

August 27, 2024

Via Electronic Delivery

To the Honorable President and Members of the Medford City Council Medford City Hall Medford, MA 02155

RE: Request to Establish a Revolving Fund for Electric Vehicle Charging

Dear President Bears and Members of the City Council,

I respectfully request and recommend that the City Council approve the following amendment to Chapter 2, Article V, Division 4, of the City's Ordinances by adopting the following change:

The table in "Sec. 2-964. – Authorizing revolving funds" shall be amended to include an Electric Vehicle Charging Revolving Fund as per the enclosed table.

Enclosed is a letter from the Director of Planning, Development & Sustainability Alicia Hunt that outlines this request, as well as a memorandum that provides supporting documentation. Finally, I am enclosing a memorandum by Finance Director/Auditor Bob Dickinson that provides the necessary certification pursuant to M.G.L. c. 44, § 53E ½ for establishing a revolving fund in the middle of a fiscal year.

Climate Staff Planner Brenda Pike will be available to speak to this request and answer any questions that you may have.

Thank you for your kind attention to this matter.

Sincerely,

Breanna Lungo-Koehn

Mayor

Enclosures (4)

A	В	С	D	Е	F	G
Revolving Fund	Department, Board,	Fees, Charges or Other	Program or Activity	Restrictions or	Other Reporting	Fiscal Years
	Committee, Agency or	Receipts Credited to Fund	Expenses Payable from	Conditions on Expenses	Requirements/Reports	
	Officer Authorized to		Fund	Payable from Fund		
	Spend from Fund					
			Expenses related to City-			
			owned electric vehicle			
			charging stations, to include,			
	Department of Planning,	Receipts from City-owned	but not be limited to, energy,	Annual expenditures	Director to prepare an	
	Development, and	public electric vehicle	maintenance, and operating	shall not exceed	annual report on deposits	Fiscal Year 2024 and
EV Charging	Sustainability	charging station sessions	costs	account balances.	and expenditures	subsequent years



City of Medford

Office of Development, Planning & Sustainability

City Hall - Room 308 85 George P. Hassett Drive Medford, Massachusetts 02155 Contact: (781)393-2480 Fax: (781)393-2342 ocd@medford-ma.gov

August 12, 2024

Mayor Breanna Lungo-Koehn 85 George P Hassett Drive Medford, MA 02155

The Planning, Development & Sustainability Department is requesting that the City Council establish a revolving fund to be the receipt of the charges generated by City-owned electric vehicle charging station.

M.G.L. c. 44, § 53E ½ the fund shall meet the following specifications:

A) The programs or activities for which the revolving fund may be expended;

The EV Charging revolving fund shall be expended for expenses related to City-owned electric vehicle charging stations. These expenses shall include, but not be limited to, energy, maintenance, and operating costs.

B) The departmental receipts in connection with those programs or activities that shall be credited to the revolving fund;

The EV Charging revolving account shall be established for all receipts from City-owned public electric vehicle charging station sessions.

C) The board, department, or officer authorized to expend from such fund; and

The City of Medford Department of Planning, Development & Sustainability will be the authorized department to initiate expenditure of the EV Charging revolving account funds.

D) any reporting or other requirements the City may impose;

The Director of Planning, Development & Sustainability will prepare an annual report on deposits and expenditures.

I would be happy to answer any of the Council's questions in regard to the creation of this fund. Please feel free to contact me here at City Hall or by email (ahunt@medford-ma.gov).

Thank you,

Alicia Hunt

Director of Planning, Development & Sustainability



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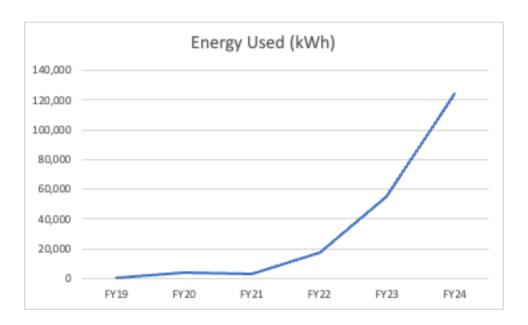
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RE: EV Charging Costs

We want to make sure that receipts to the Electric Vehicle Charging revolving fund will cover expenses. Medford's current electric vehicle charging pricing of \$0.25/kWh is not set at a level to cover the current annual operating costs for the stations. Increasing the pricing to \$0.35/kWh is likely to cover the operating costs moving forward, assuming future usage levels increase at a similar rate as they have been. This is a reasonable assumption, since usage has more than doubled every year since 2021.

