



TRAVERSE CITY LIGHT & POWER

SIX-YEAR CAPITAL IMPROVEMENT PLAN

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Why Develop a Capital Improvement Plan?

The Capital Improvement Plan (CIP) is required by the Michigan Planning Enabling Act, Public Act 33 of 2008. The purpose of the Capital Improvement Plan is to show public structures and improvements ensuing a six-year period providing for time and cost of the improvements.

While this is required by Statute there are many other benefits to preparing a six-year Capital Improvement Plan. They are as follows:

- **Long-term planning** a six-year time frame allows for planning, assessing future organization needs, forecasting costs and prioritizing projects.
- **Financial Allocation** used to determine the number of financial resources necessary for the organization in future years.
- **Project Sequencing** doing this exercise allows for better coordination of projects such as dependencies, impact to operations, and potential disruption with multiple projects moving forward at one time.
- Stakeholder Communication provides clarity and transparency to the utility stakeholders such as governmental officials and the public. It can be used as a method to convey an organization's strategy and goals.
- **Risk Management** can be used to mitigate risks associated with capital projects such as changing economic environment, regulatory requirements, and technological advancements.

Overall, a CIP creates a structured approach to capital investment planning providing for informed decisions and the opportunity to optimize resource allocation and better achieve long-term goals/objectives.

What is Included in the Capital Improvement Plan?

The CIP is structured into eight major categories: generation, transmission, distribution, electric vehicle charging stations, facilities, joint projects with City of Traverse City and DDA, fiber, and other.

Included within the plan are the project funding sources. These sources include federal/state which consists of federal and state grants along with federal financing, local which consists of local grants/contributions and internal funding from the fund's net assets.

All projects exceeding \$50,000 are included for authorization by the Traverse City Light & Power Board ("Board") and City of Traverse City Commission except new extensions of services and emergency repairs.

Timeline and Process

Step 1: The six-year capital improvement plan begins annually in the fall where the Executive Director requesting submissions from the leadership team with several data points to be utilized for multiple purposes not only the six-year management plan but project authorizations and project management. This information will be utilized to process future grant applications. The data submission begins the framework of the six-year plan.

Step 2: After data submissions are complete, the Review Committee which consists of the Executive Director, Chief Financial Officer, and Business and Planning Analyst holds clarity sessions as needed to obtain a more in-depth understanding of the projects.

Step 3: Following the clarification sessions, the review committee independently scores each project based on predetermined scorecard. This predetermined scorecard focuses on developing priority ratings based on alignment with the utility's strategic initiatives. This ensures that each project's timeliness, level of necessity and other organizational impacts are considered when determining which years projects will take place and are budgeted for effectively.

Evaluation Criteria

- Climate Action reduces the overall carbon footprint of the utility and/or community.
- Financial Value including the return on investment even considering those not financial in nature along with the type of funding source.
- Customer and Employee Value how the project will impact how customers/employees perceive the utility and how it will meet or exceed customer/employee expectations.
- Risk Mitigation provides for mitigation to the following risks:
- Legal and Regulatory prevents noncompliance with legal and regulatory requirements.
- Operational prevents the risk of loss from failed processes.
- Technology prevent access risk to information or data that could negatively impact business operations.
- Operational Excellence provides for efficiencies in utility operations leading to more reliable service and enhancing grid resiliency for our customers.
- Innovation a project the utility has not undertaken in the past and is considered an improvement project that effects several customers, influences how the utility operates, requires new skills for the workforce, uniquely solves a problem, enhances the utility's brand or reputation, and might inspire other utilities, local governments, and businesses to do the same project.

Step 4: The draft report is drafted and distributed for review among the leadership team for feedback and the report goes through a final review process for inclusion in the December 2023 Board packet.

Step 5: In January 2024 the Board approves moving forward the Six-Year Capital Improvement Plan for inclusion into the overarching City Six-Year Capital Plan whereby it goes through the approval process required by the Michigan Planning Act.

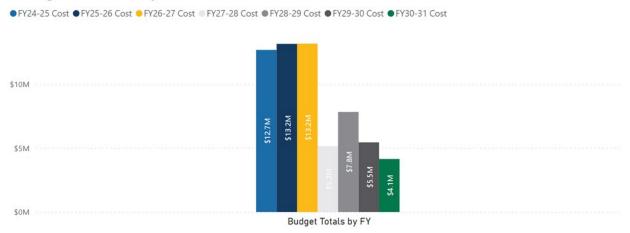
Electric Fund Project Prioritization Process

In addition to the previous predetermined criteria mentioned, the utility took into consideration projects that are stabilization in nature (practice of ensuring something doesn't dramatically change, fail or decline), renewal in nature (innovation, reimagining, reorganizing, or updating) and growth in nature (leveraging progress and opportunities in a sustainable and viable fashion). Projects were segregated into two subcategories 1) stabilization and 2) renewal and growth, then separately reviewed. These projects were prioritized within the subcategories.

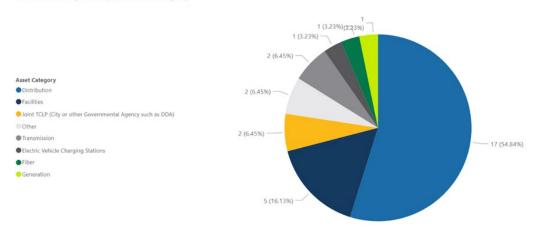
This was then followed by a third layer of evaluation that took into consideration those assets in service now on the probability of failure and the impact of failure if it were to occur. This third layer provided confidence that those projects are placed in the correct priority sequence on the cash flow.

Data Visualization

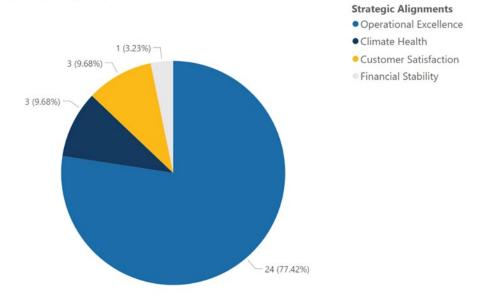
Budget Totals by Fiscal Year



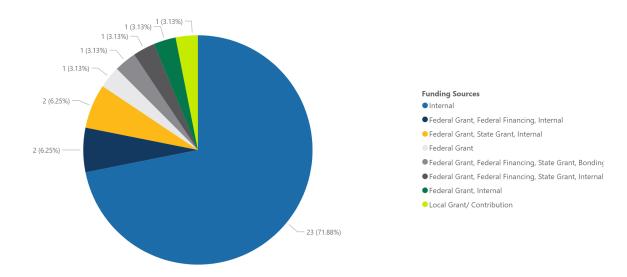
Count of Projects by Asset Category



Projects by Strategic Alignment



Count of Funding Sources by Funding Sources



Funding

Funding Strategy

Each project included in the CIP has designated the ideal funding scenarios for the six-year capital improvement plan. While most of our planned investments will utilize internal funding, TCLP is also exploring external funding opportunities in the form of State and Federal grants, bond/loan programming and additional collaboration opportunities with regional organizations and local government for mutual cost sharing benefits.

