

ANNUAL REPORT 2022



EVOLUTION



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OUR MISSION

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

OUR VISION

To be a thriving and innovative regional utility service provider that exceeds customer expectations.



LETTER FROM MANAGEMENT

During 2022, Manitowoc Public Utilities experienced significant changes: an evolution of what we do and where we are heading.

After four years of contract management, the City of Manitowoc **transferred the Wastewater Treatment Facility (WWTF) to MPU** effective January 1, 2023. The decision to move forward was made in 2021, with 2022 being the year of transition planning and logistics. The transition focused on the separation of wastewater collections (the pipes in the street) from the wastewater treatment (the plant on the lakefront with the bobber). Physically, this separation was relatively straightforward. The separation of the business was more complex, which involved splitting the wastewater rates, reserves, and assets between collections and treatment. The separation is intended to **increase efficiency and improve services** through the synergies that treatment has with utility operations.

In 2022, the Public Service Commission of Wisconsin approved a project that consisted of the City of Manitowoc, and MPU, extending water service to areas south of the city. The extension provides **access to safe drinking water** for those affected by groundwater contamination. Construction was completed and the affected township residents were allowed to connect. The project costs are not socialized by existing MPU customers and are recovered through the related water sales, as well as from the City of Manitowoc.

The **Manitowoc Refuel Renewable Project** successfully reached a major milestone during 2022. The smaller of MPU's two Circulating Fluidized Bed (CFB) boilers operated the entire year exclusively on Wisconsin-recognized **100% renewable biomass densified fuel pellets**. These pellets are made from local non-economically-recyclable industrial paper and plastic waste that would otherwise be landfill-bound. The refueling for the boiler resulted in a 6% increase in generation capacity bringing the units generation to over 23MWs. Additionally, refueling resulted in a 50% reduction in average production cost (\$/MWh) and was regularly dispatched into the market based on economics. This is something to celebrate and affirms the path that MPU is on: an evolution. This past year MPU also successfully completed a test run with these pellets on the second, larger CFB (63MW). Planning continued throughout the year working towards the goal of refueling both CFBs to pellets. In addition to downward pressure on costs, the refueling project will provide many benefits to our community including **reducing greenhouse gas emissions by 55%** (2005 baseline), diverting up to 18,000 tons per month of waste from the landfill and eliminating approximately 5,000 tons per month of landfilled ash, and preserving over \$2 million in Payment in Lieu of Taxes (PILOT) to the City of Manitowoc.

Manitowoc Public Utilities commits to be the **trusted primary resource to our community** for providing customer-focused utility services. We are successful in this through intentional change that positions MPU to be a thriving, innovative regional utility service provider that exceeds customer expectations...**EVOLUTION.**

Troy Adams, P.E.

“
MANITOWOC PUBLIC
UTILITIES COMMITS
TO BE THE TRUSTED
PRIMARY RESOURCE
TO OUR COMMUNITY
FOR PROVIDING
CUSTOMER-FOCUSED
UTILITY SERVICES.”



TROY ADAMS
General Manager



KEY ACCOMPLISHMENTS IN 2022

BUSINESS SERVICES

MPU filed two rate case applications with the Public Service Commission of Wisconsin (PSCW), both with the intention to increase rates. The water rate application was filed in July with an anticipated final decision expected in late spring 2023. New rates are anticipated to be effective in early summer. The electric application was filed in December with an anticipated final decision and new rates effective late summer 2023. Through MPU's partnership with Great Lakes Utilities, electric rate case applications were also filed with the PSCW for Medford and Trempealeau Electric Utilities.

The City of Manitowoc's Wastewater Treatment Facility (WWTF) was officially transferred to MPU, including all assets and employees, January 1, 2023. New sewer rates were developed to segregate funds between the collection system and treatment plant. MPU also went through a strategic rebranding to include the WWTF in our brand. A third-party design company was hired to design the logo, and collateral design pieces, as well as prepare a Style Guide to include guidelines for each branding piece. MPU's new logo was released in early 2023 with the transition to be completed by the end of 2023.

In an effort to support our Employer of Choice strategic focus, an HR Manager was hired to bring greater awareness to Human Resources. The metering department also focused on evaluating the strategic deployment of water meter endpoints for the eventual conversion to a water Automated Meter Reading system.

UTILITY OPERATIONS

POWER PLANT

The MPU power plant provided regional reliability support during American Transmission Company (ATC) transmission line upgrades. Additionally, the Turbine 5 emergency lube oil pump control system was upgraded and the Control Room building roof was replaced.

The year was largely spent collecting data from operating both boilers on 100% Wisconsin-recognized renewable fuel pellets and reviewing large-scale renewable fuel options. Boiler 8 ran entirely on renewable fuel and Boiler 9 trial runs were commenced.

ELECTRIC DISTRIBUTION

MPU replaced 80 deteriorated poles identified in the pole inspection program, 3,100 feet of underground street light cable, substation exit cabling for 3 feeders, and batteries in the Custer and Dewey substations. We continued the HPS street light replacement program by converting another 1,050 fixtures to LED. Over 50% of the conversions have been completed over this 5-year project plan.

The installation of a 13KV to 4KV stepdown transformer as an alternate supply to the 4KV distribution system was continued from the previous year. We also extended fiber optic to serve nine additional commercial buildings and six, privately-owned, 5G communication antennas.

The SCADA system was upgraded to facilitate streamlined management and additional reporting for improved power plant and electrical distribution operations. We were also recognized for the seventh consecutive year for top quartile reliability performance nationally.

WATER SYSTEM

New watermain was installed on North Rapids Road. The Pressure Reducing Valve was replaced on Michigan Ave. and the High Service Pump #1 replacement was commenced. The pump, motor, and variable frequency drive will all be replaced, but due to supply chain issues, this will not be completed until 2023.

MPU applied for and distributed Wisconsin Department of Natural Resource (WDNR) funding to replace privately-owned lead service lines (LSLs), which assisted over 150 LSL replacements worth over \$450,000 for property owners. The water department also purchased a new hydraulic drill rig and trailer package that will assist with locating watermain breaks.

WASTEWATER TREATMENT FACILITY

The Wastewater Treatment Facility (WWTF) will be undergoing a facility-wide automation project. The contract was awarded in 2022 and the project commenced. Additionally, staff completed prioritization of the projects recommended in the Master Plan for facility planning/budgeting and decision-making consideration. Out of that process, the rehab/repair of the Stack Filters and Final Clarifiers project funding requirements commenced at the end of the year.

The removal and repair of a mixer for the West Anaerobic Digester was completed. The WWTF also treated and applied 10,890,000 gallons of biosolids as fertilizer on Manitowoc County farm fields.

TECHNICAL SERVICES

MPU began preparing the engineering and design of a 4-megawatt diesel generator at the power plant. The design also includes the installation of an express line from the Custer CT to the plant. The PSCW granted the Certificate of Authority for this project.

A new tariff was obtained from the PSCW for a Community Solar Garden project. This is anticipated to be completed in winter of 2023. A small pilot solar facility was also installed with a residential energy storage system to gain



operational experience. Staff is also using this project to determine how well the facility can be used to offset power supply costs. A pilot study of a smart thermostat demand response program was completed, which evaluated the effectiveness of the program and the end-user experience.

The infrastructure for hosting the authentication, application, and file servers, along with the infrastructure to host the storage environment, was updated. Network switches serving MPU and City of Manitowoc infrastructure were replaced and updated. Recommended upgrades to the existing Physical Access and Control System, including replacement of existing card readers and addition of readers to perimeter doors, was completed. Additional cameras will be installed to improve facility security. A new asset management web portal was rolled out to managers for non-distribution assets.

A Purchase Contract was issued to procure a replacement plant tie transformer.

RELIABILITY STATISTICS

- **System Average Interruption Duration Index (SAIDI)** is the outage duration of an average customer on the system. It is calculated by dividing the sum total of customer-outage-interruption-minutes experienced in a year by the total number of electrical customers served by the system. MPU SAIDI was 28 minutes in 2022 compared to a 5-year rolling average of 30 minutes.
- **Customer Average Interruption Duration Index (CAIDI)** is the average outage restoration time. It is calculated by dividing the sum total of customer-outage-interruption-minutes by the total number of customer interruptions experienced in a year. MPU CAIDI was 67 minutes in 2022 compared to a 5-year rolling average of 69 minutes.
- **System Average Interruption Frequency Index (SAIFI)** is the average outage frequency. It is calculated by dividing the total number of customer-interruptions by the total number of customers served. MPU SAIFI was 0.43 interruptions per customer in 2022 compared to a 5-year rolling average of 0.44 interruptions per customer.



PLANNED ACTIVITIES FOR 2023

BUSINESS SERVICES

MPU is embarking on a full website redesign, including the addition of a chatbot. This is a complementary project to the full re-branding that was rolled out January 1, 2023.

Electric and water meters will be purchased in preparation for replacement and/or new construction. The field collection device used for water meter reading will also be replaced. The MC4 Processor tablet will replace one of our outdated and unsupported handheld processors and it will be compatible with our Automated Meter Reading (AMR) ready endpoints. This will support the conversion to a full-scale AMR system, which will allow for drive-by readings of the entire system in less than one week. MPU will then be able to transition back to monthly water meter reading.

MPU is overseeing the transition of Management and Accounting Services for Great Lakes Utilities to a new service provider, which will allow MPU to focus on the success of the power plant re-fueling project.

Various meter data management platforms and Outage Management Systems (OMS) will be evaluated to lay the groundwork for a future OMS implementation.

UTILITY OPERATIONS

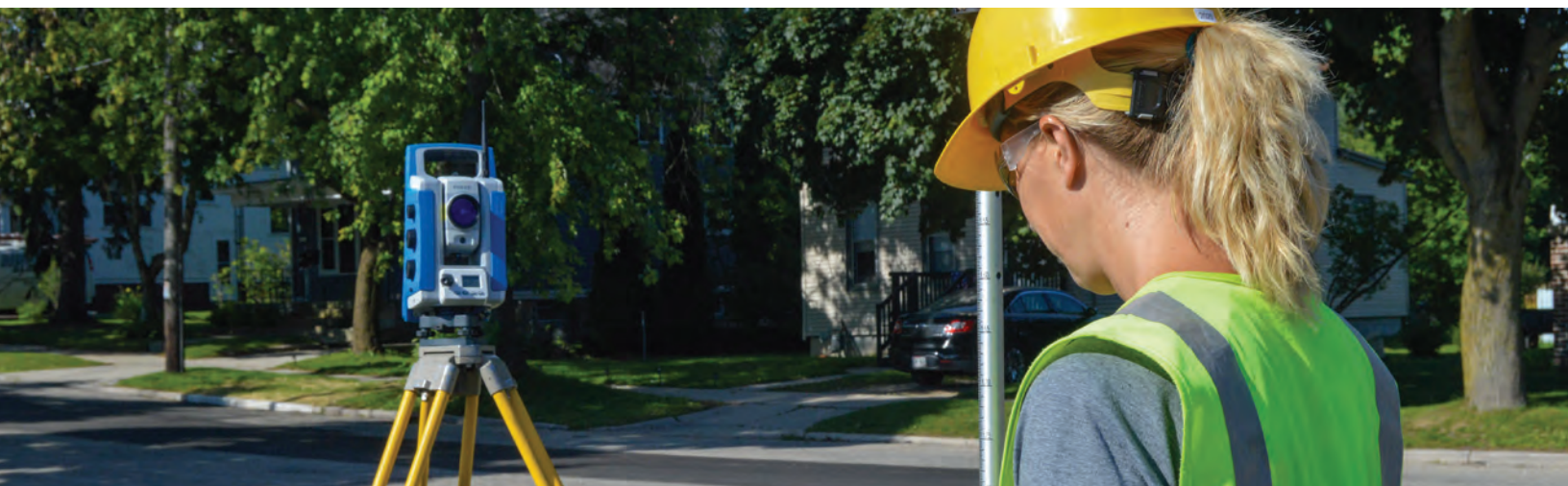
POWER PLANT

Efficient renewable fuel pellet handling options for full generation capacity will be evaluated. Boiler trial runs and research related to the boiler refueling will continue all year.

