



Item 37

# USDOT FHA FY23 Charging and Fueling Infrastructure (CFI) Discretionary Grant

Authorizing the Submission of FY23 Applications to the Discretionary Grant Program

Goal 7. Enhance & Sustain El Paso's Infrastructure Network

June 6, 2023



# Council Requested Action

- City Council to authorize the City Manager to sign a Memorandum of Understanding (MOU) with the County of El Paso and El Paso Electric (EPE) to partner on a USDOT FHWA FY23 Charging and Fueling Infrastructure (CFI) Discretionary Grant and submit the CFI Discretionary Grant application.



# FY23 FHA CFI GRANT PROGRAM

- The U.S. DOT Federal Highway Administration (US FHA) **Charging and Fueling Infrastructure Discretionary Grant**
  - Part of the Infrastructure and Jobs Act of 2021
  - Will allow the strategic deployment of charging stations located on public roads and other publicly-accessible locations across all districts at no cost to the City
  - Administered by USDOT
- June 13, 2023 deadline for submission





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Project :

# El Paso EV Charging Station Deployment

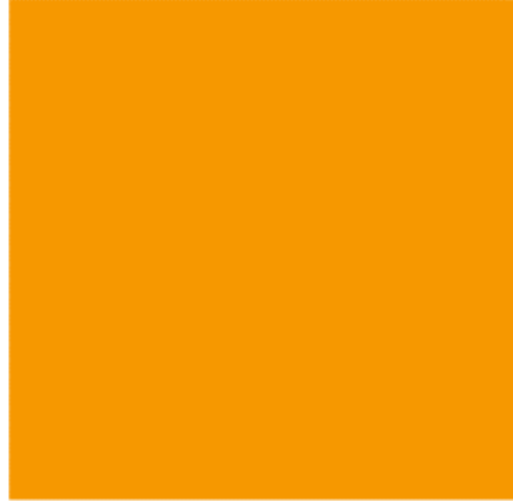
**Budget: \$18.75M**

**Request: \$15M | Local Match:  
\$3.75M**

**Local Match Funding Source: El Paso Electric**

**Strategic Plan Alignment: Goal 7. Enhance &  
Sustain El Paso's Infrastructure Network**

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# Project Details

- The proposed **El Paso EV Charging Stations Program: Phase I** project will help El Paso meet projected EV infrastructure demand not expected to be met by the private sector.
- Partners: El Paso County & El Paso Electric
- Expected funding authorization date: January 2024.
- Project design, construction, and installation is expected to take 24 months from the date of funding authorization
- Funding is expected to cover 46 workplace stations, 15 Level 2 charging stations, and 4 DC Fast Charging stations, and 40 multi-unit dwelling stations: = **105 stations = 280+ plugs**
- Stations would be city and county owned
- City would own all but 16 of the charging stations
- Installation would be fully-grant funded at no cost to the City





# Demand Projections

EV estimates according to the Department of Energy Electric Vehicle Infrastructure Tool (“EVI-Pro”)

- There will be 8,854 EVs operating in the EPE Texas service area by the end of 2025.
- Existing infrastructure will not be sufficient to meet customer needs through 2025

Plug Type	2025 Est. Demand	Existing Plugs	2025 Est. Deficit	% Deficit
Workplace	192	8	184	4%
Public Level 2	150	54	96	36%
Public DC Fast Charger	27	9	18	33%
<b>TOTAL</b>	<b>369</b>	<b>71</b>	<b>298</b>	<b>19%</b>

# Charging Station Types

## KNOW YOUR EV CHARGING STATIONS

### AC Level One



**VOLTAGE**

120v 1-Phase AC

**AMPS**

12–16 Amps

**CHARGING LOADS**

1.4 to 1.9 kW

**CHARGE TIME FOR VEHICLE**

3–5 Miles of Range Per Hour

### AC Level Two



**VOLTAGE**

208V or 240V 1-Phase AC

**AMPS**

12–80 Amps (Typ. 32 Amps)

**CHARGING LOADS**

2.5 to 19.2 kW (Typ. 7 kW)

**CHARGE TIME FOR VEHICLE**

10–20 Miles of Range Per Hour

### DC Fast Charge



**VOLTAGE**

208V or 480V 3-Phase AC

**AMPS**

<125 Amps (Typ. 60 Amps)

**CHARGING LOADS**

<90 kW (Typ. 50 kW)

**CHARGE TIME FOR VEHICLE**

80% Charge in 20–30 Minutes

# Revenue Model

- Charging station typically charge for cost of electricity plus an additional surcharge(s) to cover costs and generate a profit
- Cost of electricity is based on current rate, unless EPE proposes a different rate on EV charging, as they have in the ongoing pilot.
- Profit from charging stations is meant to further municipal EV strategies including future charging stations
- EPE request:
  - Reimbursement of match expenditures before investing in future EV infrastructure
  - Operational and utility costs are paid as part of EV infrastructure revenues





