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2022 SEP -1 PM 2: 54

CITY SECRETARY  
DALLAS, TEXAS

## City of Dallas

1500 Marilla Street,  
Council Chambers, 6th Floor  
Dallas, Texas 75201

## Public Notice

220819

POSTED CITY SECRETARY  
DALLAS, TX



### Environment and Sustainability Committee

September 6, 2022

9:00 AM

(For General Information and Rules of Courtesy, Please See Opposite Side.)  
(La Información General Y Reglas De Cortesía Que Deben Observarse  
Durante Las Asambleas Del Consejo Municipal Aparecen En El Lado Opuesto, Favor De Leerlas.)

## 2022 CITY COUNCIL APPOINTMENTS

<b>COUNCIL COMMITTEE</b>	
<b>ECONOMIC DEVELOPMENT</b> Atkins (C), Arnold (VC), McGough, Narvaez, Resendez, West, Willis	<b>ENVIRONMENT AND SUSTAINABILITY</b> Blackmon(C), Ridley (VC), Arnold, Bazaldua, Resendez, Schultz, West
<b>GOVERNMENT PERFORMANCE AND FINANCIAL MANAGEMENT</b> Mendelsohn (C), Willis (VC), Atkins, Bazaldua, McGough, Ridley, West	<b>HOUSING AND HOMELESSNESS SOLUTIONS</b> Thomas (C), Moreno (VC), Arnold, Blackmon, Mendelsohn, Ridley, Schultz
<b>PUBLIC SAFETY</b> McGough (C), Mendelsohn (VC), Atkins, Moreno, Resendez, Thomas, Willis	<b>QUALITY OF LIFE, ARTS, AND CULTURE</b> Bazaldua (C), West (VC), Arnold, Blackmon, Narvaez, Ridley, Thomas
<b>TRANSPORTATION AND INFRASTRUCTURE</b> Narvaez (C), Atkins (VC), Bazaldua, Mendelsohn, Moreno, Schultz, Willis	<b>WORKFORCE, EDUCATION, AND EQUITY</b> Schultz (C), Thomas (VC), Blackmon, McGough, Moreno, Narvaez, Resendez
<b>AD HOC JUDICIAL NOMINATING COMMITTEE</b> Resendez (C), Arnold, Bazaldua, Ridley, Thomas, West, Willis	<b>AD HOC LEGISLATIVE AFFAIRS</b> Atkins (C), McGough, Mendelsohn, Narvaez, Willis
<b>AD HOC COMMITTEE ON PROFESSIONAL SPORTS RECRUITMENT AND RETENTION</b> Johnson (C), Atkins, Bazaldua, Blackmon, Thomas	<b>AD HOC COMMITTEE ON GENERAL INVESTIGATING &amp; ETHICS</b> Mendelsohn (C), Atkins, Blackmon, McGough, Schultz
<b>AD HOC COMMITTEE ON ADMINISTRATIVE AFFAIRS</b> Willis (C), McGough, Moreno, Schultz, West	

(C) – Chair, (VC) – Vice Chair

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[INSERT LINK]

### Call to Order

### MINUTES

1. [22-1952](#) Approval of the August 1, 2022 Committee Minutes

**Attachments:** [Minutes](#)

### BRIEFING MEMOS

- A. [22-1953](#) OEQS Environmental Legislative Priorities Update  
[Carlos Evans, Director, Office of Environmental Quality & Sustainability;  
Pharr Andrews, Senior Climate Coordinator, Office of Environmental Quality & Sustainability]

**Attachments:** [Memorandum](#)

- B. [22-1954](#) Solar PV Projects Update  
[John Johnson, Director, Building Services Department; Srinivas Vemuri,  
Senior Program Manager, Building Services Department]

**Attachments:** [Memo](#)

### BRIEFING ITEMS

- C. [22-1955](#) Comprehensive Urban Agriculture Plan (CUAP) Recommendations  
[Rabekha Siebert, Urban Agriculture Coordinator, Office of Environmental  
Quality & Sustainability; Christian Kanlian, Agritecture; Jeffrey Landau,  
Agritecture; Mikel Wilkins, TBG Partners; Jordan Clark, TBG Partners; Scott  
Snodgrass, The Edible Group, LLC]

**Attachments:** [Presentation](#)

- D. [22-1956](#) City Deployment of Electric Vehicle Charging Infrastructure for Public Use  
[Carlos Evans, Director, Office of Environmental Quality & Sustainability;  
Susan Alvarez, Assistant Director, Office of Environmental Quality &  
Sustainability; Pharr Andrews, Senior Climate Coordinator, Office of  
Environmental Quality & Sustainability]

**Attachments:** [Presentation](#)

- E. [22-1957](#) Environmental Commission Update  
[Kathryn Bazan, Chair, Environmental Commission]

**Attachments:** [Memorandum](#)

### **UPCOMING AGENDA ITEMS**

- F. [22-1987](#) A public hearing to receive comments on a proposed municipal setting designation to prohibit the use of groundwater as potable water beneath property owned by Jubilee Park Clinic Holdings, LLC located near the intersection of Parry and Ann Avenues and adjacent street rights-of-way; and an ordinance authorizing support of the issuance of a municipal setting designation to Jubilee Park Clinic Holdings, LLC by the Texas Commission on Environmental Quality and prohibiting the use of groundwater beneath the designated property as potable water - Financing: No cost consideration to the City  
Recommendation of Staff: Approval
- G. [22-1988](#) A public hearing to receive comments on a proposed municipal setting designation to prohibit the use of groundwater as potable water beneath property owned by SCP/OI Good Latimer OZ Owner, LLC located near the intersection of South Good Latimer Expressway and Dawson Street and adjacent street rights-of-way; and an ordinance authorizing support of the issuance of a municipal setting designation to SCP/OI Good Latimer OZ Owner, LLC by the Texas Commission on Environmental Quality and prohibiting the use of groundwater beneath the designated property as potable water - Financing: No cost consideration to the City  
Recommendation of Staff: Approval

### **ADJOURNMENT**

**EXECUTIVE SESSION NOTICE**

A closed executive session may be held if the discussion of any of the above agenda items concerns one of the following:

1. seeking the advice of its attorney about pending or contemplated litigation, settlement offers, or any matter in which the duty of the attorney to the City Council under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act. [Tex. Govt. Code §551.071]
2. deliberating the purchase, exchange, lease, or value of real property if deliberation in an open meeting would have a detrimental effect on the position of the city in negotiations with a third person. [Tex. Govt. Code §551.072]
3. deliberating a negotiated contract for a prospective gift or donation to the city if deliberation in an open meeting would have a detrimental effect on the position of the city in negotiations with a third person. [Tex. Govt. Code §551.073]
4. deliberating the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee; or to hear a complaint or charge against an officer or employee unless the officer or employee who is the subject of the deliberation or hearing requests a public hearing. [Tex. Govt. Code §551.074]
5. deliberating the deployment, or specific occasions for implementation, of security personnel or devices. [Tex. Govt. Code §551.076]
6. discussing or deliberating commercial or financial information that the city has received from a business prospect that the city seeks to have locate, stay or expand in or near the city and with which the city is conducting economic development negotiations; or deliberating the offer of a financial or other incentive to a business prospect. [Tex Govt. Code §551.087]
7. deliberating security assessments or deployments relating to information resources technology, network security information, or the deployment or specific occasions for implementations of security personnel, critical infrastructure, or security devices. [Tex Govt. Code §551.089]



# City of Dallas

1500 Marilla Street  
Council Chambers, 6th Floor  
Dallas, Texas 75201

## Agenda Information Sheet

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**File #:** 22-1952

**Item #:** 1.

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Approval of the August 1, 2022 Committee Minutes

MINUTES OF THE CITY COUNCIL COMMITTEE  
MONDAY, AUGUST 1, 2022

22-0016

ENVIRONMENT AND SUSTAINABILITY COMMITTEE  
CITY COUNCIL CHAMBER, CITY HALL/VIDEO CONFERENCE  
COUNCILMEMBER PAULA BLACKMON, PRESIDING

PRESENT: [7] Blackmon, Ridley, Arnold (\*\*9:07 a.m.), Bazaldua (\*\*9:08), \*Resendez, Schultz, West

ABSENT: [0]

The meeting was called to order at 9:00 a.m. with a quorum of the committee present.

The meeting agenda, posted in accordance with Chapter 551, "OPEN MEETINGS," of the Texas Government Code, was presented.

After all business properly brought before the committee had been considered, the meeting adjourned at 11:02 a.m.

\_\_\_\_\_  
Chair

ATTEST:

\_\_\_\_\_  
City Secretary Staff

\_\_\_\_\_  
Date Approved

The agenda is attached to the minutes of this meeting as EXHIBIT A.

The actions taken on each matter considered by the committee are attached to the minutes of this meeting as EXHIBIT B.

The briefing materials are attached to the minutes of this meeting as EXHIBIT C.

**\*Note: Members of the Committee participated in this meeting by video conference.**

**\*\* Note: Indicates arrival time after meeting called to order/reconvened.**

MINUTES OF THE CITY COUNCIL COMMITTEE  
MONDAY, AUGUST 1, 2022

EXHIBIT A

**RECEIVED**

2022 JUL 28 PM 8:42

**CITY SECRETARY  
DALLAS, TEXAS**

**City of Dallas**

*1500 Marilla Street,  
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**Public Notice**

**220698**

**POSTED CITY SECRETARY  
DALLAS, TX**



**Environment and Sustainability Committee**

**August 1, 2022**

**9:00 AM**

(For General Information and Rules of Courtesy, Please See Opposite Side.)  
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### Call to Order

### MINUTES

- A. 22-1612 Approval of the June 6, 2022 Committee Minutes

**Attachments:** Minutes

### BRIEFING ITEMS

- B. 22-1613 Fleet Electrification Analysis  
[Donzell Gipson, Director, Equipment & Fleet Management; Vincent Olsen, Assistant Director, Equipment & Fleet Management; Ken Kelly, Cory Sigler, Matt Jeffers, National Renewable Energy Laboratory]

**Attachments:** Presentation

- C. 22-1614 Gas-Powered Landscape Equipment Policies  
[Susan Alvarez, Assistant Director, Office of Environmental Quality & Sustainability]

**Attachments:** Presentation

- D. 22-1615 Environmental Commission Update  
[Kathryn Bazan, Chair, Environmental Commission]

### BRIEFING MEMOS

- E. 22-1616 Bachman Lake Dredging Update  
Terry Lowery, Director, Dallas Water Utility; Matthew Penk, Assistant Director, Dallas Water Utility; Marc Cottingame, Engineering Program Administrator, Dallas Water Utility

**Attachments:** Memo

- F. 22-1618 City Forestry Quarterly Update  
Carl Simpson, Assistant City Manager

**Attachments:** Memorandum

- G. 22-1642 Environmental Justice Update  
[Paul White II, Superintendent, Air, Soil, & Groundwater Division, Office of Environmental Quality & Sustainability; Lori Trulson, Senior Environmental Coordinator, Office of Environmental Quality & Sustainability]

**Attachments:** Memo

- H. 22-1643 OEQS Environmental Legislative Priorities  
[Pharr Andrews, Senior Climate Coordinator, Office of Environmental Quality & Sustainability]

**Attachments:** Memo

#### DISCUSSION ITEM

- I. 22-1619 Environment & Sustainability Committee Priorities for Upcoming Fiscal Year

#### **UPCOMING AGENDA ITEMS**

- J. [22-1590](#) Authorize **(1)** the acceptance of a grant from the Texas Commission on Environmental Quality (TCEQ) for the Air Pollution Compliance Program (Contract No. 582-23-40125) in the amount of \$2,525,585.00 to continue to provide investigation services and complaint response within the City of Dallas for the period September 1, 2022 through August 31, 2027; **(2)** the receipt and deposit of funds in an amount not to exceed \$2,525,585.00 in the TCEQ 22-27 Local Air Pollution Compliance Program Fund; **(3)** the establishment of appropriations in an amount not to exceed \$2,525,585.00 in the TCEQ 22-27 Local Air Pollution Compliance Program Fund; **(4)** a required local match in the amount of \$1,243,944.85 over the five year period; and **(5)** execution of the contract with TCEQ for the Air Pollution Compliance Program and all terms, conditions, and documents required by the agreement - Not to exceed \$3,769,529.85 - Financing: Texas Commission on Environmental Quality Grant Funds (\$2,525,585.00) and General Fund (\$1,243,944.85) (subject to annual appropriations)

**Attachments:** [Resolution](#)

- K. [22-1591](#) Authorize the **(1)** acceptance of a grant from the U.S. Environmental Protection Agency through the Texas Commission on Environmental Quality (TCEQ) (Contract No. 582-23-40028, CFDA Nos. 66.034 and 66.605) in the amount of \$96,707.48 to operate the ambient air monitoring station in Rockwall County and air quality monitoring of the Particulate Matter (PM) 2.5 network, for the period September 1, 2022 through August 31, 2023; **(2)** the receipt and deposit of funds in an amount not to exceed \$96,707.48 in the TCEQ 22-23 Rockwall and PM 2.5 Monitoring Program Fund; **(3)** the establishment of appropriations in an amount not to exceed \$96,707.48 in the TCEQ 22-23 Rockwall and PM 2.5 Air Monitoring Program Fund; and **(4)** execution of the contract and all terms, conditions, and documents required by the agreement - Not to exceed \$96,707.48 - Financing: Texas Commission on Environmental Quality Grant Funds

**Attachments:** [Resolution](#)

- L. [22-1592](#) Authorize the **(1)** first amendment to the contract with the Texas Commission on Environmental Quality (TCEQ) (Contract No. 582-21-22370, CFDA No. 97.091) passed through from the U.S. Environmental Protection Agency to accept additional grant funds in an amount not to exceed \$425,924.25 to conduct the Whole Air Monitoring Program for the period September 1, 2022 through August 31, 2023; **(2)** receipt and deposit of funds in an amount not to exceed \$425,924.25 in the TCEQ 22-23 Whole Air Monitoring Program Fund; **(3)** establishment of appropriations in an amount not to exceed \$425,924.25 in the TCEQ 22-23 Whole Air Monitoring Program Fund; and **(4)** execution of the contract and all terms, conditions, and documents required by the agreement - Not to exceed \$425,924.25, from \$581,027.03 to \$1,006,951.28 - Financing: Texas Commission on Environmental Quality Grant Funds

**Attachments:** [Resolution](#)

- M. [22-1537](#) Authorize **(1)** acceptance of a grant from the Environmental Protection Agency through the North Central Texas Council of Governments for an award through the “Clean Fleets North Texas 2020 Call for Projects” (Project No. TRN6875, CFDA No. 66.039, Federal Award ID No. 01F56701) (to purchase replacement vehicles and equipment to reduce Nitrogen Oxides emissions in the amount of \$109,116.00 for the period August 11, 2022 through February 26, 2023); **(2)** the receipt and deposit of grant funds in an amount not to exceed \$109,116.00 in the Clean Fleets North Texas 2020 Fund - Award 2; **(3)** the establishment of appropriations in an amount not to exceed \$109,116.00 in the Clean Fleets North Texas 2020 Fund - Award 2; **(4)** a required local match in the amount of \$255,640.00 from Equipment Notes Series 2021 Fund; and **(5)** execution of the grant agreement and all terms, conditions, and documents required by the grant agreement - not to exceed \$364,756.00 - Financing: North Central Texas Council of Governments Grant Funds (\$109,116.00) and Equipment Notes Series 2021 Fund (\$255,640.00)

**Attachments:** [Resolution](#)

**ADJOURNMENT**

**EXECUTIVE SESSION NOTICE**

A closed executive session may be held if the discussion of any of the above agenda items concerns one of the following:

1. seeking the advice of its attorney about pending or contemplated litigation, settlement offers, or any matter in which the duty of the attorney to the City Council under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the Texas Open Meetings Act. [Tex. Govt. Code §551.071]
2. deliberating the purchase, exchange, lease, or value of real property if deliberation in an open meeting would have a detrimental effect on the position of the city in negotiations with a third person. [Tex. Govt. Code §551.072]
3. deliberating a negotiated contract for a prospective gift or donation to the city if deliberation in an open meeting would have a detrimental effect on the position of the city in negotiations with a third person. [Tex. Govt. Code §551.073]
4. deliberating the appointment, employment, evaluation, reassignment, duties, discipline, or dismissal of a public officer or employee; or to hear a complaint or charge against an officer or employee unless the officer or employee who is the subject of the deliberation or hearing requests a public hearing. [Tex. Govt. Code §551.074]
5. deliberating the deployment, or specific occasions for implementation, of security personnel or devices. [Tex. Govt. Code §551.076]
6. discussing or deliberating commercial or financial information that the city has received from a business prospect that the city seeks to have locate, stay or expand in or near the city and with which the city is conducting economic development negotiations; or deliberating the offer of a financial or other incentive to a business prospect. [Tex Govt. Code §551.087]
7. deliberating security assessments or deployments relating to information resources technology, network security information, or the deployment or specific occasions for implementations of security personnel, critical infrastructure, or security devices. [Tex Govt. Code §551.089]

MINUTES OF THE CITY COUNCIL COMMITTEE  
MONDAY, AUGUST 1, 2022

EXHIBIT B

OFFICIAL ACTION OF THE CITY COUNCIL COMMITTEE

AUGUST 1, 2022

Item A: Approval of the June 6, 2022 Committee Minutes

Councilmember Ridley moved to adopt the minutes as presented.

