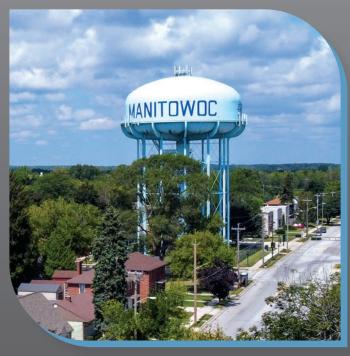
ANNUAL REPORT

2023











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

Table of **CONTENTS**

Our **VISION**

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



Letter from MANAGEMENT

Manitowoc Public Utilities is **governed autonomously** by a seven-member Commission. Five members are citizens appointed to five-year terms by the City Council, another member is an Alderperson appointed to serve on the Commission, and the final Commissioner is the Mayor. All seven members of the Commission have voting rights. Public utilities are unique in that members of the community are the governing body creating local control for the area we serve unlike utilities governed by shareholders seeking a profit.

The Commission has seen great stability in membership over the years where many Commissioners serve multiple terms. However, in 2023, MPU welcomed **two new** members to the Commission. In January, Scott McMeans was appointed by Council to the Commission filling the seat vacated by Dave Luckow who had served for 22 years. Scott had previously served on Council and brings business expertise to the governing body. In November, Betsy Roberts was appointed filling the seat vacated by Mark Seidl who had served for 25 years. Betsy brings technical expertise and industrial customer perspective to the Commission.

Although unusual to have this level of turnover on the Commission, there was considerable effort made to ensure a smooth transition. Developed and approved in 2023, the Commission has adopted a comprehensive Commission Policy Manual which documents purpose, governance style and role, and relationship between governance and management. Additionally, this policy manual establishes the framework for how the Commission sets organizational goals and measures results. This undertaking provides expectations for how the Commission leads through governance and how the Commission ensures that MPU achieves the desired results for the right people, in the right way. We're grateful for our board members dedication to our community.

Troy Adams, P.E.

General Manager



TROY ADAMS General Manager



BUSINESS SERVICES

In an effort to respond to customer expectations and expand our customer service offerings, MPU completed a full website redesign that went live in the fall of 2023. The new site includes enhanced forms, user-friendly navigation, and a live chat option.

To fully allow MPU to focus on the success of the Manitowoc Refuel Renewable project, staff oversaw the transition of MPU Management and Accounting Services for Great Lakes Utilities (GLU) to a new service provider. Additionally, final orders were received on the last two rate cases (Medford and Trempealeau) that were performed under this Services Agreement for GLU.

MPU is focused on transitioning back to monthly water meter readings by converting to a full-scale Automated Meter Reading (AMR) system. Staff purchased an upgraded field collection device to support this transition as well as focused on deploying AMR-ready endpoints.

UTILITY OPERATIONS

POWER PLANT

MPU initiated the Manitowoc Refuel Renewable project in 2021, which consists of refueling our two existing boilers, Boilers 8 & 9, from burning primarily fossil fuels to burning 100% Wisconsin-recognized renewable fuel pellets. Boiler 8 has been refueled and operational since December 2021 and Boiler 9 had successful extended runs exclusively on pellets in Spring of 2023. Additionally, MPU facilitated an expansion at an existing pelletizing facility to increase pellet production by 33% and secured a lease on a dry storage facility capable of holding one month's worth of fuel needed to operate both boilers.

ELECTRIC DISTRIBUTION

As a backup supply to the downtown area, Electric Distribution installed a 4 KV distribution stepdown transformer. Additionally, in collaboration with Engineering, the Electrical System Study was updated to reflect load changes and system modifications that have been made since 2017.

The Study will include load projections for the next 5-10 years due to electric vehicle charging and distributed generation.

Substation upgrades occurred at both the Custer and Revere substations. The feeder exit cabling was replaced at Revere and protection relays were replaced for three substation feeders at Custer to improve reliability.

WATER SYSTEM

In 2021, President Biden signed the Bipartisan Infrastructure Law (BIL) that included funding to be used for lead service line (LSL) replacements. A key aspect of the BIL implementation plan is ensuring that disadvantaged communities benefit equitably from this funding. With that direction, MPU applied for funding focusing on disadvantaged areas of the community by using census information. MPU is one of 40 communities participating in the Environmental Protection Agency's (EPA) Lead Service Line Replacement Accelerator Program and received funding for seven census tracts within the City.

The Water Department also performed drinking water quality sampling for PFAS as required by the Wisconsin Department of Natural Resources and the Environmental Protection Agency. All sampling results were well below recommended standards.

WASTEWATER TREATMENT FACILITY

The Wastewater Treatment Facility (WWTF) nearly finalized their automation project in 2023 which entailed replacing the outdated SCADA and PLC system, the addition of monitoring equipment, the extension of fiber optic lines, and the installation of other critical controls and equipment. The completion of this project, anticipated for 2024, will eliminate the need for manned third shift operations.

The WWTF also prepared to embark on a Stack Filter Rehabilitation project by preparing the specification, bid, design, and funding. This project was identified as a high-priority need in the WWTF Master Plan to ensure compliance with the DNR permitted parameters for effluent. Most of this equipment is original to the 1976 construction.

TECHNICAL SERVICES

MPU completed a filing with the Federal Energy Regulatory Commission (FERC) for cost recovery to support the continued operation of Boiler 9 as a System Support Resource (SSR). FERC approved the filing in 2023, which is in effect for one year. MPU will be completing a second filing in 2024.

Materials on the Community Solar Garden site, which was an old gravel pit off of Hecker Road, were relocated to make the site ready for the solar generation system installation. More details regarding this innovative Community Solar Program are available on page 5.

Through additional cameras and upgrades, MPU continues to increase physical security at our facilities as well as have greater emphasis and focus on operational technology.

Reliability **STATISTICS**

MPU saw three significant events impact reliability statistics in 2023. A snowstorm in early January created a circuit lockout, the Rapids substation locked out in June, and one of the largest storms of the Century hit the area in August which impacted 5 circuits and created many scattered outages. As a public power utility, we are locally operated, which gives us an opportunity to respond quickly to these unanticipated major events. We're grateful for our community's support as we worked through restoration.

- 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-outageinterruption-minutes experienced in a year by the total number of electrical customers served by the system. MPU SAIDI was 71 minutes in 2023 compared to a 5-year rolling average of 41 minutes.
- Customer Average Interruption Duration Index (CAIDI) is the average outage restoration time. It is calculated by dividing the sum total of customer-outage-interruptionminutes by the total number of customer interruptions experienced in a year. MPU CAIDI was 110 minutes in 2023 compared to a 5-year rolling average of 80 minutes.
- System 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 0.65 interruptions per customer in 2023 compared to a 5-year rolling average of 0.50 interruptions per customer.



As MPU embarks on 2024, we've aligned our initiatives under five strategic Areas of Focus: Workplace Culture, Operational Excellence, Financial Excellence, Customer's Experience, and Governance/Management Excellence.

WORKPLACE CULTURE

Our employees are the heart of MPU. To continue to grow as an organization, MPU is focused on strengthening the culture of a unified organization while planning for the future. Through an emphasis on succession planning and employee development in 2024, MPU is committed to retaining engaged employees and recruiting applicants that are aligned with our mission and vision.

