Electric Vehicle Charging Grant and Plan

City of Milwaukee



Council Resolution 241213

Sponsored by Alders Dimitrijevic and Burgelis

Grant application developed the Environmental Collaboration Office (ECO)

milwaukee.gov/EV



City of Milwaukee | ECO ENVIRONMENTAL COLLABORATION OFFICE

Part 1: Background

- Introduction
- Public EV Charging Plan

Implementing the Climate and Equity Plan

City adopted a **Climate and Equity Plan** in 2023

Goals:

1. Reduce community greenhouse gas emissions: 45% by 2030 and achieve net zero emissions by 2050.

2. Improve racial and economic equity by creating green jobs that pay at least $40,000 and are focused on recruiting local people of color.

Electrify Transportation is one of the *10 Big Ideas* in the plan, including building a public EV charging network

ECO mobilized to successfully write grants to fund all 10 of the Big Ideas

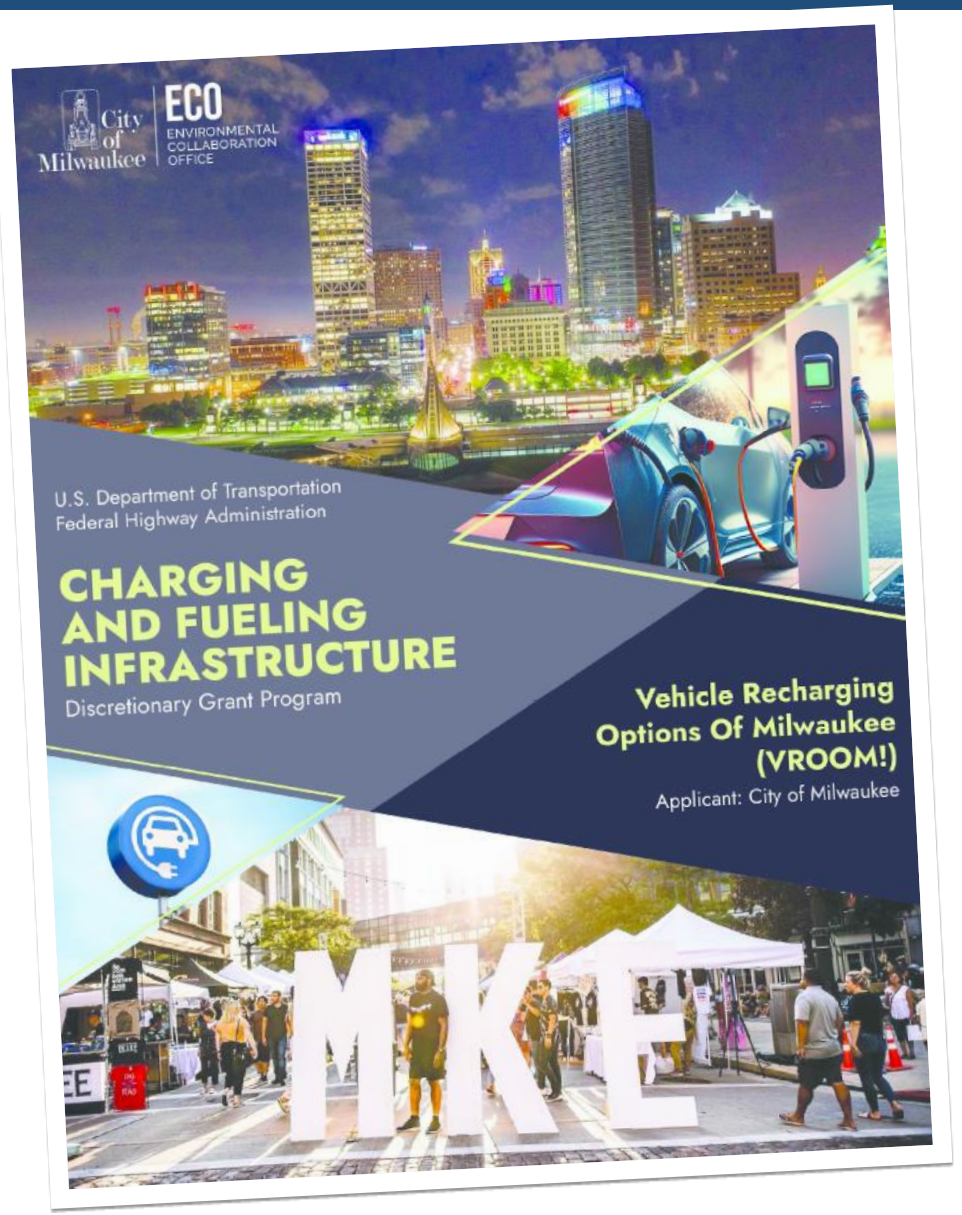


Federal Grants Overview



- **City of Milwaukee has been awarded nearly $15 million** ($14,965,533) by the U.S. DOT Federal Highway Administration through the Charging & Fueling Infrastructure (CFI) Discretionary Grant Program
- The project will install approximately 53 public electric vehicle charging locations, each with 4 ports.
- Total project is size is $18,706,916 including $3,741,383 local cost share.
- We anticipate that the local cost share will come from a private-sector network provider who would design, build, finance, operate and maintain the network in exchange for all or a portion of the system revenues.

Preliminary EV Readiness Plan and Proposal



1. As part of the grant application, ECO hired WSP Engineering to develop:

   A. A public "Preliminary EV Readiness Plan"

   B. The Vehicle Recharging Options of Milwaukee (VROOM!) grant proposal

2. The plans contain:

   A. A preliminary list of locations, including 51 locations with Level 2 chargers and 2 locations with Level 3 DC fast chargers

   B. A Community Benefits Plan for local workers

   C. A Plan for a Public-Private Partnership to Design, Build, Finance, Operate, and Maintain the System

Why a Public Private Partnership?

- City has limited resources to provide matching funds on the project. By using private sector cost share, we were able to apply for the maximum grant amount.
- Conformance with State Statute
- Revenues from system are likely but hard to project
- ECO didn't want to create a system that would create a long-term maintenance burden
- More flexibility in working with private parking lot hosts