Motion seconded by Councilmember Schultz and unanimously adopted.

OFFICIAL ACTION OF THE CITY COUNCIL COMMITTEE

AUGUST 1, 2022

BRIEFING ITEMS

Item B: Fleet Electrification Analysis

The following individuals briefed the committee on the item:

- Donzell Gipson, Director, Equipment & Fleet Management;
- Ken Kelly, National Renewable Energy Laboratory; and
- Susan Alvarez, Assistant Director, Office of Environmental Quality & Sustainability

OFFICIAL ACTION OF THE CITY COUNCIL COMMITTEE

AUGUST 1, 2022

BRIEFINGS ITEMS

Item C: Gas-Powered Landscape Equipment Policies

The following individuals briefed the committee on the item:

- Susan Alvarez, Assistant Director, Office of Environmental Quality & Sustainability; and
- Carrie Rogers, Director of Government Affairs, City Manager's Office

OFFICIAL ACTION OF THE CITY COUNCIL COMMITTEE

AUGUST 1, 2022

BRIEFINGS ITEMS

Item D: Environmental Commission Update

The following individual briefed the committee on the item:

- Kathryn Bazan, Chair, Environmental Commission

OFFICIAL ACTION OF THE CITY COUNCIL COMMITTEE

AUGUST 1, 2022

BRIEFING MEMOS

Item E: Bachman Lake Dredging Updates

Item F: City Forestry Quarterly Update

Item G: Environmental Justice Update

Item H: OEQS Environmental Legislative Priorities

The committee discussed the items.

OFFICIAL ACTION OF THE CITY COUNCIL COMMITTEE

AUGUST 1, 2022

DISCUSSION ITEM

Item I: Environmental & Sustainability Committee Priorities for Upcoming Fiscal Year

The committee discussed the item.

OFFICIAL ACTION OF THE CITY COUNCIL COMMITTEE

AUGUST 1, 2022

UPCOMING AGENDA ITEMS

- Item J: Authorize (1) the acceptance of a grant from the Texas Commission on Environmental Quality (TCEQ) for the Air Pollution Compliance Program (Contract No. 582-23-40125) in the amount of \$2,525,585.00 to continue to provide investigation services and complaint response within the City of Dallas for the period September 1, 2022 through August 31, 2027; (2) the receipt and deposit of funds in an amount not to exceed \$2,525,585.00 in the TCEQ 22-27 Local Air Pollution Compliance Program Fund; (3) the establishment of appropriations in an amount not to exceed \$2,525,585.00 in the TCEQ 22-27 Local Air Pollution Compliance Program Fund; (4) a required local match in the amount of \$1,243,944.85 over the five year period; and (5) execution of the contract with TCEQ for the Air Pollution Compliance Program and all terms, conditions, and documents required by the agreement - Not to exceed \$3,769,529.85 - Financing: Texas Commission on Environmental Quality Grant Funds (\$2,525,585.00) and General Fund (\$1,243,944.85) (subject to annual appropriations)
- Item K: Authorize the (1) acceptance of a grant from the U.S. Environmental Protection Agency through the Texas Commission on Environmental Quality (TCEQ) (Contract No. 582-23-40028, CFDA Nos. 66.034 and 66.605) in the amount of \$96,707.48 to operate the ambient air monitoring station in Rockwall County and air quality monitoring of the Particulate Matter (PM) 2.5 network, for the period September 1, 2022 through August 31, 2023; (2) the receipt and deposit of funds in an amount not to exceed \$96,707.48 in the TCEQ 22-23 Rockwall and PM 2.5 Monitoring Program Fund; (3) the establishment of appropriations in an amount not to exceed \$96,707.48 in the TCEQ 22-23 Rockwall and PM 2.5 Air Monitoring Program Fund; and (4) execution of the contract and all terms, conditions, and documents required by the agreement - Not to exceed \$96,707.48 - Financing: Texas Commission on Environmental Quality Grant Funds
- Item L: Authorize the (1) first amendment to the contract with the Texas Commission on Environmental Quality (TCEQ) (Contract No. 582-21-22370, CFDA No. 97.091) passed through from the U.S. Environmental Protection Agency to accept additional grant funds in an amount not to exceed \$425,924.25 to conduct the Whole Air Monitoring Program for the period September 1, 2022 through August 31, 2023; (2) receipt and deposit of funds in an amount not to exceed \$425,924.25 in the TCEQ 22-23 Whole Air Monitoring Program Fund; (3) establishment of appropriations in an amount not to exceed \$425,924.25 in the TCEQ 22-23 Whole Air Monitoring Program Fund; and (4) execution of the contract and all terms, conditions, and documents required by the agreement - Not to exceed \$425,924.25, from \$581,027.03 to \$1,006,951.28 - Financing: Texas Commission on Environmental Quality Grant Funds

OFFICIAL ACTION OF THE CITY COUNCIL COMMITTEE

UPCOMING AGENDA ITEMS

Page 2

Item M: Authorize **(1)** acceptance of a grant from the Environmental Protection Agency through the North Central Texas Council of Governments for an award through the “Clean Fleets North Texas 2020 Call for Projects” (Project No. TRN6875, CFDA No. 66.039, Federal Award ID No. 01F56701) (to purchase replacement vehicles and equipment to reduce Nitrogen Oxides emissions in the amount of \$109,116.00 for the period August 11, 2022 through February 26, 2023); **(2)** the receipt and deposit of grant funds in an amount not to exceed \$109,116.00 in the Clean Fleets North Texas 2020 Fund - Award 2; **(3)** the establishment of appropriations in an amount not to exceed \$109,116.00 in the Clean Fleets North Texas 2020 Fund - Award 2; **(4)** a required local match in the amount of \$255,640.00 from Equipment Notes Series 2021 Fund; and **(5)** execution of the grant agreement and all terms, conditions, and documents required by the grant agreement - not to exceed \$364,756.00 - Financing: North Central Texas Council of Governments Grant Funds (\$109,116.00) and Equipment Notes Series 2021 Fund (\$255,640.00)

The committee discussed the items.

MINUTES OF THE CITY COUNCIL COMMITTEE  
MONDAY, AUGUST 1, 2022

EXHIBIT C

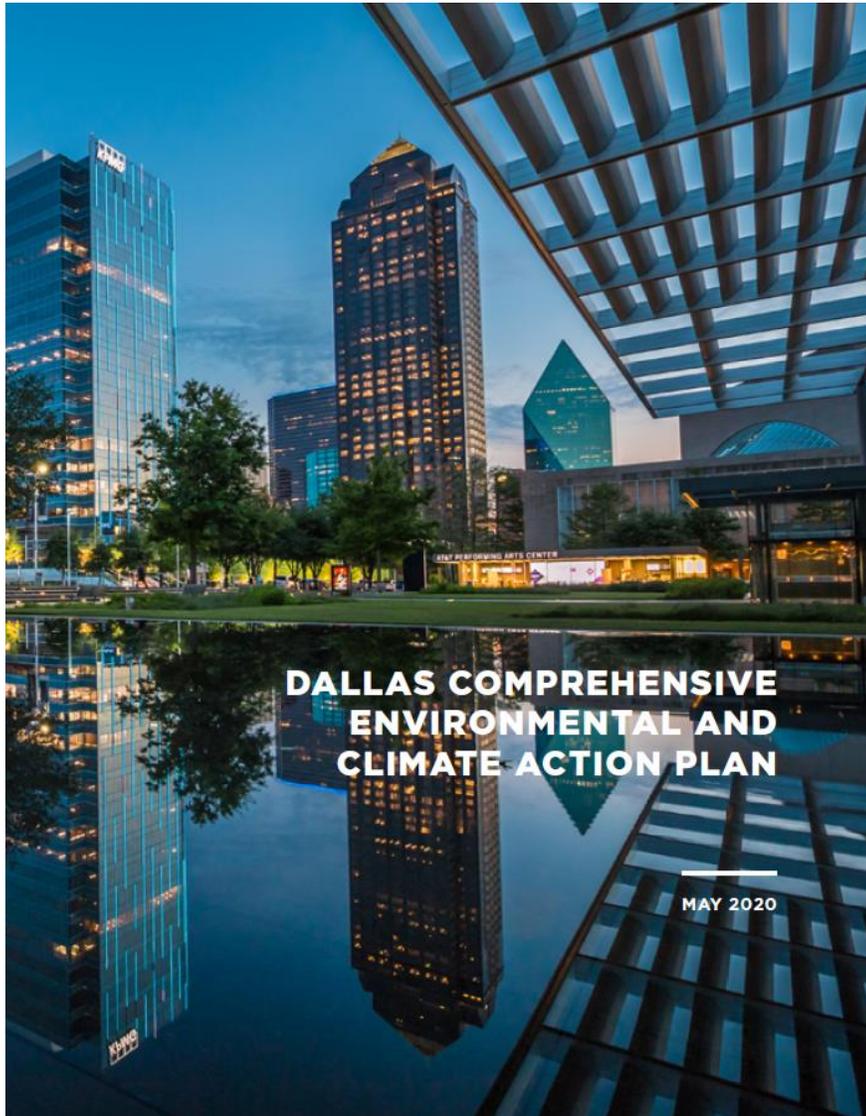
# City of Dallas Fleet Electrification Analysis - *Executive Summary*

- See full presentation for supporting data and analyses

National Renewable Energy Laboratory  
Ken Kelly, Cory Sigler, Matt Jeffers

August 2022

# Dallas Fleet Electrification Goals



## Dallas Comprehensive Environmental and Climate Action Plan (CECAP)

- The Intergovernmental Panel on Climate Change (IPCC) recommends **reducing GHG emissions to net zero by 2050** to limit the increase in global temperatures to below 1.5°C.
- The City of Dallas is **committed to meeting the international emission reduction targets** set by the Paris Agreement in 2016.
- The 2015 greenhouse gas (GHG) inventory reported that **35% of Dallas' GHG emissions come from transportation sector**.
- The CECAP provides a roadmap for the City to improve quality of life, **to reduce greenhouse gas emissions**, to prepare for the impacts of climate change, and to create a healthier and more prosperous community.

# Fleet Electrification Considerations

- What are the overall goals of the Dallas fleet electrification plan?
- Where are the best opportunities for fuel reduction and emissions reduction?
- Which vehicle duty cycles are suitable for electrification?
- Which vehicles are eligible for electrification (i.e., non-emergency response or non-special purpose vehicles)?
- Which vehicles are nearing retirement or overdue for replacement?
- Which vehicles have an electric model that's commercially available today?
- Which vehicles have dedicated parking locations suitable for charging equipment?
- Which communities or regions of the city stand to benefit the most from lower emissions and improved air quality?
- What are the vehicle-life economics and what factors influence economic payback and GHG savings?

## *Data-driven Analysis Approach*

### Vehicle Inventory

- Number of vehicles by department
- Vehicle class/type by department
- Vehicle age

### Vehicle Operation

- Annual vehicle miles traveled (VMT) by department and vehicle type
- Estimated daily miles traveled per vehicle

### Fuel/Energy Consumption

- Annual fuel consumption by department and vehicle type
- Estimated daily energy consumption per vehicle

### Vehicle Replacement Criteria

- Review of replacement eligibility criteria
- Review of replacement ranking, year and cost by vehicle

### EV Availability

- Alternative Fuels Data Center (AFDC) Advanced Vehicle Search tool
- Review of commercially available EVs by vehicle class and type
- MSRP values

### EV and EVSE Economics

- Inputs from steps above feed VICE Economic Model (cost and operations)
- Light-duty sedans and pickup scenarios evaluated
- Parametric sweeps show impacts of key input parameters

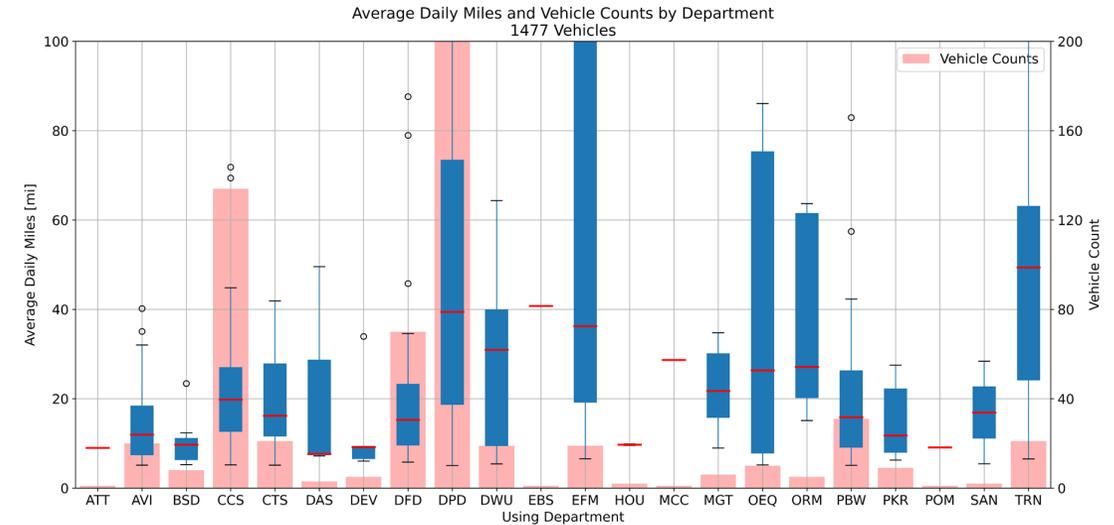
### GHG Impacts

- Data on regional energy generation energy and vehicle efficiencies
- GREET Model to estimate GHG impacts of EV replacements
- Combine VICE economics and GREET GHG to estimate cost of GHG offsets

