



City of Dallas

City Deployment of Electric Vehicle (EV) Charging Infrastructure for Public Use

September 6, 2022

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Overview



- City of Dallas role in deploying public facing EV infrastructure
- Types of EV infrastructure
- Locations for City deployment
- Funding for public EV charging stations
- Next steps



Increased interest in EV charging for public use



Do we have existing funding to install public facing EV infrastructure in City budget?

Where could City of Dallas put public facing EV charging infrastructure?

Are there funding opportunities from the State and Federal level for EV Infrastructure?

What initiatives could be implemented by the City in FY23 to support the deployment of EV charging infrastructure?



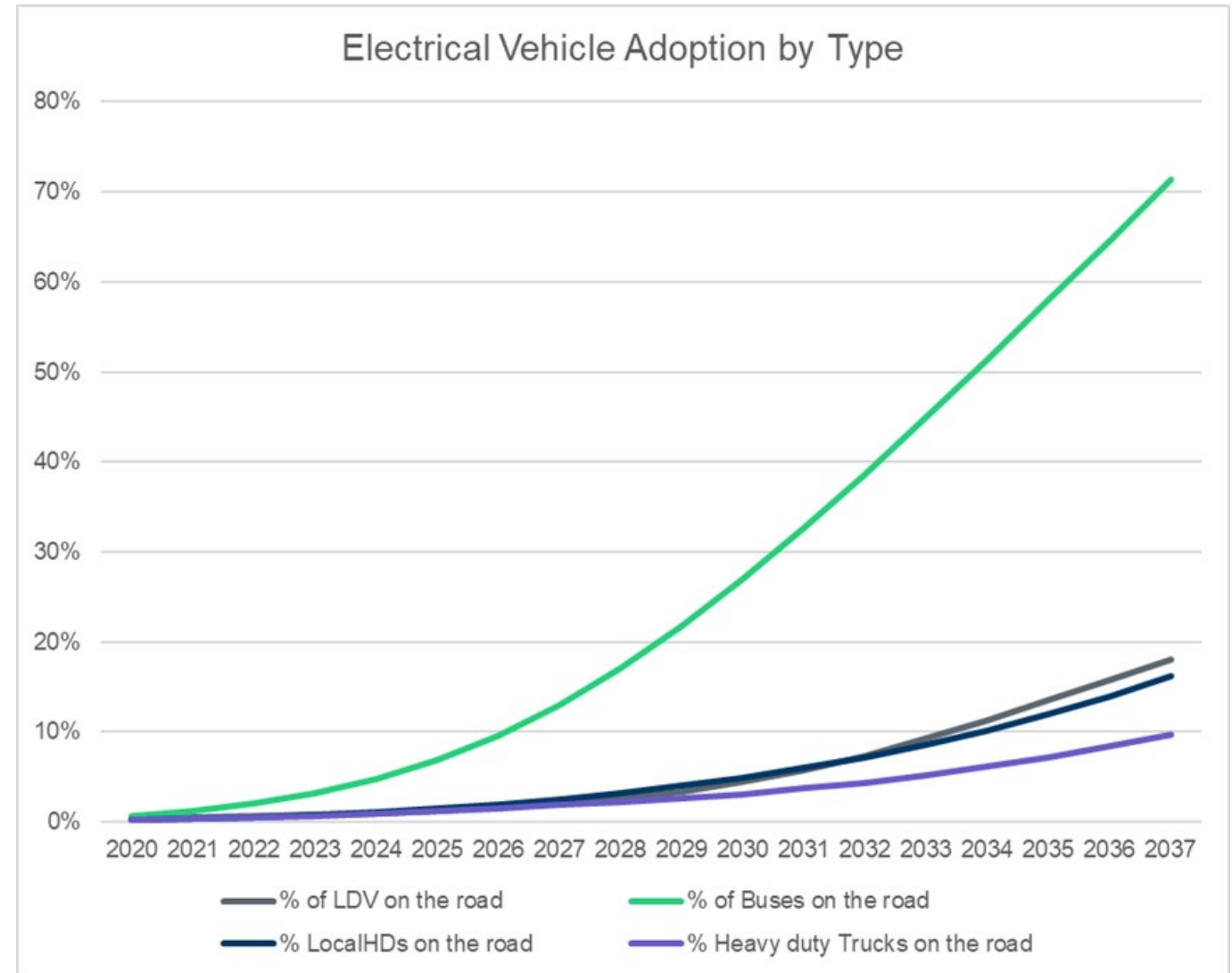
Why does Dallas need more EV infrastructure?