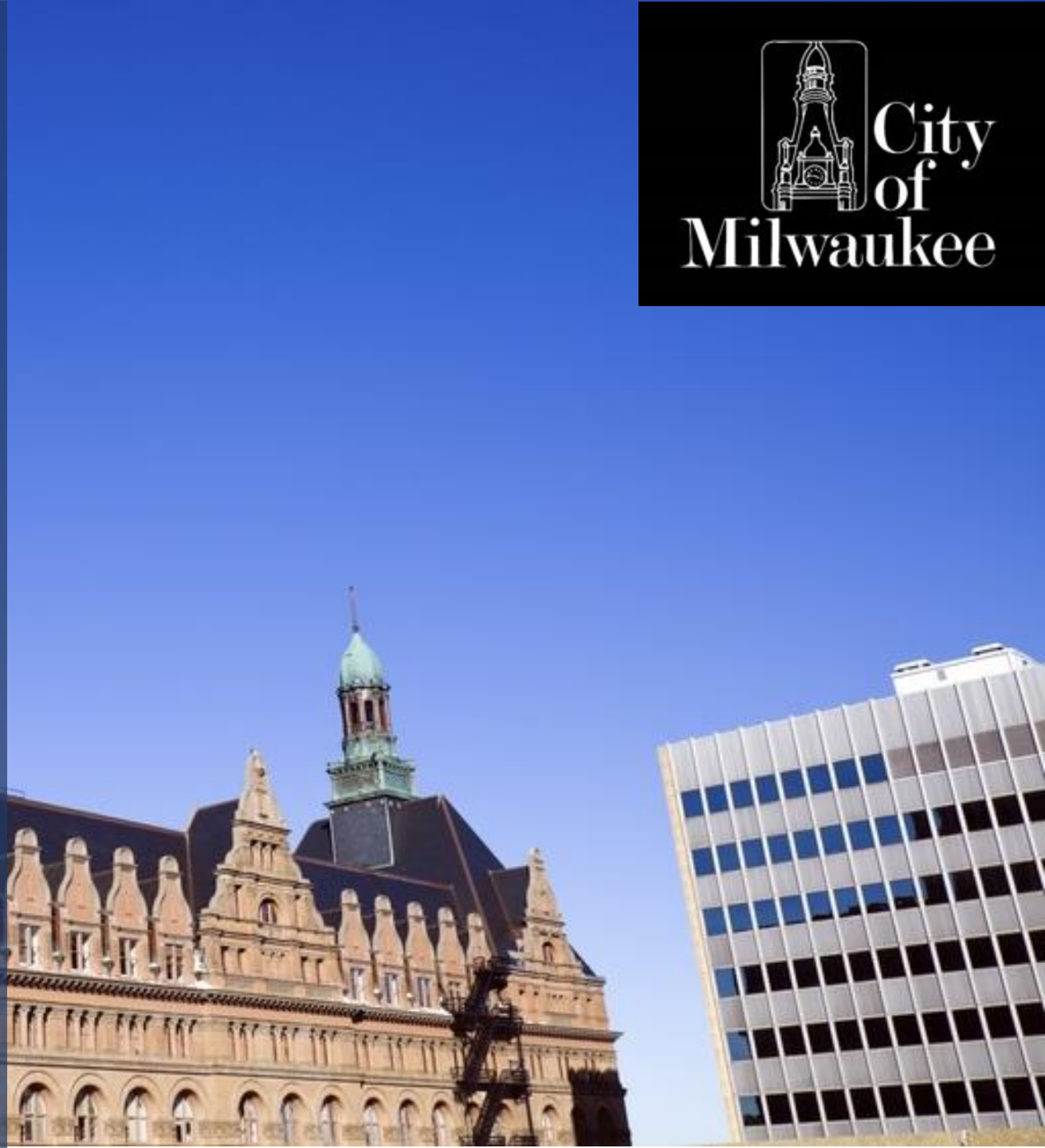
Part 2: Implementation

Phase 1

- *Administrative*
- *Engineering*
- *Community Outreach*
- *Site Selection*
- *RFP for firm to Design, Build, Finance, Operate, and Maintain the system and provide cost share*

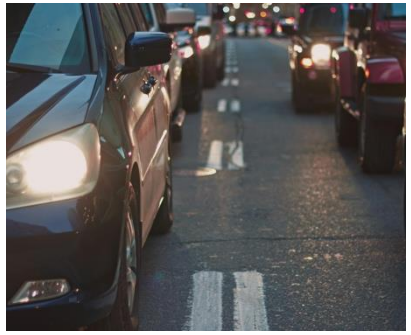
Phase 2 – Construction and Operations

Note: US DOT will not release the $13,844,893 in construction funding + local match until phase 1 is complete.



City of Milwaukee

Project Phases (Total grant period is six years)







PHASE 1: 2025 (possibly into 2026)

1. Project Initiation
2. Select Preliminary Engineering firm from DPW Master Services List
3. Conduct Public Engagement on locations
4. Conduct site reviews of possible locations
5. Confirm locations through Council resolution(s)
6. Begin procurement of P3 partner

PHASE 2: Construction (2026-2030)

1. Finalize P3 Partner contract (including on-going evaluation of performance)
2. Finalize agreements with property owners for hosting stations
3. Construct and Operate sites
    - MPL libraries and city-owned lots are first priority for construction

PHASE 1 & PHASE 2

PHASE 1 : Preliminary Engineering & Planning

The first phase of the project will focus on the engineering and design of the electric vehicle (EV) charging infrastructure.

Site Assessment & Planning: Mapping of proposed charging station sites based on demand analysis, proximity to public transit hubs, residential and commercial areas, and other critical infrastructure.

Design & Engineering Specifications: Development of electrical load analysis, network connectivity requirements, and detailed infrastructure designs to ensure the system is scalable and resilient. Securing necessary permits and approvals from local authorities, utility companies, and other relevant stakeholders.

Partnership Engagement: Coordinating with local utilities, private sector partners, and community organizations to foster collaboration and ensure the project meets the diverse needs of all stakeholders.