# Dallas Fleet Electrification Process

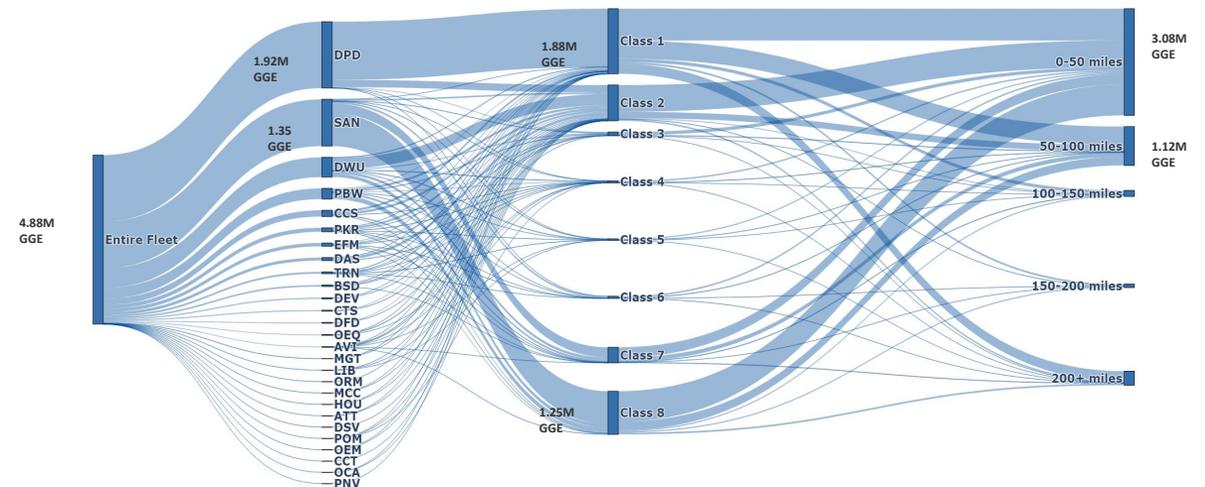
- **Review of Established Transportation Energy Goals / Policies**
- **Dallas Fleet Inventory Energy Consumption and Usage**
  - Fleet inventory and usage statistics
  - ZEV model availability
  - Energy breakdown by vehicle types and departments
  - Vehicle energy requirements / duty cycle analysis
  - Fleet replacement criteria – vehicle age / mileage
  - Selection of priority electrification candidates
- **Infrastructure Requirements**
  - Priority charging locations
  - Vehicle dwell times and fleet parking locations
  - Utility rates / rate structures
- **Cost of Operation / Ownership Estimation**
  - Cost data collection (fleet) – fuel cost, electricity cost, maintenance
  - Cost data collection (market) – fuel cost, electricity cost, maintenance
  - Cost calculations – e.g., Vehicle Infrastructure Cash-Flow Evaluation (VICE) tool

## Fleet Inventory Usage Statistics



## Entire Fleet Energy Consumption by Department and Vehicle Type

Dallas Fleet Breakdown - Annual Fuel Consumption [GGE]



Note: expanded versions of above figures provided in backup slides

# Dallas Fleet Vehicle Usage

Dallas fleet inventory data reveals the number, size, and type of vehicles operated by each city department, as well as:

- Annual fuel consumption
- Average daily vehicle miles traveled (VMT)

Review of GPS data for select vehicle groups indicates that

- GPS daily VMT somewhat higher than estimated annual averages
- GPS data indicate that most vehicles have maximum daily driving distances well within the range of suitable replacement EVs

Vehicle age and anticipated replacement dates suggest many Admin Sedans and Light Duty Pickups have met replacement criteria

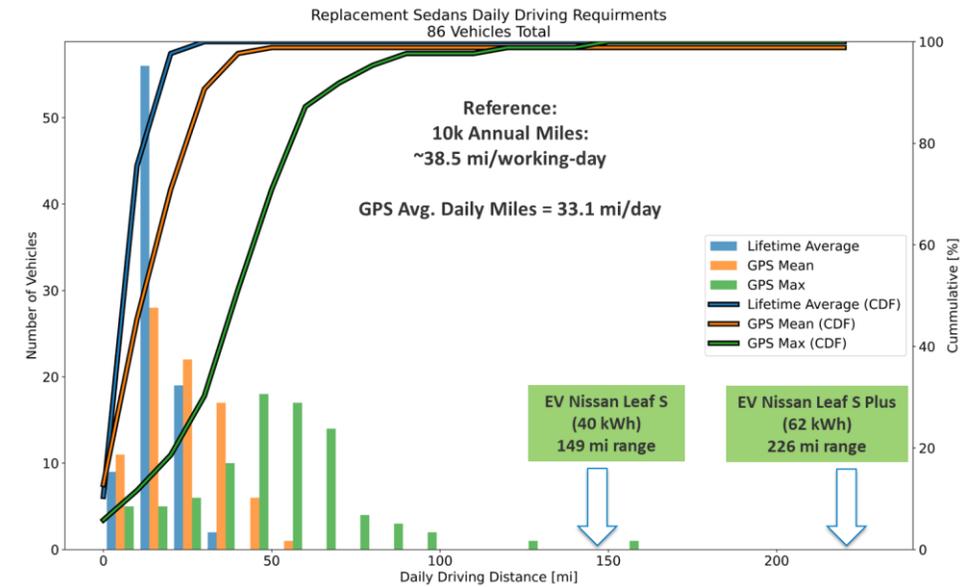
**Key Takeaways:** Analysis of fleet inventory, usage statistics, and replacement criteria help to narrow the EV candidates.

GPS data provides more detailed info on vehicle daily usage

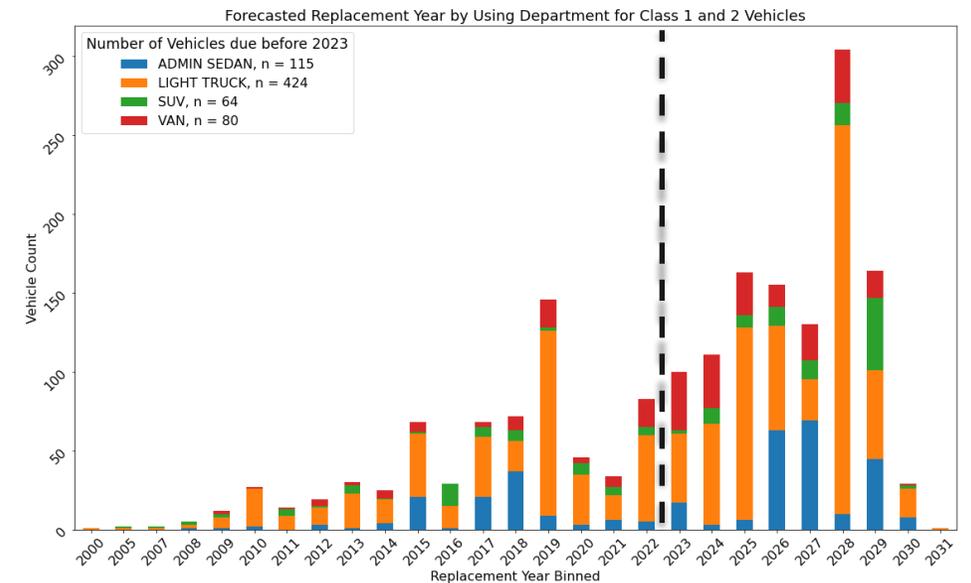
Candidates for replacement with EVs should be reviewed with the operating managers to ensure specific vehicle suitability – including maximum driving range requirements and energy used for loads during idle

Note: expanded versions of above figures provided in backup slides

## Comparing GPS to Fleet Aggregate Statistics

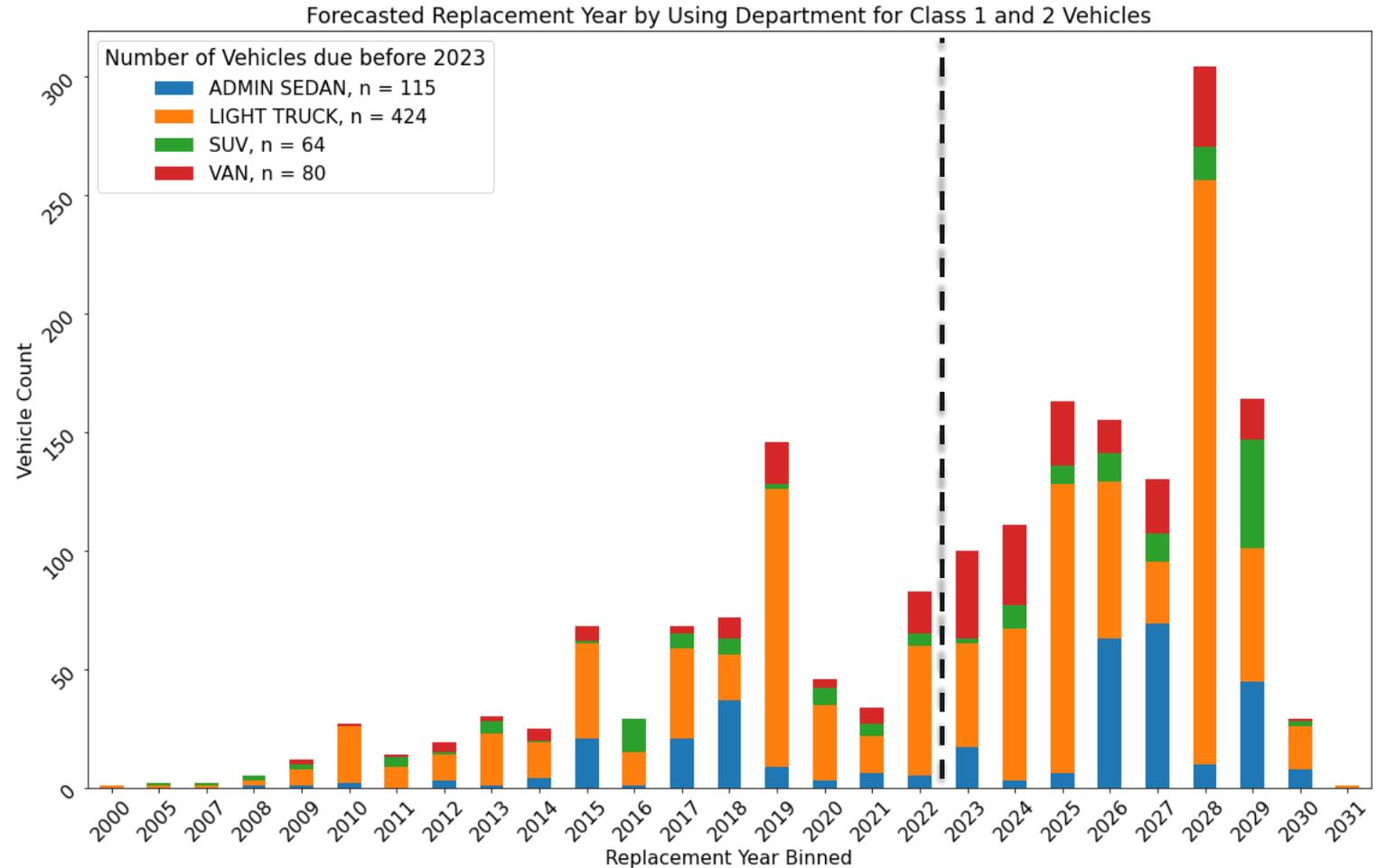


## Vehicles Scheduled for Replacement by Type



# Vehicle Replacement Schedule

- Dallas has established criteria for replacement/retirement of fleet vehicles, which determines forecasted replacement year
- There are nearly 700 class 1 & 2 vehicles in current fleet with scheduled replacements before 2023 (excluding DPD)
- Sizeable opportunities currently exist for replacement of Admin Sedans and Light Trucks with EV's

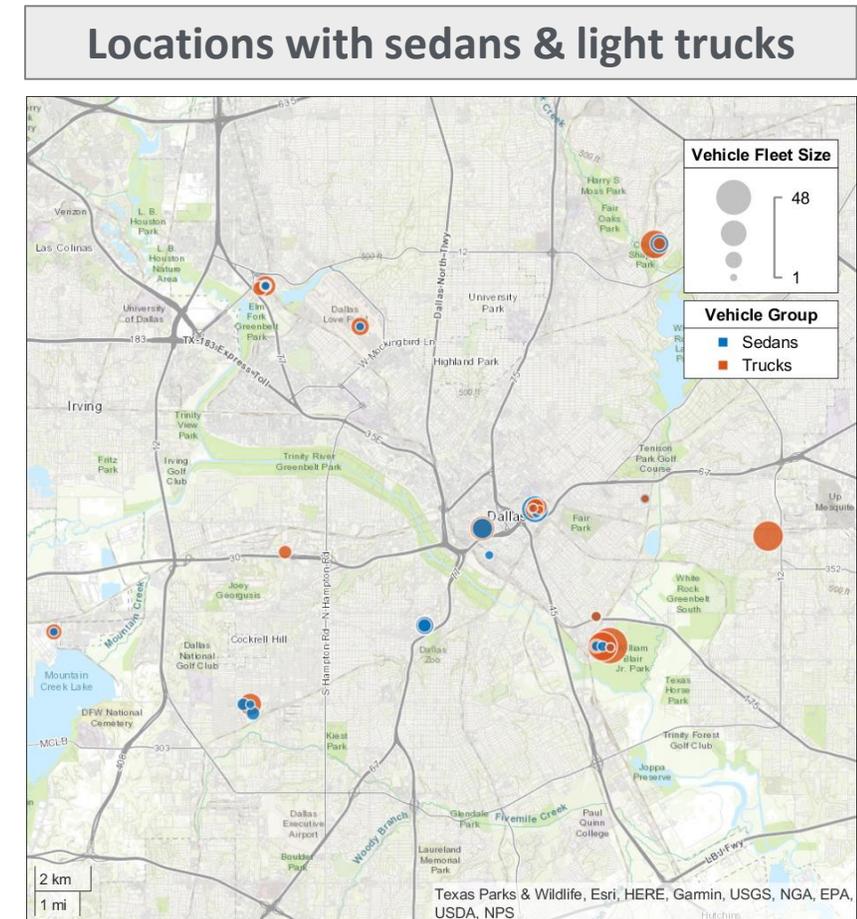


# Primary cost drivers for EVSE

- **Power level of unit (kW)**
  - Level 2 EVSE tend to be much cheaper than DCFC
- **Number of charging ports per unit**
  - Chargers with multiple connectors/charging ports tend to be cheaper (\$/port)
  - Software can enable simultaneous or sequential vehicle charging
- **Mounting type (pedestal or wall-mount)**
  - Wall-mounted units tend to be cheaper than pedestal-mounted, for hardware and installation
- **Internet connectivity**
  - Networked EVSE—enabling mobile app connectivity, point-of-sale capability and other features—increases EVSE costs
- **EVSE location and number of units installed**
  - Will have a large impact on construction and installation costs
- **EVSE costs are variable and can be challenging to predict**
  - It is recommended to purchase and install only the minimum charging level and capabilities needed



Figure 5. Ballpark cost ranges for different tiers of Level 2 EVSE units. Image from Kristina Rivenbark, New West Technologies.