External Funding Opportunities

For CIP projects that extend to later years or that have significant costs, TCLP aims to align external funding opportunities as projects become further developed in anticipation for potential grant opportunities. TCLP has been tracking and reviewing a variety of opportunities to evaluate which best aligns with our projects. We are adamant about leveraging many funding opportunities that have been designed to meet national climate and energy goals set by federal and state legislators. The focus of which tend to encourage investment in projects that support grid technology innovations/modernization, grid resiliency, distributed energy resources, facility efficiencies, electrification, electric vehicle charging infrastructure growth, and customer programming.

The most notable contributor of funding opportunities is The Inflation Reduction Act ("IRA"). Approved in August 2022, it is the largest piece of federal legislation to address climate change. The law directs \$400B in federal funding to clean energy with the goal of substantially lowering the nation's carbon emissions by the end of the decade.

The utility is positioning itself to apply for funds relating to different aspects of the IRA as the federal programs are developed and openings for grant/financing proposals are opened for submission, while taking into consideration the reality of the time required for the application process, review, and awarding of the funding. Many of the projects previously developed already have the concepts in place required for the various grants/financing being awarded with IRA funds providing a step ahead for the utility.

The goals of the Climate Action Plan coincide nicely with the IRA goals of advancing and deploying American made clean energy technologies, making homes and buildings cleaner and more efficient to save consumers money and cut pollution, and increasing the resilience of our communities in a changing climate.

Not only do the utility goals coincide with the federal government, but the state government under the most recent legislation passed on Clean Energy to lower costs, create jobs, protect air and water and make more energy in Michigan. It is estimated that this legislation will help secure \$7.8B in federal investment from the IRA providing a larger opportunity of success for the utility in combatting climate change.

Sustainability

With the recent completion of the Climate Action Plan, it is vital our CIP projects revolve around reducing our carbon output. Projects included in this plan covers five main Sustainability features:

- Renewable Energy Resources are allocated for clean energy and reducing reliance on fossil fuels and reducing greenhouse gas emissions.
- Grid Modernization Resources are allocated to modernize the grid infrastructure, including installing advanced communication systems providing for better monitoring and control of energy flows and optimizing power distribution and reducing energy losses.
- Battery Storage Resources are allocated to address intermittency issues associated with renewable energy, providing for the ability to store excess energy during periods of peak demand improving grid stability and reducing reliance on fossil fuel-based peaker plants.
- EV Infrastructure Resources are allocated for expanding the existing network in additional public areas, workplaces, residential complexes. By installing the infrastructure, it would encourage the use of electric vehicles thus reducing emissions from transportation and promoting sustainable mobility.
- Demand Response Resources are allocated to Climate Action Plan technologies that are vital to the demand response programs under development to incentivize consumers to adjust their electricity usage during peak demand periods. This will help balance grid load, reduce strain on the system and potentially avoid the need for additional fossil fuel power plants.

All initiatives are included for the purpose of contributing to a cleaner and more resilient energy infrastructure. They also are fostering the transition towards a low-carbon future, mitigating climate change impacts, and improving the overall health of our planet.

Key Takeaways

Financial Stability – staff recognizes financial resources need to be attributed to operation and maintenance over the next few fiscal years to ensure there is enough sources available to effectively develop program recommendations within the Climate Action Plan. The IRA complements this strategy with funding available over the next couple years for many of the CIP projects will most likely be eligible for grant reimbursement or financing allowing the utility to transition funds to more of an O &M focus versus capital.

Prioritization – staff has put forth more effort this year in developing a prioritization for these projects to ensure they are classified appropriately within the correct fiscal year. As mentioned previously, we had two different methods of looking at prioritization. The first is the established predetermined criteria which really encompasses looking at the capital plan from a strategic plan focus along with risk management, and the second is solely taking into consideration system reliability for our rate payers.

One noticed trend is projects located in the later years tend to move between years and are more flexible in nature whereas projects in soon years tend to have higher priority and less flexibility and be more accurate in cost estimates.

The utility is always evaluating capital plans to consider alternative funding and the plan remains aligned with changing circumstances and priorities.

Strategic Vision and Mission – Lastly, staff takes a step back and reviews the plan holistically to ensure it is meeting the overall utility's vision and mission.