Aging management assessments of critical plant equipment will be conducted to understand remaining life and develop strategies for renewal. An upgraded emissions monitoring instrumentation will also be installed as well as replacing an obsolete District Heating Plant control system.

ELECTRIC DISTRIBUTION

MPU plans to replace 100 reject poles identified in the pole inspection program, 100 feet of single-phase primary cable, and 200 feet of underground street lighting cable. Protection relays for three substation feeders will also be replaced as well as 20% of existing HPS street lights converted to LED. This is year 4 out of a 5-year plan. Lastly, the substation feeder exit cabling for three additional circuits will be replaced.



Electric Distribution is working with Engineering to update the Electrical Distribution System Study to reflect load changes and system modifications that have been made since 2017. The Study will include load projections due to electric vehicle charging and distributed generation within the next 5-10 years. These departments are also working together to develop purchase specifications for a plant tie transformer replacement.

MPU will complete the installation of a 4KV distribution stepdown transformer as backup support to the downtown area. Circuit R135 will also be extended by 400 feet to ensure backup capacity in view of projected load growth.

WATER SYSTEM

The watermain on North 2nd Street and North 3rd Street will be replaced as part of the City of Manitowoc's reconstruction of Reed Ave. Approximately 200' of 2" watermain on North 2nd Street (1949-era main) will be replaced and 420' of 6" watermain on North 3rd Street (1954-era main) will be replaced. Watermain on Division Street will also be replaced as part of the City of Manitowoc's reconstruction. This will consist of replacing 1,800' of 6" watermain (1912-era main) as well as the street portion of lead service lines. Additional replacements will also occur including the 1970 water meter for the Water Treatment Plant High Service Pumps and the SMF CIP lines. The system requires the dosage of sulfuric acid and sodium hypochlorite from the CMF basement to the SMF modules.

A mixer will be installed in the Northwest Water Tower to thoroughly mix the tower and avoid stratification. The department will also be conducting a Master Plan for the Water Treatment Plan to review treatment capacity, quality regulations, building improvements, and process operations.

Along with regular water quality testing, MPU will be performing water quality sampling of the drinking water for PFAS, as required by the WDNR and the EPA. Additionally, WDNR-funded assistance will be applied for to help property owners replace lead service lines in the City of Manitowoc. This funding is anticipated to be available in 2024.

WASTEWATER TREATMENT FACILITY

MPU will be repairing 2 of the 3 original mixers that were installed in 1999. The third was repaired in 2021. Actuators that are in poor condition and not reliable in open/close valve applications will be replaced. The Final Effluent Pump #2 will be rehabilitated. These pumps discharge filtered water back into the channel to flow to the chlorine contact chamber. This is a critical part of the treatment process.

The WWTF will be automating portions of the facility. Current computer hardware and SCADA software are out of date. The reliability of the operations through SCADA are not currently supported by their respected developers therefore we will replace with automated software instead. Automation within the WWTF will eliminate the third employee shift.

Identified as a high priority need in the WWTF Master Plan, the specifications, bid, design, and funding for the stack filter rehabilitation/repairs project will be prepared this year.

TECHNICAL SERVICES

The design and bid documents will be completed for two projects: the express distribution line from the Custer CT to the Columbus Street Power Plant and for the installation of the 4-megawatt emergency backup



WWTF TRANSFER & REBRANDING

On January 1, 2023, the City of Manitowoc Wastewater Treatment Facility (WWTF) was officially transferred to MPU. This transfer encompassed 15 employees and a wide range of treatment assets. MPU has been managing the WWTF since 2019. The community saw some changes with this transition on their utility bills. Wastewater collection and wastewater treatment are now separate. In order to separate the funds, MPU had to create new sewer billing rates.

As part of welcoming the WWTF into the MPU family, MPU completed a rebranding to be able to visually show the community the three core services we provide: electric, water, and wastewater. Although there are many different services nestled under those three, these are our enterprise funds represented by color in the logo: red for electric, blue for water, and green for wastewater. These specific colors directly correlate with the color of the locating flags associated with each service. This rebranding will be a slow rollout, so customers may still see both logos on documents, or vehicles, while we transition. We are proud to be the essential services provider in our community.

generator. An environmental permit based on operational improvements for Boiler 8 will also be studied and designed.

Thin client devices will be replaced for concurrent users of VDI infrastructure due to the incompatibility with VMWare Horizon 8. The upgrade and addition of security/operational cameras will also continue.

MPU will be procuring payments and early construction costs for the multi-year electric system resiliency project. The installation of a 1MW Community Solar project will be completed as well.

MANITOWOC REFUEL RENEWABLE PROJECT

Manitowoc Public Utilities (MPU) is celebrating one year of success on our power plant boiler refueling project. This project began in 2021 and entails refueling our two primarily fossil fuel-fired boilers to run exclusively on Wisconsin-recognized 100% renewable densified fuel pellets. These pellets are made from local non-economically-recyclable industrial paper and plastic waste that would otherwise be landfill-bound.

Boiler 8 ran successfully on 100% renewable densified fuel pellets this past year. Our second boiler, Boiler 9, is burning up to 40% pellets and that percentage is expected to rise. While we've been making this shift in our boilers, we've been concurrently working on increasing the supply of densified fuel pellets that MPU is able to secure.

WHY IS THIS PROJECT IMPORTANT?

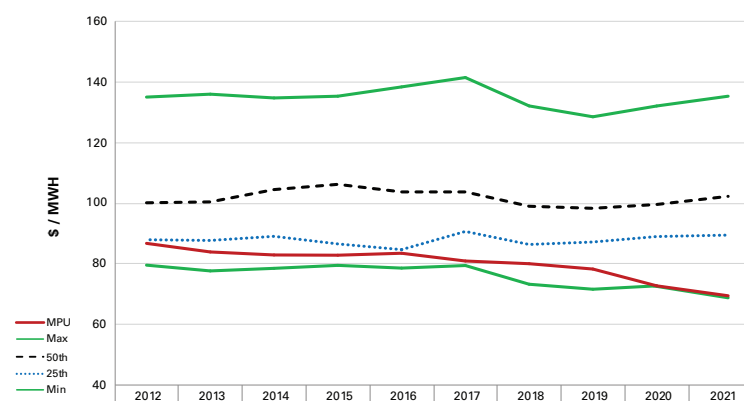
Refueling to burn 100% renewable densified fuel pellets is beneficial to our community for several reasons. Primarily, this refueling is an effort to mitigate risk in an extremely volatile fuel market, but we also recognize efficiencies and benefits in other areas including: cost control, sustainability, local control, and grid resiliency. To learn more about this project, visit our project page at www.manitowocrefuelrenewable.org.

COMMITTED TO COMPETITIVE RATES

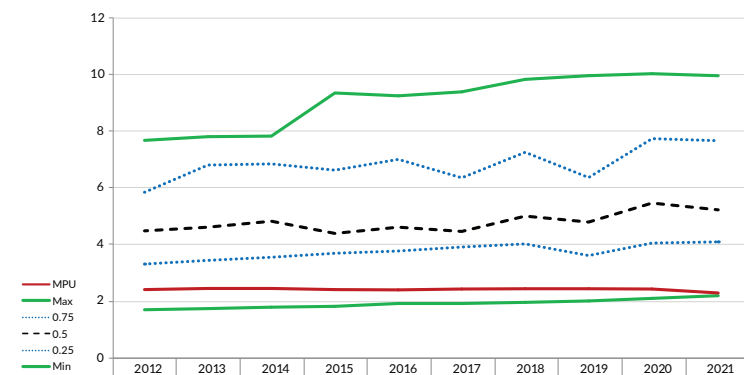
MPU filed electric and water rate cases with the Public Service Commission of Wisconsin (PSCW) in 2022. Increases were requested with both filed cases with effective dates expected in 2023. The last electric rate increase was filed in 2005 and the last full water rate case was filed in 2012. **Even with these requested increases, MPU will still have highly competitive rates compared to other municipal utilities within Wisconsin.** MPU's rates are consistently some of the lowest in the state and we are committed to maintaining competitive rates for our customers.

Why are we requesting increases? For several reasons, but primarily because of increases in inflationary operating and maintenance costs, and rising fuel costs.

AGGREGATE ELECTRICAL RETAIL RATE COMPARISON (AB MUNICIPAL)



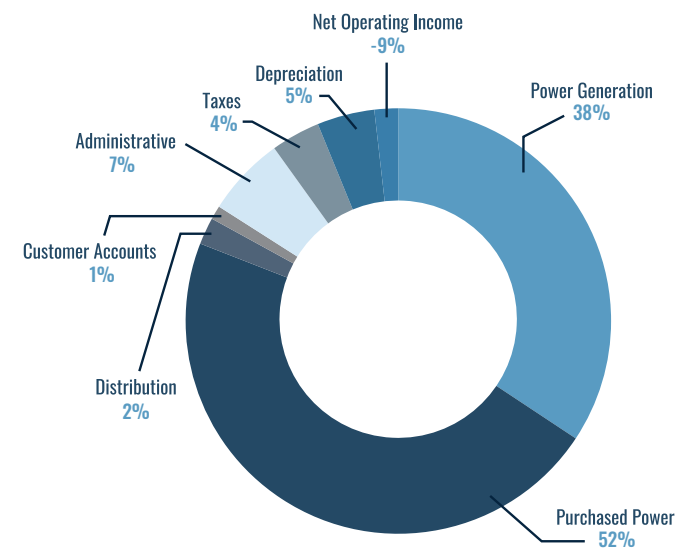
METERED SALES TO GENERAL CUSTOMERS (SURFACE WATER AB WATER UTILITIES)