# Vehicle and Infrastructure Cash Flow Evaluation (VICE) model

## Key Inputs & Outputs

### General Input Parameters

Number of vehicles

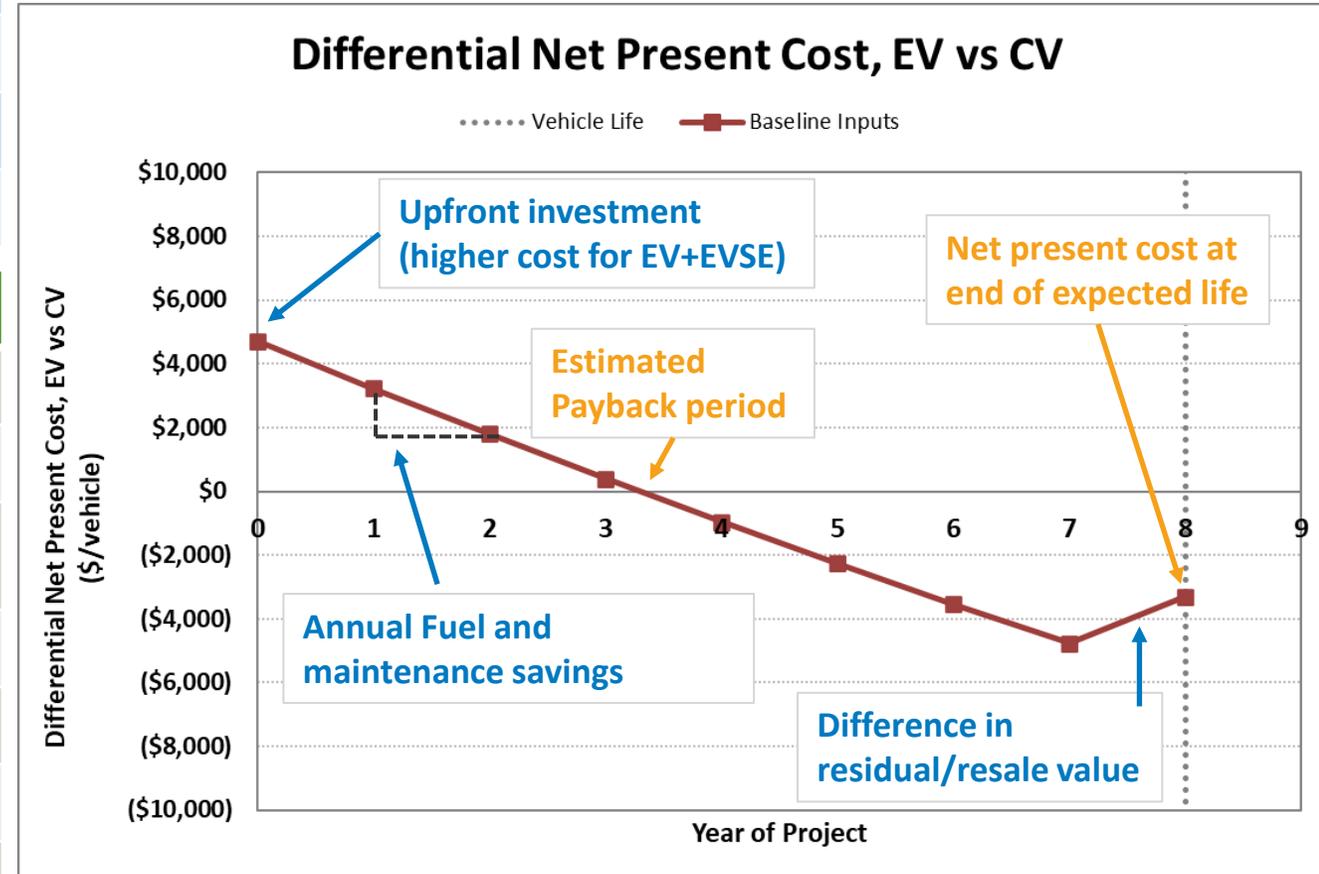
Annual VMT (miles)

Expected vehicle lifetime (years)

Rate of return, discount rate

Vehicle-Specific Inputs	Conventional	Electric
Purchase cost (\$)	✓	✓
Fuel efficiency (mpg, kWh/mi)	✓	✓
Fuel/electricity price (\$/gal, \$/kWh)	✓	✓
Maintenance costs (\$/mi)	✓	✓
Residual/salvage value (\$)	✓	✓
EVSE purchase cost (\$)		✓
EVSE installation cost (\$)		✓
Grants/rebates/tax incentives for EVs and EVSE (\$)		✓

### Example of VICE model results



# Baseline Inputs & Parametric Sweeps

## Light Duty Sedan



### Swept Parameters (see backup slides)

#### EV Cost

- \$28K vs. \$23K (base)

#### EV Rebates

- \$0 (baseline), \$2.5K, 7.5K, 15K per vehicle

#### EVSE Cost

- \$3K (baseline), \$2K, \$5K each

#### Daily VMT (miles/day)

- 24.5 miles, 38.5 miles, 46 miles

#### Gasoline Price

- \$2.36/gal (baseline), \$3/gal, \$4/gal

#### Extended vehicle life was also projected

- 8 –year vs. 12-year

	Parameter	Units	Conventional Vehicle	EV
Values from fleet vehicles to be replaced	Fleet size	#	10	
	Annual VMT	miles	6,382	
Values for replacement vehicle options	<b>Year/Make/Model</b>		<b>2022 Honda Civic LX</b>	<b>2022 Nissan Leaf S</b>
	Capital cost (MSRP)	\$/vehicle	\$23,365	\$28,425
	Fuel efficiency	mpg kWh/mi	34 mpg	112 MPGe 0.268 kWh/mi
	Fuel price	\$/gal \$/kWh	\$2.36/gal	\$1.71/gal \$0.052/kWh
	Maintenance cost	\$/mi	\$0.187	\$0.117
Model inputs estimated from other data sources	Salvage value	% of MSRP	~31%	~17%
	EVSE cost	\$/EVSE	n/a	\$1,000 + \$2,000
	Rebates	\$/vehicle	n/a	\$0

# Dallas Fleet EV Economics

## Light-Duty “Administrative Sedans”

### VICE Economic Model Results – Light Duty Sedans

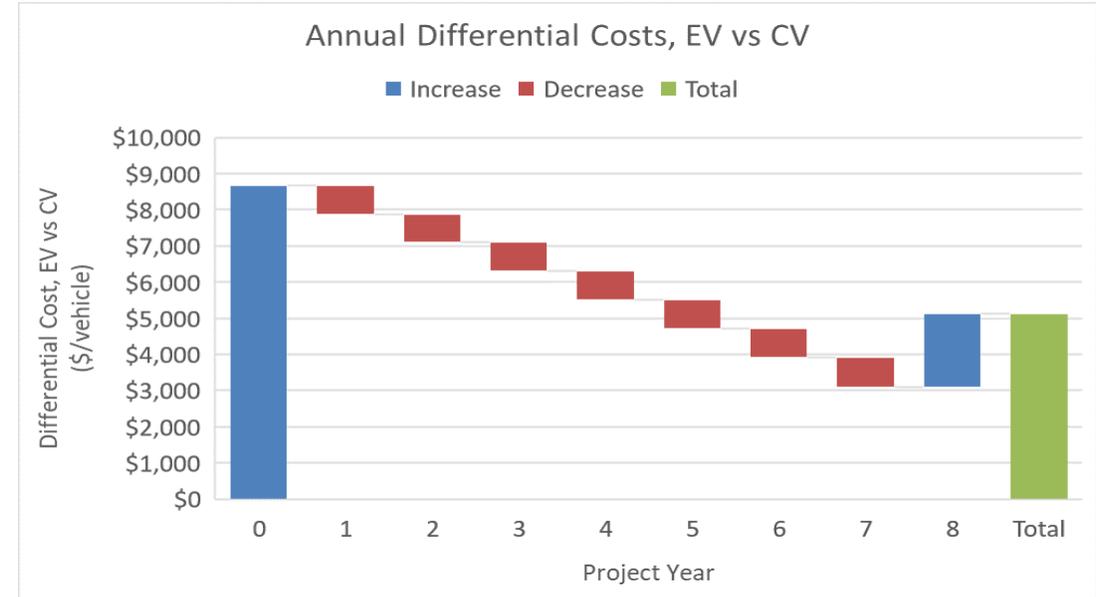
- The base 2022 Nissan Leaf Model S appears capable of meeting "most" driving range requirements at a lower price point – 40-kWh battery/149-mile EV range
- Baseline total net present cost at end of expected 8-year life = \$4,345 per vehicle ) – vehicle operation beyond year 8 continues to accrue savings
- Operational savings accumulate faster when replacing vehicles that are driven more – this can be done well within estimated Nissan Leaf S range of 149 miles

#### Scenarios to achieve lifetime “cost parity” include

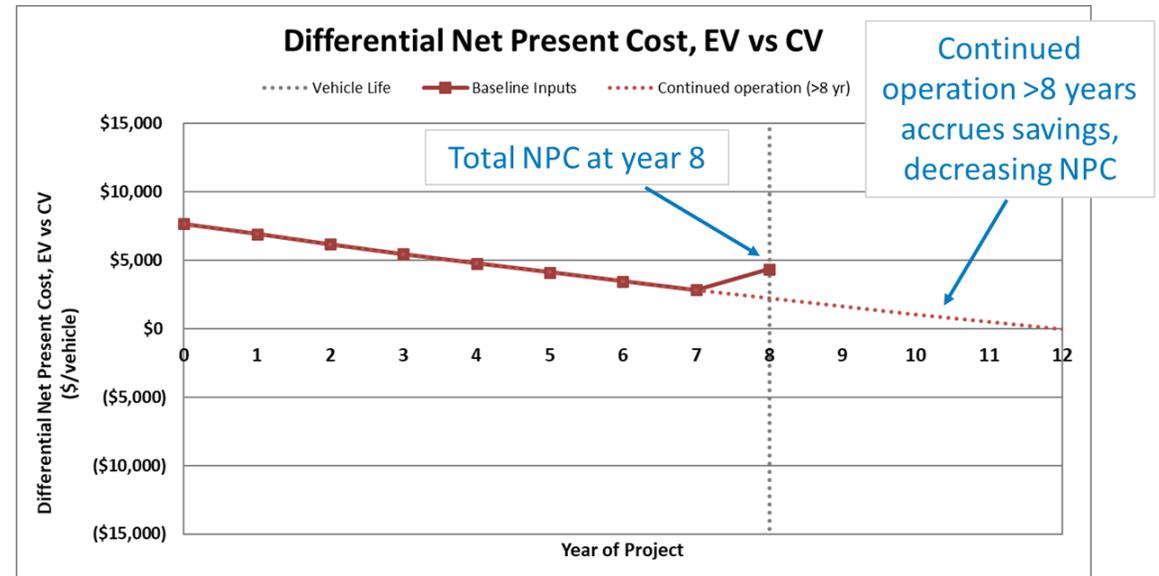
- Case 1: \$2.5K EV rebate
- Case 2: Lower EVSE cost (\$2.5K), higher gas price (\$3/gal) and VMT (8K miles/year)

Note: expanded versions of above figures provided in backup slides

### VICE Model Results – baseline lifetime costs & savings



### VICE Model Results – lifetime cost differential



# Baseline Inputs & Parametric Sweeps

## Pickup Trucks



Parameter	Units	CV	EV
Fleet size	#	9	
Annual VMT	miles	7,731	
<b>Year/Make/Model</b>		<b>2022 Ford F-150</b>	<b>2022 Ford F-150 Lightning</b>
Capital cost (MSRP)	\$/veh	\$31,685	\$41,669
Fuel efficiency	mpg kWh/mi	18 mpg	67 MPGe 0.426 kWh/mi
Fuel price	\$/gal \$/kWh	\$2.36/gal	\$1.71/gal \$0.052/kWh
Maintenance cost	\$/mi	\$0.247	\$0.154
Salvage value	% of MSRP	~31%	~18%
EVSE cost	\$/EVSE	n/a	\$1,000 + \$2,000
Rebates	\$/vehicle	n/a	\$0

Values from fleet vehicles to be replaced

Values for replacement vehicle options

Model inputs estimated from other data sources

### Swept Parameters (see backup slides)

#### Daily VMT (miles/day)

- 30 miles (baseline), 38.5 miles, 46 miles

#### Gasoline Price

- \$2.36/gal (baseline), \$3/gal, \$4/gal

#### Extended vehicle life was also projected

- 8 –year vs. 12-year

# Dallas Fleet EV Economics

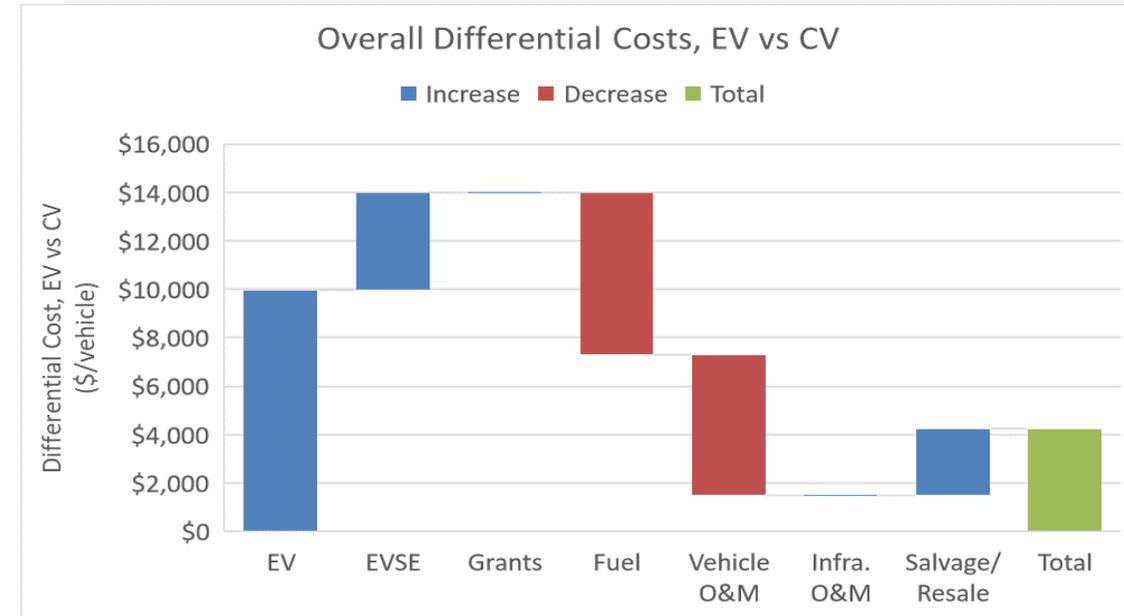
## Light-Duty Pickup Trucks

### VICE Economic Model Results – Light Duty Pickups

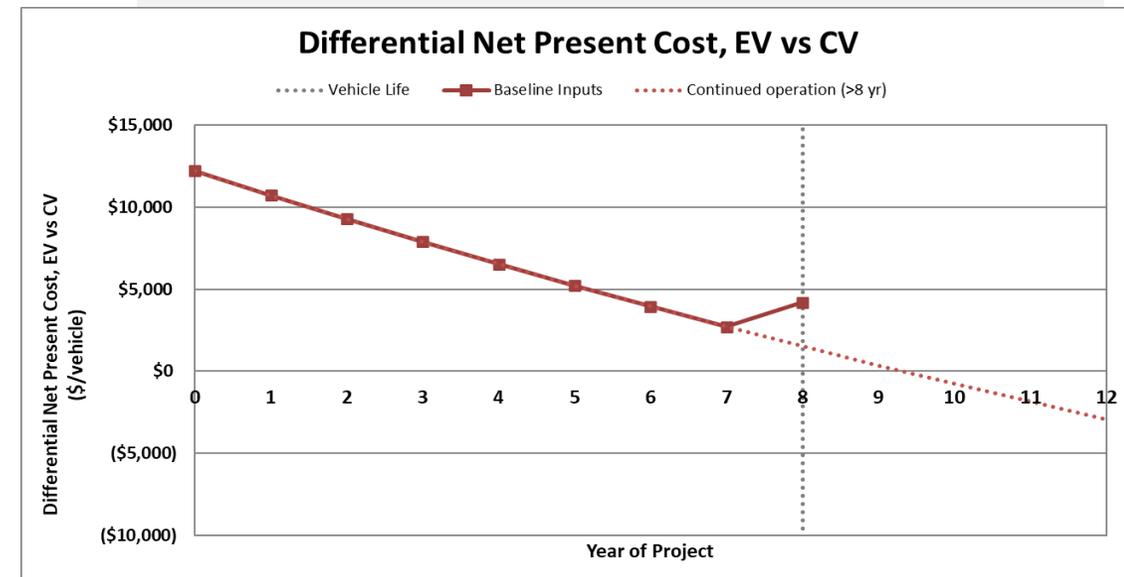
- The 2022 Ford F-150 Lightning Pro appears to be capable of meeting “majority” of driving range requirements at a lower price point – 98-kWh battery/230-mile EV range
- Baseline net present cost at end of 8-year life ~ \$4,202 per vehicle – vehicle operation beyond year 8 continues to accrue savings
- Annual Operational savings accumulate faster for EV pickups than EV sedans – due to higher relative energy savings
- Operational savings accumulate faster when replacing vehicles that are driven more – this can be done well within estimated Ford F150 Lightning Pro EV driving range of 230 miles