Traverse City Light and Power

Six Year Capital Improvement Plan - FYE 2024-25 through 2029-30

Fund Type	Electri	ic Fund											
Row Labels	Sum	of FY24-25 Cost	Sum of FY	'25-26 Cost	Su	m of FY26-27 Cost	Sı	um of FY27-28 Cost	S	ium of FY28-29 Cost	Sum of FY29-30 Cost	S	Sum of Total
Generation									\$	3,500,000.00		\$	3,500,000.00
Generation									\$	3,500,000.00		\$	3,500,000.00
Renewable Demonstration (NEW)									\$	3,500,000.00		\$	3,500,000.00
Transmission							\$	650,000.00			\$ 883,200.00	\$	1,533,200.00
Substation Improvements							\$	650,000.00				\$	650,000.00
Transmission Substation Relay Replacement							\$	650,000.00				\$	650,000.00
Transmission Line Reconstruction											\$ 883,200.00	\$	883,200.0
Cass Road Substation to Cass Junction											\$ 883,200.00	\$	883,200.0
Distribution	\$	3,405,000.00	\$ 3	,857,420.00	\$	4,000,000.00	\$	3,890,000.00	\$	3,570,000.00	\$ 3,785,000.00	\$ 2	22,507,420.0
Substation Improvements	\$	850,000.00	\$	400,000.00	\$	55,000.00	\$	55,000.00	\$	360,000.00	\$ 60,000.00	\$	1,780,000.0
Cass Road #1 Transformer	\$	800,000.00										\$	800,000.0
Distribution Substation Relay Replacement									\$	300,000.00		\$	300,000.0
Operational Technology Solutions			\$	350,000.00								\$	350,000.0
Substation Improvements	\$	50,000.00	\$	50,000.00	\$	55,000.00	\$	55,000.00	\$	60,000.00	\$ 60,000.00	\$	330,000.0
Distribution Circuit Reliability	\$	150,000.00	\$ 1	,012,420.00	\$	1,325,000.00	\$	1,100,000.00			\$ 700,000.00	\$	4,287,420.0
CD-24 - Pine St			\$	387,420.00								\$	387,420.0
Grandview Parkway	\$	150,000.00										\$	150,000.0
HL-33 - Locust St			\$	225,000.00	\$	225,000.00						\$	450,000.0
PC-22 - Cypress St			\$	400,000.00								\$	400,000.0
PC-22 - Munson, Davis to 3 Mile											\$ 700,000.00	\$	700,000.0
South Airport Road Tie					\$	1,100,000.00	\$	1,100,000.00				\$	2,200,000.0
Meters	\$	180,000.00	\$	195,000.00	\$	210,000.00	\$	225,000.00	\$	240,000.00	\$ 255,000.00	\$	1,305,000.0
Meter Procurement	\$	180,000.00	\$	195,000.00	\$	210,000.00	\$	225,000.00	\$	240,000.00	\$ 255,000.00	\$	1,305,000.0
Smart Grid	\$	100,000.00							\$	300,000.00		\$	400,000.0
Division and South Airport Automatic Healing (NEW)									\$	300,000.00		\$	300,000.0
Climate Action Plan Technology Solutions (NEW)	\$	100,000.00										\$	100,000.0
Extensions, New Services and Line Improvements	\$	1,975,000.00	\$ 2	,100,000.00	\$	2,250,000.00	\$	2,350,000.00	\$	2,500,000.00	\$ 2,600,000.00	\$ 1	13,775,000.0
Extensions and New Services	\$	850,000.00	\$	900,000.00	\$	950,000.00	\$	1,000,000.00	\$	1,050,000.00	\$ 1,100,000.00	\$	5,850,000.0
Overhead Line Improvements	\$	600,000.00	\$	600,000.00	\$	650,000.00	\$	650,000.00	\$	700,000.00	\$ 700,000.00	\$	3,900,000.0
Underground Line Improvements	\$	525,000.00	\$	600,000.00	\$	650,000.00	\$	700,000.00	\$	750,000.00	\$ 800,000.00	\$	4,025,000.0
Street and Area Lighting	\$	150,000.00	\$	150,000.00	\$	160,000.00	\$	160,000.00	\$	170,000.00	\$ 170,000.00	\$	960,000.0
Street and Area Lighting	\$	150,000.00	\$	150,000.00	\$	160,000.00	\$	160,000.00	\$	170,000.00	\$ 170,000.00	\$	960,000.0
Electric Vehicle Charging Station	\$	150,000.00			\$	150,000.00			\$	150,000.00		\$	450,000.0
Electric Vehicle Charging Station	\$	150,000.00			\$	150,000.00			\$	150,000.00		\$	450,000.0
TC EV Expansion (NEW)	\$	150,000.00			\$	150,000.00			\$	150,000.00		\$	450,000.0
Facilities	\$	705,000.00	\$	450,000.00	\$	250,000.00	\$	100,000.00	\$	100,000.00	\$ 275,000.00	\$	1,880,000.0
Facility Improvements	\$	305,000.00	\$	450,000.00	\$	100,000.00	\$	100,000.00	\$	100,000.00	\$ 100,000.00	\$	1,155,000.0
Hastings Service Center - Bldg B Trough and Concrete Repairs	\$	55,000.00										\$	55,000.0
Hastings Service Center Facility Improvements	\$	100,000.00	\$	100,000.00	\$	100,000.00	\$	100,000.00	\$	100,000.00	\$ 100,000.00	\$	600,000.0
Hall Street Renewable Demonstration Investment (NEW)	\$	150,000.00	\$	350,000.00								\$	500,000.0
Technology	\$	400,000.00			\$	150,000.00					\$ 175,000.00	\$	725,000.0
Data Center Updates					\$	150,000.00					\$ 175,000.00	\$	325,000.0
Meter Data Managment (MDM) Solution (NEW)	\$	400,000.00										\$	400,000.0
Joint TCLP (City or other Governmental Agency such as DDA)			\$	425,000.00	\$	425,000.00	\$	500,000.00	\$	500,000.00	\$ 500,000.00	\$	2,350,000.0
Underground Line Improvements			\$	425,000.00	\$	425,000.00	\$	500,000.00	\$	500,000.00	\$ 500,000.00	\$	2,350,000.0
Front and State Alley - Pine to Union			\$	425,000.00	\$	425,000.00						\$	850,000.0
Upgrade Front Street Underground Lighting Circuits and Receptacles							\$	500,000.00	\$	500,000.00	\$ 500,000.00	\$	1,500,000.0
Other	\$	15,000.00	\$	15,000.00	\$	15,000.00	\$	10,000.00	\$	8,000.00	\$ 8,000.00	\$	71,000.0

Grand Total	Ś	4.275.000.00 S	4.747.420.00 S	4.840.000.00 \$	5.150.000.00 S	7.828.000.00 \$	5.451.200.00 \$ 32.291.620.00
Capital Tools	\$	15,000.00 \$	15,000.00 \$	15,000.00 \$	10,000.00 \$	8,000.00 \$	8,000.00 \$ 71,000.00
Other	\$	15,000.00 \$	15,000.00 \$	15,000.00 \$	10,000.00 \$	8,000.00 \$	8,000.00 \$ 71,000.00

Fund Type	Fiber Fund						
Row Labels	Sum of FY24-25 Cost	Sum of FY25-26 Cost	Sum of FY26-27 Cost	Sum of FY27-28 Cost	Sum of FY28-29 Cost	Sum of FY29-30 Cost	Sum of Total
Fiber	\$ 8,333,333.00	\$ 8,333,333.00	\$ 8,333,333.00				\$ 24,999,999.00
Smart Grid	\$ 8,333,333.00	\$ 8,333,333.00	\$ 8,333,333.00				\$ 24,999,999.00
Smart Grid Expansion	\$ 8,333,333.00	\$ 8,333,333.00	\$ 8,333,333.00				\$ 24,999,999.00
Other	\$ 75,000.00	\$ 75,000.00					\$ 150,000.00
Other	\$ 75,000.00	\$ 75,000.00					\$ 150,000.00
Capital Tools - Fiber	\$ 75,000.00	\$ 75,000.00					\$ 150,000.00
Grand Total	\$ 8,408,333.00	\$ 8,408,333.00	\$ 8,333,333.00				\$ 25,149,999.00

Notes:

- 1. Worksheets are for illustration purposes and considered supplemental to the plan.
- 2. Actual fiscal year that a project may be undertaken may differ from the fiscal year depicted in the spreadsheet. Dollar amounts are estimates and only for information purposes.
- 3. Street and area lighting projects are subject to funding requirements per the Decorative Lighting Policy and Street Lighting Operations and Maintenance Policy.
- 4. Projects highlighted in green are related to the Climate Action Plan.

