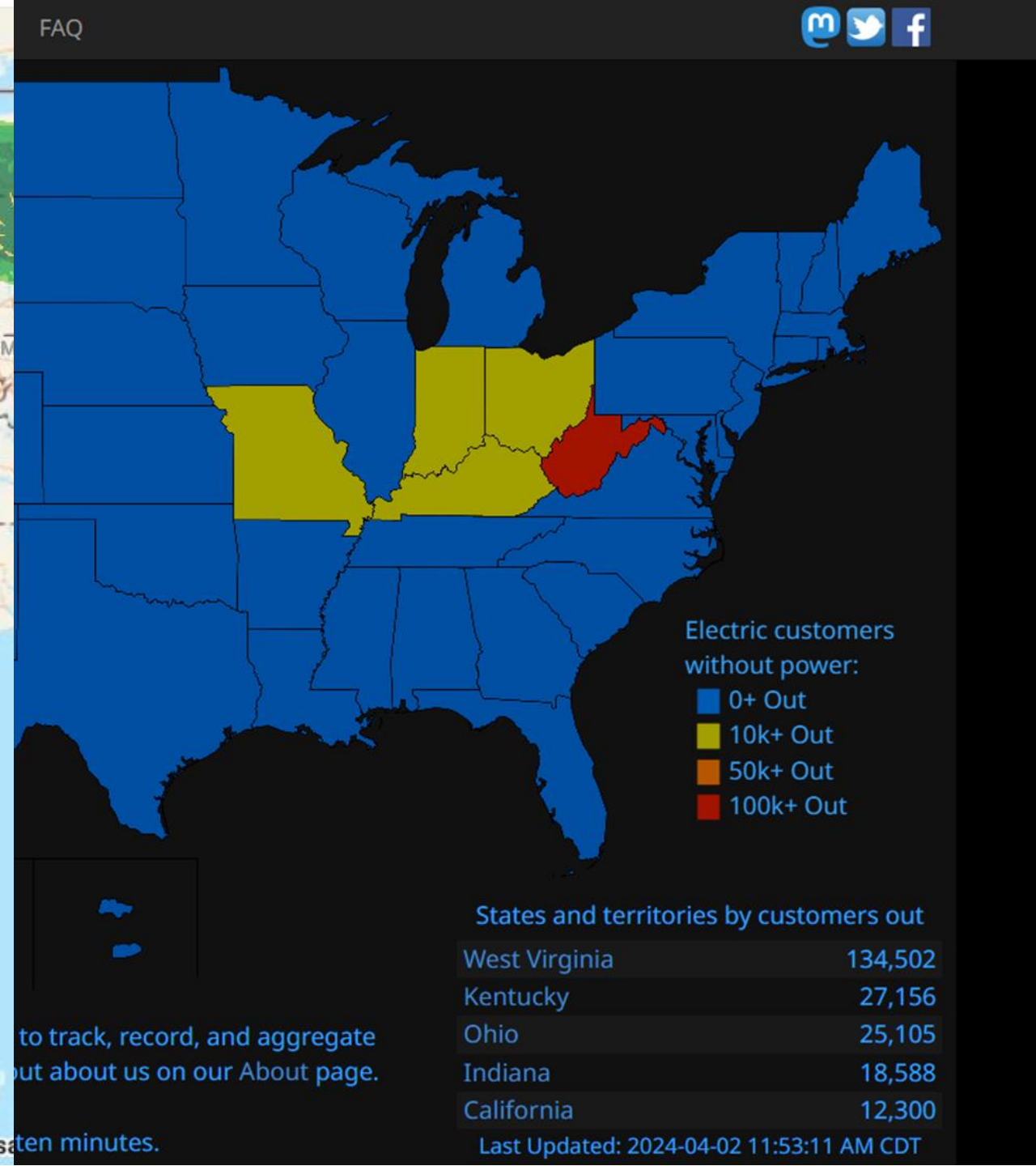