*Note: expanded versions of above figures provided in backup slides*

### VICE Model Results – baseline lifetime costs & savings



### VICE Model Results – lifetime cost differential

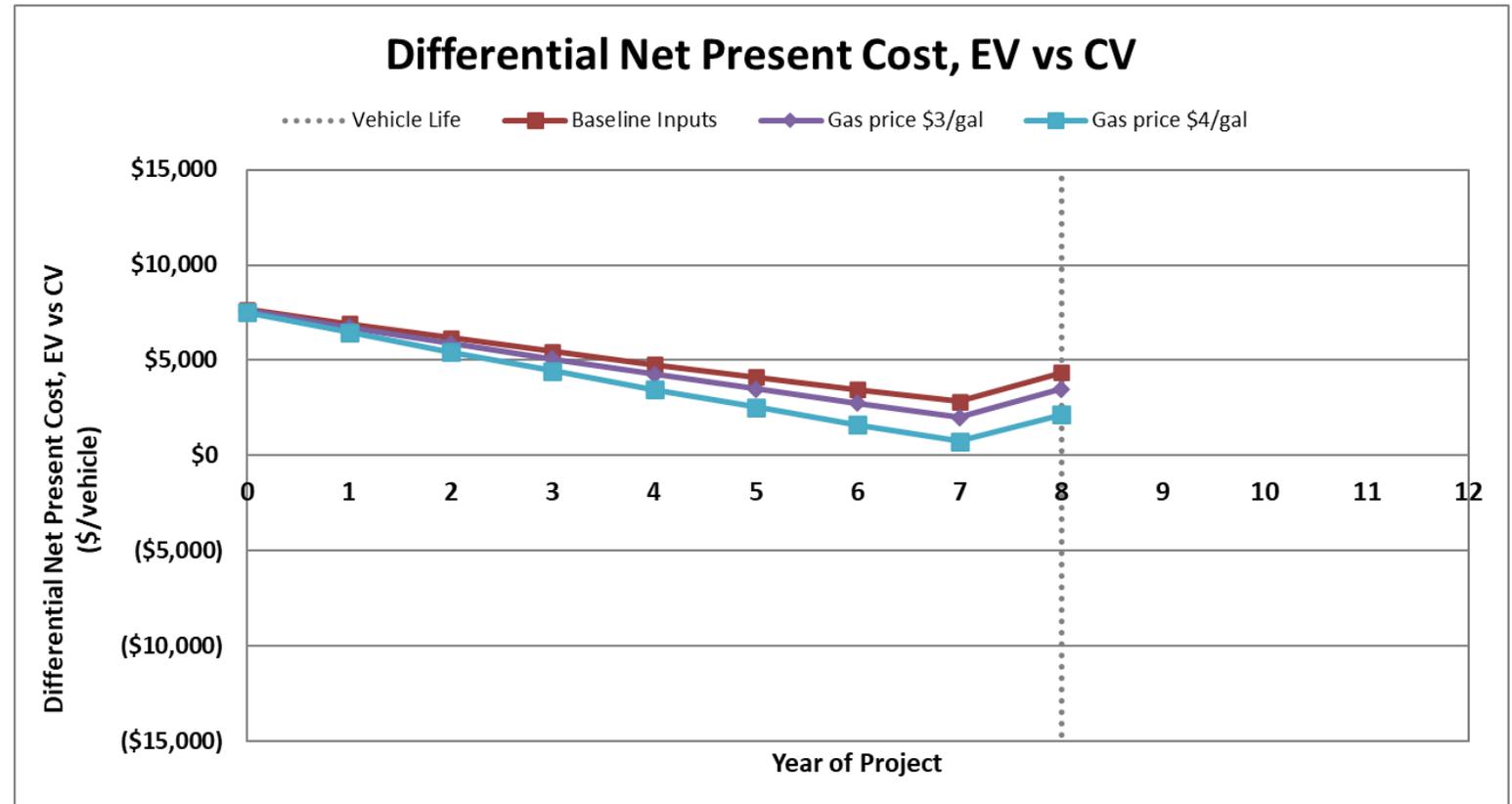


# VICE Model Results – Impact of Fuel Prices

## Impact of gas price

- Baseline gas price = \$2.36/gal (2021 Dallas avg.)
- Gas price \$3/gal represents small increase
- Gas price \$4/gal represents larger increase (similar to current gas prices)

**Takeaway:** Higher gasoline fuel prices (relative to electricity costs) impact rate of savings and payback period for the EV option



**Electric Vehicle**

2022 Nissan Leaf S



**Conventional Vehicle**

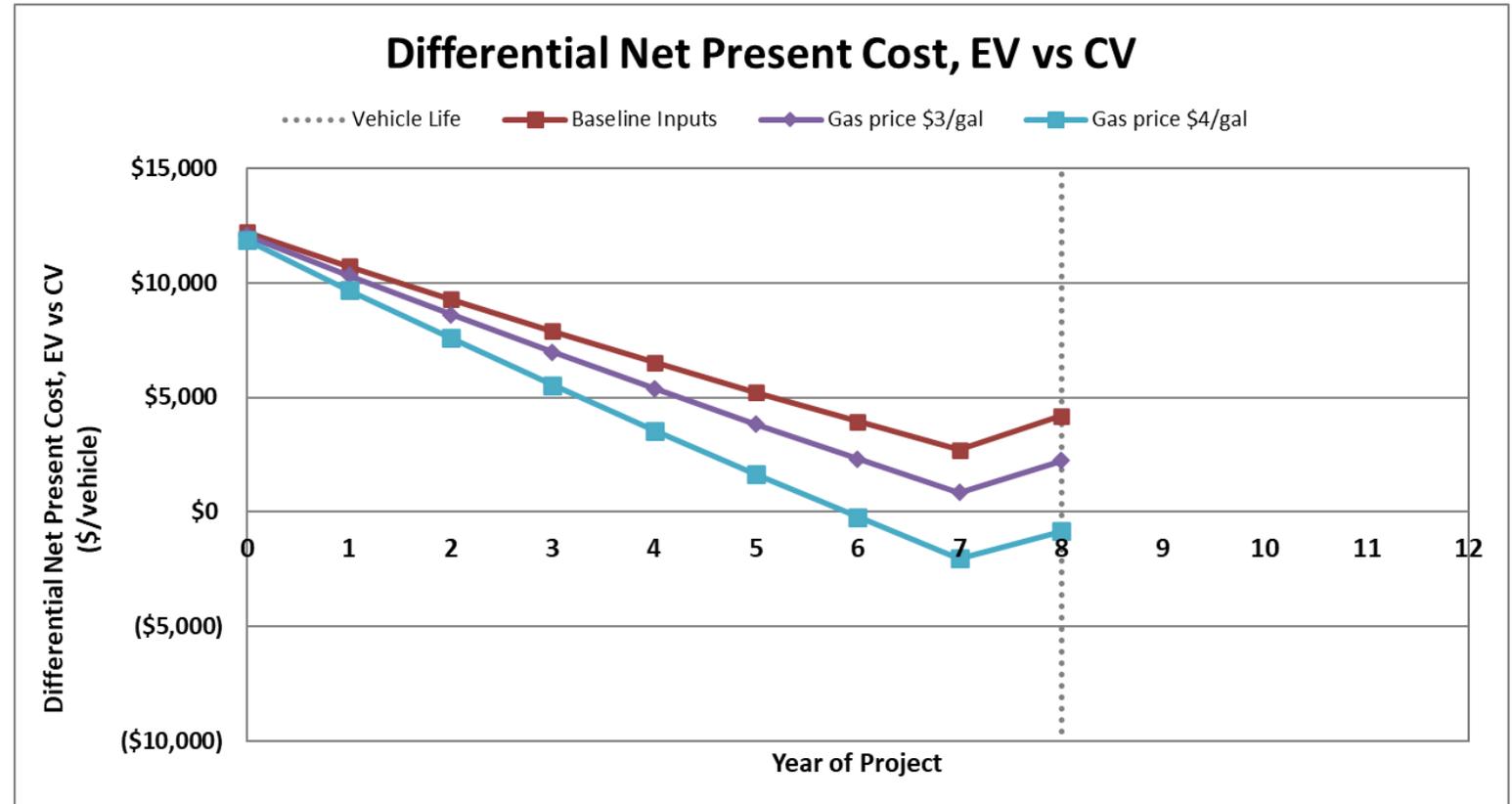
2022 Honda Civic LX

# VICE Model Results – Scenario 2 (trucks)

## Impact of gas prices

- Baseline gas price = \$2.36/gal (2021 Dallas avg.)
- Gas price \$3/gal represents small increase
- Gas price \$4/gal represents larger increase (similar to current gas prices)

**Takeaway:** Higher gasoline fuel prices (relative to electricity costs) impact rate of savings and payback period for the EV option



**Electric Vehicle**

2022 Ford F-150 Lightning



**Conventional Vehicle**

2022 Ford F-150

# VICE Model Summary

- The VICE model provides a comparison of project economics and investigate scenarios for a purchase of EVs and EVSE compared to a purchase of conventional vehicles
- Upfront project costs have a large impact on overall economics
  - Relative purchase price of EV compared to comparable CV
  - Equipment and installation costs of EVSE for EV fleet being purchased
    - Note: EVSE costs are highly variable depending on the specific equipment needs and unique circumstances of the charging location
  - The value of GHG emissions reductions and air quality improvements should be considered
- Financial incentives such as grants, rebates and tax credits can have a large impact on project economics
  - Numerous programs exist for federal and state funding for EVs and for EVSE
- EVs can accrue savings from lower per-mile fuel and maintenance costs compared to CVs, but these costs carry some uncertainty
  - Low fixed electricity price for Dallas is very advantageous for vehicle electrification
- Lead times for EVSE (procurement, permitting, site preparation/construction, installation) can be longer than lead times for EVs
  - Begin process to establish charging infrastructure to enable deployment of EV fleets

# Estimation of Cost per ton GHG Offset

*assuming zero-carbon “green” electricity*

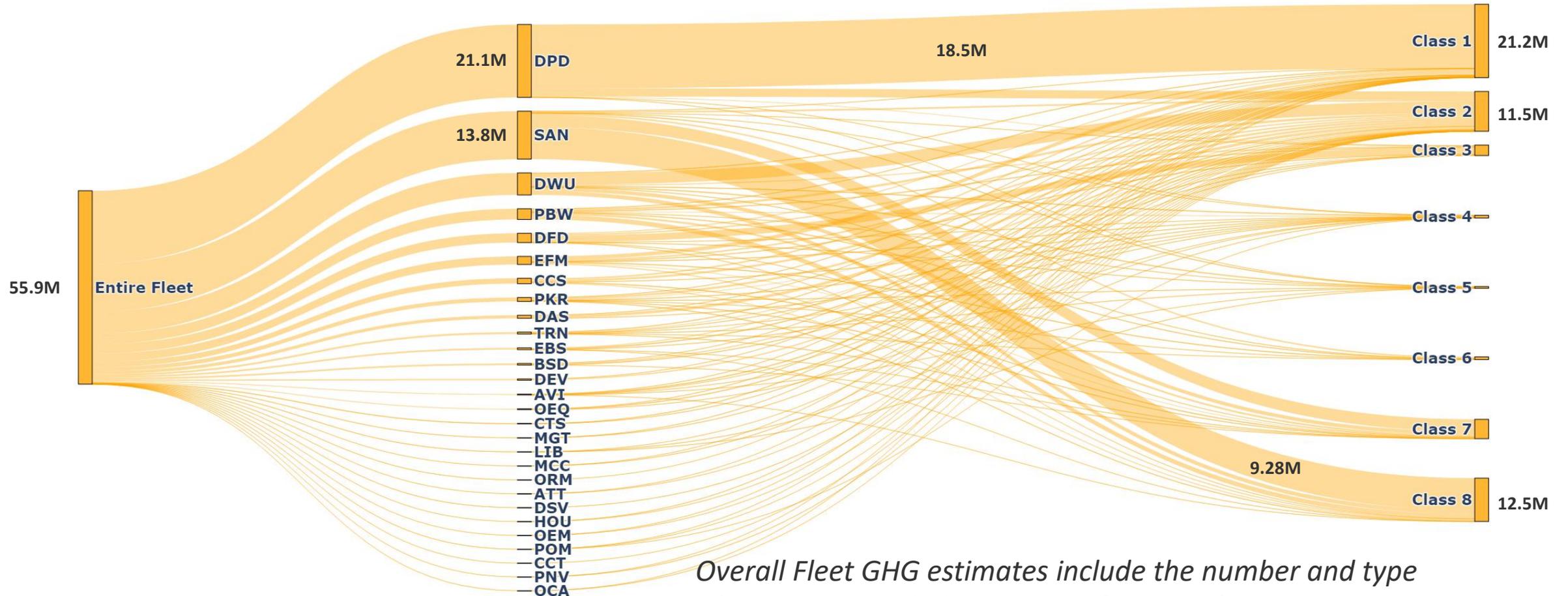
Parameter	Units	Baseline Scenario 1 (sedans)	Baseline Scenario 2 (light trucks)
VICE model total project cost per vehicle	\$/vehicle	4,345	4,202
Lifetime emissions reduction (EV vs CV) per vehicle	metric ton CO <sub>2</sub> e/vehicle	16.03	36.67
Project cost per metric ton CO <sub>2</sub> e to achieve lifetime emissions reduction	\$/metric ton CO <sub>2</sub> e	271	114

- The VICE model estimates that purchasing EVs instead of CVs could reduce GHG emissions by
  - 16.03 metric tons CO<sub>2</sub>e per light-duty sedan over an eight-year expected lifetime
  - 36.67 metric tons CO<sub>2</sub>e per light-duty pickup truck over an eight-year expected lifetime
- Based on the per-vehicle lifetime costs baseline assumptions, GHG emissions reductions are estimated to be
  - \$271 per metric ton CO<sub>2</sub>e for the light-duty sedan scenario
  - \$114 per metric ton CO<sub>2</sub>e for the light-duty pickup truck scenario
- **Any improvement in EV cost will lower the cost to achieve GHG reductions**
  - Achieving EV **cost parity** (through grants or other means discuss previously) results in GHG emissions savings estimated above at no additional cost

# Dallas Fleet Annual GHG Emission Estimates

(Excluding vehicles in fleet less than 1 year)

Annual Average GHG Emission Estimates [tonneCO<sub>2e</sub>]



*Overall Fleet GHG estimates include the number and type of vehicles in each department, fuel type (gasoline or diesel), vehicle efficiency, and annual fuel consumption*