OPERATIONAL EXCELLENCE

As a public service provider of electric, water, wastewater treatment, steam, and broadband, MPU is intentional about embarking on projects that add value to the community. While we have many projects in line for 2024, here are a few operational highlights:

Electric Resiliency Project

This project was initiated by the MPU Commission in an effort to provide resiliency in the event of a transmission grid failure. Through system modifications, MPU would be able to provide local electric service apart from the transmission grid. While this is a multi-year project, in 2024, staff will be purchasing and installing a 4-megawatt diesel generator and creating an express electrical line from the Custer substation to the power plant to allow startup of the boilers to generate power for the community.

Plant Tie Transformer

Testing on our transformer at the Lakefront substation, which is over 20 years old, has shown that corrective action is needed. A new transformer will arrive for installation in September, but the old transformer will need to be removed beforehand. The old transformer will be sent for repair to be used at a substation in the future.

Manitowoc Refuel Renewable Project

For the past few years, MPU has been refueling our two power plant boilers from burning fossil fuels to burning Wisconsin-recognized renewable fuel pellets. This project has many benefits including cost control, sustainability, grid resiliency, and local control. MPU has already seen success with Boiler 8 so the focus for 2024 will be on Boiler 9's successful refueling. Additionally, MPU is securing long-term fuel supply contracts to ensure adequate supply and initiating design upgrades to the fuel handling equipment at the power plant.

Wastewater Treatment Facility (WWTF) Stack Filter & Clarifier Rehab Project

The WWTF will be embarking on a rehabilitation of the stack filters and clarifier. This project will be funded by the Clean Water Fund Loan Program. The bidding process will occur in 2024, but most of the construction will not occur until 2025. Coordination is key during this project as the equipment will need to stay operable during construction.

Private Lead Service Line (LSL) Replacement Program

As part of the Environmental Protection Agency's (EPA) Lead Service Line Accelerator Program, MPU was awarded funding to assist in private LSL replacements within seven census tracts in the City of Manitowoc. In 2024, MPU will be focused on responsibly facilitating the use of the replacement funds through customer notice, contractor bids, and project oversight. MPU intends to apply for future funding to further assist our community in getting the lead out.

Water Treatment Plant Capacity Analysis

Utilizing the Water Treatment Plan Master Plan, MPU will be working with an Engineering firm to create a preliminary design and report for additional Water Treatment Plant capacity.

FINANCIAL EXCELLENCE

Financial stability and competitive rates are at the forefront of MPU's decision making. In 2024, MPU will be focusing on:

Steam Rates

MPU provides low-pressure steam directly to five customers in downtown Manitowoc via the district heating loop. The steam is also used to heat a water circuit supplying hot water to four additional customers. As inflationary costs have risen, MPU will be evaluating a necessary increase to steam rates in 2024.

Key Performance Indicator Dashboards

To measure the health of the organization and prioritize our strategic outcomes, MPU tracks Key Performance Indicators (KPI). MPU will be developing internal and external dashboards to visually display KPI progress.

CUSTOMER'S EXPERIENCE

Through strengthening and promoting our reputation of stewardship, citizenship, and expertise, we will work to engage, and exceed the expectations of, our customers through these projects:

Online Customer Portal Transition

In an effort to provide improved functionality and expanded options for our customers, MPU will be transitioning to a new "My Account" online customer portal. This will also provide customers an opportunity to download a "My Account" app, which will provide customers with easy access to their usage with analysis tools, bill history, and quick payment options.

After-Hours Call Center

MPU will be transitioning to an after-hours call center that will provide limited customer service as well as outage/emergency dispatching. This will expand the after-hours options for our customers and help to alleviate phone system bottlenecks during large outages.

Net Promoter Score

To effectively gauge customer satisfaction and gain actionable feedback, MPU is working with a third-party to prepare a Net Promoter Score (NPS) survey that can be taken after customer interactions. The focus in 2024 will be on establishing a baseline NPS score with the intent to build upon the score and evaluate any potential opportunities within the feedback.

GOVERNANCE/MANAGEMENT EXCELLENCE

With the adoption of the Commission Policy Manual in 2023, MPU is focused on developing a comprehensive Management Policy Manual in 2024 that will encompass all of the policies that have been replaced due to the rollout of the Commission Policy Manual.

Community **SOLAR GARDEN**

In 2022, a tariff was approved by the Public Service Commission of Wisconsin (PSCW) to allow MPU, in conjunction with GRNE Solar, to build a 1,000 KW community solar garden facility. After overwhelming public interest in the program, MPU filed for an expansion in 2023. The PSCW approved the expansion to 1,500 KW. While there are other community solar gardens in Wisconsin, the innovative way this subscription-based program was designed makes it a first-of-its-kind program.

Why is this project important? This Community Solar Garden program will allow our customers to experience the benefits of solar without the upfront costs that rooftop solar requires. This is a 20-year project offered to current MPU customers on a subscription first-come, first-serve basis. Blocks of solar are available in 1KW increments up to 20KW. Construction at the site began in the fall of 2023 with an anticipated live date of early summer 2024.



Manitowoc Refuel RENEWABLE PROJECT

MPU initiated the Manitowoc Refuel Renewable project in 2021, which consists of refueling our two existing boilers, Boilers 8 & 9, from burning primarily fossil fuels to burning 100% Wisconsin-recognized renewable fuel pellets. While MPU saw great success in 2023 by facilitating an expansion at an existing pelletizing facility to increase pellet production and by securing a lease on a dry storage facility for pellet storage, this is an ongoing project with many milestones.

As we move into 2024, MPU will be analyzing upgrades to our power plant fuel handling system to improve efficiencies with the transition from fossil fuel handling to fuel pellet handling. Additionally, MPU will be working towards executing a contract for local construction of an additional pelletizing facility with production starting in 2025. Time will also be spent on exploring a wet raw material (sludge) drying facility to increase raw material options for fuel pellets.

This project continues to be one of MPU's top priorities as it brings significant benefits to our community: cost control, sustainability, grid resiliency, and local control.

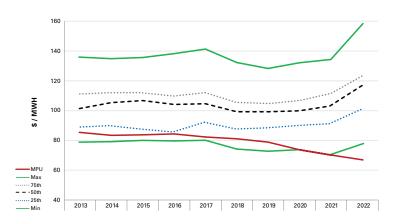


COMMITTED TO COMPETITIVE RATES

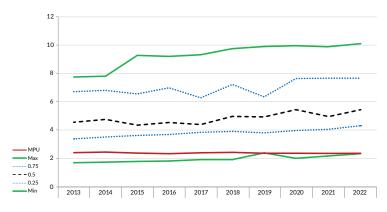
In 2022, MPU filed for two rate cases with the Public Service Commission of Wisconsin (PSCW). Both electric and water filings were requesting increases. The electric filing was approved effective for services rendered on or after September 1, 2023 and the water filing was approved effective for services rendered on or after December 1, 2023. Why were increases requested for both services? Primarily due to inflationary increases in operating and maintenance costs as well as high electric fuel and purchased power costs. For the average residential customer, they would see an increase of about \$3.78/month in electric costs and about \$3.19/month increase in water costs.

Even with these increases, MPU's rates are incredibly competitive compared to municipals and privately-owned utilities within Wisconsin. MPU remains in the bottom quartile for rates within the state. As a public utility, we are committed to maintaining cost-effective rates providing economic benefit to our residents and businesses.