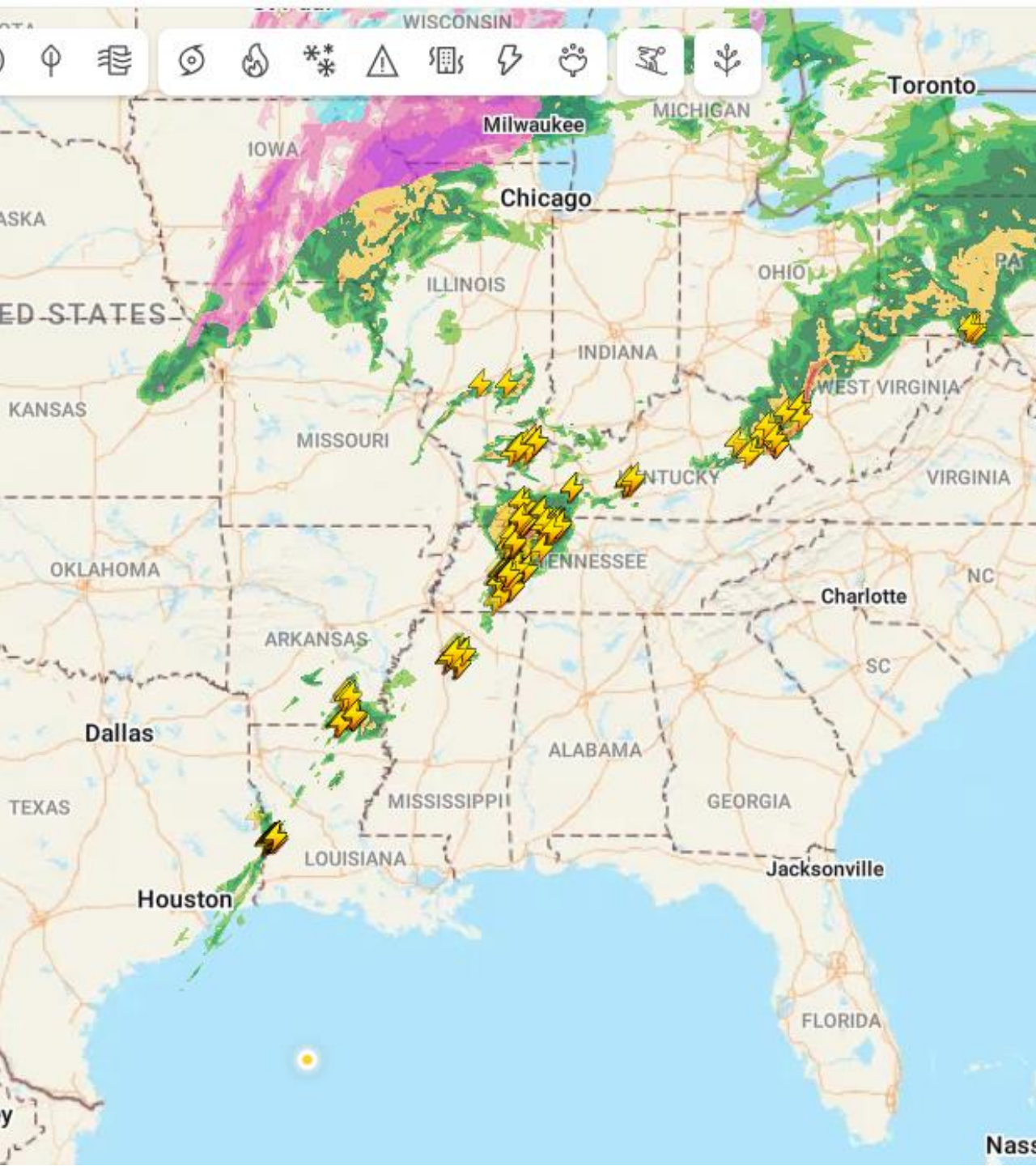