# Recommendations/Next steps

## 1. Deploy commercially available LD EV sedans and light trucks and charging infrastructure

- Consider factors from VICE model for each purchase decision to replace retired vehicles
- Meet with individual departments to review EV replacement recommendations, charging infrastructure and review any special requirements
- Place EVs in relatively high-mileage service (within EV range) to maximize payback
- Apply for federal and state grants/rebates – working with DFW Clean Cities and others
- Begin process to install EVSE as soon as possible (working with utility)
- Track cost and performance data on EVs and EVSE to inform future purchase decisions

# Recommendations/Next steps

## 2. Test/demonstrate Medium- and Heavy-duty EVs in Dallas fleet service

- Medium- and heavy-duty vehicles consume a significant portion of energy within the fleet (e.g., class 8 refuse haulers)
- MD/HD EVs are emerging – but in some case products/markets are not fully developed
- Collect detailed in-use data on high priority fleet vehicles to characterize duty cycles and energy requirements to evaluate electrification potential
- Hydrogen fuel cell vehicles may be suitable alternatives for vehicle types/vocations that are more challenging to replace with battery-electric vehicles

## 3. Coordinate and seek lessons learned from others

- Clean Cities Coalitions – DFW Clean Cities and national experience
- Transit industry – including DART
- DFW Airport is developing similar ZEV strategies
- Other municipal fleets operating EVs – e.g., refuse, police, fire

# Thank You!

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[www.nrel.gov/transportation](http://www.nrel.gov/transportation)

***We would like to respectfully acknowledge input and guidance from Dallas Fleet Management and Office of Environmental Quality & Sustainability, Dallas Environmental Commission, and DFW Clean Cities***

- Donzell Gipson, Susan Alvarez, Lori Clark – and many other contributors

## **NREL Center for Integrated Mobility Sciences**

Ken Kelly, Chief Engineer for Commercial Vehicle Electrification

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[cory.sigler@nrel.gov](mailto:cory.sigler@nrel.gov)

Matt Jeffers, Senior Commercial Vehicle Research Engineer

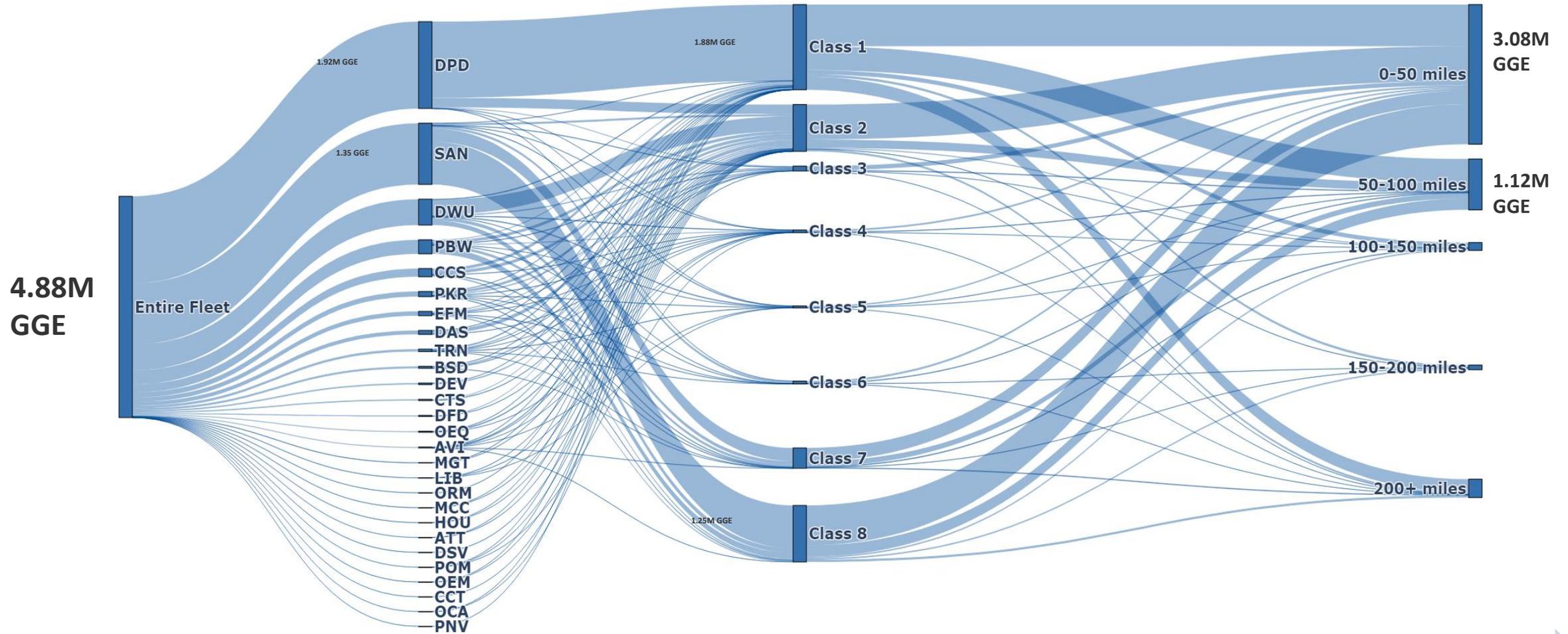
[matthew.jeffers@nrel.gov](mailto:matthew.jeffers@nrel.gov)



# Backup Slides

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# Annual Energy Consumption by Department and Vehicle Type



Entire Fleet Annual Fuel Consumption

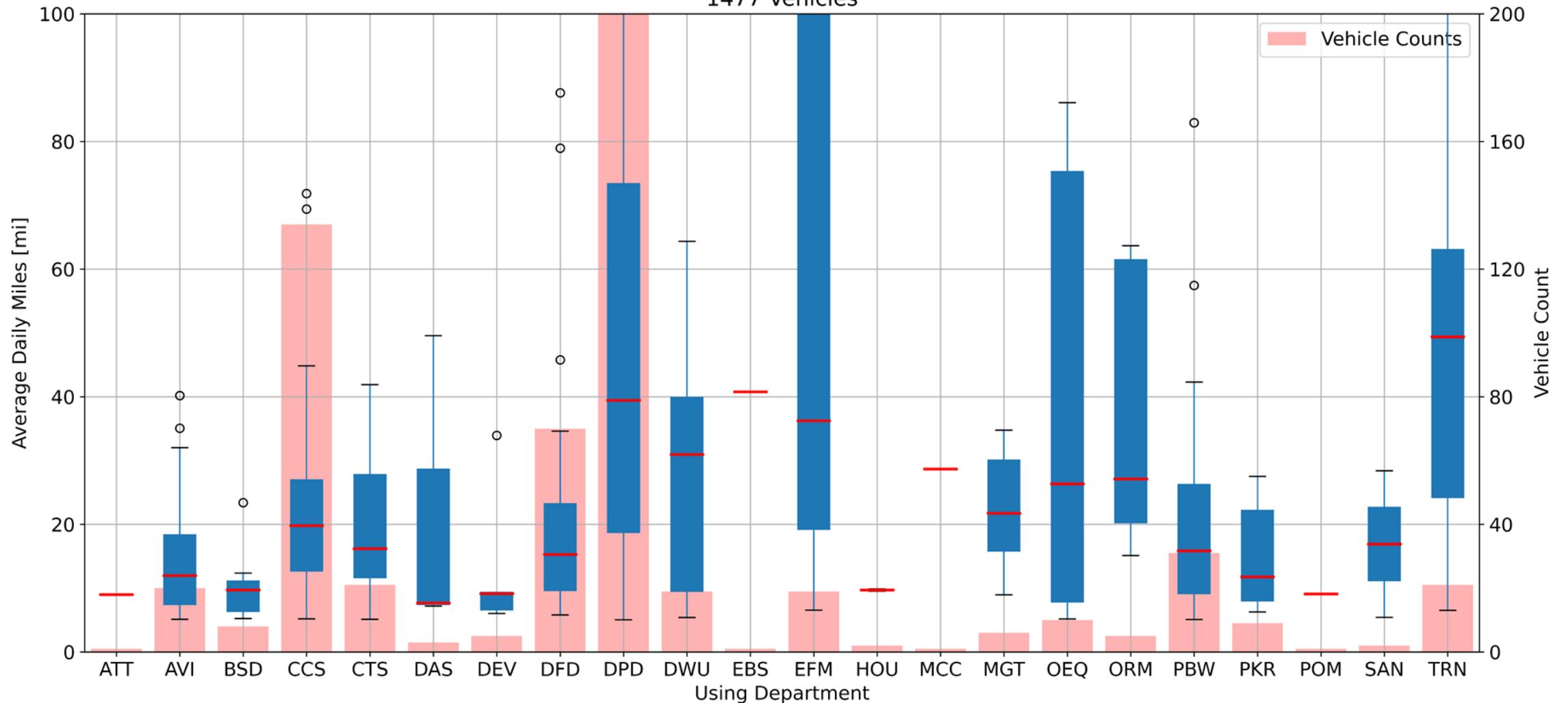
Annual Fuel Use by Department

Annual Fuel Use by Vehicle Weight Class

Annual Fuel Use by Daily Mileage Driven

# Fleet Inventory Usage Statistics

Average Daily Miles and Vehicle Counts by Department  
1477 Vehicles



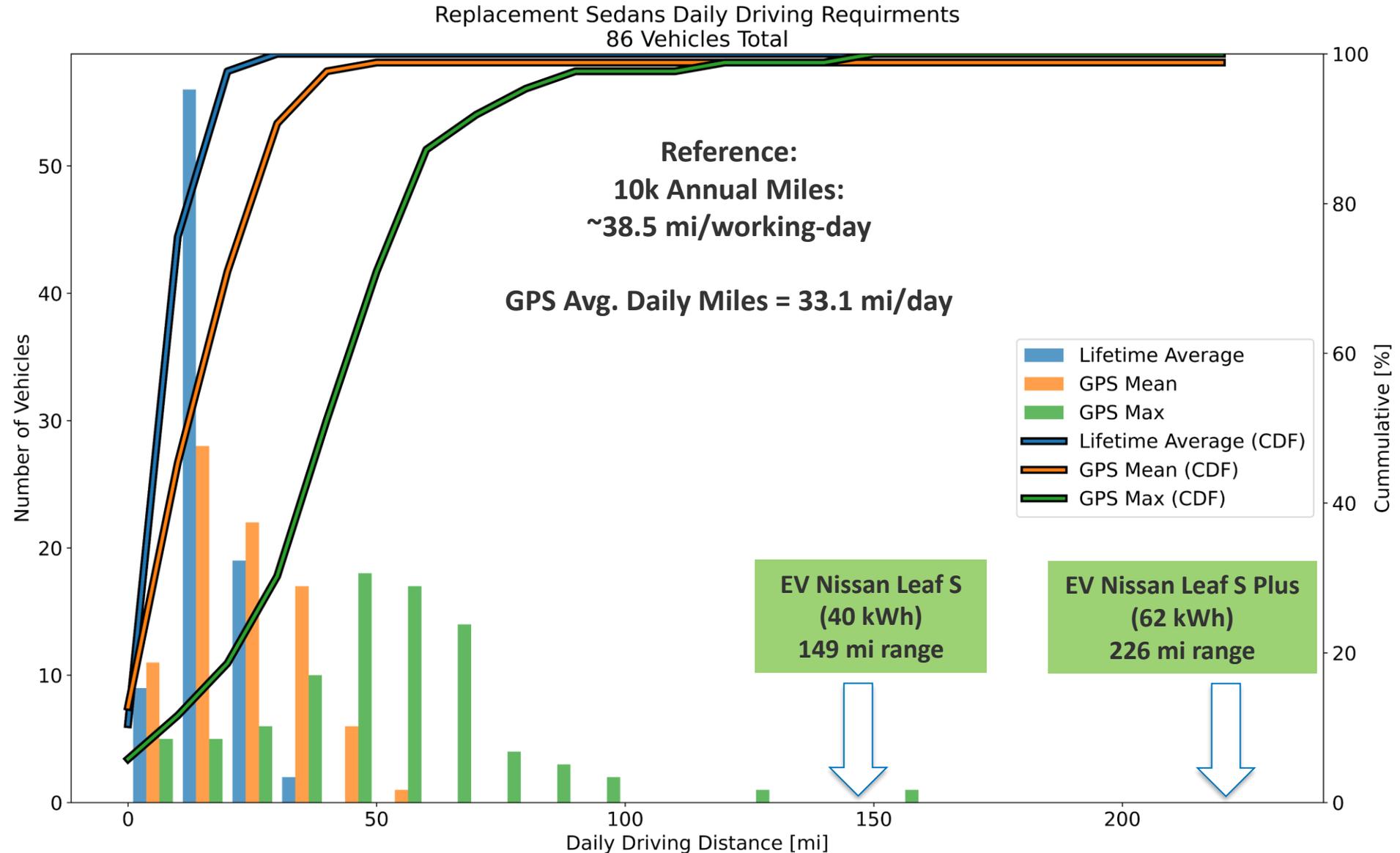
# Comparing GPS Data to Aggregate Fleet Averages

– Admin Sedans –

Graph shows comparison of GPS daily driving distances to fleet average stats for 86 Admin Sedans scheduled for replacement (with GPS units)

GPS average daily miles (orange) are somewhat higher than fleet aggregated data (blue)

Maximum daily miles traveled from GPS are higher than averages, but still within the driving range of Nissan Leaf EV



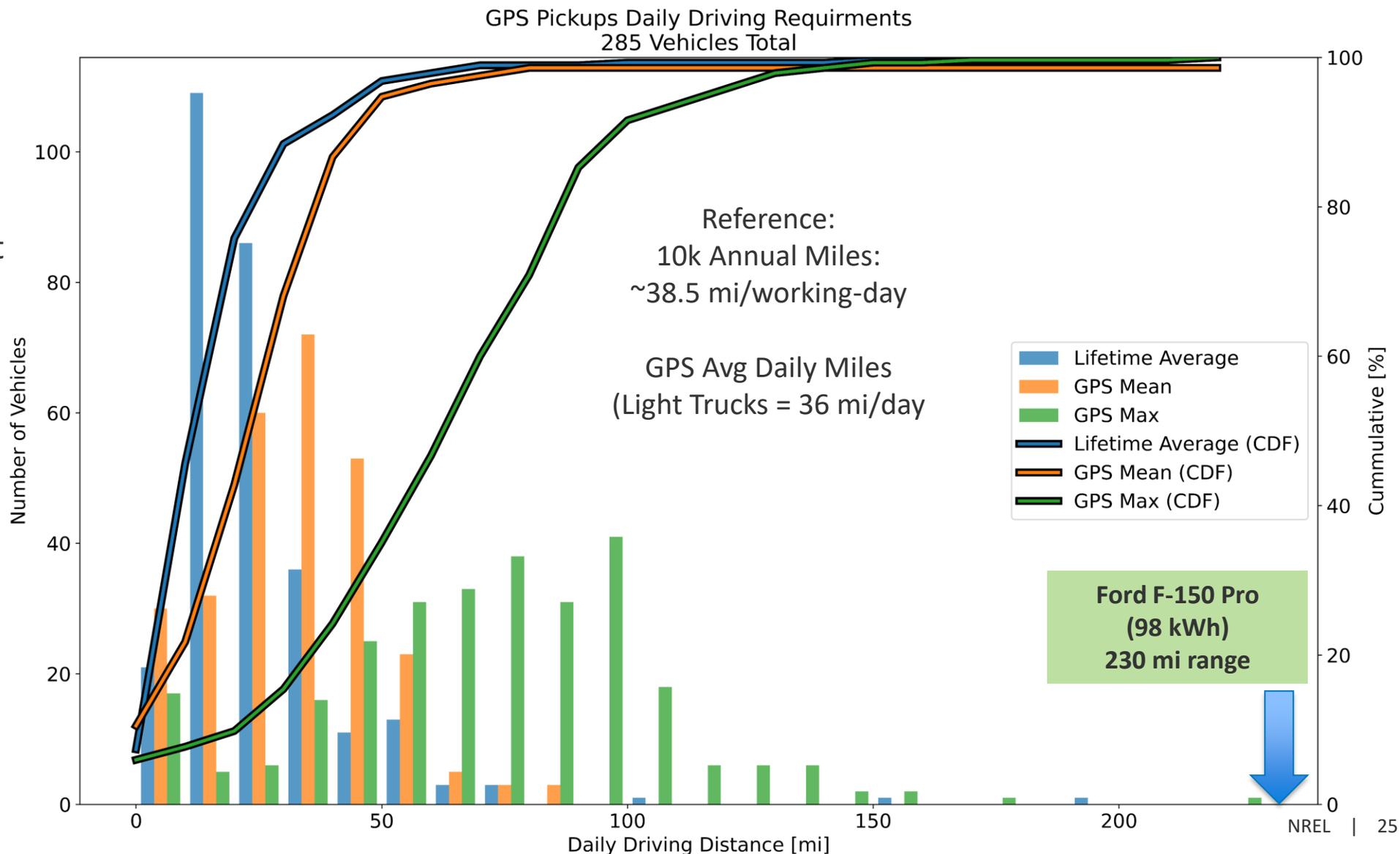
# Comparing GPS Data to Aggregate Fleet Averages