AGGREGATE ELECTRICAL RETAIL RATE COMPARISON (AB MUNICIPAL)

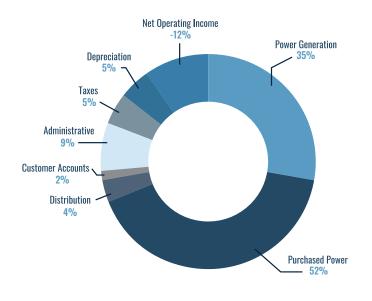


METERED SALES TO GENERAL CUSTOMERS (SURFACE WATER AB WATER UTILITIES)

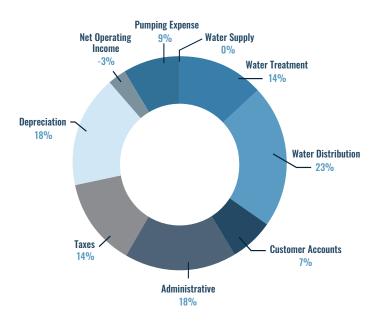




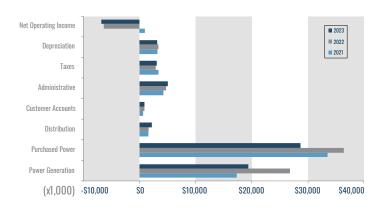
ELECTRIC



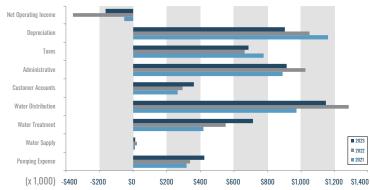
WATER



ELECTRIC UTILITY EXPENSE TRACKING



WATER UTILITY EXPENSE TRACKING



FINANCIAL HIGHLIGHTS 2023 CONTINUED

		2023	2022	2021
	Electric Revenues - Retail	\$43,002,811	\$40,488,117	\$37,197,036
	Electric Revenues - Wholesale	\$10,018,454	\$27,037,246	\$25,510,154
	Number of Electric Customers	18,511	18,473	18,369
<u> </u>	Megawatt-hours Sold - Retail	514,574	524,467	532,692
ELECTRIC	Megawatt-hours Sold - Wholesale	168,030	298,248	241,124
쁣	Peak Electric System Demand	110	103	107
	Miles of Distribution Line	240	238	237
	Average Net Plant Investment	\$92,719,565	\$85,130,437	\$85,979,519
	Payment In Lieu of Taxes (PILOT)	\$2,413,596	\$2,952,990	\$2,988,653
	Water Revenues - Retail	\$4,841,694	\$4,730,873	\$4,814,347
	Water Revenues - Wholesale	\$2,208,571	\$2,069,951	\$2,057,918
	Number of Water Customers	14,063	13,962	13,881
~	Gallons of Water Sold (X 1000) - Retail	1,703,586	1,657,263	1,714,927
WATER	Gallons of Water Sold (X 1000) - Wholesale	2,598,808	2,482,482	2,440,864
>	Miles of Water Main	192	192	187
	Number of Hydrants	1,380	1,345	1,401
	Average Net Plant Investment	\$47,746,075	\$45,307,564	\$46,076,713
	Payment In Lieu of Taxes (PILOT)	\$862,267	\$979,895	\$957,588
	Wastewater Service Revenues	\$6,256,218		
	Gallons Treated (X 1000)	2,430,900		
- 4	Average Net Investment Rate Base	\$18,628,477		
TER	Outstanding Facility Debt Balance	\$7,187,255		
WASTEWATER	Natural Gas Consumed (CCF)	128,120	Historica	l data not
STE	Methane Consumed (CCF)	200,594	displayed unti	l future years.
×	Methane Flared (CCF)	115,060		
	Total Methane Produced (CCF)	315,653		
	Natural Gas: Methane Consumed	63.90%		
	Natural Gas: Methane Produced	40.60%		

ADMINISTRATIVE >

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

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.





DAVID DIEDRICH President



ALEX ALLIE Vice President



SCOTT MCMEANS Secretary



DANIEL R. HORNUNG



BETSY ROBERTS



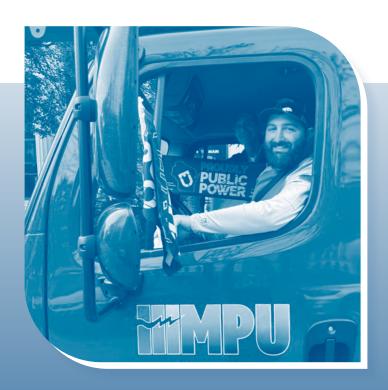
ERIC SITKIEWITZ

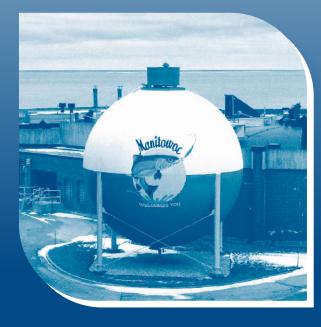


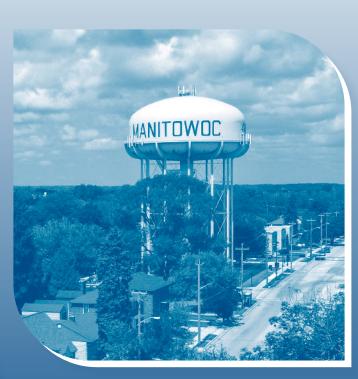
MAYOR JUSTIN NICKELS

ANNUAL REPORT

2023







MANITOWOC PUBLIC UTILITIES

CITY OF MANITOWOC, WISCONSIN

STATEMENT OF NET POSITION »

December 31, 2023

	2023
CURRENT ASSETS	
Cash	\$ 14,704,706
Investments	11,016,604
Receivables:	
Customer Accounts Receivable, Net	7,500,672
Current Lease Receivable Due from Other Governments	207,912
Prepaid Supplies	17,468,782
Prepaid Items	4,958,678 3,702,854
1 repaid items	
Total Current Assets	59,560,208
NON-CURRENT ASSETS	
Other Assets:	
Investments	26,091,015
Notes Receivable	1,490,495
Notes Receivable - City of Manitowoc	584,257
Lease Receivable	3,113,879
Investment in ATC	16,098,729
Rate Stabilization Deposit Property Held for Future Use	991,641
Nonutility Property	1,893,264
Nonatinty (Toperty	379,860
Total Other Assets	50,643,140
Capital Assets:	
Nondepreciable	
Electric	2,848,033
Water	694,870
Wastewater	1,769,555
Steam	57,610
Broadband	174,796
Total Capital Assets, Nondepreciable	5,544,864
Depreciable	
Electric	192,845,081
Water	78,396,045
Wastewater	48,922,970
Steam	4,802,077
Broadband	1,873,636
Total Capital Assets, Depreciable	326,839,809
Less: Accumulated Depreciation	(173,397,924)
Capital Assets, Depreciable, Net	153,441,885
Total Capital Assets	158,986,749
Total Non-Current Assets	209,629,889
Total Assets	\$ 269,190,097



CITY OF MANITOWOC, WISCONSIN

STATEMENT OF NET POSITION »