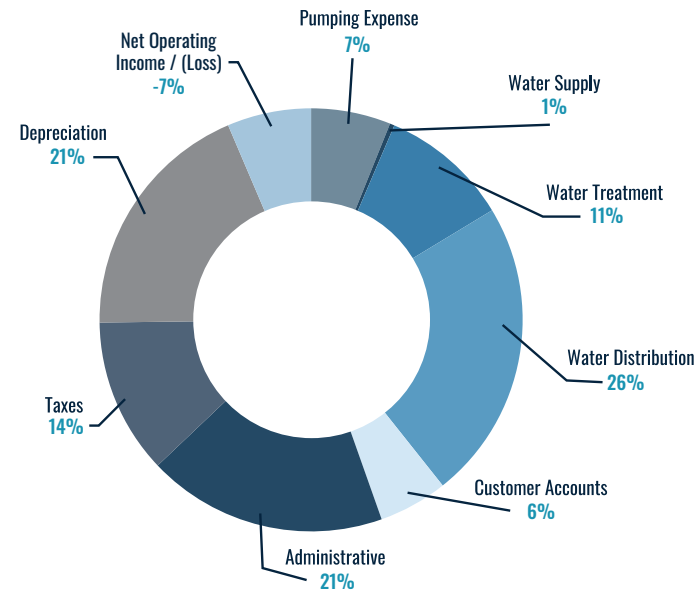


FINANCIAL HIGHLIGHTS 2022

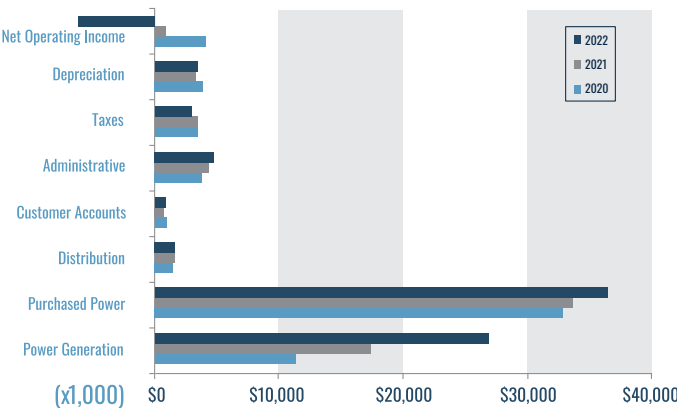
ELECTRIC



WATER



ELECTRIC UTILITY EXPENSE TRACKING

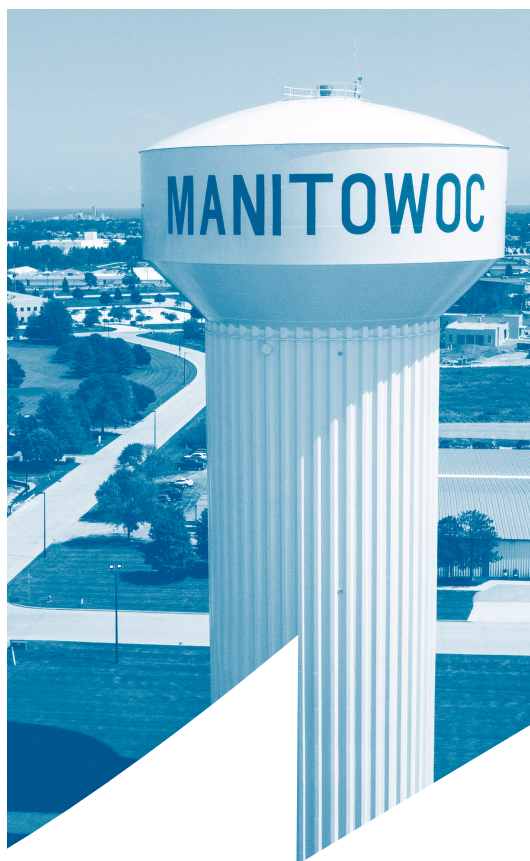


WATER UTILITY EXPENSE TRACKING



*See definitions on following page.

FINANCIAL **STATEMENTS** 2022



EVOLUTION

MANITOWOC PUBLIC UTILITIES

CITY OF MANITOWOC, WISCONSIN

STATEMENT OF NET POSITION »

December 31, 2022

With summarized comparative information as of December 31, 2021

	2022	2021
CURRENT ASSETS		
Cash	\$ 13,765,010	\$ 15,779,618
Investments	3,786,956	6,297,603
Receivables:		
Customer Accounts Receivable, Net	8,430,536	8,397,608
Due from Other Governments	2,886	3,597
Notes Receivable - City of Manitowoc	25,555	24,932
Prepaid Supplies	3,990,851	2,978,101
Prepaid Items	2,700,792	1,856,373
Total Current Assets	32,702,586	35,337,832
NON-CURRENT ASSETS		
Other Assets:		
Investments	33,359,038	33,306,458
Notes Receivable	1,395,257	1,345,020
Notes Receivable - City of Manitowoc	917,558	921,638
Lease Receivable	1,263,381	1,351,583
Investment in ATC	15,057,727	14,255,623
Rate Stabilization Deposit	3,951,067	9,000,000
Nonutility Property	1,123,585	1,124,291
Net Pension Asset	3,926,235	2,713,917
Total Other Assets	60,993,848	64,018,530
Capital Assets:		
Nondepreciable		
Electric	3,315,204	3,109,841
Water	473,724	598,943
Steam	55,731	54,067
Broadband	173,886	97,969
Total Capital Assets, Nondepreciable	4,018,545	3,860,820
Depreciable		
Electric	182,746,311	182,411,872
Water	78,672,621	77,289,005
Steam	4,683,373	4,702,846
Broadband	1,814,633	1,670,605
Total Capital Assets, Depreciable	267,916,938	266,074,328
Less: Accumulated Depreciation	(140,588,608)	(137,402,728)
Capital Assets, Depreciable, Net	127,328,330	128,671,600
Total Capital Assets	131,346,875	132,532,420
Total Non-Current Assets	192,340,723	196,550,950
Total Assets	225,043,309	231,888,782

MANITOWOC PUBLIC UTILITIES

CITY OF MANITOWOC, WISCONSIN

STATEMENT OF NET POSITION »

December 31, 2022

With summarized comparative information as of December 31, 2021

	2022	2021
DEFERRED OUTFLOWS OF RESOURCES		
Pension Related Amounts	\$ 7,684,716	\$ 4,504,174
Other Postemployment Related Amounts - Cost-Sharing Plan	232,305	277,462
Other Postemployment Related Amounts - Single-Employer	84,758	80,335
Asset Retirement Obligations	12,133,332	12,999,999
Total Deferred Outflows of Resources	20,135,111	17,861,970
LIABILITIES		
Current Liabilities		
Accounts Payable	4,182,524	5,401,919
Accrued and Other Current Liabilities	970,654	788,458
Other Liabilities	1,000,000	1,000,000
Compensated Absences	718,916	605,887
Due to Other Governments	4,006,687	4,613,620
Customer Deposits	986,413	879,071
Total Current Liabilities	11,865,194	13,288,955
Non-Current Liabilities		
Compensated Absences	1,459,563	1,315,185
Asset Retirement Obligations	26,000,000	26,000,000
Other Postemployment Benefits - Cost-Sharing Plan	699,832	647,792
Other Postemployment Benefits - Single-Employer	228,882	259,144
Total Non-Current Liabilities	28,388,277	28,222,121
Total Liabilities	40,253,471	41,511,076
DEFERRED INFLOWS OF RESOURCES		
Lease Receivable	1,263,381	1,351,583
Pension Related Amounts	9,242,826	5,944,079
Other Postemployment Related Amounts - Cost-Sharing Plan	79,991	77,015
Other Postemployment Related Amounts - Single-Employer	47,716	4,757
Total Deferred Inflows of Resources	10,633,914	7,377,434
NET POSITION		
Net Investment in Capital Assets	132,470,460	133,656,711
Restricted for:		
Pension Benefits	2,368,125	1,274,012
Unrestricted	59,452,450	65,931,519
Total Net Position	\$ 194,291,035	\$ 200,862,242

MANITOWOC PUBLIC UTILITIES

CITY OF MANITOWOC, WISCONSIN

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION »

Year ended December 31, 2022

With summarized comparative information for the year ended December 31, 2021

	2022	2021
OPERATING REVENUES		
Charges for Services		
Electric	\$ 68,371,737	\$ 63,443,427
Water	6,942,221	6,963,803
Steam	2,271,656	1,777,436
Broadband	377,638	276,686
Total Operating Revenues	77,963,252	72,461,352
OPERATING EXPENSES		
Water Supply and Distribution	3,422,811	2,790,517
Electric Supply and Distribution	62,939,461	51,236,765
Steam Supply and Distribution	2,253,594	1,408,657
Broadband	78,918	65,179
Customer Accounts	1,115,800	1,007,545
Administrative and General	4,983,242	4,896,110
Depreciation	5,832,016	5,675,147
Amortization of Asset Retirement Obligation	866,667	866,667
Taxes	618,780	572,309
Total Operating Expenses	82,111,289	68,518,896
OPERATING INCOME (LOSS)	(4,148,037)	3,942,456
NONOPERATING REVENUES (EXPENSES)		
Investment Income	1,962,766	1,785,360
Unrealized Losses	(2,886,605)	(887,785)
Merchandising, Jobbing and Other Nonoperating Income	107,206	93,143
Interest and Fiscal Charges	(14,393)	(3,975)
Other Nonoperating Expenses	(706)	(706)
Total Nonoperating Revenues (Expenses)	(831,732)	986,037
INCOME (LOSS) BEFORE CONTRIBUTIONS AND TRANSFERS	(4,979,769)	4,928,493
Capital Contributions	1,688,601	1,320,353
Transfers - Tax Equivalents	(3,280,039)	(3,937,373)
CHANGE IN NET POSITION	(6,571,207)	2,311,473
TOTAL NET POSITION - BEGINNING	200,862,242	198,550,769
TOTAL NET POSITION - ENDING	\$ 194,291,035	\$ 200,862,242

MANITOWOC PUBLIC UTILITIES

CITY OF MANITOWOC, WISCONSIN

STATEMENT OF CASH FLOWS »

Year ended December 31, 2022

With summarized comparative information for the year ended December 31, 2021

	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES		
Received from Customers	\$ 78,144,872	\$ 71,193,983
Paid for Employee Wages and Benefits	(3,953,886)	(4,098,249)
Paid to Municipality	(606,222)	(37,886)
Paid to Suppliers for Goods and Services	(74,986,439)	(57,571,061)
Net Cash Flows From Operating Activities	(1,401,675)	9,486,787
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES		
Economic Development Loans Paid Out	(50,237)	(82,897)
Received (Paid) on Notes to City of Manitowoc	3,457	2,848
Deposit from (to) Others	5,048,933	(5,000,000)
Transfer to City of Manitowoc	(3,280,039)	(3,937,373)
Net Cash Flows From Noncapital Financing Activities	1,722,114	(9,017,422)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Acquisition of Capital Assets	(4,794,048)	(4,472,079)
Capital Contributions	1,688,601	1,320,353
Salvage Received on Capital Assets	210,669	155,829
Cost of Removal of Capital Assets	(158,000)	(485,491)
Interest Paid on Long-Term Debt	(14,393)	(3,975)
Net Cash Flows From Capital and Related Financing Activities	(3,067,171)	(3,485,363)
CASH FLOWS FROM INVESTING ACTIVITIES		
Investment Income	1,962,766	1,785,360
Cash Paid to ATC LLC	(802,104)	(341,194)
Purchase of Investments	(9,253,896)	(10,298,817)
Proceeds from Maturity of Investments	6,314,711	8,115,000
Net Cash Flows From Investing Activities	(1,778,523)	(739,651)
NET DECREASE IN CASH AND INVESTMENTS	(4,525,255)	(3,755,649)
CASH AND INVESTMENTS - BEGINNING OF YEAR	22,077,221	25,832,870
CASH AND INVESTMENTS - END OF YEAR	\$ 17,551,966	\$ 22,077,221

MANITOWOC PUBLIC UTILITIES

CITY OF MANITOWOC, WISCONSIN

STATEMENT OF CASH FLOWS »