– Light Trucks –

Graph shows comparison of GPS daily driving distances to fleet average stats for 285 Light Trucks scheduled for replacement (with GPS units)

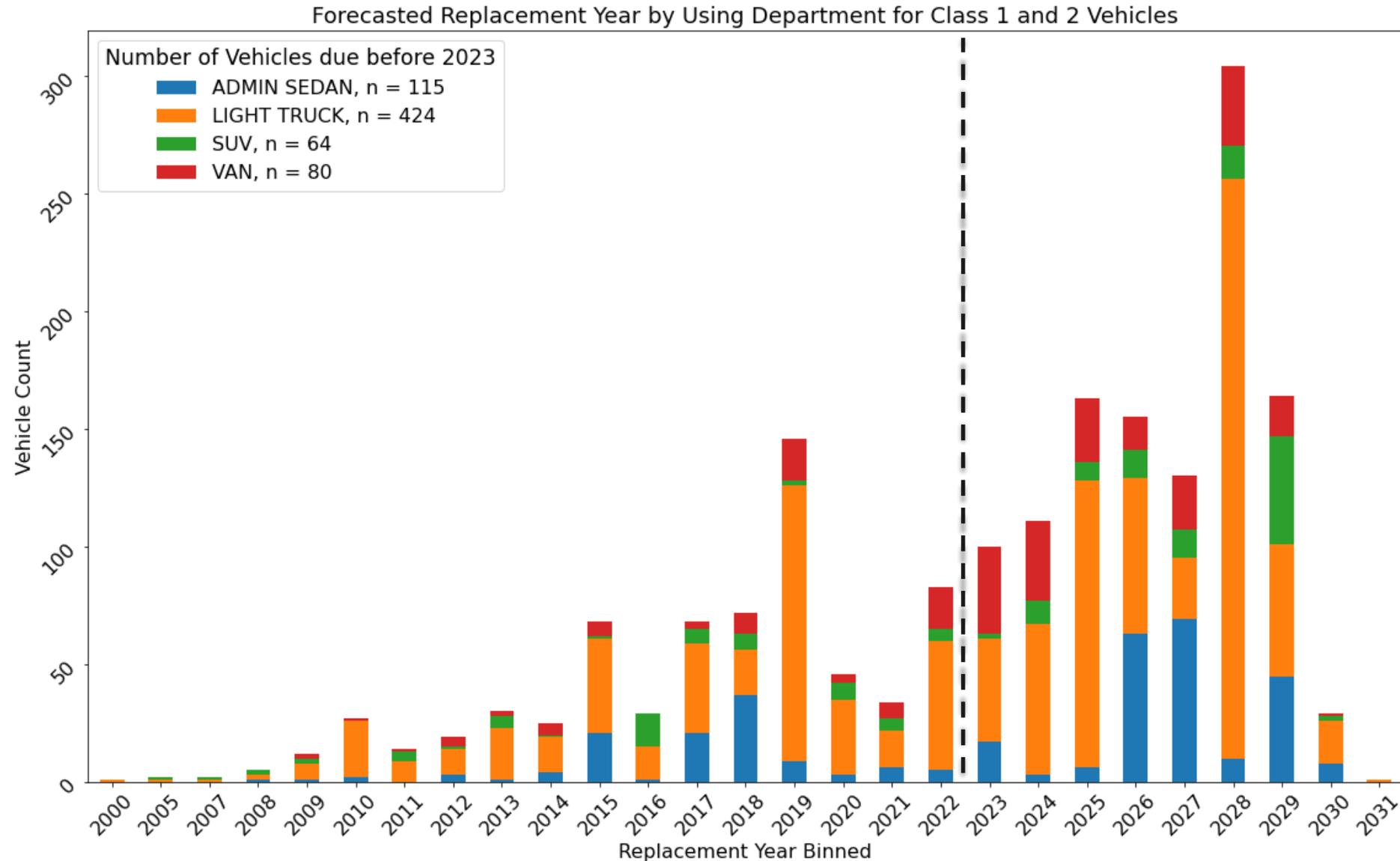
GPS average daily miles (orange) are somewhat higher than fleet aggregated data (blue)

Maximum daily miles traveled from GPS are higher than averages, but still within the driving range of Ford F150 EV



# Dallas Fleet

## Vehicles Scheduled for Replacement by Type



# VICE Model Sources for Key Inputs

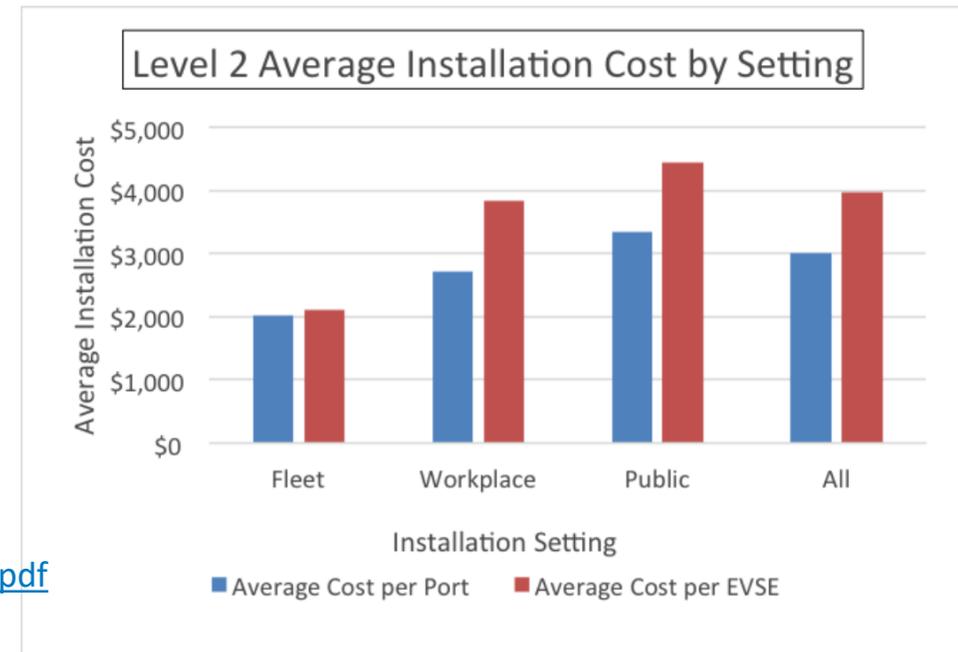
	Parameter	Units	Conventional Vehicle (CV)	Electric Vehicle (EV)
Values from fleet vehicles to be replaced	Fleet size	#	Size of subfleet (filtered from fleet inventory)	
	Annual VMT	miles	Average annual VMT of subfleet	
Values for replacement vehicle options	Year/Make/Model		MY 2022 CV	MY 2022 EV
	Capital cost	\$/veh	MSRP	MSRP
	Fuel efficiency	mpg kWh/mi	EPA avg for MY 2022 CV	EPA avg for MY 2022 EV
Model inputs estimated from other data sources	Fuel price	\$/gal \$/kWh	Dallas fuel station 2021 average price	Dallas average electricity price
	Maintenance cost	\$/mi	Average of subfleet	Estimated from ANL vehicle TCO report
	Salvage value	% of MSRP	Estimated from ANL vehicle TCO report	Estimated from ANL vehicle TCO report
	EVSE cost	\$/EVSE	n/a	Estimated equipment + installation cost
	Rebates	\$/vehicle	n/a	Assume \$0

# EVSE Cost Considerations

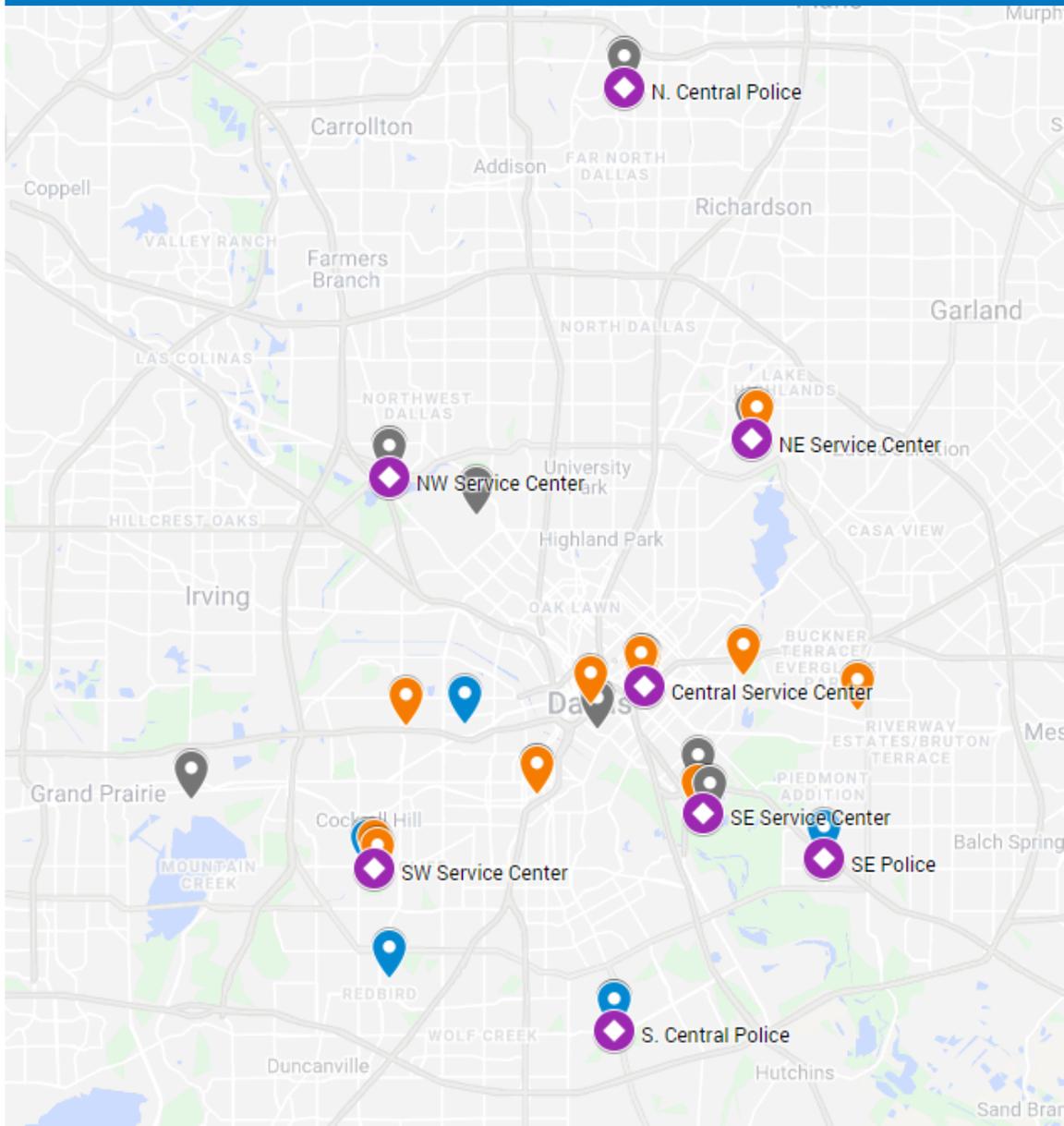
- EVSE costs are variable and can be challenging to predict
  - It is recommended to purchase and install only the minimum charging level and capabilities needed
- Many light-duty vehicles in the Dallas fleet have sufficient dwell time during non-working hours to utilize Level 2 chargers
  - Co-located, overnight parking
  - Some vehicles could share multiport chargers
- Dallas chargers likely will not need internet connectivity or point-of-sale system, as needed with public chargers
  - Could use RFID to restrict use to city employees



Figure 5. Ballpark cost ranges for different tiers of Level 2 EVSE units. Image from Kristina Rivenbark, New West Technologies.



# Dallas Parking & Fueling Locations



**Parking location is an important consideration in selecting vehicles for EV replacement and installing EVSE**

- Map shows fuel island locations and all parking locations listed in Dallas vehicle inventory
- Separated DPD vehicle locations from non-DPD locations
- Identified locations with 5 or more vehicles, for class 1 and for class 2

