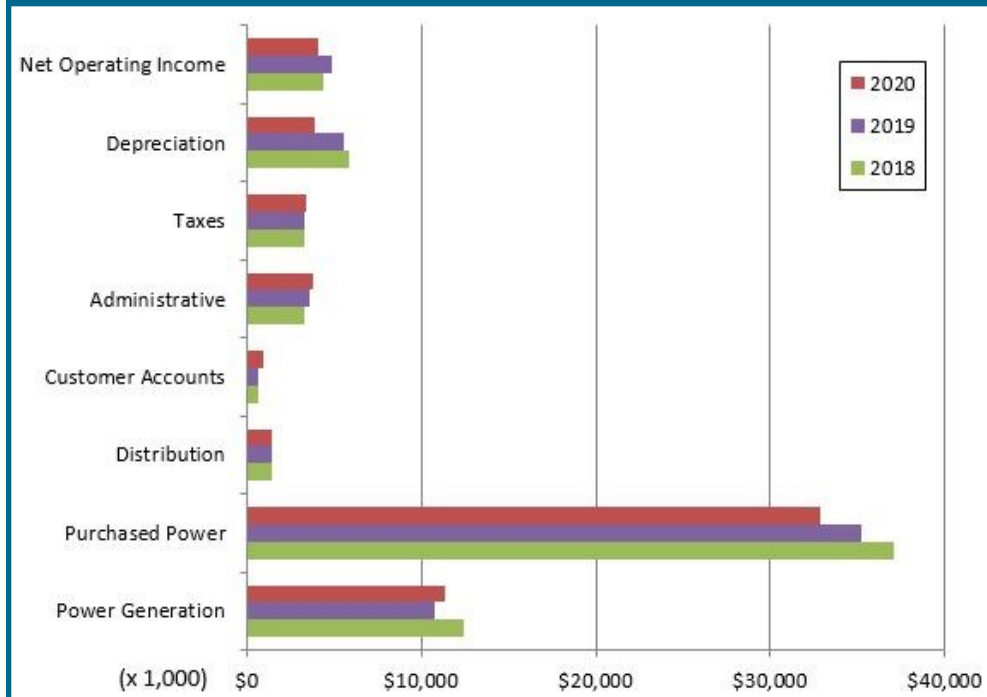
MPU is committed to be the trusted primary resource for providing customer focused utility services.

## Annual Return on Rate Base

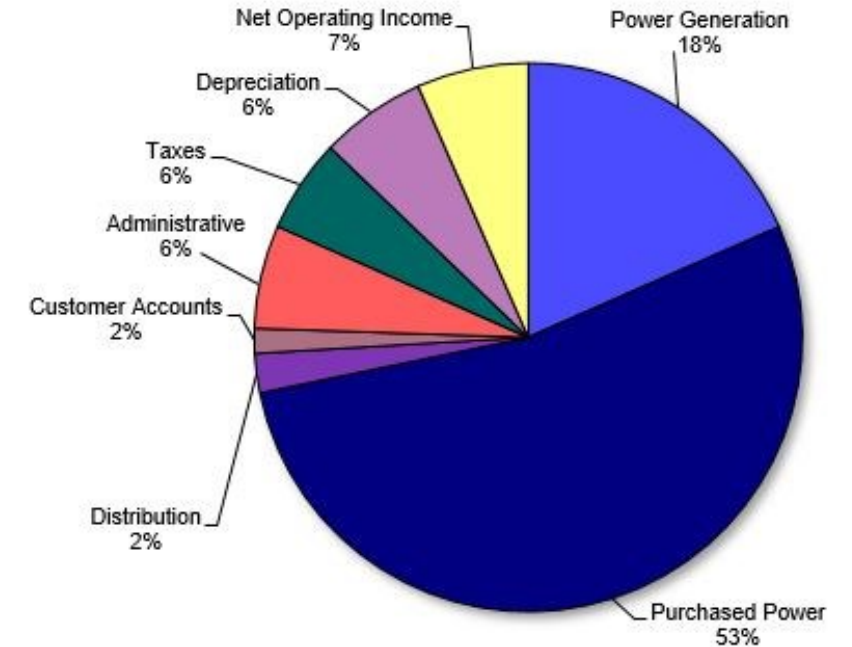


\*Excludes Wholesale Revenues and Expenses from the Central Brown County Water Authority (CBCWA)

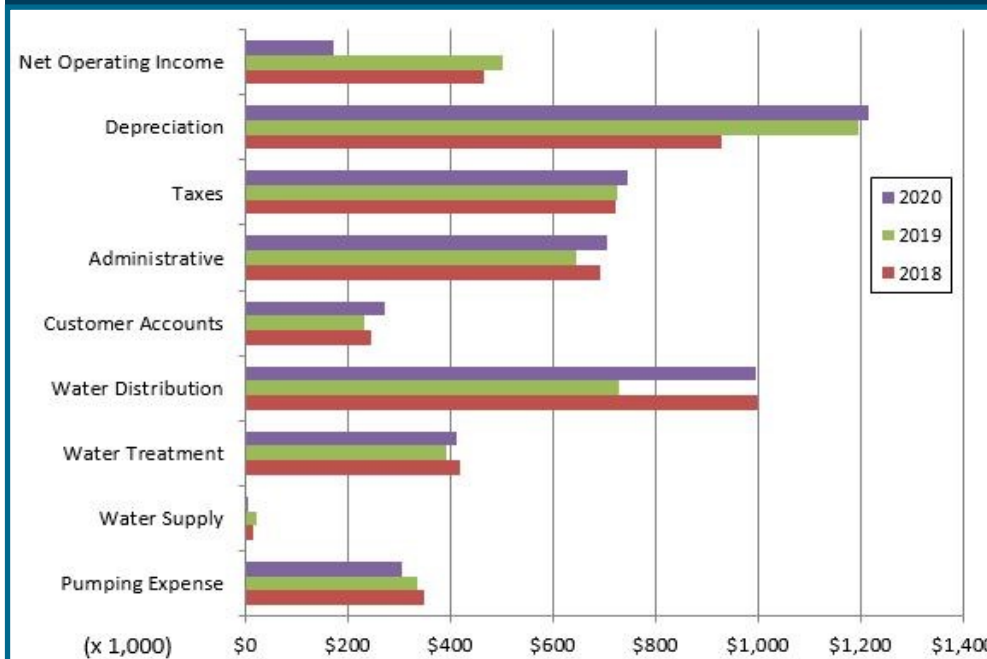
## Electric Utility Expense Tracking



## Electric Revenue Distribution- 2020



## Water Utility Expense Tracking \*



## Water Revenue Distribution- 2020