December 31, 2023

	2023
DEFERRED OUTFLOWS OF RESOURCES	
Pension Related Amounts	\$ 10,910,979
Other Postemployment Related Amounts - Cost-Sharing Plan	282,406
Other Postemployment Related Amounts - Single-Employer	59,195
Asset Retirement Obligations	11,266,666
Total Deferred Outflows of Resources	22,519,246
LIABILITIES	
Current Liabilities	
Accounts Payable	6,682,302
Accrued and Other Current Liabilities	1,459,896
Other Liabilities	916,666
Compensated Absences	879,953
Due to Other Governments	3,198,099
Customer Deposits	1,348,821
Current Portion of Lease Liability	2,449,824
Current Portion of Long-Term Obligations	457,204
Total Current Liabilities	17,392,765
Non-Current Liabilities	
Compensated Absences	1,774,273
Net Pension Liability	2,908,832
Lease Liability	2,969,373
Asset Retirement Obligations	26,000,000
Other Postemployment Benefits - Cost-Sharing Plan	653,683
Other Postemployment Benefits - Single-Employer	25,731
Noncurrent Portion of Long-Term Obligation	6,730,051
Total Non-Current Liabilities	41,061,943
Total Liabilities	58,454,708
	58,454,708
DEFERRED INFLOWS OF RESOURCES Lease Receivable	3 321 701
	3,321,791
Pension Related Amounts	6,097,633
Other Postemployment Related Amounts - Cost-Sharing Plan	461,688
Other Postemployment Related Amounts - Single-Employer	3,298
Total Deferred Inflows of Resources	9,884,410
NET POSITION	
Net Investment in Capital Assets	148,653,421
Restricted for:	
Pension Benefits	1,904,514
Unrestricted	72,812,290
Total Net Position	\$ 223,370,225

CITY OF MANITOWOC, WISCONSIN

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION »

Year ended December 31, 2023

	2023
OPERATING REVENUES	
Charges for Services	£ 54044704
Electric	\$ 54,244,701
Water	7,206,886
Wastewater	6,349,825
Steam Broadband	1,609,134 547,925
broadband	
Total Operating Revenues	69,958,471
OPERATING EXPENSES	
Water Supply and Distribution	3,499,611
Electric Supply and Distribution	48,952,177
Wastewater Supply and Distribution	2,851,764
Steam Supply and Distribution	1,583,829
Broadband	99,037
Customer Accounts	1,593,709
Administrative and General	8,316,302
Depreciation	6,975,295
Amortization of Asset Retirement Obligation	866,667
Taxes	794,437
Total Operating Expenses	75,532,828
OPERATING INCOME (LOSS)	(5,574,357)
NON-OPERATING REVENUES (EXPENSES)	
nvestment Income	3,732,314
Unrealized Gains	987,599
Merchandising, Jobbing and Other Nonoperating Income	(192,774)
nterest and Fiscal Charges	(163,369)
Other Nonoperating Expenses	(706)
Total Nonoperating Revenues (Expenses)	4,363,064
INCOME (LOSS) BEFORE CONTRIBUTIONS AND TRANSFERS	(1,211,293)
Capital Contributions	2,779,077
Transfers - Wastewater Net Position	30,924,307
Transfers - Tax Equivalents	(3,412,901)
CHANGE IN NET POSITION	29,079,190
	194,291,035
TOTAL NET POSITION - BEGINNING	

CITY OF MANITOWOC, WISCONSIN

STATEMENT OF CASH FLOWS »

Year ended December 31, 2023

	2023
CASH FLOWS FROM OPERATING ACTIVITIES Received from Customers Paid for Employee Wages and Benefits Paid to Municipality Paid to Suppliers for Goods and Services	\$ 70,844,517 (5,375,747) (321,852) (59,979,107)
Net Cash Flows From Operating Activities	5,167,811
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES Lead Service Line Replacement Loans Paid Out Received (Paid) on Notes to City of Manitowoc Deposit from (to) Others Transfer to City of Manitowoc	(96,663) (126,076) 2,797,003 (3,412,901)
Net Cash Flows From Noncapital Financing Activities	(838,637)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES Acquisition of Capital Assets Capital Contributions Salvage Received on Capital Assets Cost of Removal of Capital Assets Principal Paid on Long-Term Debt Interest Paid on Long-Term Debt Net Cash Flows From Capital and Related Financing Activities	(10,590,132) 2,779,077 193,029 (600,072) (449,297) (241,703)
CASH FLOWS FROM INVESTING ACTIVITIES Investment Income Cash Paid to ATC LLC Purchase of Investments Proceeds from Maturity of Investments Net Cash Flows From Investing Activities	4,661,396 (1,041,002) (12,991,864) 3,285,000 (6,086,470)
NET DECREASE IN CASH AND INVESTMENTS CASH AND INVESTMENTS - BEGINNING OF YEAR	(10,666,394)
CASH AND INVESTMENTS - END OF YEAR	\$ 25,721,310

CITY OF MANITOWOC, WISCONSIN

STATEMENT OF CASH FLOWS »

Year ended December 31, 2023

	2023
RECONCILIATION OF OPERATING INCOME (LOSS) TO	
NET CASH FLOWS FROM OPERATING ACTIVITIES	.
Operating Loss	\$ (5,574,357)
Noncash Items Included in Operating Income (Loss):	(075 005
Depreciation	6,975,295
Amortization of Asset Retirement Obligation	866,667
Changes in Deferred Outflows and Inflows of Resources:	
Deferred Outflows Related to Pension	(2,481,451)
Deferred Inflows Related to Pension	(4,041,019)
Deferred Outflows Related to OPEB - Cost-Sharing Plan	(21,418)
Deferred Inflows Related to OPEB - Cost-Sharing Plan	371,809
Deferred Outflows Related to OPEB - Single-Employer	39,284
Deferred Inflows Related to OPEB - Single-Employer	(48,563)
Changes in Assets and Liabilities	
Customer Accounts Receivable, Net	855,018
Due from Other Governments	1,193,273
Prepaid Supplies and Other Items	(1,902,331)
Net Pension Asset	4,306,771
Accounts Payable	1,684,391
Accrued and Other Current Liabilities	344,321
Other Liabilities	(5,000)
Due to Other Governments	(862,215)
Customer Deposits	362,408
Compensated Absences	475,747
Net Pension Liability	2,908,832
Net OPEB Liability - Cost-Sharing Plan	(46,149)
Net OPEB Liability - Single-Employer	(203,151)
Merchandising and Jobbing	(30,351)
Net Cash Flows from Operating Activities	\$ 5,167,811
RECONCILIATION OF CASH AND INVESTMENTS TO THE STATEMENTS OF NET POSITION	
Cash	\$ 14,704,706
Investments	11,016,604
Total Cash and Investments	\$ 25,721,310
NONCASH CAPITAL FINANCING ACTIVITIES	
Long-Term Building Lease	\$ 5,419,197

CITY OF MANITOWOC, WISCONSIN

NOTES TO FINANCIAL STATEMENTS »

December 31, 2023

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.

The Wastewater Treatment Plant was previously reported with the City of Manitowoc and was transferred to MPU in 2023. The related assets, deferred outflows of resources, liabilities, deferred inflows of resources and net position were transferred to MPU. More information is provided in Note 4 and Note 15.