Traverse City Light and Power

Six Year Capital Improvement Plan (Funding Type) - FYE 2024-25 through 2029-30

Fund Type	Electric Fund													
Row Labels	Sun	n of FY24-25 Cost	Sur	n of FY25-26 Cost	Su	ım of FY26-27 Cost	Sur	m of FY27-28 Cost	Sı	ım of FY28-29 Cost	Su	ım of FY29-30 Cost	Sum	n of Total
Internal	\$	3,475,000.00	\$	3,622,420.00	\$	4,265,000.00	\$	5,150,000.00	\$	4,178,000.00	\$	5,451,200.00	\$ 26,1	141,620.00
Transmission							\$	650,000.00			\$	883,200.00	\$ 1,5	533,200.00
Cass Road Substation to Cass Junction											\$	883,200.00	\$ 8	883,200.00
Transmission Substation Relay Replacement							\$	650,000.00					\$ 6	650,000.00
Distribution	\$	3,305,000.00	\$	3,507,420.00	\$	4,000,000.00	\$	3,890,000.00	\$	3,570,000.00	\$	3,785,000.00	\$ 22,0	057,420.00
Cass Road #1 Transformer	\$	800,000.00											\$ 8	800,000.00
CD-24 - Pine St			\$	387,420.00									\$ 3	387,420.00
Distribution Substation Relay Replacement									\$	300,000.00			\$ 3	300,000.00
Division and South Airport Automatic Healing (NEW)									\$	300,000.00			\$ 3	300,000.00
Extensions and New Services	\$	850,000.00	\$	900,000.00	\$	950,000.00	\$	1,000,000.00	\$	1,050,000.00	\$	1,100,000.00	\$ 5,8	850,000.00
Grandview Parkway	\$	150,000.00											\$ 1	150,000.00
HL-33 - Locust St			\$	225,000.00	\$	225,000.00							\$ 4	450,000.00
Meter Procurement	\$	180,000.00	\$	195,000.00	\$	210,000.00	\$	225,000.00	\$	240,000.00	\$	255,000.00	\$ 1,3	305,000.00
Overhead Line Improvements	\$	600,000.00	\$	600,000.00	\$	650,000.00	\$	650,000.00	\$	700,000.00	\$	700,000.00	\$ 3,9	900,000.00
PC-22 - Cypress St			\$	400,000.00									\$ 4	400,000.00
PC-22 - Munson, Davis to 3 Mile											\$	700,000.00	\$ 7	700,000.00
South Airport Road Tie					\$	1,100,000.00	\$	1,100,000.00					\$ 2,2	200,000.00
Street and Area Lighting	\$	150,000.00	\$	150,000.00	\$	160,000.00	\$	160,000.00	\$	170,000.00	\$	170,000.00	\$ 9	960,000.00
Substation Improvements	\$	50,000.00	\$	50,000.00	\$	55,000.00	\$	55,000.00	\$	60,000.00	\$	60,000.00	\$ 3	330,000.00
Underground Line Improvements	\$	525,000.00	\$	600,000.00	\$	650,000.00	\$	700,000.00	\$	750,000.00	\$	800,000.00	\$ 4,0	025,000.00
Facilities	\$	155,000.00	\$	100,000.00	\$	250,000.00	\$	100,000.00	\$	100,000.00	\$	275,000.00	\$ 9	980,000.00
Data Center Updates					\$	150,000.00					\$	175,000.00	\$ 3	325,000.00
Hastings Service Center - Bldg B Trough and Concrete Repairs	\$	55,000.00											\$	55,000.00
Hastings Service Center Facility Improvements	\$	100,000.00	\$	100,000.00	\$	100,000.00	\$	100,000.00	\$	100,000.00	\$	100,000.00	\$ 6	600,000.00
Joint TCLP (City or other Governmental Agency such as DDA)							\$	500,000.00	\$	500,000.00	\$	500,000.00	\$ 1,5	500,000.00
Upgrade Front Street Underground Lighting Circuits and Receptacles							\$	500,000.00	\$	500,000.00	\$	500,000.00	\$ 1,5	500,000.00
Other	\$	15,000.00	\$	15,000.00	\$	15,000.00	\$	10,000.00	\$	8,000.00	\$	8,000.00	\$	71,000.00
Capital Tools	\$	15,000.00	\$	15,000.00	\$	15,000.00	\$	10,000.00	\$	8,000.00	\$	8,000.00	\$	71,000.00
Federal/State	\$	800,000.00	\$	700,000.00	\$	150,000.00			\$	3,650,000.00			\$ 5,3	300,000.00
Generation									\$	3,500,000.00			\$ 3,5	500,000.00
Renewable Demonstration (NEW)									\$	3,500,000.00			\$ 3,5	500,000.00
Distribution	\$	100,000.00	\$	350,000.00									\$ 4	450,000.00
Operational Technology Solutions			\$	350,000.00									\$ 3	350,000.00
Climate Action Plan Technology Solutions (NEW)	\$	100,000.00											\$ 1	100,000.00
Electric Vehicle Charging Station	\$	150,000.00			\$	150,000.00			\$	150,000.00			\$ 4	450,000.00
TC EV Expansion (NEW)	\$	150,000.00			\$	150,000.00			\$	150,000.00			\$ 4	450,000.00
Facilities	\$	550,000.00	\$	350,000.00									\$ 9	900,000.00
Hall Street Renewable Demonstration Investment (NEW)	\$	150,000.00	\$	350,000.00									\$ 5	500,000.00
Meter Data Managment (MDM) Solution (NEW)	\$	400,000.00											\$ 4	400,000.00
Local			\$	425,000.00	\$	425,000.00							\$ 8	850,000.00
Joint TCLP (City or other Governmental Agency such as DDA)			\$	425,000.00	\$	425,000.00							\$ 8	850,000.00
Front and State Alley - Pine to Union			\$	425,000.00	\$	425,000.00							\$ 8	850,000.00
Grand Total	\$	4,275,000.00	\$	4,747,420.00	\$	4,840,000.00	\$	5,150,000.00	\$	7,828,000.00	\$	5,451,200.00	\$ 32,2	291,620.00

Project Title: Capital Tools

Project Information

Project Owner: Daren Dixon/Andy Bott Strategic Priority: Operational Excellence

Category: Other Funding Sources: Internal

Subcategory: Other Project Years: FY 24-25 FY 25-26

Fund: Electric Fund FY 26-27

FY 27-28 FY 28-29 FY 29-30 **Project Description:**

Purchase of capital tools, typically for replacement of existing tools for line construction and maintenance; however, occasionally to provide new capabilities.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$15,000	\$15,000	\$15,000	\$10,000	\$8,000	\$8,000

Total Project Cost: \$71,000

Location	Location Character		Purpose & Necessity
Not applicable. These will typically be stored at 1131 Hastings Yard.	This is not a project, but rather purchases. These tools will be used on a multitude of projects.		TCLP uses many capital tools to install, operate and maintain transmission and distribution lines. Not having the proper, reliable tools can result in project or service restoration delays, additional costs in manpower, and damage to company or customer facilities. The purpose here is to ensure that funds are earmarked for proactive replacement as well as replacement due to failure. The objective is to ensure line crews have the proper tools to do the work without failure to the best extent possible so as to avoid delays, additional manpower costs, and pressure to use other tools that are meant for the work required.