Phase 2: Construction Phase

The construction phase, where the physical installation of the EV charging infrastructure will take place. This phase will involve the deployment of the charging stations, the integration of necessary electrical systems, and the development of supporting infrastructure.

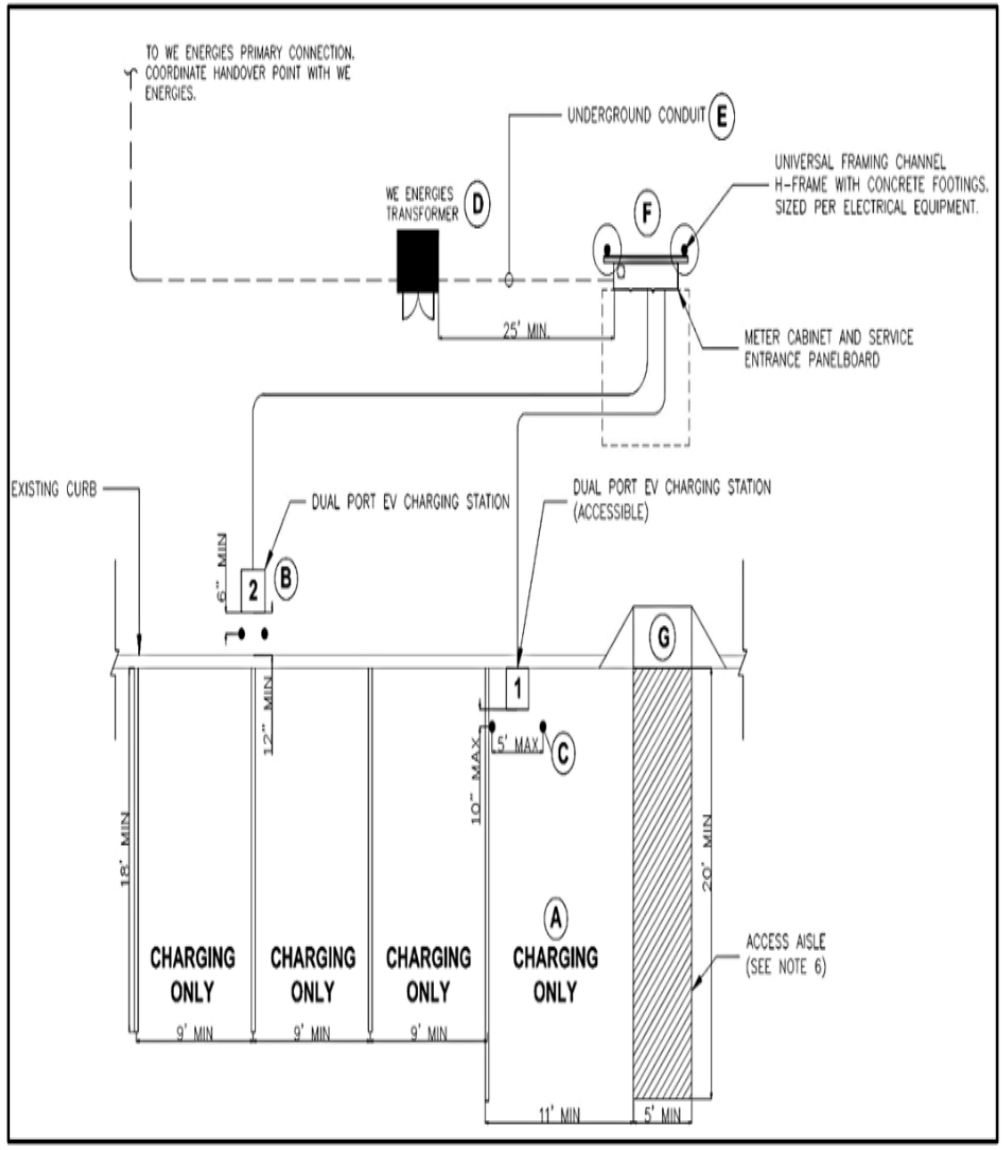
Installation of Charging Stations: Deployment of the designed charging units, including hardware installation and electrical grid connections, ensuring compliance with safety standards and operational efficiency.