Year ended December 31, 2022

With summarized comparative amounts for the year ended December 31, 2021

	2022	2021
RECONCILIATION OF OPERATING INCOME (LOSS) TO NET CASH FLOWS FROM OPERATING ACTIVITIES		
Operating Income (Loss)	\$ (4,148,037)	\$ 3,942,456
Noncash Items Included in Operating Income (Loss):		
Depreciation	5,832,016	5,586,424
Depreciation Charged to Operating Accounts	706	707
Depreciation Charged to Sewer (Meters)	94,908	88,723
Amortization of Asset Retirement Obligation	866,667	866,667
Changes in Deferred Outflows and Inflows of Resources:		
Deferred Outflows Related to Pension	(3,180,542)	(1,389,266)
Deferred Inflows Related to Pension	3,298,747	1,933,759
Deferred Outflows Related to OPEB - Cost-Sharing Plan	45,157	(112,147)
Deferred Inflows Related to OPEB - Cost-Sharing Plan	2,976	13,950
Deferred Outflows Related to OPEB - Single-Employer	(4,423)	2,129
Deferred Inflows Related to OPEB - Single-Employer	42,959	(731)
Changes in Assets and Liabilities		
Customer Accounts Receivable, Net	(32,928)	(1,576,369)
Due from Other Governments	711	(338)
Prepaid Supplies and Other Items	(1,857,169)	(94,092)
Net Pension Asset	(1,212,318)	(1,374,911)
Accounts Payable	(1,219,395)	960,243
Accrued and Other Current Liabilities	182,196	140,222
Due to Other Governments	(606,933)	(37,548)
Customer Deposits	107,342	215,857
Compensated Absences	257,407	(43,258)
Net OPEB Liability - Cost-Sharing Plan	52,040	251,298
Net OPEB Liability - Single-Employer	(30,262)	20,575
Merchandising and Jobbing	107,206	93,143
Miscellaneous	(706)	(706)
Net Cash Flows from Operating Activities	\$ (1,401,675)	\$ 9,486,787

RECONCILIATION OF CASH AND INVESTMENTS TO THE STATEMENTS OF NET POSITION

Cash and Investments	\$ 50,911,004	\$ 55,383,679
Less: Long-Term Investments	(33,359,038)	(33,306,458)
Total Cash and Investments	\$ 17,551,966	\$ 22,077,221

MANITOWOC PUBLIC UTILITIES

CITY OF MANITOWOC, WISCONSIN

NOTES TO FINANCIAL STATEMENTS »

December 31, 2022

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES »

INTRODUCTION

This summary of significant accounting policies of the Manitowoc Public Utilities (MPU) is presented to assist in understanding MPU's financial statements. The financial statements and notes are representations of MPU's management who is responsible for the integrity and objectivity of the financial statements. These accounting policies conform to generally accepted accounting principles (GAAP) and have been consistently applied in the preparation of the financial statements. The Governmental Accounting Standards Board (GASB) is the accepted standards setting body for establishing governmental accounting and financial reporting principles.

REPORTING ENTITY

Manitowoc Public Utilities is a business-type activity component unit of the City of Manitowoc, Wisconsin. In accordance with GAAP, the financial statements are required to include MPU and any separate component units that have a significant operational or financial relationship with MPU. MPU has not identified any component units that are required to be included in the financial statements in accordance with standards.

PROPRIETARY FUND FINANCIAL STATEMENTS

Manitowoc Public Utilities is reported as business-type activities of the City of Manitowoc, Wisconsin municipality. The accounts of MPU are organized on the basis of funds, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, liabilities, deferred outflow/inflows of resources, fund equity, and revenues and expenses. MPU utilizes the following funds to report its operations:

- **Enterprise funds.** Enterprise funds are used to account for government operations (a) that are financed and operated in a manner similar to private business enterprises – where the intent of the governing body is that the costs (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance, public policy, management control, accountability and other purposes. Enterprise funds are used to account for the operations of the electric, water, steam and broadband utility.
- **Internal service fund.** An Internal service fund is used to account for the financing of goods and services provided by one department to other departments of MPU, or to other governmental units, on a cost-reimbursement basis. An internal service fund is used to account for the operation of MPU's infrastructure technology department.

MPU issues consolidated financial statements with all funds presented as one operation. Interfund activity between MPU funds has been eliminated.

MEASUREMENT FOCUS, BASIS OF ACCOUNTING AND BASIS OF PRESENTATION

MPU's financial statements are reported using the *economic resources measurement focus* and the *accrual basis of accounting*. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing or related cash flows. Unpaid customer accounts receivable are recorded at year end.

MPU distinguishes *operating* revenues and expenses from *nonoperating* items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with MPU's principal ongoing operations. The principal operating revenues of MPU are charges to customers for services. Operating expenses include the costs of services, administrative expenses and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

When both restricted and unrestricted resources are available for use, it is MPU's policy to use restricted resources first, then unrestricted resources, as they are needed.

CASH AND INVESTMENTS

Cash and investments are combined on the statement of net position. Cash deposits consist of demand and time deposits with financial institutions and are carried at cost. Investments are stated at fair value. Fair value is the price that would be received to sell an asset in an orderly transaction between market participants at the measurement date. For purpose of the statement of cash flows, all cash deposits and highly liquid investments (including restricted assets) with a maturity of three months or less from the date of acquisition are considered to be cash equivalents.

RECEIVABLES AND PAYABLES

Transactions between MPU and other funds of the Municipality that are representative of lending/borrowing arrangements outstanding at year end are referred to as advances to/from other funds. All other outstanding balances between MPU and other funds of the Municipality are reported as payable to/receivable from the Municipality.

MPU has the right under Wisconsin statutes to place delinquent electric bills on the tax roll for collection. An allowance for uncollectible accounts of \$47,294 has been provided for electric and water MPU receivables.

PREPAID AND SUPPLIES ITEMS

Prepaid supplies consist of expendable supplies held for consumption. The cost is recorded as an expense at the time individual items are consumed rather than purchased. Prepaid items represent payments made to vendors that will benefit periods beyond the end of the current fiscal year are recorded as prepaid items and are expensed in the periods benefited.

INVESTMENT IN AMERICAN TRANSMISSION COMPANY (ATC)

MPU is a member of ATC. ATC was formed by approximately 25 utilities to plan, construct, maintain, monitor and own electric transmission facilities in Wisconsin. On June 28, 2001, MPU sold its transmission assets to ATC at a book value of \$2,351,000. In return, MPU received cash for half of the value and an ownership interest in ATC for the other half. MPU owns less than 1% of ATC.

The investment earns dividends quarterly, some of which are paid in cash and some of which are required to be reinvested. From time to time, MPU has the option to contribute additional funds to maintain its proportionate share of ownership. The investment in American Transmission Company LLC is recorded at cost since it is privately held and has no readily available fair market value. MPU's ownership share is valued at \$15,057,727 as of December 31, 2022, and is reported on the statement of net position as other assets.

NONUTILITY PROPERTY

Nonutility property consists of land and improvements and is valued at cost of acquisition, demolition, and site improvements. Properties includes both land intended for future use and land designated as a public area. Assets are recorded at acquisition cost.

CAPITAL ASSETS

Capital assets, which include property, plant, equipment and infrastructure assets, are reported in the financial statements. The Public Service Commission of Wisconsin establishes estimated lives and straight-line depreciation rates. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at estimated acquisition value at the date of donation. The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend asset lives are not capitalized.

WASTEWATER COLLECTIONS

MPU performs the billing and collection functions for the City of Manitowoc Wastewater Treatment Plant (the Wastewater Treatment Plant). MPU charges the Wastewater Treatment Plant for these services at cost plus a return on investment. The cost reimbursement is credited directly to the related expense accounts.

COMPENSATED ABSENCES

MPU's policy permits employees to accumulate earned but unused vacation and sick leave benefits in accordance with employee handbook policies. MPU records unused sick leave and vacation benefits as an expense and a liability as the benefits accrue to employees.

DEFERRED OUTFLOWS/INFLOWS OF RESOURCES

Deferred outflows of resources are a consumption of net position by MPU that is applicable to a future reporting period. Deferred inflows of resources are an acquisition of net position by MPU that is applicable to a future reporting period. The recognition of those outflows and inflows are expenses and revenues and are deferred until the future periods to which the outflows and inflows are applicable.

PENSION AND OTHER POST-EMPLOYMENT BENEFITS

Pensions

For purposes of measuring the net pension liability (asset), deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense (revenue), information about the fiduciary net position of the Wisconsin Retirement System (WRS) and additions to/deductions from

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

WRS' fiduciary net position have been determined on the same basis as they are reported by the WRS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Local Retiree Life Insurance Fund (LRLIF)

The fiduciary net position of the Local Retiree Life Insurance Fund has been determined using the flow of economic resources measurement focus and the accrual basis of accounting. This includes, for purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to other post-employment benefits, OPEB expense, and information about the fiduciary net position of the plan. Additions to/ deductions from the plan's fiduciary net position have been determined on the same basis as they are reported by the plan. For this purpose, benefit payments (including refunds) of employee contributions are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Single-Employer Defined Postemployment Benefit Plan

The total OPEB liability of MPU's single-employer other post-employment benefit plan has been determined using the flow of economic resources measurement focus and the accrual basis of accounting. This includes for purposes of measuring the total OPEB liability, deferred outflows of resources and deferred inflows of resources related to other post-employment benefits and OPEB expense. The plan has no assets, and benefits are on a pay-as-you-go basis.

LONG-TERM OBLIGATIONS

Long-term debt and other obligations are reported as liabilities. Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. Debt payables are reported net of the applicable bond premium or discount. Debt issuance costs, whether or not withheld from the actual debt proceeds received, are reported as expenses.

LEASES

MPU adopted GASB Statement No. 87 for the year ended December 31, 2022 which requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. This statement establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. A lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. There was an adjustment for material leases that was required to be recorded for the year ended December 31, 2022. See Note 13.

CAPITAL CONTRIBUTIONS

Cash and capital assets are contributed to MPU from customers, the Municipality or other external parties. The value of property contributed to MPU is reported as capital contributions on the statements of revenues, expenses and changes in net position.

TRANSFERS

Transfers include the payment in lieu of taxes to the Municipality.

BASIS FOR EXISTING RATES

Electric – The Public Service Commission of Wisconsin approved the electric rates on April 1, 2020 and are designed to provide a 4.9% return on rate base.

Water – The Public Service Commission of Wisconsin approved the water rates on June 1, 2015 and are designed to provide a 4.0% return on rate base.

Dark Fiber – The current rates to these customers are approved by MPU commission.

Steam – The current rates to these customers are approved by MPU commission.

CERTAIN ASSET RETIREMENT OBLIGATIONS

MPU implemented GASB Statement No. 83, Certain Asset Retirement Obligation (ARO) during the fiscal year ended December 31, 2020. An ARO is a legal enforceable liability associated with the retirement of a tangible asset. A legal obligation exists for MPU to perform future retirement activities for the decommissioning of the power plant complex and coal storage site, as the site contains hazardous and other materials that require special handling, based upon Federal Regulations.

NET POSITION

Net position is classified into three components defined as follows:

- ▶ **Net investment in capital assets** – Amount of capital assets, net of accumulated depreciation, less outstanding balances of any bonds, mortgages, notes or other borrowings that are attributable to the acquisition, construction, or improvements of those assets.
- ▶ **Restricted net position** – Amount of net position that is subject to restrictions that are imposed by 1) external groups, such as creditors, contributors or laws or regulations of other governments or 2) law through constitutional provisions or enabling legislation.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

- **Unrestricted net position** – Net position that is neither classified as restricted nor as net investment in capital assets.

When both restricted and unrestricted resources are available for use, it is MPU's policy to use restricted resources first, then unrestricted resources as they are needed.

USE OF ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates, and such differences may be material.

RECLASSIFICATIONS

Certain amounts in the prior year financial statements have been reclassified to conform with the presentation in the current year financial statements with no change in previously reported net position, or changes in net position.

NOTE 2 - CASH AND INVESTMENTS

Wisconsin statutes authorize MPU to make deposits and invest in the accounts of banks, credit unions, savings banks, trust companies and savings and loan associations, which are authorized to transact business in the State of Wisconsin. MPU is allowed to invest in:

- Time deposits in any credit union, bank, savings bank or trust company maturing in three year or less.
- Bonds or securities of any county, city, drainage district, technical college, village, town or school district of the state. Also, bonds issued by a local exposition district, local professional baseball park district or the University of Wisconsin Hospitals and Clinics.
- Bonds or securities issued or guaranteed by the federal government.
- The Wisconsin local government investment pool.
- Any security maturing in seven years or less and having the highest or second highest rating category of a nationally recognized rating agency.
- Securities of an open-end management investment company or investment trust subject to various conditions and investment options.
- Repurchase agreements with public depositories, with certain conditions.

