

N M E P W S

SPECIAL EDITION: 2019 ANNUAL REPORT DIGEST

See the complete report and audited financial statements at mpw.org/AnnualReport



GAGE HUSTON
GENERAL MANAGER

A Utility worth being proud of

In April 2019, I had the distinct honor of becoming the General Manager of Muscatine Power & Water (MPW). Having served MPW for nearly 17 years — and now having the perspective of seeing our operation from the GM role — I have a tremendous amount of pride for this great Utility. MPW has a long and rich history of serving the Muscatine community. I continue to be humbled in my attempt to fill the shoes of the great leaders that came before me, including my predecessor, Sal LoBianco, who led MPW for 10 successful years.

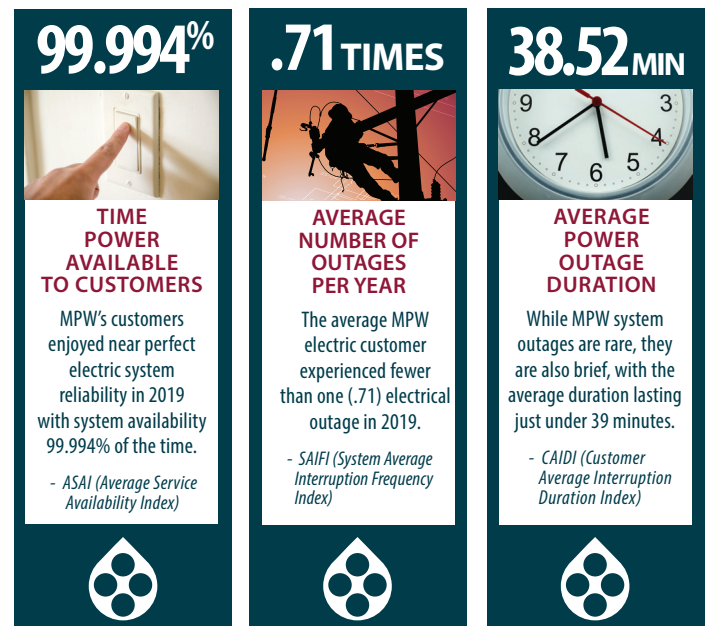
This digest report highlights some of 2019's many accomplishments, demonstrating our continued commitment to serving Muscatine and reinforcing the reasons why all customer-owners should share in my feeling of pride in this Utility. Be sure to read the full Annual Report online at mpw.org.

Your Reliable Neighbor

Reliability of essential utility services remains one of our top priorities and I'm happy to say MPW continues to perform very well in this area. For many years, MPW has been designated as a **Diamond Level Reliable Public Power Provider (RP3)** by the American Public Power Association (APPA), their highest electric service reliability award. Based on actual customer outage data, RP3 confirms Muscatine customers experience fewer and shorter outages than most of the nation as a result of our comprehensive approach to system design and outage response.

While RP3 specifically recognizes proficiency among public power utilities, MPW embraces its principles throughout, practicing a utility-wide commitment to safe and reliable delivery of all services and system improvements along with responsive customer service and relentless cost-containment for the benefit of our customer-owners.

We continue to push the limits of outage response improvement. We implemented a new tool utilizing available data from our new Fiber-to-the-Home (FTTH) infrastructure which helps us pinpoint electrical outages and minimizes response times for our lineworkers. Efforts like this will help ensure that your service reliability will remain one of the best in the nation.



While the Annual Report and this Digest were prepared, all of us are in the midst of responding to the novel coronavirus outbreak. Staff has been working tirelessly to modify operations to protect our customers and employees from the spread, while maintaining a firm focus on continued reliable operation of our essential utility services. Knowing many are impacted by this crisis, we continue to develop programs and policies to support you during these unprecedented times.

We'll get through this together and this Utility will be there to help make it happen.

