

Chippewa-Eau Claire MPO
Technical Advisory Committee

May 25, 2022
Meeting Packet

CHIPPEWA-EAU CLAIRE METROPOLITAN PLANNING ORGANIZATION



800 Wisconsin Street, Mail Box 9
Eau Claire, WI 54703
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MEETING NOTICE

**Technical Advisory Committee
of the
Chippewa-Eau Claire Metropolitan Planning Organization
Wednesday, May 25, 2022
1:30 p.m.**

Note: This is a Zoom Conference Call Meeting
Dial in Number: 312.626.6799
Meeting ID: 814 3242 1871
Passcode: 754671

Agenda

1. Call to order
2. Welcome and introductions
3. Approval of minutes of April 27, 2022 meeting
4. Review and recommendation of scores and ranking for Bipartisan Infrastructure Law Carbon Reduction projects located in Chippewa-Eau Claire MPO.
5. Other Business
6. Establish next meeting date (tentatively August 10, 2022)
7. Adjournment

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Minutes of the Technical Advisory Committee (TAC) of the Chippewa-Eau Claire Metropolitan Planning Organization Held as a virtual meeting over Zoom Wednesday, April 27, 2022 1:30 p.m.

Members present: Fred Anderson – Chippewa County, Dave Walter – City of Altoona, Brad Hentschel – City of Chippewa Falls, Leah Ness – City of Eau Claire, Karl Buck – Federal Highway Administration, Evan Gross – Federal Transit Administration, Diane Paoni – Wisconsin Department of Transportation (WisDOT), Dena Ryan – WisDOT, Derek Schaad – Village of Lake Hallie

Staff present: Eric Anderson – Chippewa-Eau Claire Metropolitan Planning Organization (MPO), Edwin Rothrock - Chippewa-Eau Claire MPO

Minutes

1. Mr. E. Anderson called the meeting to order a 1:33 pm
2. Welcome and introductions
3. The minutes of May 13, 2022, TAC meeting were approved by all following a motion by Mr. Walter, seconded by Mr. F. Anderson.
4. Mr. E. Anderson presented scoring and ranking for the grant applications for projects located in Chippewa-Eau Claire MPA for funding under the Bipartisan Infrastructure Law STP-Urban program. The final amount of funding for the program has not been shared from WisDOT, but the MPO staff has been told by WisDOT that it will be very close to \$1,500,000. That amount was used to build the scenarios.

For the three projects submitted, three funding scenarios were considered by the Committee. The first two were presented by MPO staff, the third was requested by Committee members:

- i. All projects would receive an equal percentage of their total project costs, estimated to be 64.5%.
- ii. The top ranked project would receive the maximum 80% of total project costs. The second and third ranked projects would each receive the same percentage from the remaining funds, estimated to be 60%.
- iii. The top two ranked projects would each receive 80% of their project costs, the lowest-ranked project would receive the remaining funding, estimated to be 57% of the project costs.

After a brief discussion, a motion to recommend Scenario ii. to the MPO Policy Council was made by Ms. Ness, seconded by Mr. Walter, and approved by all.

5. Other Business – none
6. Establish next meeting date - tentatively set for August 10, 2022
7. The meeting adjourned at 1:53 pm

BIL Carbon Reduction Program

Chippewa-Eau Claire MPO

Project Summaries From Project Applications

Altoona Vehicle Replacement

If funded, the City of Altoona in Eau Claire County, WI will be replacing four vehicles with alternative fuel vehicles. We will also be installing charging stations at four different locations within the City of Altoona. Attached is a spreadsheet that shows the estimated costs, locations, uses and types of vehicles along with the required charging stations needed at each location for the vehicles.

According to a March 4, 2022, released study by the University of Michigan and For Motor Company researchers found that the average replacing an internal-combustion pickup truck with a battery-electric pickup saves 74 metric tons carbon dioxide equivalent over the lifetime of the vehicles. Study Information: <https://iopscience.iop.org/article/10.1088/1748-9326/ac5142> I have also attached a pdf of this study. By changing our fleet to this type of vehicle we will be able to reduce the amount of Greenhouse gas.

The City of Altoona tries to lead by example. If we should get the funding for these vehicles, we will be showing the electric vehicles at our City Hall along with our newest Parks & Recreation Center also known as the Fish House. We will be using one as a Parks Maintenance vehicle and one as a Public Works vehicle. Our community will be an example of what a strong community invested in the sustainability of our natural resources and how every little bit can make a difference

Eau Claire County Vehicle Replacement

Replacing four 1/2-ton vehicles from our fleet with four Electronic Vehicles will provide the following reductions in transportation emissions. An estimated savings of \$5,708.00 per year on fuel costs. Additional financial savings will be seen from the reduced maintenance costs that come with electric vehicles. Using the EPA GHG Equivalencies Calculator, we can also estimate the total GHG emission savings will be approximately 35 tons of CO₂e per year. The electricity used to power these vehicles will be from 100% renewable energy as a result of the on-site solar at the highway facility and solar subscriptions at other county facilities.

Eau Claire County Charging Stations

Installation of four EV charging stations inside of the new Highway Department facility will begin to reduce the 2,478 metric tons of CO₂e that the Eau Claire County vehicle fleet currently produces. The EV chargers are part of the highway facility design, and the construction of the facility has begun, and the bids are completed for the project. The timeline and pricing are not likely to change beyond what is reflected in the Project Costs and Dates section. The investment in EV charging infrastructure and the replacement of fossil fuel powered vehicles with electric vehicles will result in reduced fleet operating costs. The reduction of fleet operating costs can be reinvested into more essential services provided by the county highway department such as road repairs and maintenance.