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, wastewater, steam and broadband utility.
- ▶ Internal service funds. 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 water and wastewater bills on the tax roll for collection. An allowance for uncollectible accounts of \$61,000 has been provided for electric, water, and wastewater 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 a \$16,098,729 as of December 31, 2023, and is reported on the statement of net position as other assets.

NONUTILITY PROPERTY AND PROPERTY HELD FOR FUTURE USE

Nonutility property and property held for future use consists of land and improvements and is valued at cost of acquisition, demolition, and site improvements. Properties includes both land intended for future use, land designated as a public area and plant not currently being used in operations. 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.

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 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 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.



Other Post-Employment Benefits (OPEB). The fiduciary net position of the Local Retiree Life Insurance Fund (LRLIF) has been determined using the flow of economic resources measurement focus and the accrual basis of accounting. This includes for purposes of measuring following:

- Net OPEB Liability
- Deferred Outflows of Resources and Deferred Inflows of Resources Related to Other Post-Employment Benefits
- OPEB Expense (Revenue)

Information about the fiduciary net position of the LRLIF and additions to/deductions from LRLIF's fiduciary net position have been determined on the same basis as they are reported by LRLIF. For this purpose, benefit payments (including refunds of member 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 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 follows GASB Statement No. 87 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.

SUBSCRIPTION-BASED INFORMATION TECHNOLOGY AGREEMENTS

MPU adopted GASB Statement No. 96 for the year ended December 31, 2023 which requires recognition in the financial statements of certain $subscription-based\ information\ technology\ agreements\ (SBITAS).\ A\ SBITA\ is\ any\ contract\ conveying\ control\ of\ the\ right\ to\ use\ another\ party's$ information technology software. This statement requires MPU to report a right-to-use subscription asset and corresponding subscription liability for any SBITAs. There were no material SBITAs that were required to be recorded for the year ended December 31, 2023.

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 (PSC) approved the electric rates on April 1, 2020 and were designed to provide a 4.9% return on rate base. As of September 1, 2023, the PSC approved new rates but subsequent to year-end a corrective order came into effect as of February 9, 2024. The new rates are designed to provide a 5% rate of return.

Water - The Public Service Commission of Wisconsin approved the water rates on June 1, 2015 and were designed to provide a 4.0% return on rate base. The PSC approved new rates effective December 1, 2023 for the water utility which are designed to provide a 6.3% 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.

Wastewater – The current rates to these customers are approved by resolution by the City Council.

CERTAIN ASSET RETIREMENT OBLIGATIONS

An Asset Retirement Obligation (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.
- · 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.

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 years or less.
- Bonds or securities of any county, city, drainage district, technical college district, 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 \$51,812,325 on December 31, 2023 are as follows:

Petty Cash and Cash on Hand Deposits With Financial Institutions Investments	\$ 750 14,703,955 37,107,620
	\$ 51,812,325
Reconciliation to the Financial Statements	
Statement of Net Position:	
Statement of Net Fosition.	
Cash	\$ 14,704,706
	\$ 14,704,706 11,016,604
Cash	\$, ,

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, 2023, 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, 2023:

Fully Insured Deposits	\$ 1,888,962
ollateralized	 13,863,774
ollateralized	\$ 15,752,736

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, 2023, MPU's credit quality ratings are as follows:

INVESTMENT TYPE	AMOUNT	EXEMPT FROM DISCLOSURE	AAA	Aa	A	NOT RATED
U.S. Treasury Notes	\$ 7,108,626	\$ -	\$ 7,108,626	\$ -	\$ -	\$ -
Money Market Mutual Funds	262,464	-	-	262,464	-	-
Corporate Bonds and Notes	16,535,627	-	5,865,160	9,982,191	688,276	-
State and Municipal Bonds						
and Notes	247,139	-	-	247,139	-	-
Federal Agency Securities	12,953,764	-	12,256,716	697,048	-	-
Totals	\$ 37,107,620	\$ -	\$ 25,230,502	\$ 11,188,842	\$ 688,276	\$ -

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	REPOI	RTED AMOUNT	PERCENT OF TOTAL INVESTMENTS		
Federal National Mortgage Federal Home Loan Bank	Federal Agency Securities Federal Agency Securities	\$	3,783,745 6,308,478	10% 17%		

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, 2023, MPU's investments were as follows:

				REMAINI	NG	MATURITY (IN	МС	NTHS)					
INVESTMENT TYPE		AMOUNT	1:	12 MONTHS OR LESS		13 TO 24 MONTHS		25 TO 60 MONTHS	MORE THAN 60 MONTHS				
U.S. Treasury Securities	\$	7,108,626	\$	3,550,116	\$	_	\$	3,558,510	\$	_			
Money Market Mutual Funds		262,464		262,464		-		-		_			
Corporate Bonds and Notes		16,535,627		5,199,217		4,082,651		7,253,759		-			
State and Municipal Bonds and Notes		247,139		247,139		-		-		-			
Federal National Mortgage		3,783,745		-		1,877,021		1,906,724		-			
Federal Home Loan Bank		6,308,478		1,757,670		2,659,349		1,891,459		-			
Federal Home Loan Mortgage		1,206,292		-		711,251		459,041		-			
Federal Farm Credit Bureau		1,655,249			_	938,262	_	716,987					
Total	\$	37,107,620	\$	11,016,606	\$	10,268,534	\$	15,822,480	\$	-			

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 that 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.	\$	12,953,764	

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, 2023 MPU had the following investments at fair value:

	FAIR V	ALUE MEASUREMENTS U	SING:
INVESTMENTS	LEVEL 1	LEVEL 2	LEVEL :
U.S. Treasury Securities	\$ -	\$ 7,108,626	\$
U.S. Agencies	-	729,017	
Money Market Mutual Funds	262,464	-	
Corporate Bonds and Notes	-	15,806,610	
State and Municipal Bonds	-	247,139	
Federal National Mortgage	-	3,783,745	
Federal Home Loan Bank	-	6,308,478	
Federal Home Loan Mortgage	-	1,206,292	
Federal Farm Credit Bureau		1,655,249	
Total	\$ 262,464	\$ 36,845,156	\$

NOTE 3 - INTERFUND RECEIVABLES/PAYABLES AND TRANSFERS

The following is a schedule of interfund balances as of December 31, 2023:

RECEIVABLE FUND	PAYABLE FUND	A	MOUNT	PURPOSE
MPU	Municipality	\$	584,257	Land Purchase

Interfund transfers for the year ended December 31, 2023 in the amount of \$3,412,901 were made for the purpose of transferring the tax equivalent payment from MPU to the general fund of the City of Manitowoc, Wisconsin. There was an additional transfer of the wastewater assets and liabilities with a net position of \$30,924,307.