CEO Report

Board of Commissioners

April 3rd, 2024





to track, record, and aggregate
out about us on our About page.

Nassaten minutes.

April 2nd Storm

- On the morning of Tuesday 2 April, a brief but intense line of thunderstorms impacted much of the Midwest including Memphis and Shelby County, causing many power outages in Missouri, Tennessee, Kentucky, Indiana, and Ohio
- Lightning from the storm caused damage to an MLGW electric substation and caused an outage on a high voltage transmission line impacting 2 other MLGW substations. This interrupted power for approximately 40,000 MLGW customers for just under 2 hours.
- MLGW crews worked quickly to restore power to the substations and the customers they serve by 11 AM.





Reliability - Customer Minutes Interrupted (CMI)

! Near Target

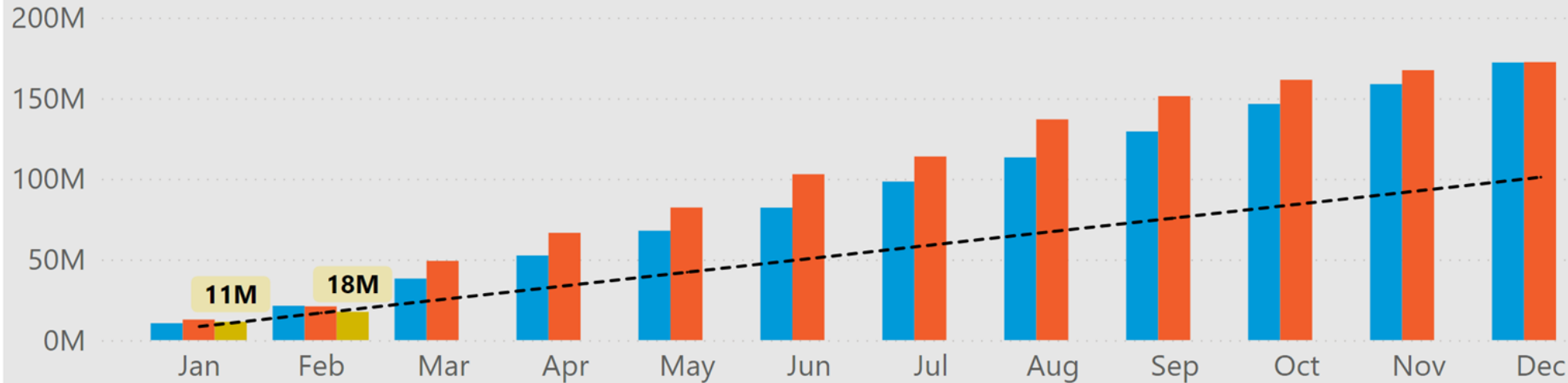
↗ Improving

Updated: February 2024

Total Customer Minutes Interrupted (CMI)

Target: at or below 101M minutes

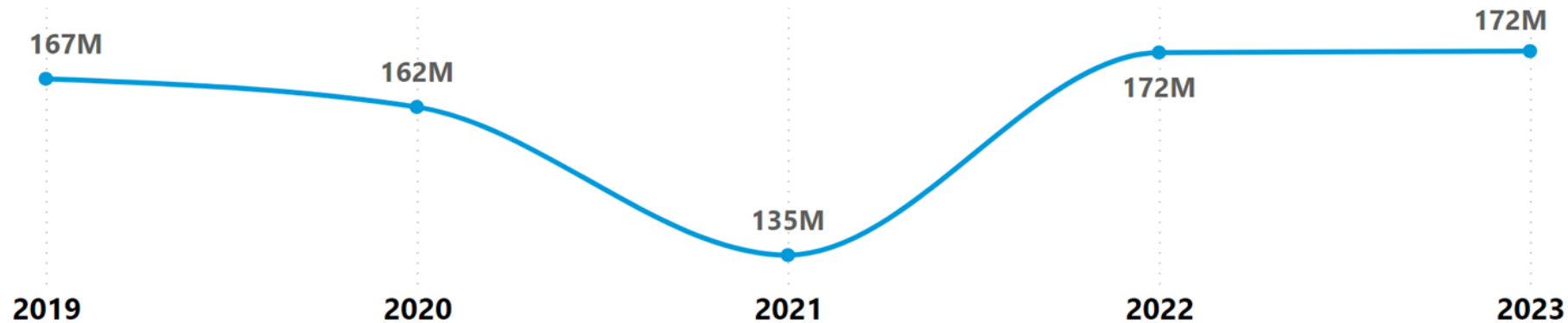
Year ● 2022 ● 2023 ● 2024 - ●- 2024 YTD Target



2024 Customer Minutes Interrupted
18M

CMI YTD Target
16.83M

CMI Annual Trend (2019-2023)



See improvement plan in next section

Note: Reliability statistics exclude major outage events.



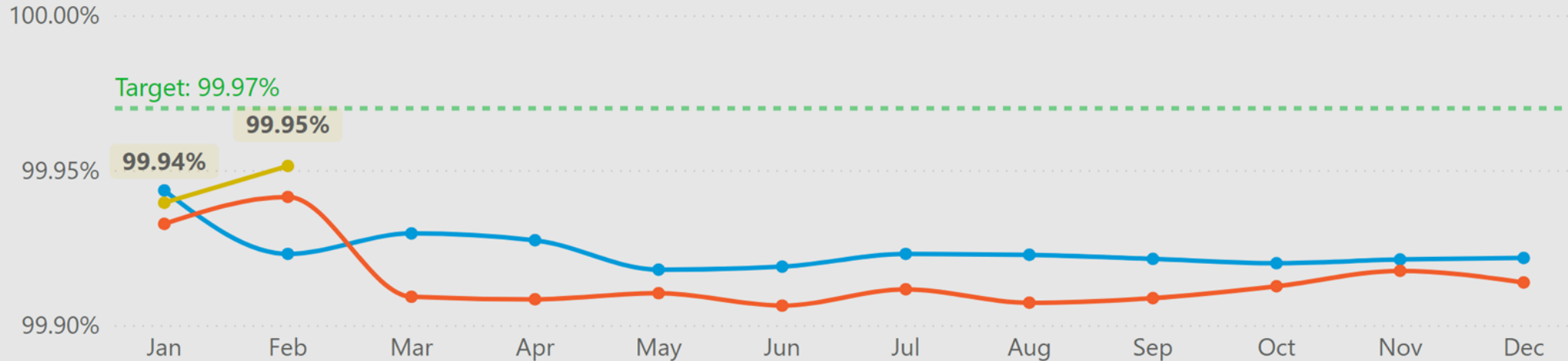
Reliability - Average Service Availability Index (ASAI)

Updated: February 2024

Average Service Availability Index (ASAI)