Eau Claire County Telehandler

We currently use a Caterpillar telehandler for all our yard loading and unloading of materials. Replacing this unit with an EV JCB telehandler unit will reduce emissions and provide an additional benefit of being able to use this unit indoors since there is no combustible engine exhaust. Using the EPA GHG Equivalencies Calculator, we can also estimate the total GHG emission savings will be approximately 2 tons of CO₂e per year. The electricity used to power this equipment will be from 100% renewable energy as a result of the on-site solar at the highway facility. The additional benefits of replacing heavy duty equipment with electric alternatives are the reduced health impacts from excessive emissions, noise, etc. that comes from operating this type of equipment.

Chippewa Falls Street Light Replacement #1

The City of Chippewa Falls is applying for federal funding through the WisDOT FFY 2022 Bipartisan Infrastructure Law Carbon Reduction Program to fund the material purchase of 70 light emitting diode (LED) street lights to replace high pressure sodium (HPS) lights. The City would install the fixtures with local funds outside of the grant application. The material only purchase would be for twenty-two 400-watt HPS equivalent fixtures and forty-eight 250-watt HPS equivalent fixtures. The equivalent fixture for a 400-watt HPS fixture is a 166-watt LED. The equivalent fixture for a 250-watt HPS fixture is an 85-watt LED. The LED fixtures represent greater than 60 percent energy savings over the traditional HPS fixture as outlined in the narrative of the application. The simplicity of this project would enable the project to meet the tight federal timelines associated with this program. If the City were awarded the funding, the City would simply have to place an order for the fixtures and request reimbursement. The City has already been in contact with a supplier that is familiar with the fixtures. The number of LED fixtures in the application represents approximately 32 percent of the HPS fixtures in the City. The number of fixtures was calculated based on the number of Chippewa Falls residents living in the Eau Claire-Chippewa Falls Metropolitan Planning Organization (MPO). Approximately 12.5% of the MPO population resides in Chippewa Falls. When that same percentage is applied to the total funding attributed to the MPO in this program cycle, it equates to approximately the \$35,356.80 in federally funded costs being requested.

Chippewa Falls Street Light Replacement #2

The City of Chippewa Falls is applying for federal funding through the WisDOT FFY 2022 Bipartisan Infrastructure Law Carbon Reduction Program to fund the material purchase of 74 light emitting diode (LED) street lights to replace high pressure sodium (HPS) lights. The City would install the fixtures with local funds outside of the grant application. The material only purchase would be for seventy-four 250-watt HPS equivalent fixtures. The equivalent fixture for a 250-watt HPS fixture is an 85-watt LED. The LED fixtures represent greater than 60 percent energy savings over the traditional HPS fixture as outlined in the narrative of the application. The simplicity of this project would enable the project to meet the tight federal timelines associated with this program. If the City were awarded the funding, the City would simply have to place an order for the fixtures and request reimbursement. The City has already been in contact with a supplier that is familiar with the fixtures. The number of LED fixtures in the application represents approximately 33 percent of the HPS fixtures in the City. This is the 2nd priority application from the City of Chippewa Falls. This application is very similar to the first priority application in that they are both for LED street light fixtures conversions. The purpose of two applications was to take advantage of additional funds to convert even more fixtures in the City. If both applications were approved approximately 65 percent of the HPS fixtures in the City would be replaced. Only 250 W equivalent fixtures were chosen for this application as the City has significantly more 250 W HPS fixtures than 400 W fixtures. The number of fixtures in this application was calculated to keep the total cost similar to the first priority application

BIL Carbon Reduction Program

Chippewa-Eau Claire MPO

Project Scores

<i>Project</i>	<i>Annual Carbon Reduction (tons)</i>	<i>Project Cost Federal Share 80%</i>	<i>Lifetime Carbon Reduction per \$1,000 Federal Dollars</i>	<i>Carbon Reduction Value Rank</i>	<i>Value Score</i>	<i>Project Lifetime (years)</i>	<i>Lifetime Carbon Reduction (tons)</i>	<i>Lifetime Rank</i>	<i>Lifetime Score</i>	<i>Combined Score</i>	<i>Combined Rank</i>
Altoona Vehicle Replacement	12.3	\$164,748	0.52	5	2	7	86.1	5	2	4	5
Eau Claire County Vehicle Replacement	35.0	\$106,880	2.29	4	3	7	245.0	3	4	7	3
Eau Claire County Charging Stations	8.8	\$23,802	3.68	3	4	10	87.5	4	3	7	3
Eau Claire County Telehandler	2.0	\$90,400	0.22	6	1	10	20.0	6	1	2	6
Chippewa Falls Street Light Replacement #1	79.5	\$35,357	22.50	1	6	10	795.4	1	6	12	1
Chippewa Falls Street Light Replacement #2	74.6	\$34,810	21.43	2	5	10	745.9	2	5	10	2

<i>Project</i>	<i>Combined Rank</i>	<i>Project Cost Federal Share 80%</i>	<i>Cummulative 80% Federal Funding</i>
Chippewa Falls Street Light Replacement #1	1	\$35,357	\$35,357
Chippewa Falls Street Light Replacement #2	2	\$34,810	\$70,167
Eau Claire County Vehicle Replacement	3	\$106,880	\$177,047
Eau Claire County Charging Stations	3	\$23,802	\$200,849
Altoona Vehicle Replacement	5	\$164,748	\$365,597
Eau Claire County Telehandler	6	\$90,400	\$455,997