Site Development: Construction of required site modifications, including the installation of proper signage, lighting, and pedestrian safety elements.

Community Engagement & Outreach: Conducting public awareness campaigns to educate residents and visitors about the new EV infrastructure, user guidelines, and sustainability benefits.

Site Selection Parameters & Requirements

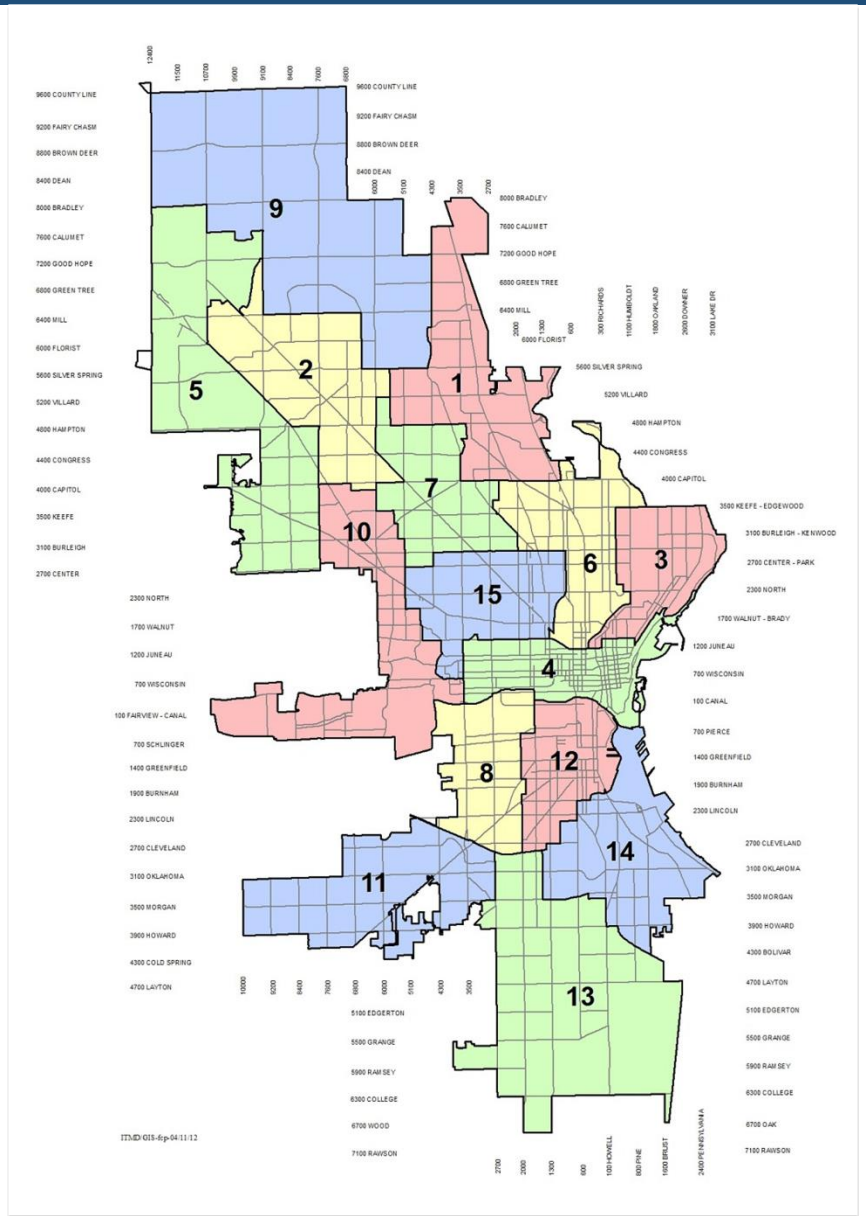
Figure 11 - Sample Charging Location Layout





- Willing Property Owner
- Minimum of 4 charging "ports"
- Adequate Power Supply
- Must Be Open to the Public
- ADA Compliance
- CCS Charging Ports
- NEPA Compliance

Preliminary Plan



All sites were selected on the parameters of:

- Approximately 47 sites to be located in the City of Milwaukee
- Up to 6 sites in Milwaukee County in neighboring communities
- 40% of sites are selected to be in disadvantaged or underserved areas.
- Population Density
- Housing Stock/Classification and Zoning laws
- Area Socio-Economic Analytics

Priority 1: Proposed Charging Sites

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Site Category	Site Name	Address		Level 2 Stations (4 ports)	Level 2 Stations (8 ports)	Level 3 DCFC Stations
Library	Washington Park Library	2121 N. Sherman Blvd, Milwaukee, WI 53208		X		
Interstate Lot	Italian Community Center	631 E. Chicago St, Milwaukee, WI 53202		X		
Library	Zablocki Library	3501 W. Oklahoma Ave, Milwaukee, WI 53215		X		
Library	Villard Library	5190 N. 35th St, Milwaukee, WI 53209		X		
Library	MLK Library	310 .W Locust St, Milwaukee, WI 53212		X		
Library	Bayview Library	2566 S Kinnickinnic Ave, Milwaukee, WI 53207		X		
Library	East Library	2320 N. Cramer St, Milwaukee, WI 53211		X		
Library	Good Hope Library	7715 Good Hope Rd, Milwaukee, WI 53223		X		
County Park	Mitchell Park Domes	524 S. Layton Blvd, Milwaukee, WI 53215			X	
Parking Lot	City Parking	3500 W. Burleigh St., Milwaukee WI		X		

Priority 2 & 3: Proposed Charging Sites

Library	Center Street Library	2727 W. Fond Du Lac Ave, Milwaukee, WI 53210		X		
Parking Lot	City Parking	2924 W. Pierce St, Milwaukee, WI 53215		X		
Parking Lot	City Parking	2254 S. Allis St, Milwaukee, WI 53207		X		
Parking Lot	City Parking	2230 W. Fond Du Lac Ave, Milwaukee, WI 53206		X		
Parking Lot	City Parking	507 W. Rogers St, Milwaukee, WI 53204		X		
Parking Lot	City Parking	2239 N. 26th St, Milwaukee, WI 53205		X		
Parking Lot	City Parking	2233 N. 37th St, Milwaukee, WI 53208		X		
Parking Lot	City Parking	3814 N. 29th St, Milwaukee, WI 53216		X		
Parking Lot	City Parking	5404 W. Bluemound Rd, Milwaukee, WI 53208		X		
Parking Lot	City Parking	2231 N. Doctor M.L.K. Jr Dr, Milwaukee, WI 53212		X		
Parking Lot	City Parking	900E E. Locust St, Milwaukee, WI 53212		X		
Parking Lot	City Parking	2530 E. Park Pl, Milwaukee, WI 53211		X		
Parking Lot	City Parking	1720 N. Arlington Pl, Milwaukee, WI 53202		X		
Parking Lot	City Parking	2128 S. 5th Pl, Milwaukee, WI 53207		X		

Parking Lot	City Parking	527 N. 28th St, Milwaukee, WI 53208		X		
Parking Lot	City Parking	1002 W. Maple St, Milwaukee, WI 53204		X		
Parking Lot	Parking Lot	401 E. Beaumont Ave, Whitefish Bay, Wisconsin 453217		X		
Parking Lot	City Parking Lot	1223 S. 15th Pl, Milwaukee, WI 53204		X		
Public Park	Lincoln Park	1301 W. Hampton Ave, Glendale, WI 53209		X		
Public Park	South Shore Park	2900 S. Shore Dr, Milwaukee, WI 53207			X	
Public Park	Boerner Botanical Gardens	9400 Boerner Dr, Hales Corners, WI 53130		X		
Public Park	Estabrook Park	4600 Estabrook Pkwy, Milwaukee, WI 53211			X	
Public Park	McGovern Park	4500 W. Custer Ave, Milwaukee, WI 53218		X		
Public Park	Dineen Park	6600 W. Keefe Ave, Milwaukee, WI 53216		X		
Public Park	Gordon Park	2828 N. Humboldt Blvd, Milwaukee, WI 53212		X		
Public Park	Riverside Park	1500 E. Riverside Pl, Milwaukee, WI 53211		X		
Public Park	Lake Park	2975 N. Lake Park Rd, Milwaukee, WI 53211		X		
Event Center	War Memorial Center	750 N. Lincoln Memorial Dr., Milwaukee, WI 53202		X		
Interstate Lot for Tech College	Milwaukee Area Technical College (MATC) Lot 1143	800-820 W. State St Milwaukee, WI		X		
Interstate Lot	The Avenue	615 N. Plankinton Milwaukee, WI				X
Interstate Lot	MAC (Milwaukee Athletic Club) Structure	777 N. Milwaukee St. Milwaukee, WI		X		
Interstate Lot	7Seventy7	777 N. Van Buren St. Milwaukee, WI		X		
Interstate Lot for Multi-modal Station	Milwaukee Intermodal Station	433 W. St Paul Ave, Milwaukee, WI 53203		X		
Interstate Lot	The Couture	909 E. Michigan St, Milwaukee, WI 53202				X
Interstate Lot	Wisconsin Convention Center & Hyatt Hotel	615 Vel R. Phillips Ave, Milwaukee, WI 53203		X		
Interstate Lot	Safe Lot	431 N. Milwaukee St., Milwaukee, WI 53202		X		
Interstate Lot	U.S. Bank Parking Lot	North Avenue & Farwell Street, Milwaukee, WI 53203		X		