Target: at or above 99.97%

Year ● 2022 ● 2023 ● 2024



2024 Average Service Availability Index:
99.95%

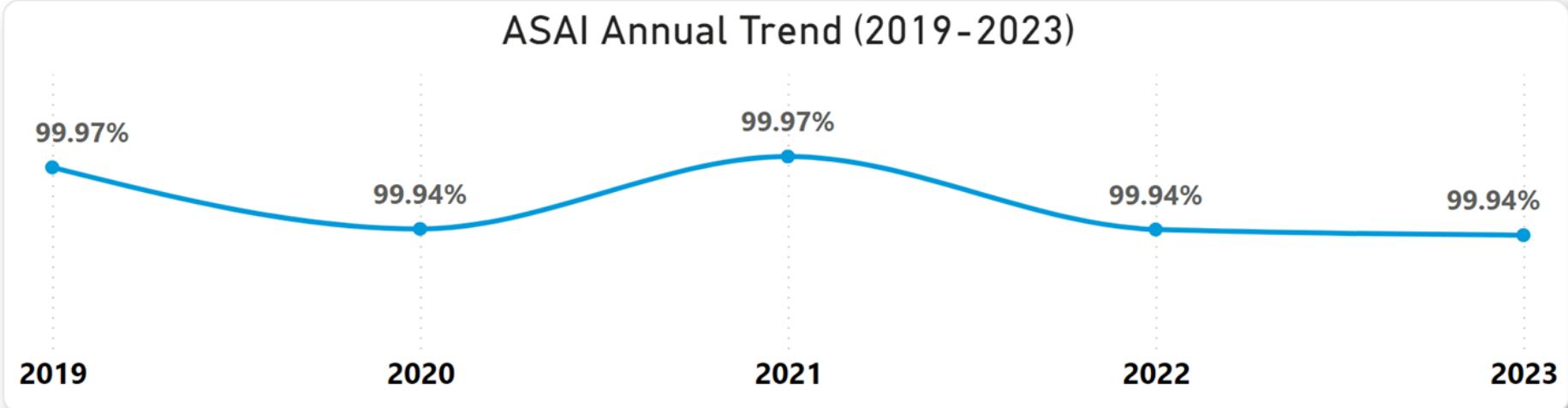
2023 Average Service Availability Index:
99.91%

2022 Average Service Availability Index:
99.92%

See improvement plan in next section

Note: Reliability statistics exclude major outage events.

ASAI Annual Trend (2019-2023)





Infrastructure Improvement Plan (2020-2024)



Kendall Vegetation Services

532

Miles per Year

Lewis Tree Service, Inc.