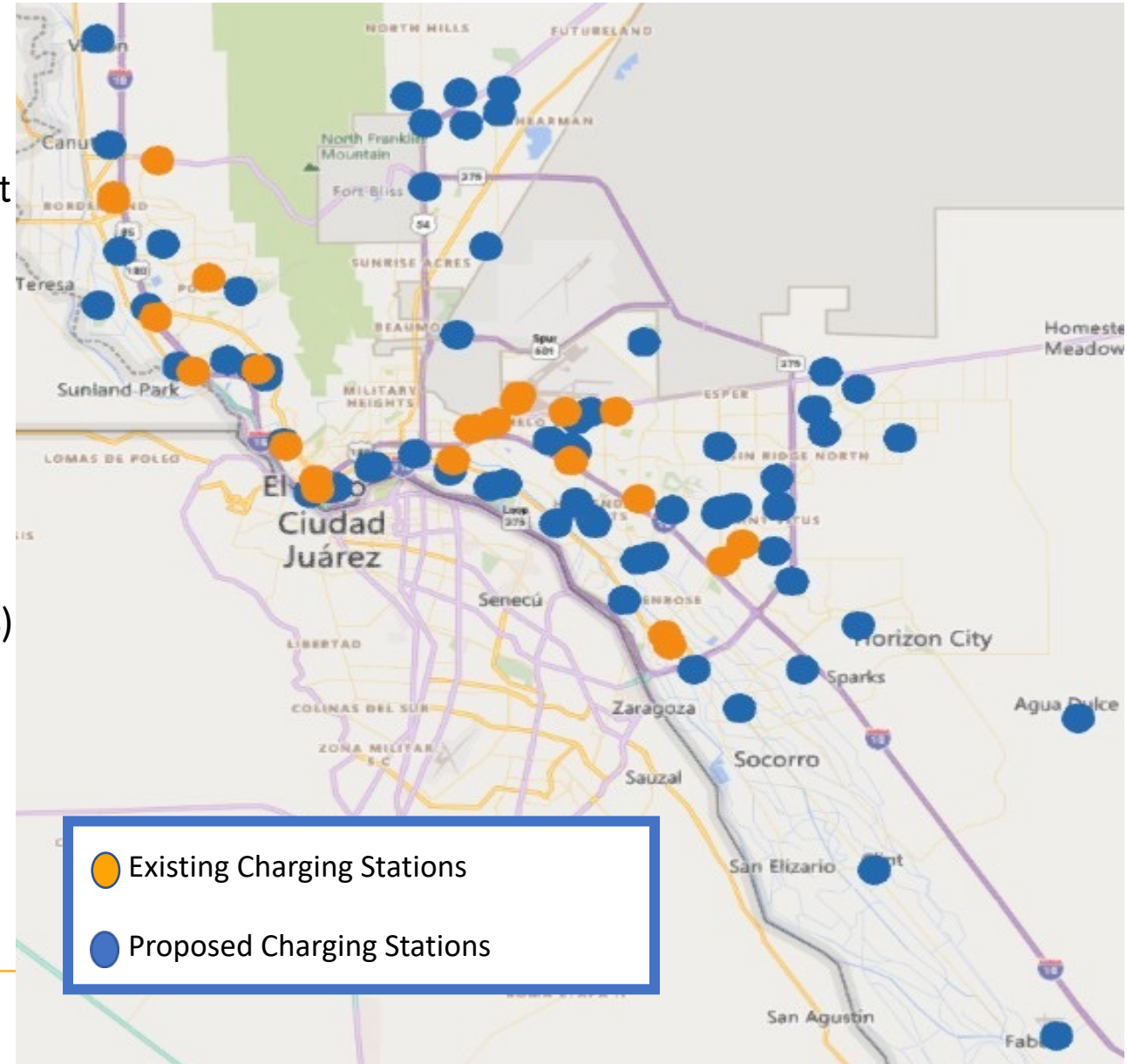
# Benefits of Electric Vehicles

- Require **less maintenance**
- **Fully charging an EV is significantly cheaper** for drivers than filling up at the gas pump
- **Federal incentives** have made EV purchasing and ownership **more financially accessible**, and in some cases, a **cheaper alternative** to gas-powered vehicles
- Increasing EV ownership creates a **demand for more EV manufacturing and charging maintenance**, thus **increasing employment opportunities** in these areas
- EV's produce **no greenhouse gasses** and emit **no pollution**, benefiting both climate and local health
- Charging stations and EVs can create a safety net as a **potential energy source** that feeds back into the power grid in case of power outages