STAY UP TO DATE WITH OUR UTILITY RESPONSE AND PROGRAMS AT mpw.org/Covid19Alerts

Investing in our commitment to reliability

Providing reliable, low-cost utility services is a tremendous responsibility, which our team members take seriously. It drives us to be proactive so we continually reinvest in infrastructure to ensure the integrity and stability of power, water and communications services. We're determined to stay ahead of customer demand by constantly evaluating future needs. Tomorrow's industrial, commercial and residential growth are supported by capital dollars invested today. 2019 capital improvements include:

ELECTRIC:

Oregon Street Transformer #2 Rebuilt

Built in the '70s, transformer #2 was at its end of life. The rebuild required its removal and transport to a facility which replaced barrier boards and its load tap changer.



Total project investment: \$551,400. 2019 capital investment: \$294,000.
Status: Complete.

Oregon Substation Breaker Replaced

Serving MPW's largest electric load, this project was a key priority. Aging equipment, breakers and isolation switches were replaced to help guarantee reliability.

Total project investment: \$238,000. 2019 capital investment: \$154,300.
Status: Complete.



After distribution and transmission lines are moved underground, poles will be removed for unobstructed views.

Mississippi Drive Corridor Phase 1

As part of a multi-year City of Muscatine project, overhead transmission and distribution lines along the project corridor are to be placed underground. The first phase addressed work from the Beckey Bridge to Broadway Street.

Total project investment: \$5.9M. 2019 capital investment: \$593,400.
Status: In process.

161kV Transmission Line 106 Project

Engineers completed preliminary design of an autotransformer for a new Muscatine switching station and a new northern route 161kV transmission line. Line 106 will further enhance MPW's reliability by adding northern access to the power grid. Design approved.

Total project investment: \$11.8M. 2019 capital investment: \$167,800.
Status: In process.

WATER:

Grandview Avenue Water Treatment Plant Expansion

This project accommodates the additional raw water from the new well field (2018) and included the expansion of chlorine gas storage, a new feed system, an unloading dock, expansion of dry chemical storage, and an additional phosphate mixing tank.



Total project investment: \$1.2M. 2019 capital investment: \$212,600.
Status: Complete.



West Hill Sewer Separation Project

This multi-year collaboration with the City of Muscatine provides us opportunity to evaluate and replace as needed, aging valves, hydrants and water mains, while the streets are excavated for sewer work. Lead or galvanized service lines are also replaced as needed.

Total project investment: \$1.3M. 2019 capital investment: \$474,000.
Status: In process.

Water Valve Replacement

Several strategic valve replacements were made in 2019. Our ongoing valve exercising program provides valuable information about water system health. The data helps identify large and small valves in need of replacement before they fail.

2019 capital investment: \$185,300. Status: Ongoing

10.3B



GALLONS OF WATER DELIVERED

MPW water has been plentiful, reliable and great-tasting for over 120 years. At the rate of 28 million gallons per day, 2019's total was 10.3 billion gallons.



3,805 FEET



WATER MAIN REPLACED

To reduce the incidence of breaks in aging water infrastructure, MPW annually targets sections of the system for water main replacements.



419 MILES



FIBER INSTALLED SINCE 2017

The MachLink Network's backbone has been fiber-optic since the '90s. Converting "the last mile" of coax brought the total served by all-fiber to 53% by 2019's end.



COMMUNICATIONS:

Because telecom services, especially internet, are so essential to business and residential customers, maintaining and improving their reliability are top priorities, along with ensuring we are prepared and have the capacity to meet growing needs. These projects are the result of proactive planning.

Fiber to the Home (FTTH) —

In the third year of the planned 4-year project, customers converted to the all-fiber system grew from around 2,600 at the end of 2018 to nearly 5,700 a year later; with approximately 4,900 remaining.

Total project investment: \$19.1M. 2019 capital investment: \$4.7M.
Status: In process.