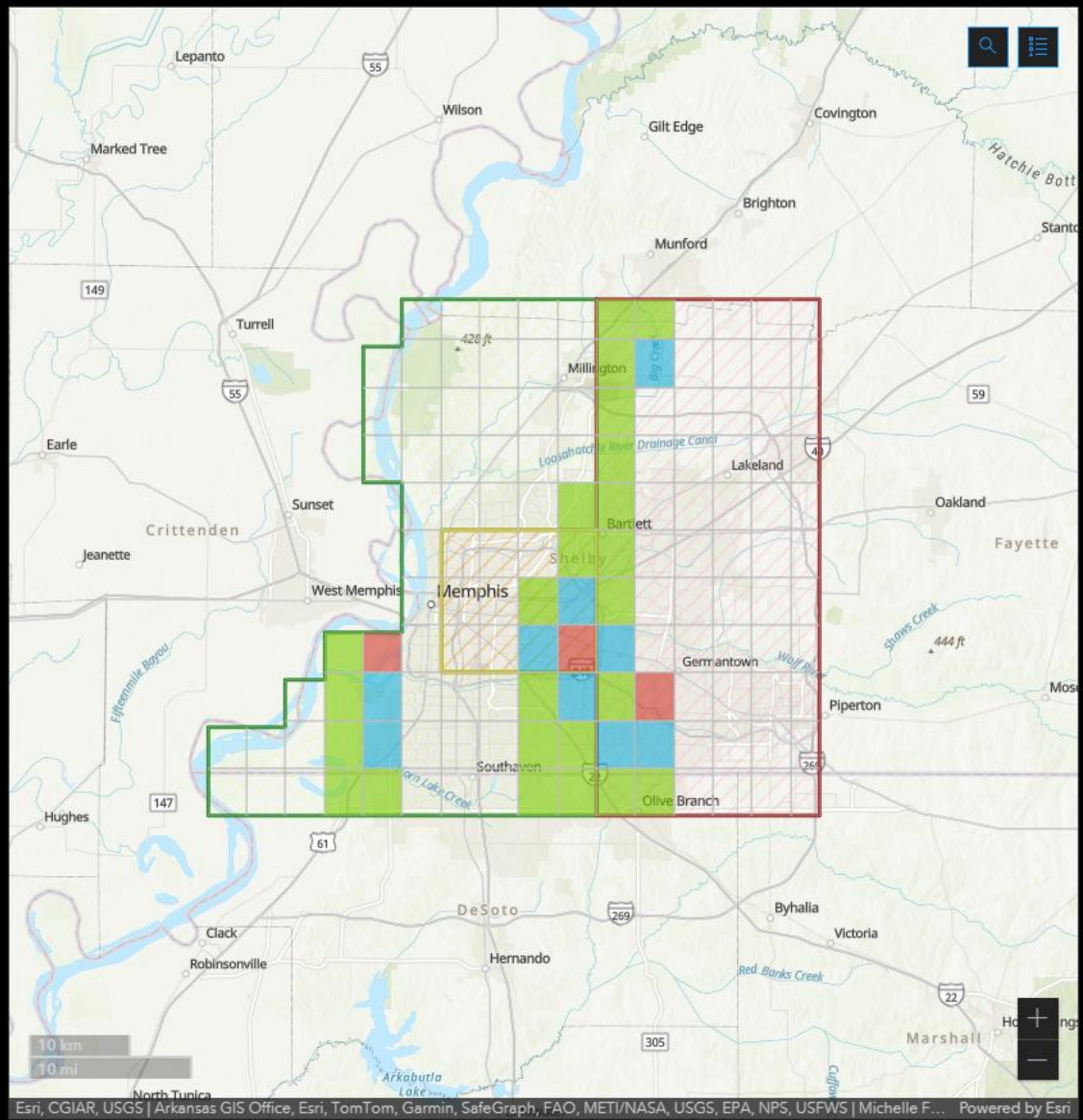
453

Miles per Year

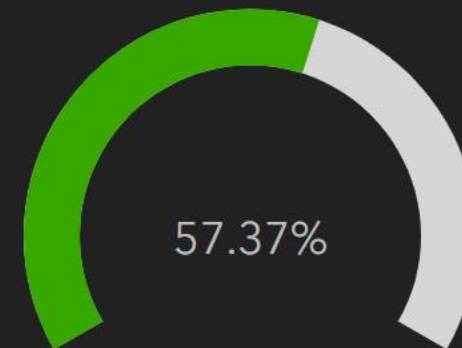
ABC Professional Tree Services

413

Miles per Year



September 1st, 2023 - August 31st, 2024
Total Miles Completed



802.5 Miles Completed

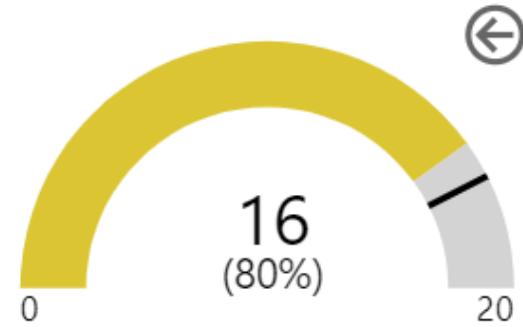
Last Updated Date: 3/28/2024

MLGW is on track to meet this goal by Aug 31 2024

Substation Transformer Replacements

16 transformers

5-Year Target: 20



Replace *Outdated* Infrastructure Substation Transformer Replacements

Substation equipment needs to be maintained and components need to be replaced periodically to extend asset life. This process prevents long duration outages due to transformer failures.

MLGW is on-track to complete the 5-year substation transformer replacement target.

MLGW will complete 5 transformers in 2024

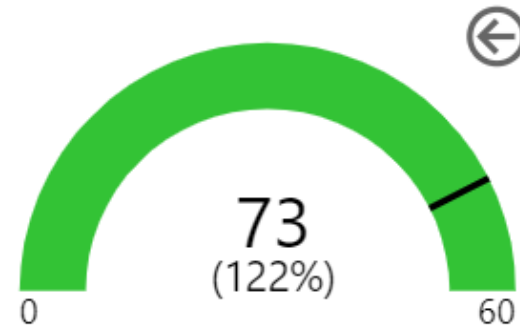
Year	Completed	Goal	Units
2020	4	4	transformers
2021	6	4	transformers
2022	1	2	transformers
2023	5	6	transformers
2024	0	5	transformers
Total	16	21	transformers

Original Target: 20 transformers

Substation Breaker Replacements

73 breakers

5-Year Target: 60



Replace *Outdated* Infrastructure Substation Breaker Replacements

Substation equipment needs to be maintained and components need to be replaced periodically to extend asset life. This process prevents long duration outages due to circuit breaker failures.

MLGW is ahead of schedule to complete the 5-year substation breaker replacement target.