NOTE 4 - CHANGES IN CAPITAL ASSETS

A summary of changes in capital assets for 2023 is as follows:

	BEGINNING BALANCES	INCREASES	DECREASES	ADJUSTMENTS	ENDING BALANCES
Business-Type Activities:					
Capital Assets, Nondepreciatable:					
Land and Improvements	\$ 2,564,096	\$ 354,313	\$	\$ -	\$ 2,918,409
Construction in Progress	1,783,241	6,994,736	6,151,522		2,626,455
Subtotal	4,347,337	7,349,049	6,151,522		5,544,864
Capital Assets, Depreciable:					
Buildings	68,540,391	5,652,820	87,227	-	74, 105,984
Improvements Other Than Buildings	163,338,005	1,373,975	363,489	4,350,727	159,997,764
Infrastructure	85,063,007	8,139,320	466,266	-	92,736,061
Subtotal	316,941,403	15,166,115	916,982	4,350,727	326,839,809
Less Accumulated Depreciation For:					
Buildings	(38,404,685)	(1,812,142)	(87,227)	_	(40,129,600)
Improvements Other Than Buildings	(98,545,078)	(2,905,568)	(367,443)	(3,177,480)	(97,905,723)
Infrastructure	(33,732,151)	(2,450,614)	(820,164)	· · · · · · · · · · · · · · · · · · ·	(35,362,601)
Total Accumulated Depreciation	(170,681,914)	7,168,324	(1,274,834)	(3,177,480)	(173,397,924)
Total Capital Assets, Depreciable, Net	146,259,489	7,997,791	(357,852)	1,173,247	153,441,885
Business-Type Activities Capital Assets, Net of Accumulated Depreciation	\$ 150,606,826	\$ 15,346,840	\$ 5,793,670	\$ 1,173,247	\$ 158,986,749

In 2023, a portion of Wastewater Treatment Plant was transferred to MPU. In addition during the year, MPU has the CMF plant constructed in 1999 which has not been fully functional since 2013. MPU adjusted the capital assets and related accumulated depreciation and placed the net capital asset as property held for future use.

Depreciation expense was charged to functions of MPU as follows:

Water Utility	\$ 1,974,61
Sewer Utility	1,601,34
Electric Utility	3,274,01
Steam Utility	52,32
Broadband	 72,99
otal Depreciation Expense	6,975,29
alvage Charged to Accumulated Depreciation	 193,02
otal Increase in Accumulated Depreciation Above	\$ 7,168,32

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 \$11,266,666 as of December 31, 2023. Current year amortization amounted to \$866,667.

NOTE 6 - LONG-TERM OBLIGATIONS

The following is a summary of changes in long-term obligations for the year ended December 31, 2023:

	01	JTSTANDING 1/1/2023	 NCREASE	DI	CREASE	JTSTANDING 2/31/2023	_	UE WITHIN ONE YEAR
Business-Type Activities:								
General Obligation Debt								
Clean Water Loan Fund	\$	7,636,552	\$ -	\$	449,297	\$ 7,187,255	\$	457,204
Building Note		<u>-</u>	 5,419,197		<u>-</u>	 5,419,197		2,449,824
Total Business Activity Long-Term Liabilities	\$	7,636,552	\$ 5,419,197	\$	449,297	\$ 12,606,452	\$	2,907,028

	DATE OF ISSUANCE	FINAL MATURITY	INTEREST RATE	ORIGINAL DEBTEDNESS	BALANCE 2/31/2023
Business-Type Activities					
Long-Term Obligations:					
2008 General Obligation Bonds	05/01/18	05/01/37	1.76%	\$ 9,346,760	\$ 7,187,255
Building Note	12/31/23	12/31/27	8.00%	5,419,197	 5,419,197
Total Business-Type Activities					
Long-Term Obligations					\$ 12,606,452

Principal and maturities for long-term obligations at December 31, 2023 are as follows:

	PI	RINCIPAL	 NTEREST	TOTAL
2024	\$	2,907,028	\$ 406,648	\$ 3,313,677
2025		1,094,701	351,905	1,446,606
2026		1,153,246	293,288	1,446,534
2027		2,141,889	304,571	2,446,460
2028		490,251	89,135	579,386
2029-2033		2,583,760	2,583,760	5,167,521
2034-2037		2,235,576	 2,235,577	 4,471,153
	\$	12,606,452	\$ 6,264,884	\$ 18,871,336

NOTE 7 - NET POSITION

Net position reported on the statement of net position at December 31, 2023 include the following:

Net Investment in Capital Assets	¢ 150,004,74
Net Capital Assets	\$ 158,986,74
Investment in Nonutility Plant - Net	2,273,12
Less: Related Long-Term Debt Outstanding	(12,606,452
Net Investment in Capital Assets	148,653,42
Net Position Restricted For:	
Pension	1,904,51
Unrestricted	72,812,29
otal Net Position	\$ 223,370,22

NOTE 8 - 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 http://etf.wi.gov/about-eft/reports-and-studies/financial-reports-and-statements.

Additionally, ETF issued a standalone Wisconsin Retirement System Financial Report, which can also be found using the link above.

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.

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 (%)
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
2022	7.4	15

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 reporting period, the WRS recognized \$766,049 in contributions from MPU.

Contribution rates as of December 31, 2023 are:

EMPLOYEE CATEGORY	EMPLOYEE	EMPLOYER
General (including executives and elected officials)	6.80%	6.80%

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

At December 31, 2023, MPU reported an liability of \$2,908,832 for its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2022, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2021 rolled forward to December 31, 2022. 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 liability was based on MPU's share of contributions to the pension plan relative to the contributions of all participating employers. At December 31, 2023, MPU's proportion was 0.05490741% which was an increase of 0.00619593% from its proportion measured as of December 31, 2021.

For the year ended December 31, 2023, MPU recognized a reduction of pension expense of \$1,477,185.

At December 31, 2023 MPU reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	 RED OUTFLOWS RESOURCES	 RRED INFLOWS RESOURCES
Differences between projected and actual experiences	\$ 4,632,868	\$ 6,086,548
Changes in assumptions	571,996	-
Net differences between projected and actual earnings on pension plan investments	4,941,434	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	3,207	11,085
Employer contributions subsequent to the measurement date	 761,474	
Total	\$ 10,910,979	\$ 6,097,633

The \$761,474 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 year ending December 31, 2024. Other amounts 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			
2024	\$	166,113		
2025		838,148		
2026		859,954		
2027		2,187,657		
	\$	4,051,872		

Actuarial Assumptions. The total pension liability in the December 31, 2022 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
Experience Study:	January 1, 2018 – December 31, 2020
	Published November 19, 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. The total pension liability for December 31, 2022 is based upon a rollforward of the liability calculated from the December 31, 2021 actuarial valuation.

Long-term Expected Return on Plan Assets. The long-term expected rate of return on pension plan investments was determined using a buildingblock 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 weighting 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, 2022

CORE FUND ASSET CLASS	ASS ALLOCA		LONG-TERM NOMINAL RATE		LONG-TERM REAL RATE O	
Global Equities	48	%	7.6	%	5.0	%
Fixed Income	25		5.3		2.7	
Inflation Sensitive Assets	19		3.6		1.1	
Real Estate	7		5.2		2.6	
Private Equity/Debt	12		9.6		6.9	
Total Core Fund ³	115	% *	7.4	%	4.8	%
VARIABLE FUND ASSETS CLASS						
U.S. Equities	70	%	7.2	%	4.6	%
International Equities	30		8.1		5.5	
Total Variable Fund	100	%	7.7	%	5.1	%

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

Single Discount Rate. A single discount rate of 6.8% was used to measure the total pension liability for the current year and prior year. The discount rate is based on the expected rate of return on pension plan investments of 6.80% and a municipal bond rate of 4.05% (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, 2022. 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.

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%.