Additional restrictions could arise from local charters, ordinances, resolutions and grant regulations of MPU.

The carrying amount of MPU's cash and investments totaled \$50,911,004 on December 31, 2022 are as follows:

Petty Cash and Cash on Hand	\$	750
Deposits With Financial Institutions		13,764,260
Investments		37,145,994
		<hr/>
		50,911,004
		<hr/>
Reconciliation to the Financial Statements		
Statement of Net Position:		
Cash	\$	13,765,010
Current Investments		3,786,956
Non-current Investments		33,359,038
		<hr/>
	\$	50,911,004
		<hr/>

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

CUSTODIAL CREDIT RISK

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, MPU will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The state statutes do not contain legal or policy requirements that would limit the exposure to custodial risks for deposits.

Deposits in each bank are insured by the FDIC up to \$250,000 for the combined amounts of all time and savings accounts (including NOW accounts); up to \$250,000 for the combined amount of all interest and noninterest bearing demand deposit accounts.

Any losses caused by failure of public depositories are also covered by the State Deposit Guarantee Fund. The fund provides coverage of \$400,000 in each financial institution above the applicable insurance coverage provided by the FDIC. However, although the fund had reserves available at December 31, 2022, the future availability of resources to cover the losses cannot be projected because provisions of the 1985 Wisconsin Act 25 provided that the amount in the fund will be used to repay public depositors for losses until the appropriation is exhausted, at which time the fund will be abolished; therefore, the State Deposit Guarantee Fund is not considered in covered amounts noted below.

The following represents a summary of deposits as of December 31, 2022:

Fully Insured Deposits	\$ 500,000
Collateralized	14,800,952
	<u>\$ 15,300,952</u>

The difference in carrying value of cash deposits and bank deposits results from outstanding checks and deposits.

CREDIT RISK

State law limits investments in commercial paper, corporate bonds, and mutual bond funds to the top two ratings issued by nationally recognized statistical rating organizations. MPU's investment policy does not further limit its investment choices. Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations.

As of December 31, 2022, MPU's credit quality ratings are as follows:

INVESTMENT TYPE	AMOUNT	EXEMPT FROM DISCLOSURE	AAA	Aa	A	NOT RATED
U.S. Treasury Notes	\$ 6,996,296	\$ 6,996,296	\$ -	\$ -	\$ -	\$ -
U.S. Agencies	1,221,689	1,221,689	-	-	-	-
Money Market Mutual Funds	178,545	-	-	178,545	-	-
Corporate Bonds and Notes	20,483,283	-	6,409,525	10,424,495	2,434,477	1,214,786
State and Municipal Bonds and Notes	240,850	-	-	240,850	-	-
Federal National Mortgage	3,646,741	-	3,646,741	-	-	-
Federal Home Loan Bank	2,802,403	-	2,802,403	-	-	-
Federal Home Loan Mortgage	449,427	-	449,427	-	-	-
Federal Farm Credit Bureau	1,126,760	-	1,126,760	-	-	-
Totals	<u>\$ 37,145,994</u>	<u>\$ 8,217,985</u>	<u>\$ 14,434,856</u>	<u>\$ 10,843,890</u>	<u>\$ 2,434,477</u>	<u>\$ 1,214,786</u>

CONCENTRATION OF CREDIT RISK

The investment policy of MPU limits the amount that can be invested in any one issuer. Corporate securities (nonequity) may not exceed 60% of the securities portfolio with an additional limitation of 7% for any individual corporation. Commercial paper may not exceed 25% of the securities portfolio with an additional limitation of 7% for any individual corporation. Mortgage backed securities may not exceed 25% of the portfolio and pools of Small Business Administration loans may not exceed 10%. Investments in any one issuer that represent 5% or more of MPU's total investments are as follows:

ISSUER	INVESTMENT TYPE	REPORTED AMOUNT	PERCENT OF TOTAL INVESTMENTS
Federal National Mortgage	Federal Agency Securities	\$ 3,646,741	10%
Federal Home Loan Bank	Federal Agency Securities	2,802,403	8%

INTEREST RATE RISK

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that MPU manages its exposure to interest rate risk is by purchasing a combination so that a portion of the portfolio is maturing or coming close to maturity evenly over time as necessary to provide the cash flow and liquidity needed for operations.

As of December 31, 2022, MPU's investments were as follows:

INVESTMENT TYPE	REMAINING MATURITY (IN MONTHS)				
	AMOUNT	12 MONTHS OR LESS	13 TO 24 MONTHS	25 TO 60 MONTHS	MORE THAN 60 MONTHS
U.S. Treasury Securities	\$ 6,996,296	\$ 1,773,781	\$ 1,765,093	\$ 3,457,422	\$ -
U.S. Agencies	1,221,689	-	497,824	723,865	-
Money Market Mutual Funds	178,545	178,545	-	-	-
Corporate Bonds and Notes	20,483,283	1,336,806	5,024,124	14,122,353	-
State and Municipal Bonds and Notes	240,850	-	-	240,850	-
Federal National Mortgage	3,646,741	-	-	3,646,741	-
Federal Home Loan Bank	2,802,403	-	-	2,802,403	-
Federal Home Loan Mortgage	449,427	-	-	449,427	-
Federal Farm Credit Bureau	1,126,760	-	-	1,126,760	-
Total	\$ 37,145,994	\$ 3,289,132	\$ 7,287,041	\$ 26,569,821	\$ -

INVESTMENTS WITH FAIR VALUES HIGHLY SENSITIVE TO INTEREST RATE FLUCTUATIONS

MPU's investments include the following investments that are highly sensitive to interest rate fluctuations (to a greater degree already indicated in the information provided above):

HIGHLY SENSITIVE INVESTMENTS	FAIR VALUE AT END OF YEAR
Mortgage-backed Securities. These securities are subject to early payment in a period of declining interest rates. The resulting reduction in expected total cash flows affects the fair value of these securities and makes the fair values of these securities highly sensitive to changes in interest rates.	\$ 8,025,331

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

FAIR VALUE

Investments are measured at fair value on a recurring basis. Recurring fair value measurements are those that Governmental Accounting Standards Board (GASB) Statements require at the end of each reporting period. Fair value measurements are categorized based on the valuation inputs used to measure an asset's fair value. Adjustments necessary to record investments at fair value are recorded as increases or decreases in investment income.

- ▶ **Level 1** – Valuation for assets are from quoted prices in active markets. These valuations are obtained from readily available pricing sources from market transactions involving identical assets.
- ▶ **Level 2** – Valuation for assets are from less active markets. These valuations are obtained from third party pricing services for identical or similar assets.
- ▶ **Level 3** – Measurements that are least observable are estimated from related market data, determined from sources with little or no market activity for comparable contracts, or are positions with longer durations. These valuations incorporate certain assumptions and projections in determining fair value assigned to such assets.

As of December 31, 2022 MPU had the following investments at fair value:

INVESTMENTS	FAIR VALUE MEASUREMENTS USING:		
	LEVEL 1	LEVEL 2	LEVEL 3
U.S. Treasury Securities	\$ -	\$ 6,996,296	\$ -
U.S. Agencies	-	1,221,689	-
Money Market Mutual Funds	178,545	-	-
Corporate Bonds and Notes	-	20,483,283	-
State and Municipal Bonds	-	240,850	-
Federal National Mortgage	-	3,646,741	-
Federal Home Loan Bank	-	2,802,403	-
Federal Home Loan Mortgage	-	449,427	-
Federal Farm Credit Bureau	-	1,126,760	-
Total	\$ 178,545	\$ 36,967,449	\$ -

NOTE 3 - INTERFUND RECEIVABLES/PAYABLES AND TRANSFERS

The following is a schedule of interfund balances as of December 31, 2022:

RECEIVABLE FUND	PAYABLE FUND	AMOUNT	PURPOSE
MPU	Municipality	\$ 25,555	Phone System
MPU	Municipality	917,558	Land Purchase
		<u>\$ 943,113</u>	

Interfund transfers for the year ended December 31, 2022 in the amount of \$3,280,039 were made for the purpose of transferring the tax equivalent payment from MPU to the general fund of the City of Manitowoc, Wisconsin.

NOTE 4 - CHANGES IN CAPITAL ASSETS

A summary of changes in capital assets for 2022 is as follows:

	BEGINNING BALANCES	INCREASES	DECREASES	ENDING BALANCES
Capital Assets, not being Depreciated:				
Land	\$ 2,226,996	\$ -	\$ -	\$ 2,226,996
Construction in Progress	1,633,824	600,814	443,089	1,791,549
Total Capital Assets Not Being Depreciated	3,860,820	600,814	443,089	4,018,545
Capital Assets Being Depreciated:				
Buildings	22,873,904	184,910	11,329	23,047,485
Improvements Other Than Buildings	160,604,798	1,392,198	2,190,550	159,806,446
Infrastructure	82,595,626	3,059,215	591,834	85,063,007
Total Capital Assets Being Depreciated	266,074,328	4,636,323	2,793,713	267,916,938
Less Accumulated Depreciation:				
Buildings	10,598,708	315,356	14,292	10,899,772
Improvements Other Than Buildings	94,523,687	3,638,547	2,205,549	95,956,685
Infrastructure	32,280,333	2,183,690	731,872	33,732,151
Total Accumulated Depreciation	137,402,728	6,137,593	2,951,713	140,588,608
Total Capital Assets, Net of Depreciation	128,671,600	(1,501,270)	(158,000)	127,328,330
Net Capital Assets	\$ 132,532,420	\$ (900,456)	\$ 285,089	\$ 131,346,875

Depreciation expense was charged to functions of MPU as follows:

Business-Type Activities:	
Water Utility	\$ 2,108,991
Electric Utility	3,600,764
Steam Utility	59,129
Broadband	63,132
Total Depreciation Expense	5,832,016
Depreciation Charged to Sewer Utility for Shared Meter Expense	94,908
Salvage Charged to Accumulated Depreciation	210,669
Total Increase in Accumulated Depreciation Above	\$ 6,137,593

NOTE 5 - ASSET RETIREMENT OBLIGATIONS

A legal obligation exists for MPU to perform future retirement activities for the decommissioning of the power plant complex and coal storage site, as the sites contain hazardous and other materials that require special handling, based upon Federal Regulations. The estimated useful life remaining is 9 years. There are no legally required funding or assurance provision or restricted assets associated with the asset retirement obligation. Based on management's best estimate and evaluation of expected retirement activities including comparison of retirement costs for similar plants, MPU estimates the cost of decommissioning these assets, and accordingly recognized a liability of \$26,000,000 and deferred outflows of resources of \$12,133,332 as of December 31, 2022. Current year amortization amounted to \$866,667.

NOTE 6 - NET POSITION

Net position reported on the statement of net position at December 31, 2022 include the following:

Net Investment in Capital Assets	
Net Capital Assets	\$ 131,346,875
Investment in Nonutility Plant - Net	1,123,585
Net Investment in Capital Assets	132,470,460
Net Position Restricted For Pension	2,368,125
Unrestricted	59,452,450
Total Net Position	\$ 194,291,035

NOTE 7 - DEFINED BENEFIT PENSION PLAN

GENERAL INFORMATION ABOUT THE PENSION PLAN

Plan Description. The WRS is a cost-sharing multiple-employer defined benefit pension plan. WRS benefits and other plan provisions are established by Chapter 40 of the Wisconsin Statutes. Benefit terms may only be modified by the legislature. The retirement system is administered by the Wisconsin Department of Employee Trust Funds (ETF). The system provides coverage to all eligible State of Wisconsin, local government and other public employees. All employees, initially employed by a participating WRS employer on or after July 1, 2011, expected to work at least 1,200 hours a year (880 hours for teachers and school district educational support employees) and expected to be employed for at least one year from employee's date of hire are eligible to participate in the WRS.