Project Title: Cass Road #1 Transformer

Project Information

Project Owner: Tony Chartrand

Strategic Priority: Operational Excellence

Category: Distribution

Funding Sources: Internal

Subcategory: Substation Improvements Project Years:

FY 24-25

Fund: Electric Fund

Project Description:

Replacement of the Cass Road #1 substation transformer with a larger transformer. This proactively replaces the oldest substation transformer in the system, and allows for future growth. This transformer was identified as being overloaded on a N-1 contingency in Cass

Road Substation.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$800,000					

Total Project Cost: \$800,000

Location	Location Character		Purpose & Necessity
Cass Road Substation on Sybrandt Rd.	Transformer is of similar physical size to existing, so no appreciable visual difference to the public. Transformer will be slightly quieter than existing.	No zoning impacts.	Replacing the transformer proactively prior to a failure and adding additional capacity to avoid an overloaded condition in certain contingencies as well as adding additional capacity for future growth.

Project Title: Cass Road Substation to Cass Junction

Project Information

Project Owner: Tony Chartrand Strate

Strategic Priority: Operational Excellence

Category: Transmission

Funding Sources: Internal

Subcategory: Transmission Line Reconstruction Project Years: FY 29-30

Fund: Electric Fund

Project Description:

Rebuilding of the transmission line including pole replacement and conductor change from 477 ACSR to 795 ACSS. This addresses age and future capacity limitations of the line. Possibly move center line from west side of Cass north of 17th to align with distribution circuits on east side of road.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
					\$883,200

Total Project Cost: \$883,200

Location	Character	Extent	Purpose & Necessity
Along Sybrandt Rd and Cass St from Cass Substation on Sybrandt Rd to the alley north of 12th St.	The line will be taller and better designed to minimize tree disturbance. Allowing trees to grow larger and minimizing impact on the buildability of properties along the line.	Will require city right of way permit.	Upgraded conductor will allow more capacity to supply for future growth and switching operations. Proactive replacement of old poles which are too large for TCLP equipment to maintain. New design to minimize tree disturbances.

Project Title: CD-24 - Pine St

Project Information

Project Owner: Tony Chartrand Strategic Priority: Operational Excellence

Category: Distribution Funding Sources: Internal

Subcategory: Distribution Circuit Reliability Project Years: FY 25-26

Fund: Electric Fund

Project Description:

New tap from CD-24 mainline at Pine St and Griffin St to existing three phase overhead at Pine St and 14th St, and upgrading existing three phase primary from Pine St and 14th St to Boughey St from #6 copper to #1/0 Hendrix conductor.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	\$387,420				

Total Project Cost: \$387,420

Location	Character	Extent	Purpose & Necessity
From Pine St and Griffin St south along Pine St to the alley south of 16th St then east down said alley to Newcomb St, then south along Newcomb St to 17th St, then east along 17th St to S Union St, then south along S Union St to Boughey St.	installed to existing three phase. Replacing existing wire, and poles as necessary.	City right of way permit required. New conductor will be less susceptible to trees allowing them to grow larger, and its configuration is further away from properties allowing less property impedance.	The new tap will better sectionalize the line, meaning a localized outage event will affect fewer customers. This also adds capacity to the line to allow for future electrification growth.

Project Title: Climate Action Plan Technology Solutions (NEW)

Project Information

Project Owner: Scott Menhart Strategic Priority: Climate Health Project Description:

Category: Distribution

Funding Sources: Federal Financing, Internal, State Grant

Technology Solutions to implement CAP recommendations.

Subcategory: Smart Grid Project Years: FY 24-25

Fund: Electric Fund

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$100,000					

Total Project Cost: \$100,000

Location Character Extent Purpose & Necessity	
Service Territory Implementation of technical solutions to carry out CAP recommendations Implementation of technical solutions, solutions to carry out CAP on the environment Depending on solutions, will have positive impacts on the environment the CAP report	

Project Title: Data Center Updates

Project Information

Project Owner: Scott Menhart Strategic Priority: Operational Excellence Project Description:

Category: Facilities

Funding Sources: Internal

TCLP's Primary Data Center - Keeping current and up to date.

Subcategory: Technology Project Years: FY 26-27 FY 29-30

Fund: Electric Fund

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
		\$150,000			\$175,000

Total Project Cost: \$325,000

Location	Character	Extent	Purpose & Necessity
	TCLP's Primary Data Center - Keeping current and up-to-date.	No impacts in perspective to zoning.	TCLP's Primary Data Center - Keeping current and up-to-date.

Project Title: Distribution Substation Relay Replacement

Project Information

Project Owner: Tony Chartrand Strategic Price

Strategic Priority: Operational Excellence

Category: Distribution Funding Sources: Internal

Subcategory: Substation Improvements Project Years: FY 28-29

Fund: Electric Fund

Project Description:

Replacement of existing SEL 351R and 351S relays on TCLP distribution circuits with modern 651R and 851 relays. This is to proactively replace relays before failure and allow additional smart grid capabilities.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
				\$300,000	

Total Project Cost: \$300,000

Location	Character	Extent	Purpose & Necessity
Cass, Hall, and Barlow Substations	Relays will be of similar size and require minimal modification to be installed in existing relay locations.	No zoning impact.	To gain additional smart grid capability including automatic circuit healing ability. Also to replace relays that have reached end of expected life.