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 6.8 percent, 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 (5.8 percent) or 1-percentage-point higher (7.8 percent) than the current rate:

	 DECREASE TO COUNT RATE (5.80%)	CURRENT COUNT RATE (6.80%)	 6 INCREASE TO ISCOUNT RATE (7.80%)
MPU's Proportionate Share of the Net Pension Liability (Asset)	\$ 9,654,319	\$ 2,908,832	\$ (1,731,484)

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 \$89,689 as of December 31, 2023.

NOTE 9 - POST-EMPLOYMENT BENEFITS OTHER THAN PENSION BENEFITS

MPU reports OPEB related balances at December 31, 2023 as summarized below:

	OPEB LIABILITY	DEFERRED OUTFLOWS OF RESOURCES	DEFERRED INFLOWS OF RESOURCES	OPEB EXPENSE
Local Retiree Life Insurance Fund (LRLIF) Single-Employer Defined OPEB Plan	\$ 653,683 25,731	\$ 282,406 59,195	\$ 461,688 3,298	\$ 10,157 69,292
Total	\$ 679,414	\$ 341,601	\$ 464,986	\$ 79,449

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 MPU's 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	-
Total	4

^{*}At the beginning of 2021, active participants are no longer eligible to continue on MPU Health and Wellness Plan.

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, 2022 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:	3.72%
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 3.72%, 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, 2022 actuarial valuation was 3.72%. 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.

Changes in the Total OPEB Liability:

	TOTAL OPEB LIABILITY		
Balance at 12/31/2022	\$	259,114	
Changes for the Year:			
Service Cost		-	
Interest		756	
Changes of Assumptions or Other Input		(211,668)	
Benefit Payments		(22,471)	
Net Changes		(233,383)	
Balance at 12/31/2023	\$	25,731	

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 (2.72%) or 1-percentagepoint higher (2.72%) than the current rate:

	1% DECREASE (2.72%)		 ISCOUNT RATE .72%)	1% INCREASE (4.72%)	
Total OPEB Liability	\$	25,992	\$ 25,731	\$	25,475

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:

	(4.8% D	1% DECREASE TO (4.8% DECREASING TO 2.7%)		HEALTHCARE COST TREND RATES (5.8% DECREASING TO 3.7%)		CREASE ECREASING 4.7%)
Total OPEB Liability	\$	25,357	\$	25,731	\$	26,107

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB For the year ended December 31, 2022, MPU recognized OPEB expense of \$10,157. At December 31, 2023, MPU reported deferred outflows of resources related to OPEB from the following sources:

	 ED OUTFLOWS ESOURCES	 ED INFLOWS ESOURCES
Differences Between OPEB Plan - Projected and		
Actual Experiences	\$ 34,597	\$ -
Changes in Assumptions	 24,598	3,298
Total	\$ 59,195	\$ 3,298

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

YEAR ENDING DECEMBER 31,	 RED OUTFLOWS OF RESOURCES
2024	\$ 9,840
2025	9,840
2026	9,840
2027	9,680
2028	9,853
Thereafter	 6,844
Total	\$ 55,897

Payable to the OPEB Plan. At December 31, 2023, 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, 2023 are:

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



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, 2022 are as listed below:

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 \$3,839 in contributions from MPU.

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

At December 31, 2023, MPU reported a liability of \$653,683, respectively for its proportionate share of the net OPEB liability. The net OPEB liability was measured as of December 31, 2022, 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, 2022. 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, 2022, MPU's proportion was 0.017157807%, which was an decrease of 0.05041574% from its proportion measured as of December 31, 2021.

For the year ended December 31, 2023, MPU recognized OPEB expense of \$69,292.

At December 31, 2023, MPU reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	 ED OUTFLOWS RESOURCES	OF RESOURCES	
Differences Between Projected and Actual Experiences	\$ 	\$	63,974
Changes in Assumptions	234,854	Ť	385,852
Net differences between projected and actual earnings on OPEB plan investments	12,266		-
Changes in proportion and differences between employer contributions and proportionate share of contributions	31.447		11,862
Employer contributions subsequent to the measurement date	3,839		-
Total	\$ 282,406	\$	461,688

The \$3,839 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, 2024. 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			
2024	\$	(9,451)		
2025		(13,753)		
2026		(4,235)		
2027		(37,652)		
2028		(62,154)		
Thereafter		(55,876)		
Total	\$	(183,121)		

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:

actuarial Valuation Date:	January 1, 2022
Measurement Date of Net OPEB Liability:	December 31, 2022
Experience Study:	January 1, 2018 - December 31, 2020,
	Published November 19, 2021
Actuarial Cost Method:	Entry Age Normal
20 Year Tax-Exempt Municipal Bond Yield:	3.72%
Long-Term Expected Rate of Return:	4.25%
Discount Rate:	3.76%
Salary Increases:	
Inflation	3.00%
Seniority/Merit	0.1% - 5.6%

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. The total OPEB liability for December 31, 2022 is based upon a rollforward of the liability calculated from the January 1, 2022 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	50 %	2.45 %					
U.S. Mortgages	Blookberg U.S. MBS	50	2.83					
Inflation			2.30					
Long-Term Expected Rate of Return			4.25					

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 remained unchanged from the prior year at 2.30%.

Single Discount Rate. A single discount rate of 3.76% was used to measure the total OPEB liability for the current year, as opposed to a discount rate of 2.17% for the prior year. The significant change in the discount rate was primarily caused by the increase in the municipal bond rate from 2.06% as of December 31, 2021 to 3.72% as of December 31, 2022. 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 percent, 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 (2.76 percent) or 1-percentage-point higher (4.76 percent) than the current rate:

	1% DECREASE TO DISCOUNT RATE (2.76%)		CURRENT DISCOUNT RATE (3.76%)		1% INCREASE TO DISCOUNT RATE (4.76%)	
MPU's Proportionate Share of the Net OPEB Liability	\$	891,227	\$	653,683	\$	471,632

Payables to the OPEB Plan. As of December 31, 2023, MPU had no outstanding payables to the OPEB plan.

NOTE 10 - 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 the 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.

	2022	2021	AVERAGE	150 DAYS
Water	\$ 6,012,321	\$ 5,265,359	\$ 5,638,840	\$ 2,317,332
Electric	70,138,611	58,684,321	64,411,466	26,470,465
Steam	2,362,002	1,521,766	1,941,884	798,035
Information Technology	1,186,566	921,541	1,054,054	433,173
Broadband	101,651	91,196	96,424	39,626

As of December 31, 2023, MPU has funded its reserves at 150 days and complied with Commission resolution of at least 120 days.

NOTE 11 - 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 12 - MAJOR POWER SUPPLY CONTRACT ACTIVITIES

MPU is a summer peaking utility. MPU continues to pursue its Manitowoc Renewable Refuel Project which entails refueling two existing circulating fluidized bed boilers – Boilers 8 & 9 – from burning primarily fossil fuels, such as coal and petroleum coke, to burning 100% Wisconsin-recognized renewable densified fuel pellets. To support that transition, MPU entered into two power supply contracts with Dairyland Power Cooperative for power supply. The first contract is for 30 MWs of on-peak (M-F, 7am – 10 pm) energy for 2023 and 2024. The second contract was for 30 MWs of ATC (Around-The-Clock) energy for 2023 thru 2027. MPU continues to receive 13 MWs of capacity and ATC energy from Great Lakes Utilities.