Regional Trends

(December 2021)

37,832 EVs Regionwide
7,371 in City of Dallas
49.6% Average Annual
Growth in EV Registration
2015-2021



Source: Electric Reliability Council of Texas (ERCOT) Long-Term System Assessment, <https://www.ercot.com/gridinfo/planning>. Uses an adjusted (delayed) forecast from Bloomberg New Energy Finance Electric Vehicle Outlook (<https://about.bnef.com/electric-vehicle-outlook/>).



What is the City's role in deployment of EV infrastructure?



GOAL 3: DALLAS' COMMUNITIES HAVE ACCESS TO SUSTAINABLE, AFFORDABLE, *TRANSPORTATION* OPTIONS.

Objectives

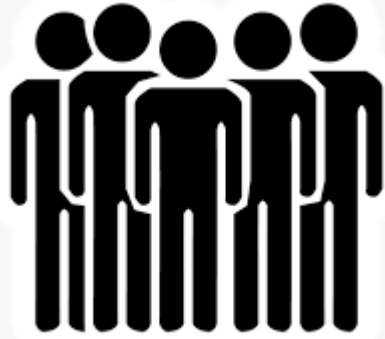
- Shift the surface transportation system to move people and goods in **fuel-efficient vehicles**.
- **Reduce trips** where people drive alone.
- **Synergize jobs and housing** with transportation infrastructure to increase access to walking and biking options, and public transit.
- Ensure that walking, biking, public transit, vehicular transportation **infrastructure is reliable and safe**.



What is the City's role in deployment of EV infrastructure?