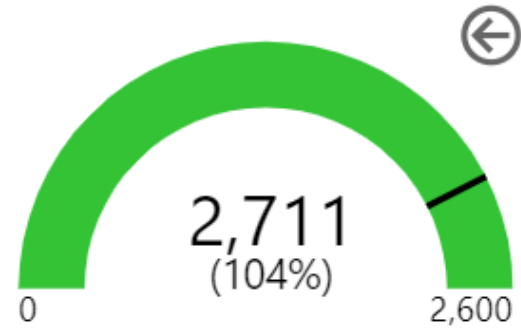
Year	Completed	Goal	Units
2020	12	12	breakers
2021	9	12	breakers
2022	22	15	breakers
2023	25	12	breakers
2024	5	11	breakers
Total	73	62	breakers

Original Target: 60 breakers

Wood Pole Replacements

2,711 poles

5-Year Target: 2,600



Replace *Outdated* Infrastructure Wood Pole Replacements

Wood Poles are inspected, rated, and rotten or end-of-life poles are replaced. This process reduces the amount of outages caused by pole failures.

The wood pole replacement target was not met in 2020 but was exceeded in both 2021 and 2022. MLGW is on-track to complete the 5-year wood pole replacement target.

MLGW will replace 600 poles in 2024

Year	Completed	Goal	Units
2020	226	500	poles
2021	894	600	poles
2022	692	600	poles
2023	745	600	poles
2024	154	520	poles
Total	2,711	2,820	poles

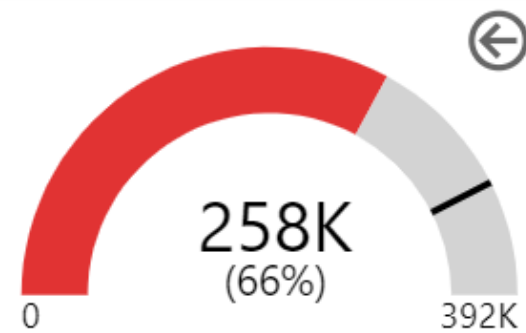
Original Target: 2600 poles



Underground Cable Replacement

257,795 feet

5-Year Target: 392,400



Replace *Outdated* Infrastructure Underground Cable Replacement

1960-1980 vintage underground cable is being replaced. This process prevents long duration outages due to underground cable failures.

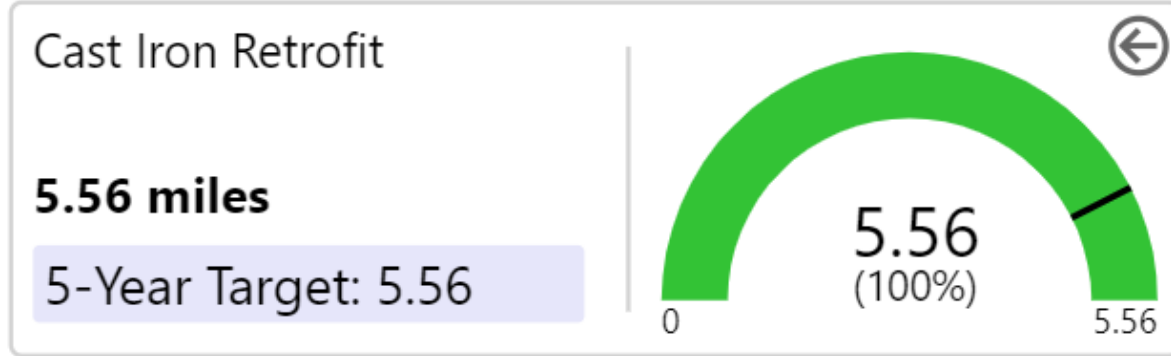
MLGW is on-track to reach this year's goal, but is slightly behind schedule on the 5-year underground cable replacement target.

MLGW will complete 100,000+ feet in 2024

Year	Completed	Goal	Units
2020	32,920	41,800	feet
2021	60,645	89,870	feet
2022	72,093	89,870	feet
2023	92,137	89,870	feet
2024	0	89,870	feet
Total	257,795	401,280	feet

Original Target: 392K feet

The goal on the charts is 85% (% of time through 5-year plan)



Cast Iron Retrofit

Federal regulations requires MLGW to develop, write, and implement a Distribution Integrity Management Plan (DIMP).

As part of the DIMP, MLGW has replaced 330 miles of cast iron mains that had a history of leaking. This was a 30-year project that was completed in 2021.

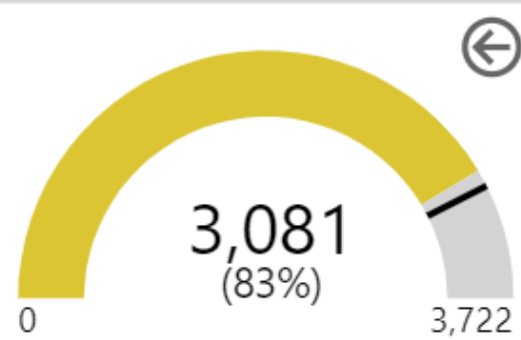
Year	Completed	Goal	Units
2020	3.48	3.48	miles
2021	2.08	2.08	miles
Total	5.56	5.56	miles

MLGW Completed this improvement

Steel Tap Replacements

3,081 units

5-Year Target: 3,722



Steel Tap Replacements

Federal regulations requires MLGW to develop, write, and implement a Distribution Integrity Management Plan (DIMP).