Priority 2 & 3: Proposed Charging Sites

Interstate Lot for University	The Brewery Structure	1213 N. 9th St, Milwaukee, WI		X		
University	Marquette	1250 W. Wisconsin Ave Milwaukee, WI 53233		X		
Office Building	Century City Tower	4201 N. 27th St Milwaukee, WI 53216		X		
Hospital	Aurora Health Care - Sinai Medical Center	945 N. 12th St, Milwaukee, WI 53233		X		
Hospital	St. Luke's	2900 W. Oklahoma Ave, Milwaukee, WI 53215			X	
Mall	South Ridge Mall	5300 S. 76th St, Greendale, WI 53129		X		
			Total Sites	**47**	**4**	**2**
			Total Ports	**188**	**32**	**8**
Grand Total – EVSE Charging Ports – Milwaukee CFI Project: 228						



Community Outreach for VROOM! Project



Community Benefits Plan

- WRTP Big Steps training grant
  Provides Job Training for all trades associated with project.

- White House workforce hub commitment on apprenticeships
  Apprenticeships provide hands-on experience and helps gain practical skills.

- IBEW training program and willingness to partner
  Supports partnerships between local employers and educational institutions.

- Davis Bacon Wages
  By guaranteeing higher wages, the project is more likely to attract skilled and experienced laborers.

Community Outreach for VROOM! Project



Public Input Process:

- **Public Meetings & Workshops:** Host public meetings to explain the project and answer questions from residents and site hosts.
- **Public Comment Periods:** Allow for these during key stages of the planning process.
- **Partnerships with Local Organizations:** Collaborate with environmental, community & neighborhood groups.
- **Digital Marketing:** Leverage social media platforms and the City website to share out key information to stakeholders.