Project Title: Division and South Airport Automatic Healing (NEW)

Project Information

Project Owner: Tony Chartrand

Category: Distribution

Subcategory: Smart Grid

Fund: Electric Fund

Strategic Priority: Operational Excellence

Funding Sources: Internal

Project Years: FY 28-29

Project Description:

Install new devices and communications to sectionalize the looped line along South Airport and Division and allow automatic system restoration. This will provide benefits to the planet's health increasing the efficiency of the grid and minimizing energy waste. It also reduces the need for backup generators and the associate emissions and has fast adaptability to renewable energy fluctuations.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
				\$300,000	

Total Project Cost: \$300,000

street, then north to Mackey Dr, then west to Division St, then north to Franke Rd, then communications between discernible difference. existing equipment, no discernible difference. customers.	Location	Character	Extent	Purpose & Necessity
north to Silver Lake Rd then east to unimproved section of S Elmwood Rd then north to east branch of Men's Trail.	Day Dr, then west to end of street, then north to Mackey Dr, then west to Division St, then north to Franke Rd, then north to Silver Lake Rd then east to unimproved section of S Elmwood Rd then north to	break devices and fiber communications between	on existing poles and in existing equipment, no	automatically remove a bad section of line and restore power to all unaffected

Project Title: Extensions and New Services

Project Information

Project Owner: Tony Chartrand Strategic Priority: Financial Stability

Category: Distribution Funding Sources: Internal

Subcategory: Distribution Circuit Reliability **Project Years:** FY 24-25 FY 25-26

Fund: Electric Fund FY 26-27

FY 27-28 FY 28-29 FY 29-30 **Project Description:**

Bucket of funds available to perform distribution system additions or upgrades in

order to feed new load.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$850,000	\$900,000	\$950,000	\$1,000,000	\$1,050,000	\$1,100,000

Total Project Cost: \$5,850,000

Location	Character	Extent	Purpose & Necessity
Entire service territory	Overhead and underground facilities to be determined by existing facilities and developer/customer requests. Includes construction / replacement of services, wire, poles, cabinets, transformers, and meters.	Possible right of way permits.	To serve projected new load.

Project Title: Front and State Alley - Pine to Union

Project Information

Project Owner: Tony Chartrand Strategic Priority: Customer Satisfaction Project Description:

Category: Joint TCLP (City or other Governmental Agency such as DDA) Funding Sources: Local Grant/ Contribution

Subcategory: Underground Line Improvements Project Years: FY 25-26 FY 26-27

Fund: Electric Fund

Convert overhead distribution line in alley

between Front St and State St to underground. Includes replacement of pole mounted transformers with padmounted transformers, and obtaining required

easements for new equipment.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	\$425,000	\$425,000			

Total Project Cost: \$850,000

Location	Character	Extent	Purpose & Necessity
Starting at Pine St in the alley between Front St and State St heading east to Union St.		Removal of overhead lines allows buildings to be built with no lot setbacks.	To allow the DDA's parking deck to be built along the alley.

Project Title: Grandview Parkway

Project Information

Project Owner: Tony Chartrand

Strategic Priority: Operational Excellence

Category: Distribution

Funding Sources: Internal

Subcategory: Distribution Circuit Reliability **Project Years:**

FY 24-25

Project Description:

Replace primary wire and transformers in the alley north of Front St from Pine St to Park St and along Front St from Park St to

Railroad Ave.

Fund: Electric Fund

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$150,000					

Total Project Cost: \$150,000

Location	Character	Extent	Purpose & Necessity
Alley north of Front St from Pine St to Park St and along Front St from Park St to Railroad Ave.	Transformers will be of similar size and be placed on existing pads.	Will require city right of way permit. Transformers to be placed on existing pads, so no additional property will be impeded.	To replace aged and fully loaded underground wire and live front transformers. This was identified in the 2021 System Study.

Project Title: Hall Street Renewable Demonstration Investment (NEW)

Project Information

Project Owner: Jacob Hardy Strategic Priority: Customer Satisfaction

Category: Facilities Funding Sources: Federal Grant Internal State Grant

Subcategory: Facility Improvements Project Years: FY 24-25 FY 25-26

Fund: Electric Fund

Project Description:

This will be a solar and battery storage demonstration at our Hall St customer service center. The intent is to have a display within the customer service area that customer would be able to view in real time. I am also hoping to have an interactive experience included for the customer.

The infrastructure that would hold the solar panels will also provide covered parking along the south side of the parking lot.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$150,000	\$350,000				

Total Project Cost: \$500,000

Location	Character	Extent	Purpose & Necessity
130 Hall St - Hall St Substation	renewable generation.	oizo modia not mako a largo	The main goal of the project is to provide customer an opportunity of what a solar system would look like and how it operates if they were to add it to their home. Will aim to include an interactive portion to educate and engage with customers.

Project Title: Hastings Service Center - Bldg B Trough and Concrete Repairs

Project Information

Project Owner: Jacob Hardy Strategic Priority: Operational Excellence

Category: Facilities Funding Sources: Internal

Subcategory: Facility Improvements Project Years: FY 24-25

Fund: Electric Fund

Project Description:

Replacement of the trough and grates in building B main garage that are starting to become a safety hazard. Also included is removing ashphalt on the east entrance of the building B garage and pouring a larger concrete pad. This area is constantly settling and needs to have a stronger

repair.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$55,000					

Total Project Cost: \$55,000

Location	Character	Extent	Purpose & Necessity
Hastings Facility service center- Building B Garage	N/A	N/A	Improve facility safety.

Project Title: Hastings Service Center Facility Improvements

Project Information

Project Owner: Jacob Hardy Strategic Priority: Operational Excellence **Project Description:**

Category: Facilities Funding Sources: Internal

FY 24-25 Subcategory: Facility Improvements Project Years: FY 25-26

FY 26-27 Fund: Electric Fund FY 27-28

FY 28-29 FY 29-30

With an aging infrastructure and all the systems (i.e. mechanical and electrical) aging as well, repairs have been on the rise. The \$50,000 budgeted in the past is no longer enough to keep everything running or replaced if necessary. There is also a need for facility remodels and upgrades to provide the appropriate space needed to operate.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

Total Project Cost: \$600,000

Location	Character	Extent	Purpose & Necessity
Hastings service center and Hall St customer service center.	Unknown, most likely none.	This aims to reduce our carbon footprint and move toward electrification.	Facility improvements, replacements, upgrades and remodels.

Project Title: HL-33 - Locust St

Project Information

Project Owner: Tony Chartrand Strategic Priority: Operational Excellence

Category: Distribution Funding Sources: Internal

Subcategory: Distribution Circuit Reliability Project Years: FY 25-26 FY 26-27

Fund: Electric Fund

Project Description:

Rebuild overhead line along Locust St including replacing wire with Hendrix insulated conductor. Also refeeding from other end of line to better sectionalize line.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	\$225,000	\$225,000			

Total Project Cost: \$450,000

Location	Character	Extent	Purpose & Necessity
_	Replacement of conductor and select poles.		Replace end of life conductor and refeed a portion of the line for better sectionalizing.

Project Title: Meter Data Managment (MDM) Solution (NEW)

Project Information

Project Owner: Scott Menhart

Category: Facilities

Subcategory: Technology

Fund: Electric Fund

Strategic Priority: Operational Excellence

Funding Sources: Federal Financing / Grant, Internal

Project Years: FY 24-25

Project Description:

Meter Data Management solution can aid in further analysis of TCLP's meter data by performing advanced data modifications and analysis such as gap filling intervals,

etc.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$400,000					

Total Project Cost: \$400,000

Location	Character	Extent	Purpose & Necessity
Software Installed.		No impacts on the environment in perspective to zoning.	Advanced analytics outside of TCLP's current analytics. The main purpose is gap filling data intervals and advanced reporting.