ETF issues a standalone Annual Comprehensive Financial Report (ACFR), which can be found at <https://etf.wi.gov/about-etf/reports-and-studies/financial-reports-and-statements>.

Vesting. For employees beginning participation on or after January 1, 1990, and no longer actively employed on or after April 24, 1998, creditable service in each of five years is required for eligibility for a retirement annuity. Participants employed prior to 1990 and on or after April 24, 1998, and prior to July 1, 2011, are immediately vested. Participants who initially became WRS eligible on or after July 1, 2011, must have five years of creditable service to be vested.

Benefits Provided. Employees who retire at or after age 65 (54 for protective occupations and 62 for elected officials and executive service retirement plan participants, if hired on or before December 31, 2016) are entitled to a retirement benefit based on a formula factor, their final average earnings and creditable service.

Final average earnings is the average of the participant's three highest annual earnings periods. Creditable service includes current service and prior service for which a participant received earnings and made contributions as required. Creditable service also includes creditable military service. The retirement benefit will be calculated as a money purchase benefit based on the employee's contributions plus matching employer's contributions, with interest, if that benefit is higher than the formula benefit.

Vested participants may retire at or after age 55 (50 for protective occupations) and receive an actuarially-reduced benefit. Participants terminating covered employment prior to eligibility for an annuity may either receive employee-required contributions plus interest as a separation benefit or leave contributions on deposit and defer application until eligible to receive a retirement benefit.

The WRS also provides death and disability benefits for employees.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

Post-Retirement Adjustments. The Employee Trust Funds Board may periodically adjust annuity payments from the retirement system based on annual investment performance in accordance with s. 40.27, Wis. Stat. An increase (or decrease) in annuity payments may result when investment gains (losses), together with other actuarial experience factors, create a surplus (shortfall) in the reserves, as determined by the system's consulting actuary. Annuity increases are not based on cost of living or other similar factors. For Core annuities, decreases may be applied only to previously granted increases. By law, Core annuities cannot be reduced to an amount below the original, guaranteed amount (the "floor") set at retirement. The Core and Variable annuity adjustments granted during recent years are as follows:

YEAR	CORE FUND ADJUSTMENT (%)	VARIABLE FUND ADJUSTMENT (%)
2012	(7.0) %	(7) %
2013	(9.6)	9
2014	4.7	25
2015	2.9	2
2016	0.5	(5)
2017	2.0	4
2018	2.4	17
2019	0.0	(10)
2020	1.7	21
2021	5.1	13

Contributions. Required contributions are determined by an annual actuarial valuation in accordance with Chapter 40 of the Wisconsin Statutes. The employee required contribution is one-half of the actuarially determined contribution rate for General category employees, including Teachers, Executives and Elected Officials. Starting on January 1, 2016, the Executives and Elected Officials category was merged into the General Employee Category. Required contributions for protective employees are the same rate as general employees. Employers are required to contribute the remainder of the actuarially determined contribution rate. The employer may not pay the employee required contribution unless provided for by an existing collective bargaining agreement.

During the 2022 reporting period, the WRS recognized \$605,120 in contributions from MPU.

Contribution rates as of December 31, 2022 are:

EMPLOYEE CATEGORY	EMPLOYEE	EMPLOYER
General (including executives and elected officials)	6.50%	6.50%
Protective with Social Security	6.50%	12.00%
Protective without Social Security	6.50%	16.40%

Pension Liabilities (Assets), Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At December 31, 2022, MPU reported an asset of \$3,926,235 for its proportionate share of the net pension asset. The net pension asset was measured as of December 31, 2021, and the total pension liability used to calculate the net pension asset was determined by an actuarial valuation as of December 31, 2020 rolled forward to December 31, 2021. No material changes in assumptions or benefit terms occurred between the actuarial valuation date and the measurement date. MPU's proportion of the net pension asset was based on MPU's share of contributions to the pension plan relative to the contributions of all participating employers. At December 31, 2022, MPU's proportion was 0.04871148% which was an increase of 0.00524108% from its proportion measured as of December 31, 2020.

For the year ended December 31, 2022, MPU recognized a reduction of pension expense of \$335,962.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

At December 31, 2022 MPU reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	DEFERRED OUTFLOWS OF RESOURCES	DEFERRED INFLOWS OF RESOURCES
Differences between projected and actual experiences	\$ 6,342,635	\$ 457,372
Changes in assumptions	732,501	-
Net differences between projected and actual earnings on pension plan investments	-	8,783,315
Changes in proportion and differences between employer contributions and proportionate share of contributions	4,460	2,139
Employer contributions subsequent to the measurement date	605,120	-
Total	<u>\$ 7,684,716</u>	<u>\$ 9,242,826</u>

At December 31, 2022, the \$605,120 reported as deferred outflows related to pension resulting from the WRS employer's contributions subsequent to the measurement date will be recognized as an adjustment of the net pension liability (asset) in the years ending December 31, 2023. Other amounts at December 31, 2022 reported as deferred outflows of resources and deferred inflows of resources related to pension will be recognized in pension expense as follows:

YEAR ENDING DECEMBER 31,	NET DEFERRED OUTFLOWS (INFLOWS) OF RESOURCES
2023	\$ (182,686)
2024	(1,064,096)
2025	(467,897)
2026	(448,551)
	<u>\$ (2,163,230)</u>

Actuarial Assumptions. The total pension liability in the December 31, 2021 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial Valuation Date:	December 31, 2020
Measurement Date of Net Pension Liability (Asset):	December 31, 2021
Actuarial Cost Method:	Entry Age Normal
Asset Valuation Method:	Fair Value
Long-Term Expected Rate of Return:	6.8%
Discount Rate:	6.8%
Salary Increases:	
Inflation	3.0%
Seniority/Merit	0.1% - 5.6%
Mortality:	2020 WRS Experience Mortality Table
Post-retirement Adjustments*	1.7%

*No post-retirement adjustment is guaranteed. Actual adjustments are based on recognized investment return, actuarial experience and other factors. 1.7% is the assumed annual adjustment based on the investment return assumption and the post-retirement discount rate.

Actuarial assumptions are based upon an experience study conducted in 2021 that covered a three-year period from January 1, 2018 to December 31, 2020. Based on this experience study, actuarial assumptions used to measure the total pension liability changed from prior year, including the discount rate, long-term expected rate of return, post-retirement adjustment, price inflation, mortality and separation rates. The total pension liability for December 31, 2021 is based upon a roll-forward of the liability calculated from the December 31, 2020 actuarial valuation.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

Long-term Expected Return on Plan Assets. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table:

ASSET ALLOCATION TARGETS AND EXPECTED RETURNS¹ AS OF DECEMBER 31, 2021

CORE FUND ASSET CLASS	ASSET ALLOCATION %	LONG-TERM EXPECTED NOMINAL RATE OF RETURN %	LONG-TERM EXPECTED REAL RATE OF RETURN % ²
Global Equities	52%	6.8%	4.2%
Fixed Income	25	4.3	1.8
Inflation Sensitive Assets	19	2.7	0.2
Real Estate	7	5.6	3.0
Private Equity/Debt	12	9.7	7.0
Total Core Fund ³	115%*	6.6%	4.0%

VARIABLE FUND ASSETS CLASS			
U.S. Equities	70%	6.3%	4.1%
International Equities	30	7.2	4.9
Total Variable Fund	100%	6.8%	4.6%

¹Asset Allocations are managed within established ranges; target percentages may differ from actual monthly allocations.

²New England Pension Consultants Long Term US CPI (Inflation) Forecast: 2.5%.

³The investment policy used for the Core Fund involves reducing equity exposure by leveraging lower-volatility assets, such as fixed income securities. This results in an asset allocation beyond 100%. Currently, an asset allocation target of 15% policy leverage is used, subject to an allowable range of up to 20%.

Single Discount Rate. A single discount rate of 6.8% was used to measure the total pension liability, as opposed to a discount rate of 7.0% for the prior year. This single discount rate is based on the expected rate of return on pension plan investments of 6.8% and a municipal bond rate of 1.84% (Source: Fixed-income municipal bonds with 20 years to maturity that include only federally tax-exempt municipal bonds as reported in Fidelity Index's "20-year Municipal GO AA Index" as of December 31, 2021. In describing this index, Fidelity notes that the Municipal Curves are constructed using option-adjusted analytics of a diverse population of over 10,000 tax exempt securities). Because of the unique structure of WRS, the 6.8% expected rate of return implies that a dividend of approximately 1.7% will always be paid. For purposes of the single discount rate, it was assumed that the dividend would always be paid. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments (including expected dividends) of current plan members. Therefore, the municipal bond rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of MPU's Proportionate Share of the Net Pension Liability (Asset) to Changes in the Discount Rate. The following presents MPU's proportionate share of the net pension liability (asset) calculated using the discount rate of 6.80%, as well as what MPU's proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (5.80%) or 1-percentage-point higher (7.80%) than the current rate:

	1% DECREASE TO DISCOUNT RATE (5.80%)	CURRENT DISCOUNT RATE (6.80%)	1% INCREASE TO DISCOUNT RATE (7.80%)
MPU's Proportionate Share of the Net Pension Liability (Asset)	\$ 2,785,942	\$ (3,926,235)	\$ (8,757,754)

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

Pension Plan Fiduciary Net Position. Detailed information about the pension plan's fiduciary net position is available in separately issued financial statements available at <https://etf.wi.gov/about-etf/reports-and-studies/financial-reports-and-statements>.

Payables to the Pension Plan. MPU is required to remit the monthly required contribution for both the employee and MPU portions by the last day of the following month. The amount due to WRS is \$63,689 as of December 31, 2022.

NOTE 8 - POST-EMPLOYMENT BENEFITS OTHER THAN PENSION BENEFITS

MPU reports OPEB related balances at December 31, 2022 as summarized below:

	OPEB LIABILITY	DEFERRED OUTFLOWS OF RESOURCES	DEFERRED INFLOWS OF RESOURCES	OPEB EXPENSE
Local Retiree Life Insurance Fund (LRLIF)	\$ 699,832	\$ 232,305	\$ 79,991	\$ 84,844
Single-Employer Defined OPEB Plan	228,882	84,758	47,716	34,357
Total	<u>\$ 928,714</u>	<u>\$ 317,063</u>	<u>\$ 127,707</u>	<u>\$ 119,201</u>

1. SINGLE-EMPLOYER DEFINED POSTEMPLOYMENT BENEFIT PLAN

Plan Description. The Plan is a single-employer defined benefit postemployment health plan. MPU provides medical coverage (including prescription drugs) for employees who retired prior to January 1, 2021. Employees retiring after December 31, 2020, are no longer eligible to remain on the MPU medical plan.

Employees Covered by Benefit Terms. As of the January 1, 2022 actuarial valuation, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefit payments	4
Active employees	115
Total	<u>119</u>

Contributions. Retired plan members and beneficiaries currently receiving benefits are required to contribute towards the cost of insurance premiums based on the employee group and their retirement date.

Total OPEB Liability. MPU's total OPEB liability was measured as of December 31, 2021 and was determined by an actuarial valuation as of January 1, 2022.