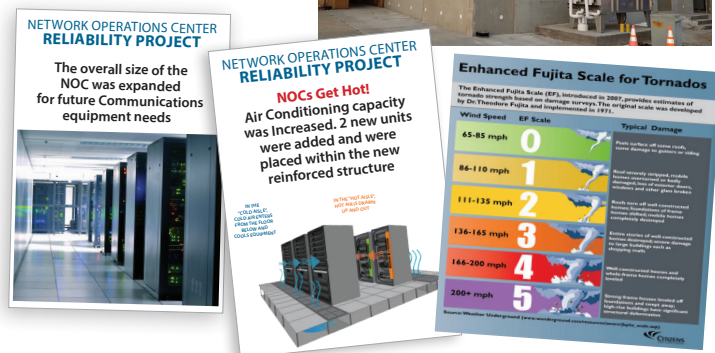


Many hands are making fiber to the home a reality.

Structural Strengthening of Network Operations Center (NOC)

The expanded NOC is completely encased in a concrete shell to protect it from weather-related disasters. It boasts resistance to up to 250 mph winds, has a new uninterruptible power supply and additional AC units to keep hot equipment cool.

Total project investment: \$2M.
Status: Complete.



99.951

PER CENT

TIME INTERNET AVAILABLE

MachLink customers enjoyed near perfect Internet connectivity in 2019 with system availability 99.951% of the time. At 99.722%, the TV system was similarly reliable.

SD to HD conversion —

With the extra capacity provided by upgrading our video delivery to IP, technicians upgraded the signal delivery for 18 channels from standard definition to high definition, improving the experience for our video customers.

2019 capital investment: \$110,504. Status: Complete.

GENERATION:

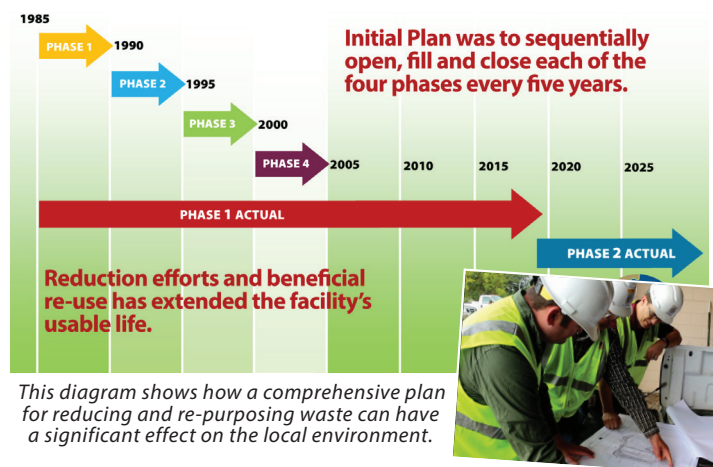
State and federal regulations aside, living in Iowa's Mississippi valley helps us focus on protecting land, water and air to the best of our ability; and MPW has long been a leader in reducing emissions, re-purposing waste and promoting efficiencies in our processes.

Coal Combustion Residue (CCR) Landfill —

Constructed in 1985, MPW's CCR landfill was expected to be full in 35 years – 2020. In 2019, the first phase of the landfill was covered, decades after its anticipated closure.

Its useful life has been extended through reduction and beneficial use of by-products:

- Gypsum used for wallboard and agricultural soil amendment.
- Fly ash used as a concrete additive.
- Bottom ash used in kilns, shingles and grit blasting media.

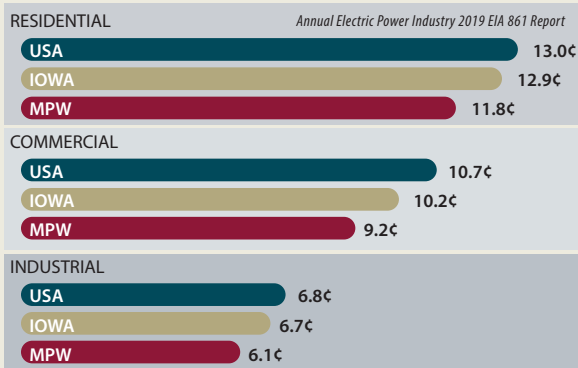


This diagram shows how a comprehensive plan for reducing and re-purposing waste can have a significant effect on the local environment.