Project Title: Meter Procurement

Project Information

Project Owner: Scott Menhart Strategic Priority: Operational Excellence Project Description:

Category: Distribution Funding Sources: Internal

Subcategory: Meters Project Years: FY 24-25

FY 25-26

Fund: Electric Fund FY 26-27

FY 27-28 FY 28-29 FY 29-30

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$180,000	\$195,000	\$210,000	\$225,000	\$240,000	\$255,000

Total Project Cost: \$1,305,000

Procurement of electrical meters.

Location Character Extent Pur	pose & Necessity
Electric Service Territory Replacement of non- working meters and installation of meters at new locations. Annual Programs Monitor electric accurately bill of meters at new locations.	c consumption and customers.

Project Title: Operational Technology Solutions

Project Information

Project Owner: Scott Menhart Strategic Priority: Operational Excellence Project Description:

Category: Distribution

Funding Sources: Federal Financing / Grant, Internal environment and performing recommendations from external study.

Subcategory: Substation Improvements Project Years: FY 25-26

Fund: Electric Fund

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	\$350,000				

Total Project Cost: \$350,000

Location	Character	Extent	Purpose & Necessity
TCLP Service Territory	Moving TCLP's current OT solutions to modernized and secure environments.	Will upgrade technology in substations to modern solutions.	Replace and update failing legacy hardware and software.

Project Title: Overhead Line Improvements

Project Information

Project Owner: Tony Chartrand Strategic Priority: Operational Excellence Project Description:

Category: Distribution Funding Sources: Internal Fund to perform minor upgrade and replacement projects for overhead lines.

Subcategory: Extensions, New Services and Line Improvements **Project Years:** FY 24-25

FY 25-26

Fund: Electric Fund FY 26-27 FY 27-28

FY 28-29 FY 29-30

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$600,000	\$600,000	\$650,000	\$650,000	\$700,000	\$700,000

Total Project Cost: \$3,900,000

Location	Character	Extent	Purpose & Necessity
TCLP Service Territory.	Replacement of poles, wires, and other pole mounted equipment.	Possible new construction types which will limit impact to adjacent properties.	Replace end of life facilities and perform capacity upgrades as required to maintain system reliability.

Project Title: PC-22 - Cypress St

Project Information

Project Owner: Tony Chartrand

Strategic Priority: Operational Excellence

Category: Distribution

Funding Sources: Internal

Subcategory: Distribution Circuit Reliability **Project Years:**

FY 25-26

Rd to Munson Ave along Cypress St. Includes upgrading conductor from #1/0 ACSR to #336 Hendrix and undergrounding

Rebuilding PC-22 mainline from Parsons

from Indian Trail Blvd to Munson Ave.

Fund: Electric Fund

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
	\$400,000				

Total Project Cost: \$400,000

Project Description:

Location	Character	Extent	Purpose & Necessity
From Parsons Rd and Avenue B north to Cypress St, then north along Cypress St and existing ROW to Munson Ave.	New wire and where required poles to be installed in the existing center line. Undergrounding to include new padmounted equipment installation.	City right of way permit required. New conductor will be less susceptible to trees allowing them to grow larger, and its configuration is further away from properties allowing less property impedance. Undergrounding a portion through area with limited width of ROW.	Current line is near capacity, reconductoring will increase capacity and allow future growth for electrification. The smaller line profile and insulated wire will impede on build-able land less and will lessen required tree trimming. Undergrounding a portion will also lessen tree trimming.

Project Title: PC-22 - Munson, Davis to 3 Mile

Project Information

Project Owner: Tony Chartrand Strategic Priority: Operational Excellence Project

Category: Distribution Funding Sources: Internal

Subcategory: Distribution Circuit Reliability Project Years: FY 29-30

Fund: Electric Fund

Project Description:

Rebuilding the PC-22 circuit along Munson Ave from Davis to 3 Mile. This includes upgrading the conductor to Hendrix insulated and undergrounding select areas

to minimize risk of car crashes.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
					\$700,000

Total Project Cost: \$700,000

Location	Character	Extent	Purpose & Necessity
	Replacement of overhead conductor and installation of new underground and padmounted equipment.	Notifying MDOT of right of way construction. Lower profile wire and undergrounding will impede less on build-able area in the corridor.	Replace end of life conductor and remove some facilities from the MDOT right of way to limit exposure to highway traffic collisions.

Project Title: Renewable Demonstration (NEW)

Project Information

Project Owner: Jacob Hardy

Category: Generation

Subcategory: Generation

Fund: Electric Fund

Strategic Priority: Climate Health

Funding Sources: Federal / State Grant, Internal

Project Years: FY 28-29

Project Description:

This is for a local solar project including a battery storage component following the implementation recommendations of the

Climate Action Plan.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
				\$3,500,000	

Total Project Cost: \$3,500,000

Location	Character	Extent	Purpose & Necessity
IDU		this project but I would	The goal of the project would be to bring more local solar to the area and allow our customers to participate in some capacity.

Project Title: Smart Grid Expansion

Project Information

Fund: Fiber Fund

Project Owner: Scott Menhart

Strategic Priority: Operational Excellence

Category: Fiber Funding Sources: Bonding, Federal Financing, Grants

Subcategory: Smart Grid **Project Years:** FY 24-25

> FY 25-26 FY 26-27

FY 2024-25 FY 2025-26 FY 2026-27 FY 2027-28 FY 2028-29 FY 2029-30 \$8,333,333 \$8,333,333 \$8,333,333

Total Project Cost: \$25,000,000

Project Description:

Deploying fiber throughout the electric service territory to create necessary

infrastructure for smart grid projects.

Location	Character	Extent	Purpose & Necessity
	There will be fiber placed throughout the Traverse City area.	Deploying fiber optic network throughout the Traverse City area.	The purpose of the project is to create a Smart Grid network for a wide variety of future planned TCLP initiatives.