CITY
FLEET



PUBLIC



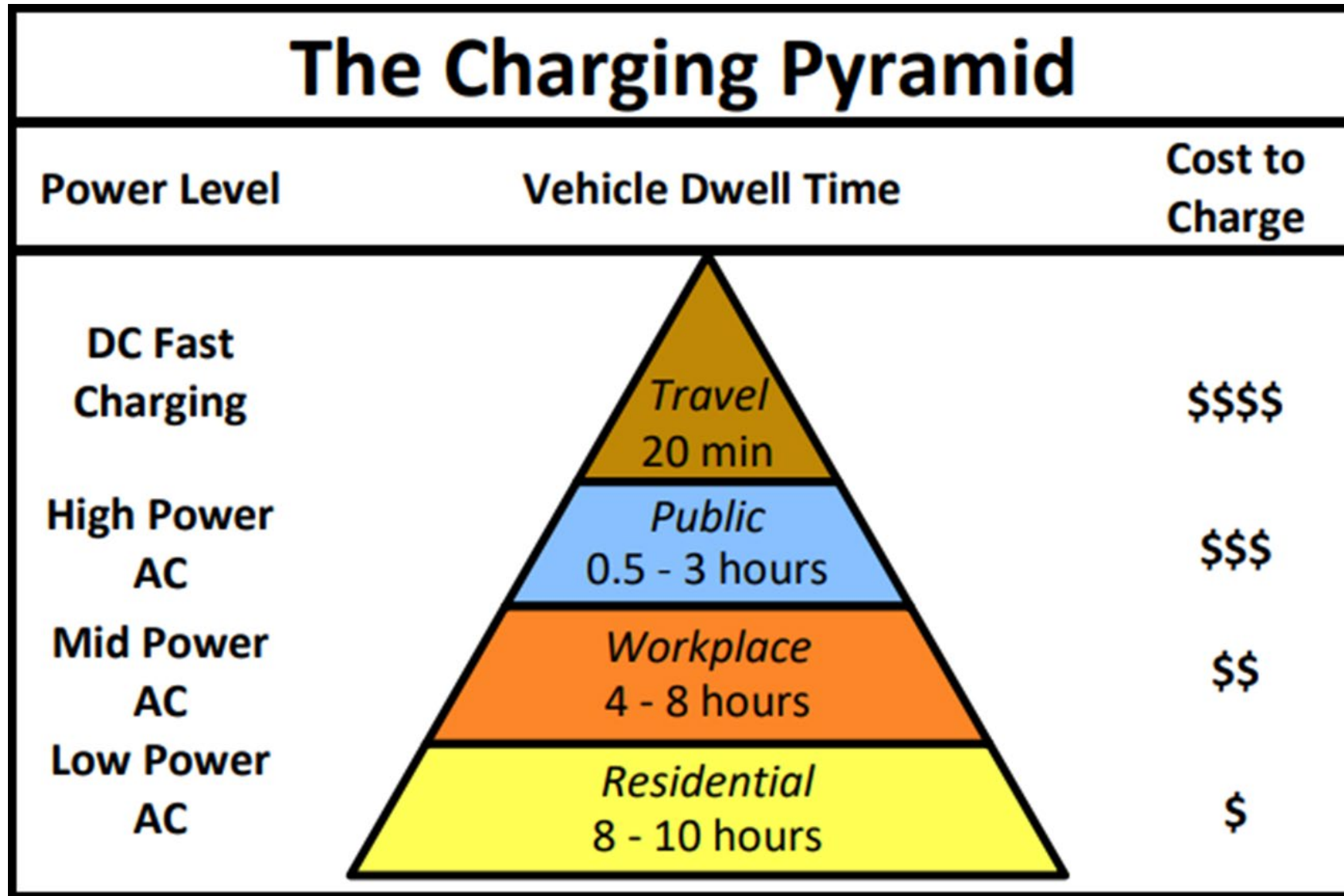
CITY
STAFF



HOME-
OWNERS



What are the types of public EV charging infrastructure?



Charging Pyramid Sourcing: https://afdc.energy.gov/files/u/publication/EV_Charger_Selection_Guide_2018-01-112.pdf



Where could City deploy public EV charging stations?



- Parks
- Libraries
- Recreation Centers
- Convention Centers
- Municipal Buildings



Does the City currently offer public EV charging stations?

Location	Address	Number of Chargers	Cost	Equipment Installed
City Hall	1500 Marilla St. Dallas, TX 75201	2	Free with Paid Parking	Charge Point
Love Field Garages (A,B,C)	8008 Herb Kelleher Way Dallas, TX 75235	30	Free with Paid Parking	Charge Point & Blink
Central Library	1515 Young Street Dallas, TX 75201	1	Free with Paid Parking	TXU
Dallas Executive Airport	5303 Challenger Dr. Dallas, TX 75237	2	Paid	Blink
Dallas Zoo	650 South R. L. Thorton Freeway Dallas, TX 75203	2	Free with Parking	Schnider Electric
Fair Park (near Gate)	3431Grand Ave Dallas, TX 75210	2	Paid	Blink

* 2020 Inventory Data



What cost are associated with EV charging stations?



1. Site Design
2. Utilities
3. Construction
4. Equipment
5. Fees and Pricing
6. Operation & Maintenance



Are there funding opportunities on State or Federal level for deploying EV charging stations?