	Actuals FY23 – 5 installed stations	Actuals FY24 – 13 installed stations	Projection FY25 – 14 installed stations
Energy Used (kWh)	55,297.30	124,740.56	249,481.12
Energy Cost	\$10,953.49	\$29,566.32	\$59,132.64
Network + Maintenance Plans	\$8,070.00	\$17,485.00	\$18,830.00
Total Cost	\$19,023.49	\$47,051.32	\$77,962.64
Received	\$12,476.22	\$28,079.10	\$56,158.20
Difference	\$6,547.27	\$18,972.22	\$21,804.44
Price Increase to Cover Difference	\$0.12	\$0.15	\$0.09



An additional charge could also be included of \$1/hour after the first four hours, to encourage drivers not to leave their cars parked at the station after fully charging, allowing other drivers to use the stations.

Equity considerations

Currently, the average electric vehicle owner has an income of more than \$100,000/year. However, to avoid potentially burdening low-income EV drivers with increased costs, the City could set up an income-based EV charging program. Residents could apply and submit documentation of income levels below 80% area median income (AMI). To ease the administrative burden of income verification, proxies could be used, such as Mass Health, Head Start, TAFDC, SNAP, WIC, EAEDC, National School Meal Programs, Veterans' Service Benefits, or Utility Fuel Assistance.

Because of the current income characteristics of EV drivers, it is anticipated that there would initially be little uptake on this offer, and thus little administrative and operating cost. However, it could be an important safety valve to ensure no harm is done to low-income populations through a price increase.

Comparisons

Level 1 or level 2 charging at home would currently be \$0.31/kWh if residents are enrolled in Medford's standard Community Electricity Aggregation offering.

Level 2 charging in the area tends to range from free (Watertown) to \$0.35/kWh (Stoneham), with most at \$0.20-\$0.25/kWh (roughly the equivalent of \$2/gallon gas with a Toyota Corolla). Other municipalities with rates at \$0.25/kWh or below have confirmed that their rates are not currently covering their ongoing costs, and Melrose, Arlington, and Somerville have recently increased their rates.

- Stoneham \$0.35/kWh, plus \$1/hour
- Melrose \$0.30/kWh, plus \$3/hour after first three hours
- Arlington \$0.30/kWh
- Somerville \$0.25/kWh
- Boston \$0.25/kWh
- Wakefield \$0.25/kWh
- Reading \$0.20/kWh
- Cambridge \$0.19/kWh
- Malden \$0.18/kWh
- Watertown free

Level 3 charging in the area tends to be around \$0.42/kWh (roughly the equivalent of \$4/gallon gas with a Toyota Corolla). Because level 3 charging is significantly faster than level 1 or level 2, it's reasonable for drivers to expect to pay more for it.

EV charging choices tend to be geographically based, and the majority of drivers are willing to pay a premium over at-home charging rates to use a public Level 2 charger¹, so it's unlikely that a price increase will reduce usage of Medford's charging stations.

Other considerations

The ChargePoint network and maintenance plans are a fixed annual cost per station, so if station usage continues to increase at the current pace, receipts could outpace operating costs. However, electricity rates are also likely to increase over time. Because of the unpredictability of these factors, rates should be reassessed on an annual basis.

ⁱ "EV Consumer Behavior," Fuels Institute. June 2021. https://www.transportationenergy.org/wp-content/uploads/2022/11/21FI -EVC ConsumerBehaviorReport V07-FINAL.pdf



City of Aledford FINANCE DEPARTMENT

City Hall – Room 105 85 George P. Hassett Drive Medford, MA 02155

Robert D. Dickinson Finance Director/Auditor Telephone (781) 393-2414

TO: Mayor Breanna Lungo-Koehn

FROM: Bob Dickinson, Finance Director/Auditor

DATE: August 12, 2024

RE: Electric Vehicle Charging Revolving Fund

In accordance with M.G.L. c. 44, § 53E ½, which states, in part (**bold** emphasis added):

"...The establishment of any fund shall be made not later than the beginning of the fiscal year in which the fund shall begin. Notwithstanding this section, whenever, during the course of any fiscal year, any new revenue source becomes available for the establishment of a revolving fund under this section, such a fund may be established in accordance with this section upon certification by the city auditor, town accountant, or other officer having similar duties that the revenue source was not used in computing the most recent tax levy..."

I hereby certify that the revenue source from the receipts generated by City-owned EV charging stations were not used in computing the most recent tax levy.

Robert D. Dickinson

Finance Director/Auditor

City of Medford, Massachusetts