# Potential Locations

- Chargers will be equitably distributed throughout the city
  - Grant will supplement market driven chargers, not displace them
  - Selected sites are intended for areas with demand not met by the private sector
- Charging station will prioritize placement at:
  - Recreation centers
  - Workplaces (e.g. City employee parking lots)
  - Multifamily housing (HOME)



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## Mission

Deliver exceptional services to support a high quality of life and place for our community



## Values

Integrity, **R**espect, **E**xcellence,  
**A**ccountability, **P**eople



## Vision

Develop a vibrant regional economy, safe and beautiful neighborhoods and exceptional recreational, cultural and educational opportunities powered by a high performing government



# Potential Locations

District	Location	Station Type
1	Don Haskins Rec Center	Level 2
1	Westside Sports Complex	Level 2
1	EPCC Westside Campus	Level 2
1	The Outlet Shoppes at El Paso	Level 2
1	Coronado Villas	Multi-Family Dwellings

# Potential Locations

District	Location	Station Type
2	El Paso Zoo	Level 2
2	Nations Tobin Rec Center	Level 2
2	Youth Services Building	Level 2
2	Memorial Park	Level 2
2	Ascarate Annex	Level 2
2	Sherman Housing Community	Multi-Family Dwellings
2	Police Headquarters*	Level 2

# Potential Locations

District	Location	Station Type
3	David Ortiz Rec Center	Level 2
3	Valle Bajo Community Center	Level 2
3	Hawkins Indoor Pool	Level 2
3	Multipurpose Rec Center	Level 2
3	Ponder Park	Level 2
3	EPCC Valle Verde Campus	Level 2
3	Butterfield Trail Golf Club	Level 2
3	Sun Metro Fred Wilson Lift	Level 2
3	Desert Tree	Multi-Family Dwellings
3	La Estancias	Multi-Family Dwellings
3	Marmolejo Apartments	Multi-Family Dwellings

# Potential Locations

District	Location	Station Type
4	Veterans Rec Center	Level 2
4	Joey Barraza and Vino Memorial Park	Level 2
4	Chuck Heinrich Memorial Park	Level 2
4	Northeast Annex	Level 2
4	EPCC Trans Mountain	Level 2
4	Metro 31	Level 2
4	Circle K (10650 Gateway Blvd N.)	DC Fast Charge
4	Bella Estancias	Multi-Level Dwellings
4	The Reserve at Sandstone Ranch	Multi-Level Dwellings



# Potential Locations

District	Location	Station Type
5	The Beast – Eastside Regional Rec Ctr	Level 2
5	Esperanza Acosta Moreno Branch Library	Level 2
5	Pebble Hills HS	Level 2
5	El Dorado HS	Level 2
5	Jail Annex	Level 2
5	Jail Annex Support Center	Level 2

# Potential Locations

District	Location	Station Type
6	Marty Robbins Rec Center	Level 2
6	SISD Student Activities Complex	Level 2
6	Americas HS	Level 2
6	Montwood HS	Level 2
6	Eastside Annex	Level 2
6	SportsPark Maintenance Building	Level 2
6	Castilleja Apartments II	Multi-Family Dwellings

# Potential Locations

District	Location	Station Type
7	Sylvia A. Carreon Community Center	Level 2
7	Bowl El Paso	Level 2
7	Ysleta Annex Building A	Level 2
7	Ysleta Annex Building B	Level 2
7	Castilleja Apartments	Multi-Family Dwellings
7	Webber Apartments	Multi-Family Dwellings
7	Alvarez Apartments	Multi-Family Dwellings

# Potential Locations

District	Location	Station Type
8	Chamizal Community Center	Level 2
8	Galatzan Rec Center	Level 2
8	UTEP Ticket Center	Level 2
8	MDR Building	Level 2
8	County's Parking Garages	Level 2
8	Remcon Transit Center	Level 2
8	Circle K (7659 N. Mesa)	DC Fast Charge
8	Santi Dwellings at Montecillo	Multi-Family Dwellings
8	The Venue at Montecillo	Multi-Family Dwellings
8	San Joaquin at Montecillo	Multi-Family Dwellings
8	Tays South	Multi-Family Dwellings

# Potential Locations

Outside City Limits	Location	Station Type
Eastside	Eastlake HS	Level 2
Eastside	Socorro HS	Level 2
Eastside	Mission Early College HS	Level 2
Eastside	Agua Dulce Community Center	Level 2
Fabens	Fabens Airport	Level 2
Upper Westside	Mission Valley Annex	Level 2
Upper Westside	Northwest Annex	Level 2
Fort Bliss	TBD	Level 2/3