- NATIONAL ELECTRIC VEHICLE Infrastructure (NEVI) FORMULA PROGRAM (\$5 billion)
- Federal grants for charging and fueling infrastructure (\$2.5 billion)
- Energy Efficiency and Conservation Block Grants (\$550 Million)
- RAISE transportation grants (\$7.5 billion)
- Congestion Mitigation and air quality improvement program funds (\$13.2 billion)
- Carbon Reduction Program (\$6.4 billion)
- Volkswagen Settlement (\$2.9 billion)
- Diesel Emission Reduction Act (~\$46 million)



Bipartisan Infrastructure Law (BIL)



The Bipartisan Infrastructure Deal will invest **\$7.5 billion** to build out the first-ever national network of EV chargers in the United States.

Grants for Charging and
Fueling Infrastructure for
Corridors and Communities
**\$2.5B for Alternative Fuels
(EV, CNG, LNG, LPG, H2)**

National Electric Vehicle
Formula Program
\$5.0B for EV Corridors

A critical element in the Biden-Harris Administration's plan **to accelerate the adoption of EVs to address the climate crisis and support domestic manufacturing jobs.**

Provide funding for deployment of EV chargers **along highway corridors to facilitate long-distance travel and within communities to provide convenient charging where people live, work, and shop.**

Funding will have a particular focus on **rural, disadvantaged, and hard-to-reach communities.**



NEVI Formula Funding Impacts to Texas



TxDOT to Receive and Administer **~\$408 Million Over 5 years** to Deploy Electric Vehicle (EV) Charging

Statewide Infrastructure Deployment Plan Required

Provide at Least **1 Qualifying Station Every 50 Miles** Along Designated Corridors

Be Within 1 Mile of Designated EV Corridor Exit

Include at Least 4 CCS-type DC Fast Charge Connectors, Minimum 150kW Power Output at all Times

Minimum Site Power Capacity 600 kW

Restrict Funding to Designated EV Corridors until Demonstration that all Designated Highways are “Saturated” With Qualifying Stations



Highlights of Draft Texas EV Infrastructure (TEVI) Plan



Enable Current and Future EV Drivers to Confidently Travel Across the State for Work, Recreation, and Exploration

Support 1 Million EVs Upon Build-Out

Draft Plan Posted at https://txdot.mysocialpinpoint.com/tx_ev_plan

Year 1	Install DC Fast Chargers Along Alternative Fuel Corridors (Estimated 55 Stations Statewide; \$36.9M Federal)
Years 2-5	Work with Counties and Small Urban Areas to Install DC Fast Charge Sites In/Near County Seats (Estimated 190 Locations, \$121.6M Federal) Work <u>with MPOs</u> to Identify Locations and Type of Sites (Estimated \$151.5M Federal)
Throughout	Collect Data