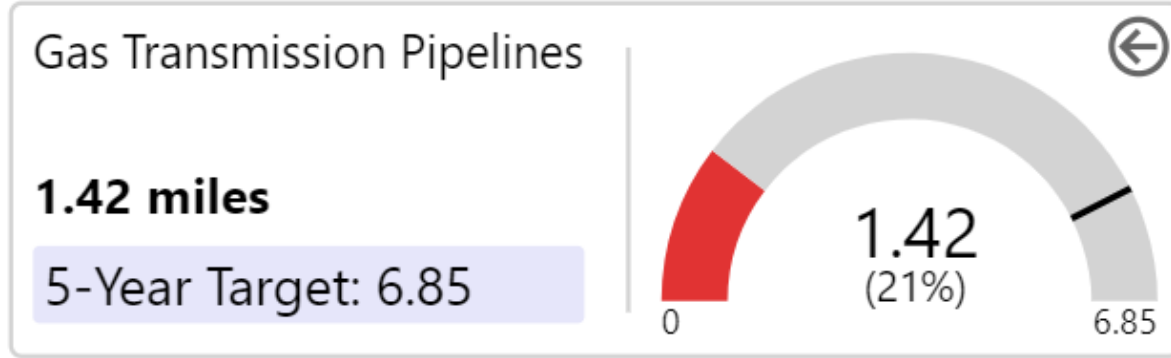
A DIMP analysis concluded that since 2010 MLGW has seen an increase in underground leaks due to the failure of steel mechanical couplings. *It is estimated that 40% of all underground leaks on MLGW's gas system occur on steel mechanical couplings on a service.*

This replacement program was created to address these couplings. It is a long term program that will address what is currently the highest risk in the distribution system (service couplings). There are estimated to be 140,000 Steel Taps in the distribution system.

The project has ramped up since the completion of the Cast Iron retrofit. The project is currently on-target for the 5-year infrastructure improvement plan.

Year	Completed	Goal	Units
2020	196	147	units
2021	591	575	units
2022	1,102	1,000	units
2023	1,179	1,000	units
2024	13	1,000	units
Total	3,081	3,722	units

The goal on the charts is 85% (% of time through 5-year plan)



Gas Transmission Pipelines

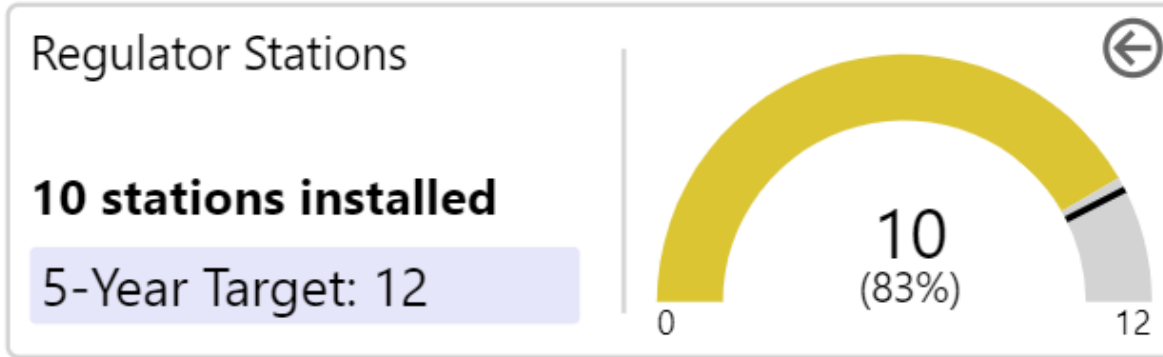
Federal regulations requires MLGW to develop, write, and implement a *Transmission* Integrity Management Plan (TIMP). In addition, as a pipeline operator, MLGW is required to identify, prioritize, assess, evaluate, repair and validate the integrity of gas *transmission* pipelines that could, in the event of a leak or failure, affect High Consequence Areas (HCAs) in the U.S.

This project involves replacing sections of gas pipeline and re-classifying several from Transmission to Distribution. This will reduce the risks within MLGW's gas system and reduce costs associated with inspection and maintenance.

There is one large project remaining from the original 5-year target. The designs have been completed and the project has now moved into the next phase. Construction of this 5+ mile project is expected to start and be completed in 2025.

Year	Completed	Goal	Units
2020	0.55	0.55	miles
2021	0.15	0.90	miles
2022	0.72	0.72	miles
2023	0.00	0.00	miles
2024	0.00	0.00	miles
Total	1.42	2.17	miles

Original Target: 6.85 miles



Regulator Stations

Department of Transportation (D.O.T.) Code mandates that regulators and relief valves must be maintained to operate within the design parameters of the gas distribution system.