Actuarial Assumptions. The total OPEB liability in the January 1, 2022 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Inflation:	3.00%
Salary Increases:	
Inflation	3.00%
Seniority/Merit	0.4% - 3.50%
Discount Rate:	2.06%
Healthcare Trend Rates:	5.80% for 2022 Decreasing to an Ultimate Rate of 3.70% After 62 Years

Mortality rates are based on the Wisconsin 2018 Mortality table.

The actuarial assumptions used in the January 1, 2021 valuation were based on the "Wisconsin Retirement System 2018 - 2020 Experience Study."

Discount Rate. The discount rate used to measure the total OPEB liability was 2.06%, which is based on the Bond Buyer GO 20-year Municipal Bond Index as of the week of the measurement date. The discount rate used in the January 1, 2018 actuarial valuation was 4.10%. No assets have been accumulated in an irrevocable trust, so the Bond buyer GO 20-year Municipal Bond Index has been applied to all periods.

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

Changes in the Total OPEB Liability:

	TOTAL OPEB LIABILITY
Balance at 12/31/2021	\$ 259,144
Changes for the Year:	
Service Cost	22,062
Interest	5,687
Changes of Assumptions or Other Input	(31,927)
Benefit Payments	(26,084)
Net Changes	(30,262)
Balance at 12/31/2022	\$ 228,882

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate. The following presents the total OPEB liability of MPU, as well as what MPU's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (1.06%) or 1-percentage-point higher (3.06%) than the current rate:

	1% DECREASE (1.06%)	CURRENT DISCOUNT RATE (2.06%)	1% INCREASE (3.06%)
Total OPEB Liability	\$ 243,838	\$ 228,882	\$ 214,463

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates. The following presents the total OPEB liability of MPU, as well as what MPU's total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates:

	1% DECREASE TO (4.8% DECREASING TO 2.7%)	HEALTHCARE COST TREND RATES (5.8% DECREASING TO 3.7%)	1% INCREASE (6.8% DECREASING TO 4.7%)
Total OPEB Liability	\$ 203,004	\$ 228,882	\$ 260,126

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB. For the year ended December 31, 2021, MPU recognized OPEB expense of \$34,357. At December 31, 2022, MPU reported deferred outflows of resources related to OPEB from the following sources:

	DEFERRED OUTFLOWS OF RESOURCES	DEFERRED INFLOWS OF RESOURCES
Differences Between OPEB Plan - Projected and Actual Experiences	\$ 40,809	\$ 43,688
Changes in Assumptions	43,949	4,028
Total	\$ 84,758	\$ 47,716

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

YEAR ENDING DECEMBER 31,	NET DEFERRED OUTFLOWS (INFLOWS) OF RESOURCES
2023	\$ 6,608
2024	6,608
2025	6,608
2026	6,608
2027	6,448
Thereafter	4,162
Total	\$ 37,042

Payable to the OPEB Plan. At December 31, 2022, MPU did not report a payable for the outstanding amount of contribution to the OPEB Plan required.

2. LOCAL RETIREE LIFE INSURANCE FUND

GENERAL INFORMATION ABOUT THE OPEB PLAN

Plan Description. The LRLIF is a multiple-employer defined benefit OPEB plan. LRLIF benefits and other plan provisions are established by Chapter 40 of the Wisconsin Statutes. The Wisconsin Department of Employee Trust Funds (ETF) and the Group Insurance Board have statutory authority for program administration and oversight. The plan provides post-employment life insurance benefits for all eligible members.

OPEB Plan Fiduciary Net Position. ETF issues a standalone Annual Comprehensive Financial Report (ACFR), which can be found at <https://etf.wi.gov/about-etf/reports-and-studies/financial-reports-and-statements>.

Additionally, ETF issued a standalone Retiree Life Insurance Financial Report, which can also be found using the link above.

Benefits Provided. The LRLIF plan provides fully paid up life insurance benefits for post-age 64 retired members and pre-65 retirees who pay for their coverage.

Contributions. The Group Insurance Board approves contribution rates annually, based on recommendations from the insurance carrier. Recommended rates are based on an annual valuation, taking into consideration an estimate of the present value of future benefits and the present value of future contributions. A portion of employer contributions made during a member's working lifetime funds a post-retirement benefit.

Employers are required to pay the following contributions based on member contributions for active members to provide them with Basic Coverage after age 65. There are no employer contributions required for pre-age 65 annuitant coverage. If a member retires prior to age 65, they must continue paying the member premiums until age 65 in order to be eligible for the benefit after age 65.

Contribution rates as of December 31, 2022 are:

COVERAGE TYPE	EMPLOYEE
50% Post-retirement coverage	40% of Member Contribution
25% Post-retirement coverage	20% of Member Contribution

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

Member contributions are based upon nine age bands through age 69 and an additional eight age bands for those age 70 and over. Participating members must pay monthly contribution rates per \$1,000 of coverage until the age of 65 (age 70 if active). The member contribution rates in effect for the year ended December 31, 2021 are as listed below:

LIFE INSURANCE MEMBER CONTRIBUTION RATES * FOR THE YEAR ENDED DECEMBER 31, 2021

ATTAINED AGE	BASIC/SUPPLEMENTAL
Under 30	\$ 0.05
30-34	0.06
35-39	0.07
40-44	0.08
45-49	0.12
50-54	0.22
55-59	0.39
60-64	0.49
65-69	0.57

* Disabled members under age 70 receive a waiver-of-premium benefit.

During the reporting period, the Plan recognized \$746 in contributions from MPU.

OPEB Liabilities, OPEB Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At December 31, 2022, MPU reported a liability of \$699,832, respectively for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of December 31, 2021, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of January 1, 2021 rolled forward to December 31, 2021. No material changes in assumptions or benefit terms occurred between the actuarial valuation date and the measurement date. MPU's proportion of the net OPEB liability was based on MPU's share of contributions to the OPEB plan relative to the contributions of all participating employers. At December 31, 2021, MPU's proportion was 0.12116233%, which was an increase of 0.00339739% from its proportion measured as of December 31, 2020.

For the year ended December 31, 2022, MPU recognized OPEB expense of \$87,922.

At December 31, 2022, MPU reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	DEFERRED OUTFLOWS OF RESOURCES	DEFERRED INFLOWS OF RESOURCES
Differences Between Projected and Actual Experiences	\$ -	\$ 35,600
Changes in Assumptions	211,444	33,920
Net differences between projected and actual earnings on OPEB plan investments	9,105	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	11,010	10,471
Employer contributions subsequent to the measurement date	746	-
Total	\$ 232,305	\$ 79,991

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

The \$746 reported as deferred outflows related to OPEB resulting from the WRS Employer's contributions subsequent to the measurement date will be recognized as an adjustment of the net OPEB liability in the year ending December 31, 2023. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

YEAR ENDING DECEMBER 31,	NET DEFERRED OUTFLOWS (INFLOWS) OF RESOURCES
2023	\$ 35,234
2024	34,178
2025	31,216
2026	37,755
2027	14,655
Thereafter	(1,470)
Total	\$ 151,568

Actuarial Assumptions. The total OPEB liability in the January 1, 2021, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Actuarial Valuation Date:	January 1, 2021
Measurement Date of Net OPEB Liability:	December 31, 2021
Actuarial Cost Method:	Entry Age Normal
20 Year Tax-Exempt Municipal Bond Yield:	2.06%
Long-Term Expected Rate of Return:	4.25%
Discount Rate:	2.17%
Salary Increases:	
Inflation	3.00%
Seniority/Merit	0.1% - 5.6%
Mortality:	2020 WRS Experience Mortality Table

Actuarial assumptions are based upon an experience study conducted in 2021 that covered a three-year period from January 1, 2018 to December 31, 2020. Based on this experience study, actuarial assumptions used to measure the total OPEB liability changed from the prior year, including the price inflation, mortality and separation rates. The total OPEB liability for December 31, 2021 is based upon a roll-forward of the liability calculated from the January 1, 2021 actuarial valuation.

Long-term Expected Return on Plan Assets. The long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. Investments for the LRLIF are held with Securian, the insurance carrier. Interest is calculated and credited to the LRLIF based on the rate of return for a segment of the insurance carriers' general fund, specifically 10-year A-Bonds (as a proxy, and not tied to any specific investments). The overall aggregate interest rate is calculated using a tiered approach based on the year the funds were originally invested and the rate of return for that year. Investment interest is credited based on the aggregate rate of return and assets are not adjusted to fair market value. Furthermore, the insurance carrier guarantees the principal amounts of the reserves, including all interest previously credited thereto.

STATE OPEB LIFE INSURANCE ASSET ALLOCATION TARGETS AND EXPECTED RETURNS AS OF DECEMBER 31, 2021			
ASSET CLASS	INDEX	TARGET ALLOCATION	LONG-TERM EXPECTED GEOMETRIC REAL RATE OF RETURN %
U.S. Intermediate Credit Bonds	Bloomberg U.S. Interm Credit	45%	1.68%
U.S. Long Credit Bonds	Bloomberg U.S. Long Credit	5	1.82
U.S. Mortgages	Bloomberg U.S. MBS	50	1.94
Inflation			2.30
Long-Term Expected Rate of Return			4.25

NOTES TO FINANCIAL STATEMENTS (CONTINUED) »

The long-term expected rate of return remained unchanged from the prior year at 4.25%. The long-term expected rate of return is determined by adding expected inflation to expected long-term real returns and reflecting expected volatility and correlation. The expected inflation rate increased from 2.20% as of December 31, 2020 to 2.30% as of December 31, 2021.

Single Discount Rate. A single discount rate of 2.17% was used to measure the total OPEB liability for the current year, as opposed to a discount rate of 2.25% for the prior year. The significant change in the discount rate was primarily caused by the decrease in the municipal bond rate from 2.12% as of December 31, 2020 to 2.06% as of December 31, 2021. The Plan's fiduciary net position was projected to be insufficient to make all projected future benefit payments of current active and inactive members. Therefore, the discount rate for calculating the total OPEB liability is equal to the single equivalent rate that results in the same actuarial present value as the long-term expected rate of return applied to benefit payments, to the extent that the plan's fiduciary net position is projected to be sufficient to make projected benefit payments, and the municipal bond rate applied to benefit payment to the extent that the plan's fiduciary net position is projected to be insufficient. The plan's fiduciary net position was projected to be available to make projected future benefit payments of current plan members through December 31, 2036.

The projection of cash flows used to determine the single discount rate assumed that employer contributions will be made according to the current employer contribution schedule and that contributions are made by plan members retiring prior to age 65.

Sensitivity of MPU's Proportionate Share of the Net OPEB Liability to Changes in the Discount Rate. The following presents MPU's proportionate share of the net OPEB liability calculated using the discount rate of 2.17%, as well as what MPU's proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (1.17%) or 1-percentage-point higher (3.17%) than the current rate:

	1% DECREASE TO DISCOUNT RATE (1.17%)	CURRENT DISCOUNT RATE (2.17%)	1% INCREASE TO DISCOUNT RATE (3.17%)
MPU's Proportionate Share of the Net OPEB Liability	\$ 949,419	\$ 699,832	\$ 512,027

Payables to the OPEB Plan. As of December 31, 2022, MPU had no outstanding payables to the OPEB plan.

NOTE 9 - CASH RESERVES

MPU's Commission has established a minimum cash reserves requirement of at least 120 days of cash outflows with a goal of 150 days in order to fund unforeseen events, uninsured losses or other claims on MPU's cash. MPU management must inform the Commission if and when the operating reserves of each individual MPU fall below this threshold. This calculation is based off the average of the prior two years' cash operating expenses and interest expense.