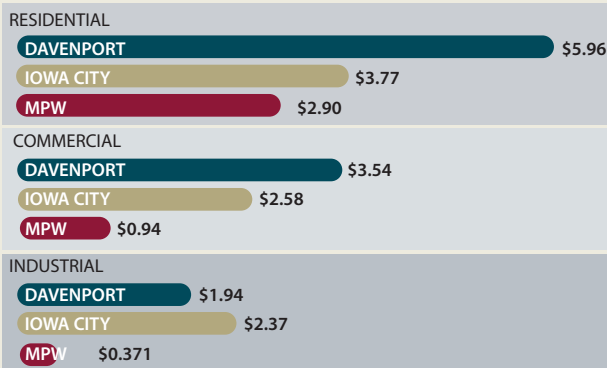


Building reliable infrastructure while keeping utility rates low

Compare electric rate per kWh



Compare water rate per CCF



On average, Muscatine customers each save \$400 per year over rate-payers living elsewhere.

\$4.4M



COMMUNITY RATE SAVINGS

In Muscatine, great reliability does not cost more! In fact, MPW customers saved \$4.4 million dollars in 2019 compared to other cities in Iowa and national averages.

Reinvesting resources

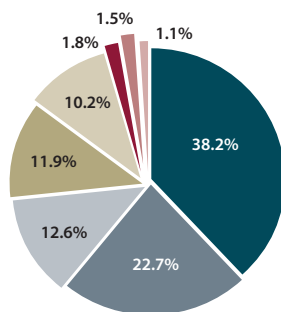
The Utility's net income is used to make system improvements like the ones noted previously in this report.

Electric:

The Electric Utility earned \$94.8 million in revenue with net income of \$13.5 million.

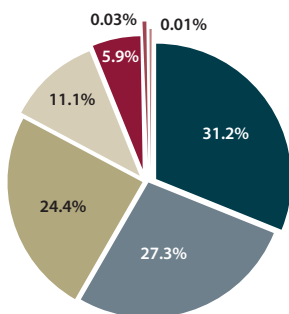
ELECTRIC - SOURCE OF FUNDS (in 000's)

Industrial	\$36,178.5	38.2%
Wholesale	21,487.1	22.7%
Residential	11,952.0	12.6%
Commercial	11,321.9	11.9%
Steam	9,665.3	10.2%
Water/Communications Utilities & Wastewater Plant	1,676.8	1.8%
Investment Income	1,434.1	1.5%
Other	1,071.4	1.1%
Total Inflows	\$94,787.0	100.0%



ELECTRIC - USES OF FUNDS (in 000's)

Operation	\$27,447.8	31.2%
Purchased Power	24,014.7	27.3%
Production Fuel	21,512.3	24.4%
Maintenance	9,792.2	11.1%
Capital Investments	5,205.3	5.9%
Interest Expense	23.0	0.03%
Emissions Allowance	7.6	0.01%
Total Outflows	\$88,003.0	100.0%

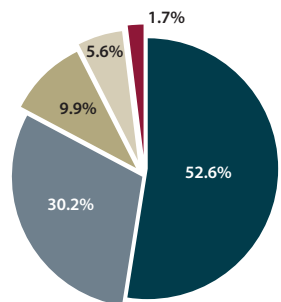


Water:

The Water Utility earned \$7 million in revenue with net income of \$480 thousand.