MLGW performs an inspection on all the regulators and relief devices within the gas distribution/transmission system on an annual basis. When a regulator or relief device has been identified for replacement due to inoperability, reliability, and/or an inability to find replacement parts it is placed into the *Regulator Replacement Program*.

The Regulator Replacement Program is a long term program that will upgrade multiple regulator stations annually by prioritizing them within the project ranking matrix.

This project is currently on-schedule.
MLGW will replace 2 regulator stations in

Year	Completed	Goal	Units
2020	3	3	stations installed
2021	2	3	stations installed
2022	3	2	stations installed
2023	2	2	stations installed
2024	0	2	stations installed
Total	10	12	stations installed

The goal on the charts is 85% (% of time through 5-year plan)



Water Infrastructure Improvements (2020-2024)

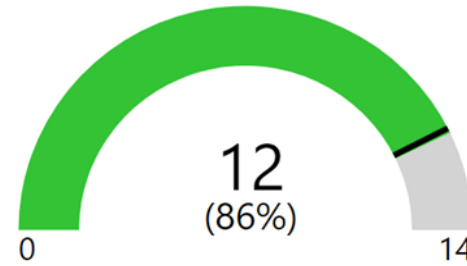
Updated: March 2024

The goal on the charts is 85% (% of time through 5-year plan)

Production Wells

12 new wells

5-Year Target: 14

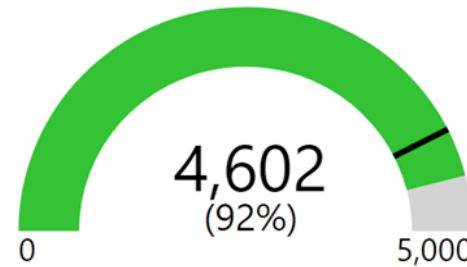


MLGW is on track to complete this improvement
MLGW will install 8 wells in 2024

Lead Service Line Replacements

4,602 services

5-Year Target: 5,000

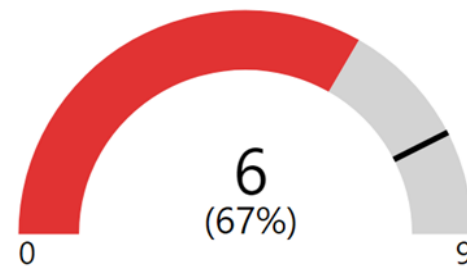


MLGW is on track to complete this improvement
MLGW will install ~1250 services in 2024

Digital Process Control Systems

6 systems installed

5-Year Target: 9



MLGW is on track to complete this improvement
MLGW will install 3 DPC in 2024

Orange Mound Initiative

Making Neighborhood Specific Infrastructure
Improvements



What's Been Done?

- To address poor reliability in this area, MLGW:
- Partnered with SYNC Energy AI to pilot their intelligent vegetation management system. Which uses artificial intelligence, satellite imagery, and LiDAR to determine at-risk vegetation.
- Partnered with PrecisionHawk to conduct drone inspections and data analytics on a portion of the Orange Mound – Sherwood Forest area to determine maintenance action necessary for system reliability.
- MLGW is preparing an RFP for drone inspections of the remaining poles in the area.
- MLGW personnel completed inspections of the 27 backbone circuits that feed the Orange Mound – Sherwood Forest area to identify additional maintenance actions required and are now assess the systems configuration to determine needed capital improvements

2024 planned improvements

FY24 Budget Allocated funding for additional contracted crews to perform remedial maintenance and capital improvements supporting the Orange Mound Initiative

Maintenance

- Contracted crews (Davis H. Elliot) are working to complete the 352 identified repairs.
- 217 completed since 2/1/2024
- 64 currently in progress
- 71 remaining
- Since September 2023, tree trimming crews have been focused on the Orange Mound – Sherwood Forest area.
 - Approximately 80% of the area has been trimmed.

Capital improvements

- \$1.75M in design
- \$4M budgeted for 2024
- Improvements include:
 - Extending backbone circuit into areas with long taps to divide them and provide another route for switching.
- Adding transformers and removing open wire secondary.
 - Replacing outdated/undersized copper conductors with aluminum conductor, steel reinforced cable.
 - Removing backbone circuit from rear property lines

Department of Energy Grant

MLGW is preparing an application to the Department of Energy (DOE) Grid Resilience and Innovation Partnerships (GRIP) program for the Orange Mound Neighborhood Initiative.

- Seeking \$21M in funding

Goals of the application:

- Bring Orange Mound – Sherwood Forest up to modern standards
- Improve the customers' overall reliability
- Increase grid resiliency during major weather events



U.S. DEPARTMENT OF
ENERGY

Questions