NEVI Formula Funding Impacts to Region



**Proposed Allocation for NCTCOG
MPO Area: ~\$65M**

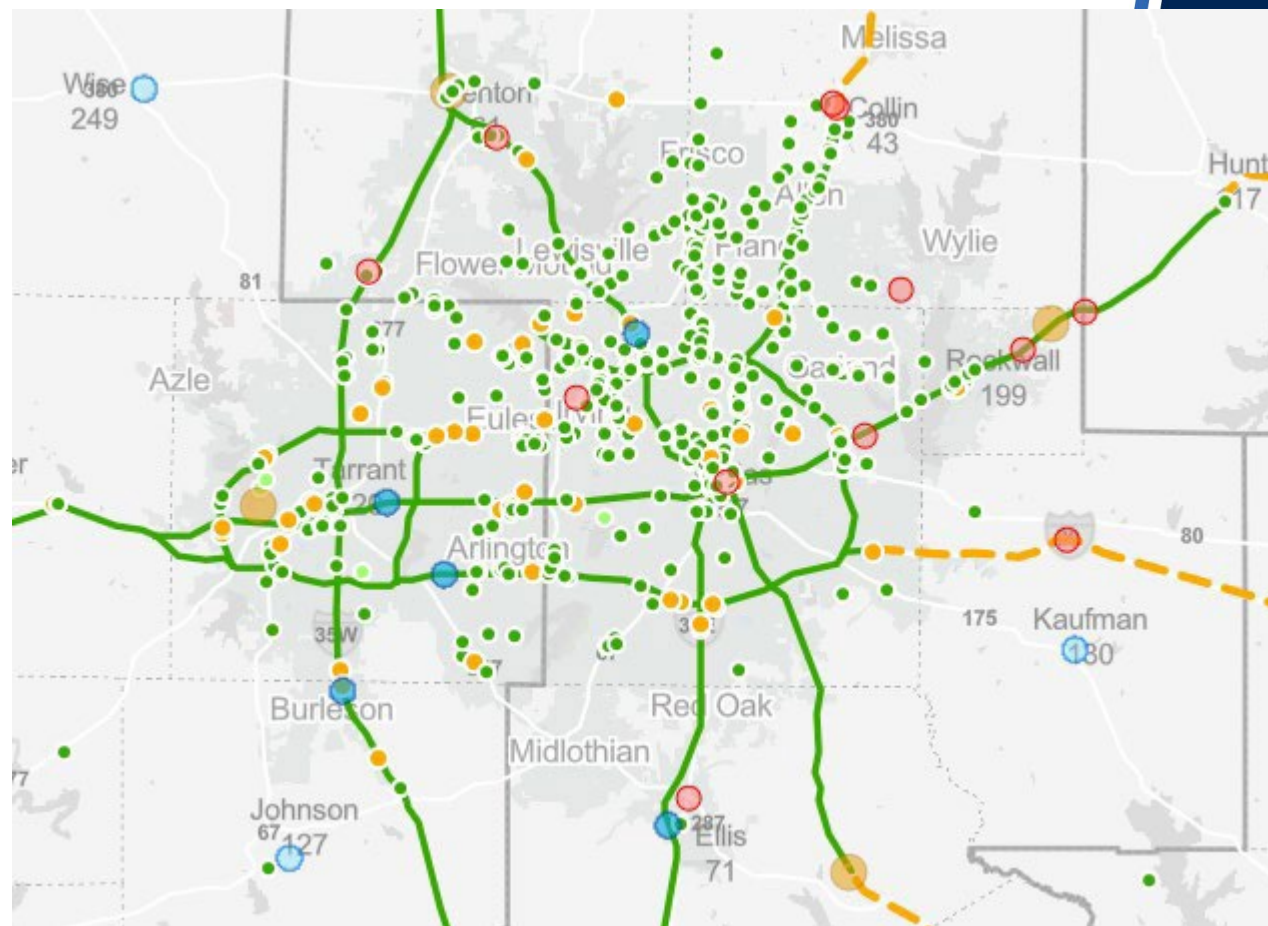
MPO Role to Collaborate with TxDOT:

Recommend Charger Types and
General Locations

Draft Solicitation

Score Responses

Image Source: TxDOT Statewide Planning Map,
https://www.txdot.gov/apps/statewide_mapping/StatewidePlanningMap.htm



Planned DC Fast Charge Stations



Alt Fuel Stations - Electric

EV Charging Type

Level 1

Level 2

DC Fast

DC Fast - Round 6 Potential

Alt Fuel Corridors

Corridor Ready

Corridor Pending

EV Station Study Areas



Study Area - County Seats



Study Area - Electric Alt Fuel
Corridor



Next steps for deployment of public EV charging stations?



- Internal EV charging infrastructure workgroup
- Prepare projects for upcoming grant opportunities
- Incorporate EV ready building codes
- Encourage investments from local businesses and new developments that install charging stations
- Work with regional coalition of stakeholders to leverage resources and build long-term strategies
- Coordinate with energy companies to minimize stress on power grid
- Prioritize charge points in environmental justice areas





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National Drive Electric Week



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