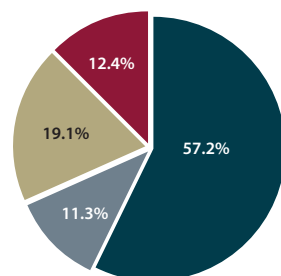
WATER - SOURCE OF FUNDS (in 000's)

Contract Customers	\$3,714.2	52.6%
Residential	2,130.7	30.2%
Commercial	695.8	9.9%
Power Plant	396.5	5.6%
Investment Income	119.0	1.7%
Total Inflows	\$7,056.1	100%



WATER - USES OF FUNDS (in 000's)

Operation	\$4,508.8	57.2%
Maintenance	890.7	11.3%
Capital Investment	1,506.4	19.1%
Interest Expense & Debt Payment	981.3	12.4%
Total Outflows	\$7,887.2	100%



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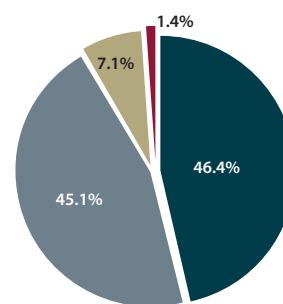
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Communications:

The Communications Utility earned \$14.7 million in revenue with net income of \$2.3 million.

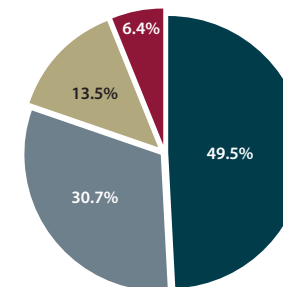
COMMUNICATIONS - SOURCE OF FUNDS (in 000's)

CATV	\$6,837.6	46.4%
Internet	6,651.6	45.1%
MAN & Phone	1,051.9	7.1%
Investment Income	203.5	1.4%
Total Inflows	\$14,744.6	100%



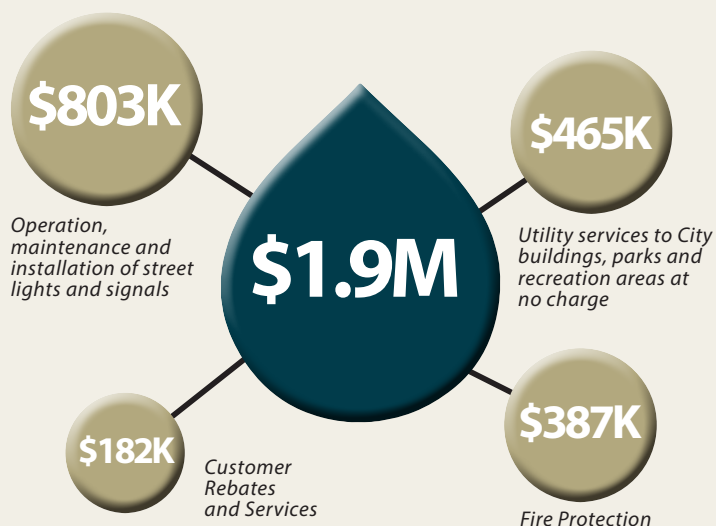
COMMUNICATIONS - USES OF FUNDS (in 000's)

Operations	\$9,873.2	49.5%
Capital Investment	6,120.7	30.7%
Interest Expense & Debt Payment	2,690.3	13.5%
Maintenance	1,278.4	6.4%
Total Outflows	\$19,962.7	100.0%



Did you know the Muscatine community receives an annual direct benefit of \$1.9M?

Besides the \$4.4 million cost-benefit citizens receive due to MPW's lower than state/national average rates, the Utility directly provides services to the city's public buildings and spaces that would otherwise be paid by taxes.



3205 Cedar St. • Muscatine, IA 52761 Visit our websites: www.mpw.org and www.machlink.com
 Business Hours: 8:00 AM – 5:00 PM, Mon - Fri. HelpDesk: 6:00 AM – 12:00 Midnight, 7 days a week.
 Contact Numbers: **Utility Emergencies:** 263-2631, opt 0 • **Pay by Phone:** 263-2631, opt 1 • **HelpDesk** 263-2631, opt 2
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