	2021	2020	AVERAGE	150 DAYS
Water	\$ 5,265,359	\$ 5,244,001	\$ 5,254,680	\$ 2,159,458
Electric	58,684,321	51,756,146	55,220,234	22,693,247
Steam	1,521,766	1,215,804	1,368,785	562,514
Information Technology	921,541	826,545	874,043	359,196
Broadband	91,196	79,932	85,564	35,163

As of December 31, 2022, MPU has funded its reserves at 150 days and complied with Commission resolution of at least 120 days.

NOTE 10 - RISK MANAGEMENT

MPU is exposed to various risks of loss related to torts, theft of, damage to, or destruction of assets, errors and omission, workers compensation and health care of its employees. These risks, except those related to health care, are covered through the purchase of commercial insurance with minimal deductibles. Settled claims have not exceeded the commercial coverage in the past year. There were no significant reductions in coverage compared to the prior three years.

NOTE 11 - MAJOR POWER SUPPLY CONTRACT ACTIVITIES

MPU is a summer peaking utility. Starting October 1, 2011, MPU entered into a 10-year contract with Great Lakes Utilities (GLU) where MPU received up to 77MW's of capacity and associated energy. As part of this contract, MPU also sold the capacity and associated energy from its steam generation units to GLU. GLU and MPU mutually agreed to terminate this contract as of December 31, 2022. Impacts from the termination of the GLU capacity contract will be minimal due to the fact that as part of the capacity contract termination there is also a termination of MPU's 64 MW load-following power purchase from GLU. This reduction of expenses will offset the loss of revenues from the capacity contract.

NOTE 12 - RELATED PARTY TRANSACTIONS

GLU has contracted with MPU, one of its members, to provide management, secretarial, accounting and technical support services. GLU is charged for these services based upon actual time spent by MPU personnel on GLU operations. GLU is then billed for these services based upon contracted hourly rates. For the year ended December 31, 2022, technical and administrative services provided to GLU totaled \$386,854, with a current receivable from GLU of \$33,792 for services rendered.

In addition, for the year ended December 31, 2022 GLU has purchased power totaling \$27,005,677 from MPU and MPU has a current receivable from GLU of \$1,681,048.

NOTE 13 - LEASES

MPU leases a water tower to Verizon for the purpose of transmission and reception of communication signals. This lease had an initial term of 5 years with three additional 5 year terms ending in 2032. The annual payment for December 31, 2022 is \$59,616. MPU leases a water tower to Cellcom for the purpose of transmission and reception of communication signals. This lease had an initial term of 5 years with six additional 6 year terms ending in 2037. The annual payment for December 31, 2022 is \$40,877 with a 3.00% annual increase. For the year end December 31, 2022, MPU recognized \$90,557 in lease revenue (including interest) related to these agreements. MPU restated the beginning balance as of January 1, 2021 for these leases of \$1,434,394. At December 31, 2022, MPU recorded a \$1,263,381 lease receivables and deferred inflows of resources for these arrangements.

LEASES RECEIVABLE	BEGINNING BALANCES	ADDITIONS	REDUCTIONS	ENDING BALANCES
	JANUARY 1, 2022			DECEMBER 31, 2022
Water Tower - 1997	\$ 617,276	\$ -	\$ 48,290	\$ 568,986
Water Tower - 2002	734,307	-	39,912	694,395
Total	<u>\$ 1,351,583</u>	<u>\$ -</u>	<u>\$ 88,202</u>	<u>\$ 1,263,381</u>

Remaining amounts to be received associated with these leases at December 31, 2022 are as follows:

YEAR ENDING DECEMBER 31,	
2023	\$ 79,242
2024	85,031
2025	91,089
2026	97,427
2027	104,060
2028-2032	540,145
2033-2037	266,387
Total	<u>\$ 1,263,381</u>

MANITOWOC PUBLIC UTILITIES

CITY OF MANITOWOC, WISCONSIN

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF EMPLOYER'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY (ASSET)

Wisconsin Retirement System

WRS FISCAL YEAR END DATE (MEASUREMENT DATE)	MPU PROPORTION OF THE NET PENSION ASSET/ LIABILITY	MPU PROPORTIONATE SHARE OF THE NET PENSION (ASSET)/ LIABILITY	MPU'S COVERED PAYROLL	MPU'S PROPORTIONATE SHARE OF THE NET PENSION (ASSET)/ LIABILITY AS A PERCENTAGE OF COVERED PAYROLL	PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL PENSION LIABILITY
12/31/21	0.04871148%	\$ (3,926,235)	\$ 7,564,766	51.90%	106.02%
12/31/20	0.04347040%	(2,713,917)	6,815,249	39.82%	105.26%
12/31/19	0.04152655%	(1,339,006)	6,830,511	19.60%	102.96%
12/31/18	0.04137931%	1,472,146	6,654,834	22.12%	96.45%
12/31/17	0.04103787%	(1,218,463)	6,354,189	19.18%	102.93%
12/31/16	0.04200699%	346,756	6,069,810	5.71%	99.12%
12/31/15	0.04243429%	689,549	5,973,877	11.54%	98.20%
12/31/14	0.04375710%	(1,074,795)	6,131,326	17.53%	102.74%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Wisconsin Retirement System (WRS)

MPU YEAR END DATE	CONTRACTUALLY REQUIRED CONTRIBUTIONS	CONTRIBUTIONS IN RELATION TO THE CONTRACTUALLY REQUIRED CONTRIBUTIONS	CONTRIBUTION DEFICIENCY (EXCESS)	COVERED PAYROLL	CONTRIBUTIONS AS A PERCENTAGE OF COVERED PAYROLL
12/31/22	\$ 605,120	\$ 605,120	\$ -	\$ 9,309,538	6.50%
12/31/21	510,622	510,622	-	7,564,766	6.75%
12/31/20	460,029	460,029	-	6,815,249	6.75%
12/31/19	447,398	447,398	-	6,830,511	6.55%
12/31/18	445,873	445,873	-	6,654,834	6.70%
12/31/17	409,764	409,764	-	6,354,189	6.45%
12/31/16	406,224	406,224	-	6,069,810	6.69%
12/31/15	418,061	418,061	-	5,973,877	7.00%

*The amounts presented for each year were determined as of the calendar year-end from the prior calendar year. Ten years of data will be accumulated beginning with 2014.

SCHEDULE OF EMPLOYER'S PROPORTIONATE SHARE OF THE NET OPEB LIABILITY

Other Post-Employment Benefits Other Than Pensions
Cost-Sharing Plan

OPEB FISCAL YEAR END DATE (MEASUREMENT DATE)	MPU'S PROPORTION OF THE NET OPEB LIABILITY	MPU'S PROPORTIONATE SHARE OF THE NET OPEB LIABILITY	MPU'S COVERED PAYROLL	MPU'S PROPORTIONATE SHARE OF THE NET OPEB LIABILITY AS A PERCENTAGE OF COVERED PAYROLL	PLAN FIDUCIARY NET POSITION AS A PERCENTAGE OF THE TOTAL OPEB LIABILITY
12/31/21	0.12116233%	\$ 699,832	\$ 6,104,558	11.46%	29.57%
12/31/20	0.11776494%	647,792	6,815,249	9.51%	31.36%
12/31/19	0.11039128%	396,494	6,830,511	5.80%	37.58%
12/31/18	0.09241670%	238,466	6,654,834	3.58%	48.69%
12/31/17	0.09089161%	273,454	6,354,189	4.30%	44.81%

SCHEDULE OF EMPLOYER CONTRIBUTIONS

Other Post-Employment Benefits Other Than Pensions

MPU YEAR END DATE	CONTRACTUALLY REQUIRED CONTRIBUTIONS	CONTRIBUTIONS IN RELATION TO THE CONTRACTUALLY REQUIRED CONTRIBUTIONS	CONTRIBUTION DEFICIENCY (EXCESS)	COVERED PAYROLL	CONTRIBUTIONS AS A PERCENTAGE OF COVERED PAYROLL
12/31/22	\$ 746	\$ 746	\$ -	\$ 6,230,669	0.01%
12/31/21	2,446	2,446	-	6,104,558	0.04%
12/31/20	2,791	2,791	-	6,815,249	0.04%
12/31/19	2,952	2,952	-	6,830,511	0.04%
12/31/18	8,701	8,701	-	6,654,834	0.13%

REQUIRED SUPPLEMENTARY INFORMATION (CONTINUED) »

SCHEDULE OF CHANGES IN TOTAL OPEB AND RELATED RATIOS

Other Post-Employment Benefit Plan - Single-Employer Plan

Last 10 Measurement Years*

	2022	2021	2020	2019	2018
Total OPEB Liability:					
Service cost	\$ 22,062	\$ 19,557	\$ 15,364	\$ 12,677	\$ 11,544
Interest	5,687	6,861	5,947	4,673	4,633
Changes of Benefit Terms	-	-	-	-	-
Differences Between Expected and Actual Experience	(48,608)	-	59,444	-	-
Changes of Assumptions or Other Input	16,681	9,696	28,770	(6,948)	3,230
Benefit Payments	(26,084)	(15,559)	(1,254)	(6,508)	(8,000)
Net Change in Total OPEB Liability	(30,262)	20,575	108,271	3,894	11,407
Total OPEB Liability - Beginning	259,144	238,569	130,298	126,404	114,997
Total OPEB Liability - Ending (a)	\$ 228,882	\$ 259,144	\$ 238,569	\$ 130,298	\$ 126,404
Covered-Employee Payroll	\$ 6,104,558	\$ 6,815,249	\$ 6,815,249	\$ 6,333,360	\$ 6,333,360
Total OPEB Liability as a Percentage of Covered-Employee Payroll	3.75%	3.80%	3.50%	2.06%	2.00%

*Ten years of data will be accumulated beginning with 2018.

To view the full audited financial statements, please visit our website at www.mpu.org

FINANCIAL HIGHLIGHTS

2022 CONTINUED



	2020	2021	2022
Electric Revenues – Retail	\$37,116,359	\$37,197,036	\$40,488,117
Electric Revenues – Wholesale	\$22,123,972	\$25,510,154	\$27,037,246
Number of Electric Customers	18,364	18,369	18,473
Megawatt-Hours Sold – Retail	504,540	532,692	524,467
Megawatt-Hours Sold – Wholesale	141,418	241,124	298,248
Peak Electric System Demand	106	107	103
Miles of Distribution Line	236	237	238
Average Net Plant Investment	\$86,874,301	\$85,979,519	\$85,130,437
Water Revenues – Retail	\$4,707,021	\$4,814,347	\$4,730,873
Water Revenues – Wholesale	\$2,046,522	\$2,057,918	\$2,069,951
Number of Water Customers	13,845	13,881	13,975
Gallons of Water Sold (X 1000) – Retail	1,644,772	1,714,927	1,657,263
Gallons of Water Sold (X 1000) – Wholesale	2,437,213	2,440,864	2,482,482
Miles of Water Main	186	187	192
Number of Hydrants	1,400	1,401	1,345
Average Net Investment	\$46,276,204	\$46,076,713	\$45,307,564

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 ACCOUNTING ▶

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 ▶

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 system including operation cost of the water treatment plant, such as energy, maintenance, chemicals and laboratory expenses.

YEAR END NET UTILITY PLANT ▶

The depreciated value of the utility system plus construction work in progress, at year end.



2022 COMMISSIONERS



DANIEL R. HORNUNG
President



DAVID DIEDRICH
Vice President



ALEX ALLIE
Secretary



MARK R. SEIDL



SCOTT MCMEANS



ERIC SITKIEWITZ



**MAYOR JUSTIN
NICKELS**



1303 South 8th Street
Manitowoc, WI 54220

920.683.4600

facebook.com/ManitowocPublicUtilities

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