Other Financing: Municipal Revenue

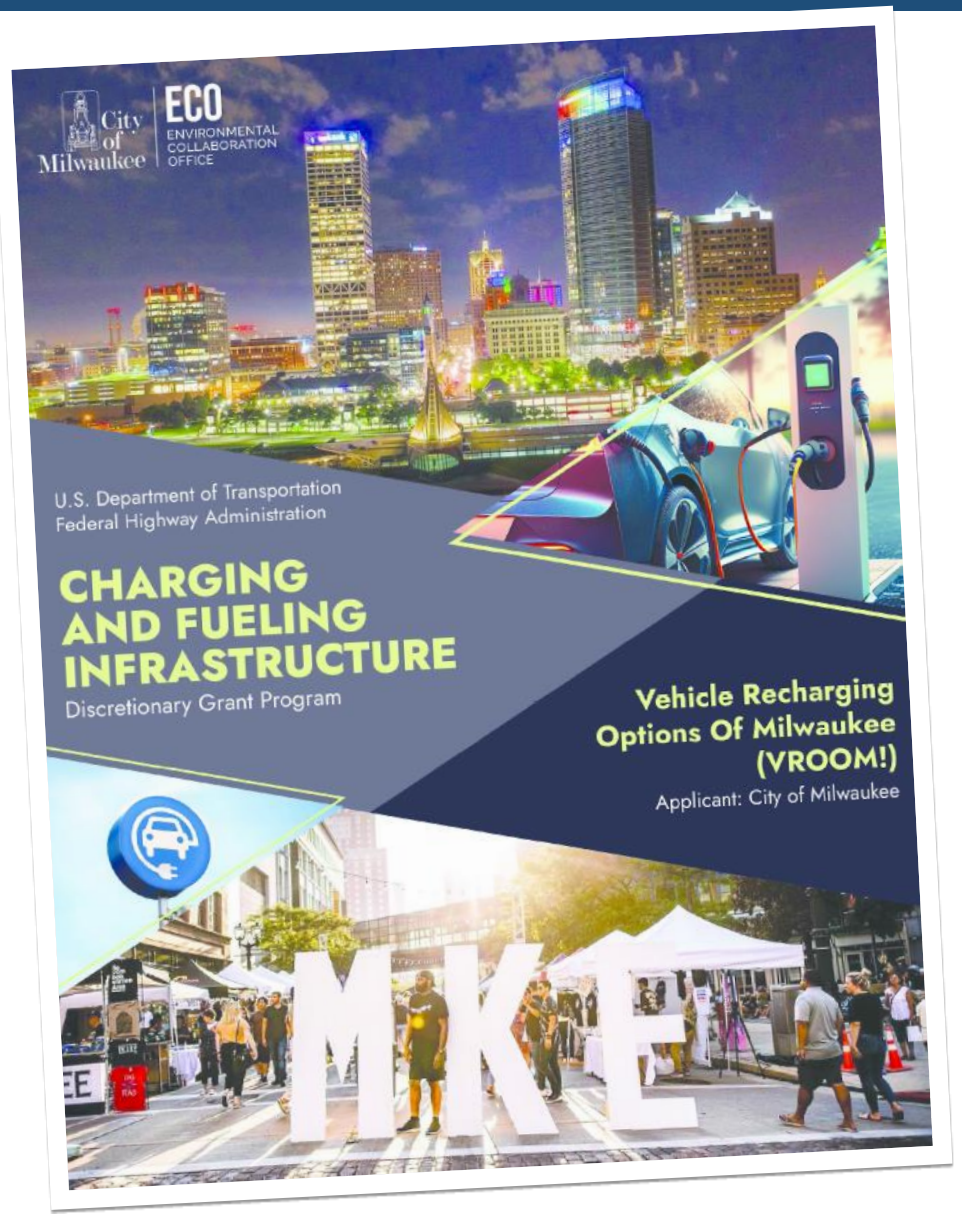
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Possible stream of revenue:

Wisconsin Act 121 Sec. 3.2(c) states: "A local government unit may own, operate, manage, or lease an electric vehicle charging station at which a Level 1 charger or a Level 2 charger installed on or after the effective date of this paragraph [March 21, 2024] is available to the public if the local government unit charges a reasonable fee for the electricity delivered or placed by all such Level 1 chargers and Level 2 chargers."



Preliminary EV Readiness Plan and Proposal



On behalf the ECO Department, we extend our sincerest gratitude for your approval of the City of Milwaukee's VROOM Project. Your support is instrumental in advancing this transformative initiative, which will secure federal funding to reinvest in our neighborhoods, enhance workforce opportunities, and bolster economic mobility for all Milwaukee residents.

Your commitment to the vision of the VROOM Project underscores the values that make Milwaukee a vibrant and equitable city. With this approval, we are poised to move forward with critical next steps, including finalizing all project sites and operational details over the next year. We are excited to work collaboratively with you and other stakeholders to ensure the successful implementation of this initiative.

This milestone marks the beginning of a journey to bring lasting positive change to our community. We deeply appreciate your leadership and partnership in making the VROOM Project a reality. Together, we are building a brighter and more ***electrified*** future for Milwaukee.

Thank you once again for your dedication and support. We look forward to continued collaboration as we move forward

ECO Department