CITY OF MANITOWOC, WISCONSIN

REQUIRED SUPPLEMENTARY INFORMATION

NOTE 13 - RELATED PARTY TRANSACTIONS

GLU had contracted with MPU, one of its members, to provide management, secretarial, accounting and technical support services through a contract which ended on June 30, 2023. GLU was charged for these services based upon actual time spent by MPU personnel on GLU operations. GLU was then billed for these services based upon contracted hourly rates. Total technical and administrative services provided to GLU for 2023 was \$189,098.

NOTE 14 - 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, 2023 is \$45,948. 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, 2023 is \$33,294 with a 3.00% annual increase. MPU leases equipment in regards to a paper pellet purchase and supply agreement. This lease had an initial term of 5 years. The monthly payment is \$20,522. For the year ended December 31, 2023, MPU recognized \$101,719 in lease revenue (including interest) related to these agreements. At December 31, 2023, MPU recorded a \$3,321,791 lease receivables and deferred inflows of resources for these arrangements.

LEASES RECEIVABLE	В	BEGINNING BALANCES JANUARY 1, 2023		ADDITIONS		REDUCTIONS		ENDING BALANCES DECEMBER 31, 2023	
Water Tower - 1997	\$	568,986	\$	-	\$	45,948	\$	523,038	
Water Tower - 2002		694,395		-		33,294		661,101	
Shredder Equipment			2,	137,652		-		2,137,652	
Total	\$	1,263,381	\$ 2,	137,652	\$	79,242	\$	3,321,791	

Remaining amounts to be received associated with these leases at December 31, 2023 are as follows:

YEAR ENDING DECEMBER 31,	
2024	\$ 207,912
2025	221,939
2026	236,763
2027	252,432
2028	251,729
2029-2033	1,448,773
2034-2037	 702,243
Total	\$ 3,321,791

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
12/31/2022	0.05490741%	\$ 2,908,832	\$ 9,309,538	31.25%	95.72%
12/31/2021	0.04871148%	(3,926,235)	7,564,766	51.90%	106.02%
12/31/2020	0.04347040%	(2,713,917)	6,815,249	39.82%	105.26%
12/31/2019	0.04152655%	(1,339,006)	6,830,511	19.60%	102.96%
12/31/2018	0.04137931%	1,472,146	6,654,834	22.12%	96.45%
12/31/2017	0.04103787%	(1,218,463)	6,354,189	19.18%	102.93%
12/31/2016	0.04200699%	346,756	6,069,810	5.71%	99.12%
12/31/2015	0.04243429%	689,549	5,973,877	11.54%	98.20%
12/31/2014	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	CONTRAC	RIBUTIONS IN ATION TO THE TUALLY REQUIRI	CONTRIBUTION DEFICIENCY (EXCESS)	COVERED PAYROLL	CONTRIBUTIONS AS A PERCENTAGE OF COVERED PAYROLL
12/31/2023	\$ 761,474	\$	761.474	\$ -	\$ 11,265,426	6.76%
12/31/2022	605,120		605,120	-	9,309,538	6.50%
12/31/2021	510,622		510,622	-	7,564,766	6.75%
12/31/2020	460,029		460,029	-	6,815,249	6.75%
12/31/2019	447,398		447,398	-	6,830,511	6.55%
12/31/2018	445,873		445,873	-	6,654,834	6.70%
12/31/2017	409,764		409,764	-	6,354,189	6.45%
12/31/2016	406,224		406,224	-	6,069,810	6.69%
12/31/2015	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	
12/31/2022	0.17157807%	\$	653,683	\$	6,230,669	10.49%	38.81%	
12/31/2021	0.12116233%		699,832		6,104,558	11.46%	29.57%	
12/31/2020	0.11776494%		647,792		6,815,249	9.51%	31.36%	
12/31/2019	0.11039128%		396,494		6,830,511	5.80%	37.58%	
12/31/2018	0.09241670%		238,466		6,654,834	3.58%	48.69%	
12/31/2017	0.09089161%		273,454		6,354,189	4.30%	44.81%	

REQUIRED SUPPLEMENTARY INFORMATION (CONTINUED) »

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	
12/31/2023	\$	3,839	\$	3,839	\$		\$	9,948,000	0.04%	
12/31/2022		2,715		2,715		-		6,230,669	0.04%	
12/31/2021		2,446		2,446		-		6,104,558	0.04%	
12/31/2020		2,791		2,791		-		6,815,249	0.04%	
12/31/2019		2,952		2,952		-		6,830,511	0.04%	
12/31/2018		8,701		8.701		-		6,654,834	0.13%	

SCHEDULE OF CHANGES IN TOTAL OPEB AND RELATED RATIOS

Other Post-Employment Benefit Plan - Single-Employer Plan

Last 10 Measurement Years'

Last 10 Measurement Years*	2023	2022	2021	2020	2019	2018
Total OPEB Liability:						
Service cost	\$ -	\$ 22,062	\$ 19,577	\$ 15,364	\$ 12,677	\$ 11,544
Interest	756	5,687	6.861	5.947	4,673	4,633
Changes of Benefit Terms	-	(180,997)	-	-	-	-
Differences Between Expected						
and Actual Experience	-	(48,608)	-	59,444	-	-
Changes of Assumptions or						
Other Input	(439)	16,681	9,696	28,770	(6,948)	3,230
Benefit Payments	(22,471)	(26,084)	(15,559)	(1,254)	(6,508)	(8,000)
Net Change in Total OPEB Liability	(22,154)	(211,259)	20,575	108,271	3,894	11,407
Total OPEB Liability - Beginning	47,885	259,144	238,569	130,298	126,404	114,997
Total OPEB Liability - Ending (a)	\$ 25,731	\$ 47,885	\$ 259,144	\$ 238,569	\$ 130,298	\$ 126,404
Covered-Employee Payroll	\$ 6,230,669	\$ 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	0.41%	0.78%	3.80%	3.50%	2.06%	2.00%

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

Defined Benefit Pension Plan

Changes of benefit terms. There were no changes of benefit terms for any participating employer in WRS.

 ${\it Changes\ of\ assumptions}.\ There\ were\ no\ changes\ of\ assumptions\ for\ any\ participating\ employer\ in\ WRS.$

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

Changes of benefit terms. There were no recent changes in benefit terms.

Changes of assumptions. In addition to the rate changes detailed above in the tables, the State of Wisconsin Employee Trust Fund Board adopted economic and demographic assumption changes based on a three year experience study performed for the Wisconsin Retirement System. These assumptions are used in the actuarial valuations of OPEB liabilities (assets) for the retiree life insurance programs and are summarized below. The assumption changes that were used to measure the December 31, 2022 total OPEB liabilities, including the following:

Other Post-Employment Benefits Plan - Single Employer Plan

Changes of benefit terms. Beginning of 2021, active participants are no longer eligible to continue on MPU Health and Wellness Plan.

Changes of assumptions. The discount rate assumption used to develop the total OPEB liability changed from the prior year. Please refer to the actuarial assumptions section above for additional detail.



^{**}Beginning of 2021, active participants are no longer eligible to continue on MPU Health and Wellness Plan.

[•] Increasing the 20 year Tax-Exempt Municipal Bond Yield from 2.06% to 3.72%

[•] Increasing the Discount Rate from 2.17% to 3.76%.



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