Project Title: South Airport Road Tie

Project Information

Project Owner: Tony Chartrand

Strategic Priority: Operational Excellence

Category: Distribution

Funding Sources: Internal

Subcategory: Distribution Circuit Reliability **Project Years:** FY 26-27

Fund: Electric Fund

FY 27-28

Project Description:

Upgrading overhead wire along South Airport Rd to just west of Cass Rd, and installing new underground wire along South Airport Rd and Day Dr to Mackey Dr. This will create a tie between two circuits and alleviate load issues at the end of the

line along Division St.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
		\$1,100,000	\$1,100,000		

Total Project Cost: \$2,200,000

Location	Character	Extent	Purpose & Necessity
Starting at Sybrandt Rd, then south along the railroad tracks to South Airport Rd then west until Day Dr, then west to end of road, then north to Mackey Dr.	wire, installation of new underground wire, conduit, and equipment.	New overhead conductor will be lower profile affecting property along route less. Underground will include minimal additional equipment installation, and will be generally unnoticeable.	Install new circuit tie to move load to a different circuit to alleviate voltage and conductor loading issues. Also creates redundancy allowing faster outage restoration and more flexibility with system switching and maintenance.

Project Title: Street and Area lighting

Project Information

Project Owner: Tony Chartrand Strategic Priority: Customer Satisfaction Project Description:

Category: Distribution Funding Sources: Internal

Subcategory: Street and Area Lighting Project Years: FY 24-25 FY 25-26

Fund: Electric Fund FY 26-27 FY 27-28

FY 28-29 FY 29-30 Fund to perform minor upgrade and replacement projects for streetlights. The utility is undergoing a Street Lighting Plan in association with the City and Downtown Development Authority which will cover various topics for the City's Master Plan including the transition the remaining high pressure sodium lights to LED. This work will provide many benefits including enhancing the pedestrian experience throughout the City.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$150,000	\$150,000	\$160,000	\$160,000	\$170,000	\$170,000

Total Project Cost: \$960,000

Entire TCLP Service Area. Installation of new poles, wire, and lights, replacement of existing lights. Possible new lighting addition of lights based on customer requests, and replacement of or damaged lights. Addition of lights based on customer requests, and replacement of or damaged lights.	Location	Character	Extent	Purpose & Necessity
	Entire TCLP Service Area.	and lights, replacement of		requests, and replacement of end of life

Project Title: Substation Improvements

Project Information

Project Owner: Tony Chartrand Strategic Priority: Operational Excellence Project Owner: Tony Chartrand

Category: Distribution Funding Sources: Internal

Subcategory: Substation Improvements Project Years: FY 24-25 FY 25-26

Fund: Electric Fund FY 26-27

FY 27-28 FY 28-29 FY 29-30 **Project Description:**

Fund to perform substation improvements which will be capitalized. Includes replacement of minor items of low cost not worth creating a CIP project for, and minor upgrades.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$50,000	\$50,000	\$55,000	\$55,000	\$60,000	\$60,000

Total Project Cost: \$330,000

Location	Character	Extent	Purpose & Necessity
Entire TCLP service area.	Replacement of existing and addition of minor equipment.	No appreciable affect.	To proactively replace equipment that has reached end of life prior to failure. Also to upgrade equipment to add functionality or reliability to the substation enhancing quality of service.

Project Title: TC EV Expansion (NEW)

Project Information

Project Owner: Jacob Hardy Strategic Priority: Climate Health

Category: Electric Vehicle Charging Stations Funding Sources: Federal Grant, Internal

Subcategory: Electric Vehicle Charging Stations Project Years: FY 24-25

FY 26-27 Fund: Electric Fund FY 28-29

Project Description:

This is for new EV charging stations that will be a part of the National Electric Vehicle Infrastructure grant. We would be required to have 4 plugs that would each be able to charge at 150kW or greater. Future years represent continue expansion of the network along with leased charging stations to utility's customers as recommended in the Climate Action Plan.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
\$150,000		\$150,000		\$150,000	

Total Project Cost: \$450,000

Location	Character	Extent	Purpose & Necessity
TBD	Installation of charging stations. A new service may be needed to feed them but it would be a minimal impact.		This would expand our TCEV Network and be the fastest chargers yet in the area. Given the requirements of the NEVI program it would be high visability and along a busy corridor.

Project Title: Transmission Substation Relay Replacement

Project Information

Project Owner: Tony Chartrand Strategic Priority: Operational Excellence

Category: Transmission Funding Sources: Internal

Subcategory: Substation Improvements Project Years: FY 27-28

Fund: Electric Fund

Project Description:

Replace 311B and 311C relays in Grand Traverse, South, Barlow, Parsons, and East Hammond substations with 311L and T401L relays, and complete transmission fiber interconnection between substations to facilitate direct relay communication.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
			\$650,000		

Total Project Cost: \$650,000

Location	Character	Extent	Purpose & Necessity
Grand Traverse, South, Barlow, Parsons, and East Hammond substations	Relays will be installed inside existing control houses.	No impact to zoning.	To use a superior protection scheme for the transmission lines allowing for faster line clearing. This will lead to less thermal damage on the transmission lines. The T401L is a time domain relay which is currently the cutting edge of transmission line protection.

Project Title: Underground Line Improvements

Project Information

Project Owner: Tony Chartrand Strategic Priority: Operational Excellence Project Description:

Fund to perform minor upgrade and replacement projects for underground lines

and selectively converting lines to

Subcategory: Distribution Circuit Reliability **Project Years:** FY 24-25 FY 25-26

Fund: Flectric Fund FY 26-27

FY 27-28 FY 28-29 FY 29-30

 FY 2024-25
 FY 2025-26
 FY 2026-27
 FY 2027-28
 FY 2028-29
 FY 2029-30

 \$525,000
 \$600,000
 \$650,000
 \$700,000
 \$750,000
 \$800,000

Total Project Cost: \$4,025,000

underground.

Location	Character	Extent	Purpose & Necessity
Entire TCLP service area.	Replacement of underground wire and equipment, new installation of conduit, wire, equipment, etc.	Underground conversions will remove overhead facilities from in and around properties.	Replace end of life facilities, perform capacity upgrades, and convert overhead facilities to underground as required to maintain system reliability.

Project Title: Upgrade Front Street Underground Lighting Circuits and Receptacles

Project Information

Project Owner: Tony Chartrand Strategic Priority: Operational Excellence **Project Description:**

Funding Sources: Internal Category: Joint TCLP (City or other Governmental Agency such as DDA)

FY 27-28 **Subcategory:** Underground Line Improvements **Project Years:** FY 28-29

FY 29-30 Fund: Electric Fund

Replace conduit and wires feeding the lights and receptacles along Front St to increase capacity and replace end of life

wire.

FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	FY 2029-30
			\$500,000	\$500,000	\$500,000

Total Project Cost: \$1,500,000

Location	Character	Extent	Purpose & Necessity
Front St from Pine St to Boardman Ave.	Replacing existing underground facilities.	Additional capacity in the receptacles circuit allowing DDA to utilize them for more events.	Wire is near end of life and has had failures. Conduit installed was of low quality and has become broken in multiple areas. New controllers are needed to breakup circuits and allow more capacity.