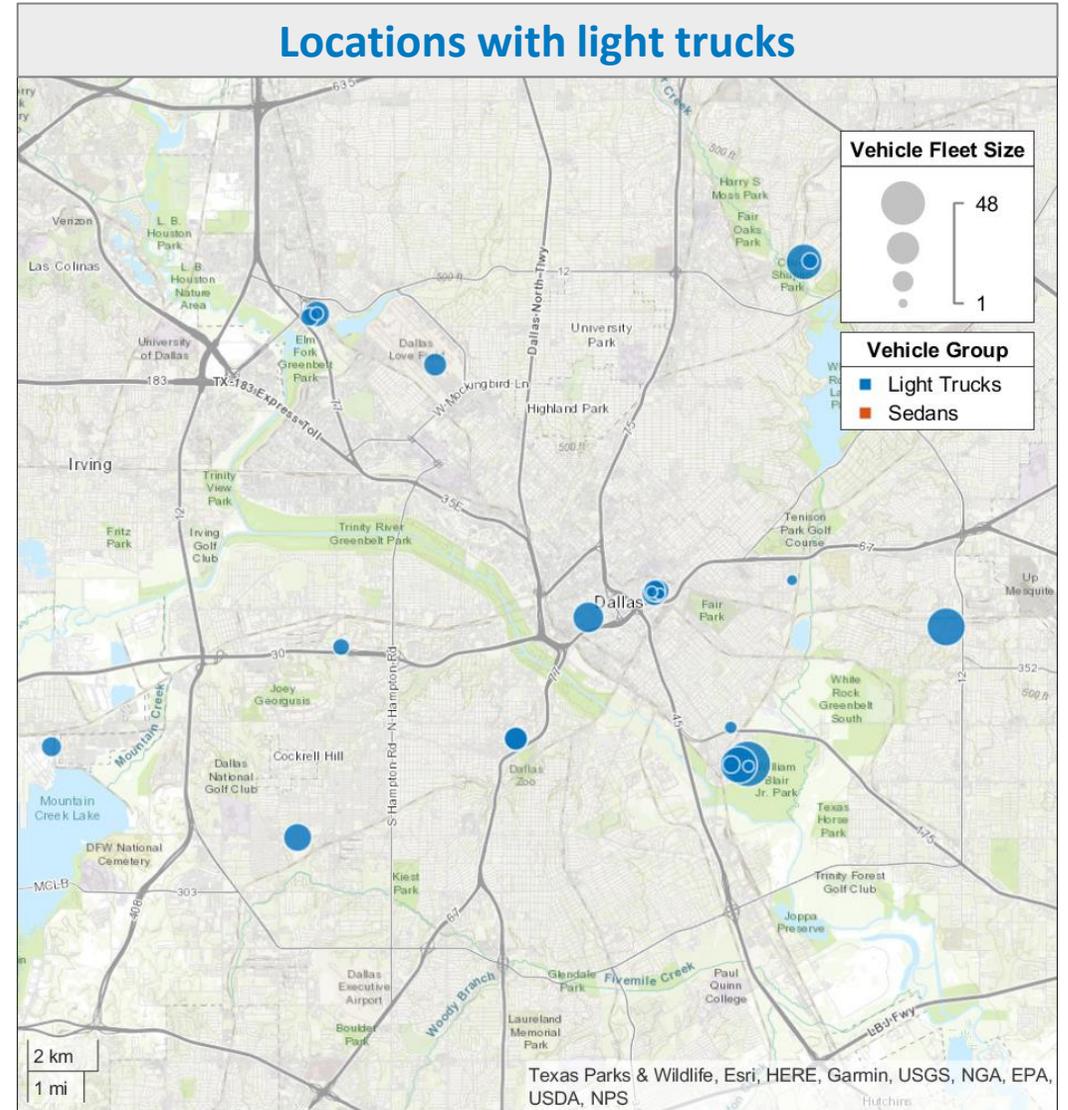
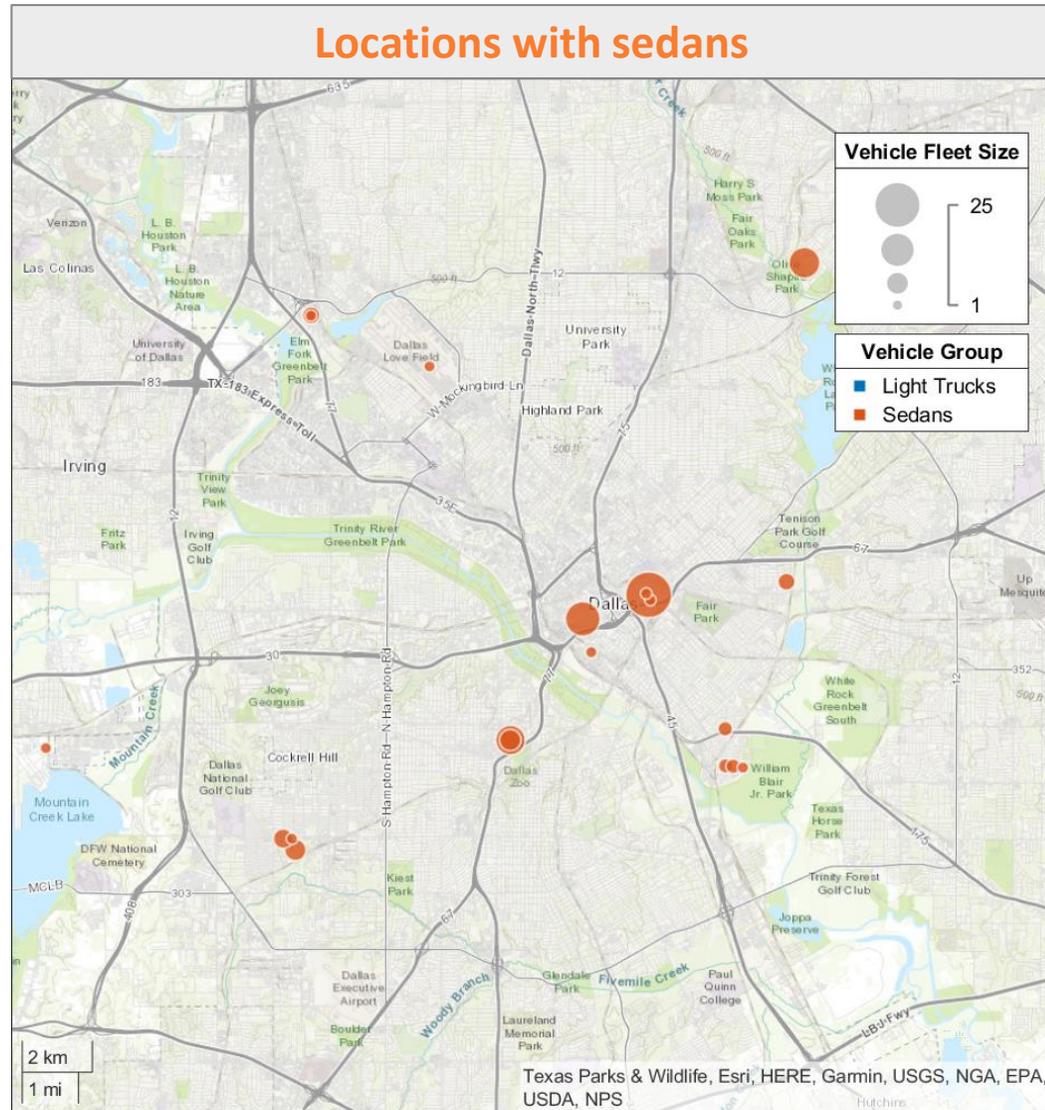
**Purple** pins – Fueling locations

**Blue** pins – DPD parking locations

**Orange** pins – all non-DPD parking locations

**Gray** pins – other parking (need additional info)

# Parking Locations – Sedans & Light Trucks



# VICE Model Primary Inputs – Scenario 1



2022 Honda Civic	LX (base model)
MSRP [\$]	\$23,365
Fuel efficiency [mpg]	34



2022 Nissan Leaf	S (base model)	S Plus (upgrade)
MSRP [\$]	\$28,425	\$33,425
ESS [kWh]	40	62
Range [mi]	149	226
Fuel efficiency [kWh/mi]	0.268	0.274
MPGe	112	104

<https://www.caranddriver.com/honda/civic>

<https://www.caranddriver.com/nissan/leaf>

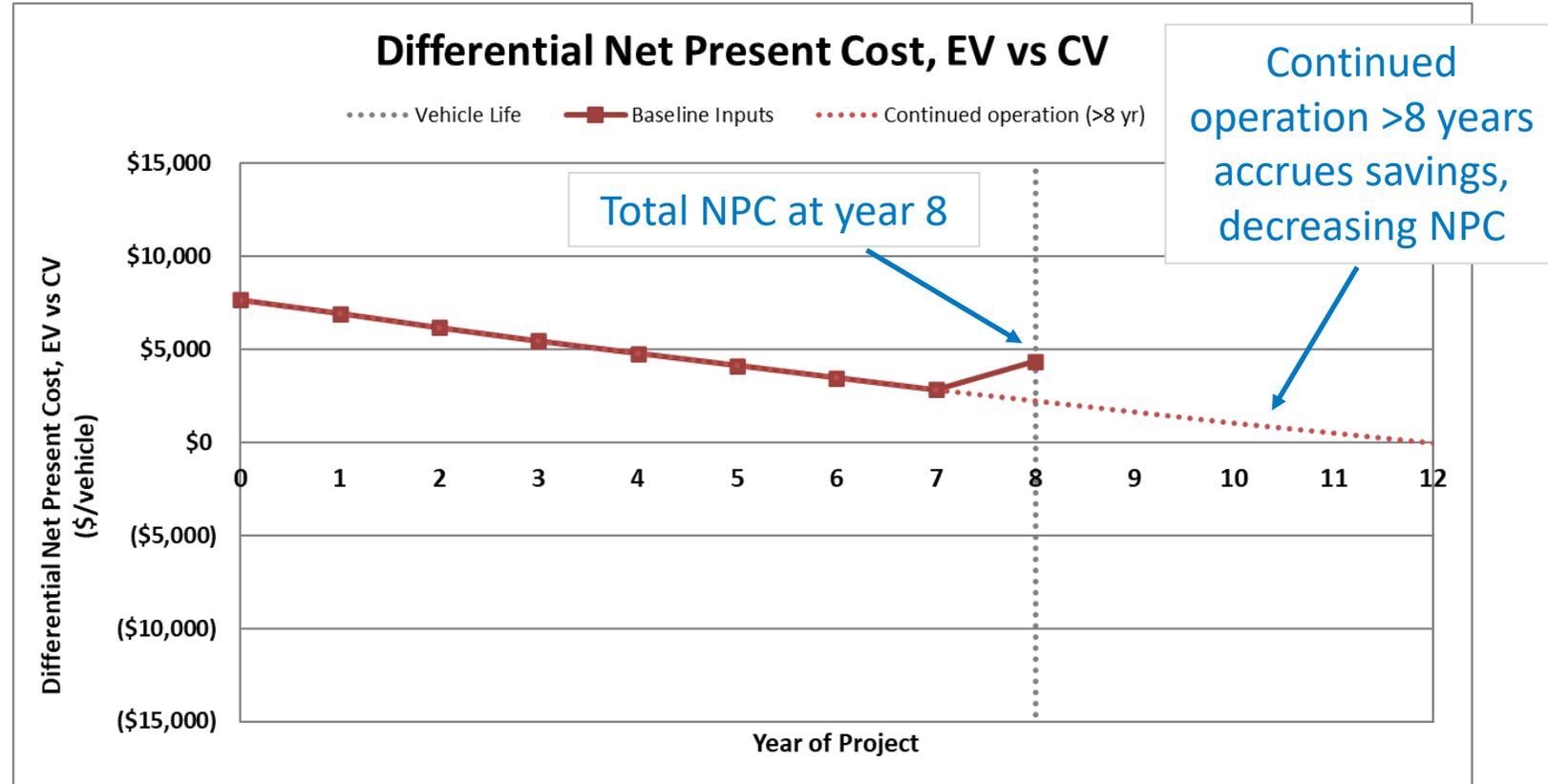
# VICE Model Results – Scenario 1 (sedans)

## “Baseline” inputs

- EV cost = \$28,425 ea.
- EVSE cost = \$3,000 ea.
- Rebates = \$0
- Annual VMT = 6,382 mi
- Gas price = \$2.36/gal

## **Key Points from baseline analysis:**

- EV+EVSE upfront investment is ~\$8k more than base sedan
- Total net present cost at end of expected life (year 8) = \$4,345 per vehicle (additional cost for EV option)
- Current projections for EV end-of-life salvage value are lower than for conventional vehicle (net incremental cost)
- EV operation beyond year 8 continues to accrue savings



**Electric Vehicle**

2022 Nissan Leaf S



**Conventional Vehicle**

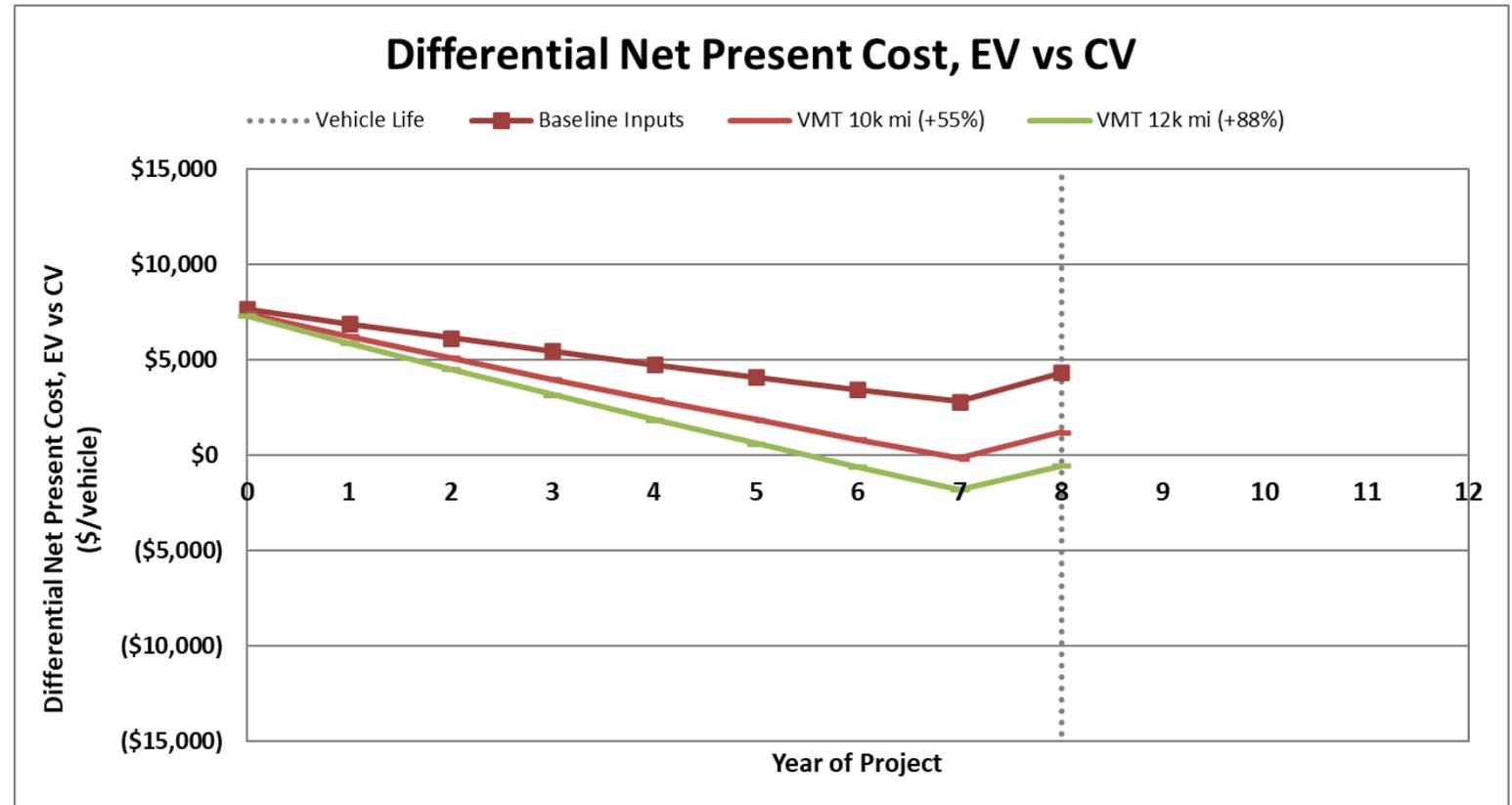
2022 Honda Civic LX

# VICE Model Results – Scenario 1 (sedans)

## Impact of annual vehicle miles traveled (VMT)

- Baseline VMT = 6,382 mi  
~ 24.5 miles/day
- VMT 10k mi represents approx. 55% increase  
~ 38.5 miles/day
- VMT 12k mi represents approx. 88% increase  
~ 46 miles/day

**Takeaway:** Operational savings accumulate faster when replacing vehicles that are driven more (well within estimated Nissan Leaf S range of 149 miles)



**Electric Vehicle**  
2022 Nissan Leaf S



**Conventional Vehicle**  
2022 Honda Civic LX

# VICE Model Primary Inputs – Scenario 2



2022 Ford F-150	XL (base model)
MSRP [\$]	\$31,685
Fuel efficiency [mpg]	18



2022 Ford F-150 Lightning	Pro (base model)	XLT (upgrade)
MSRP [\$]	\$41,669	\$54,669
ESS [kWh]	98	131
Range [mi]	230	300
Fuel efficiency [kWh/mi]	0.426	0.437
MPGe	70	69

# VICE Model Results – Scenario 2 (trucks)

## “Baseline” inputs

- EV cost = \$41,669 ea.
- EVSE cost = \$3,000 ea.
- Rebates = \$0
- Annual VMT = 7,731 mi
- Gas price = \$2.36/gal

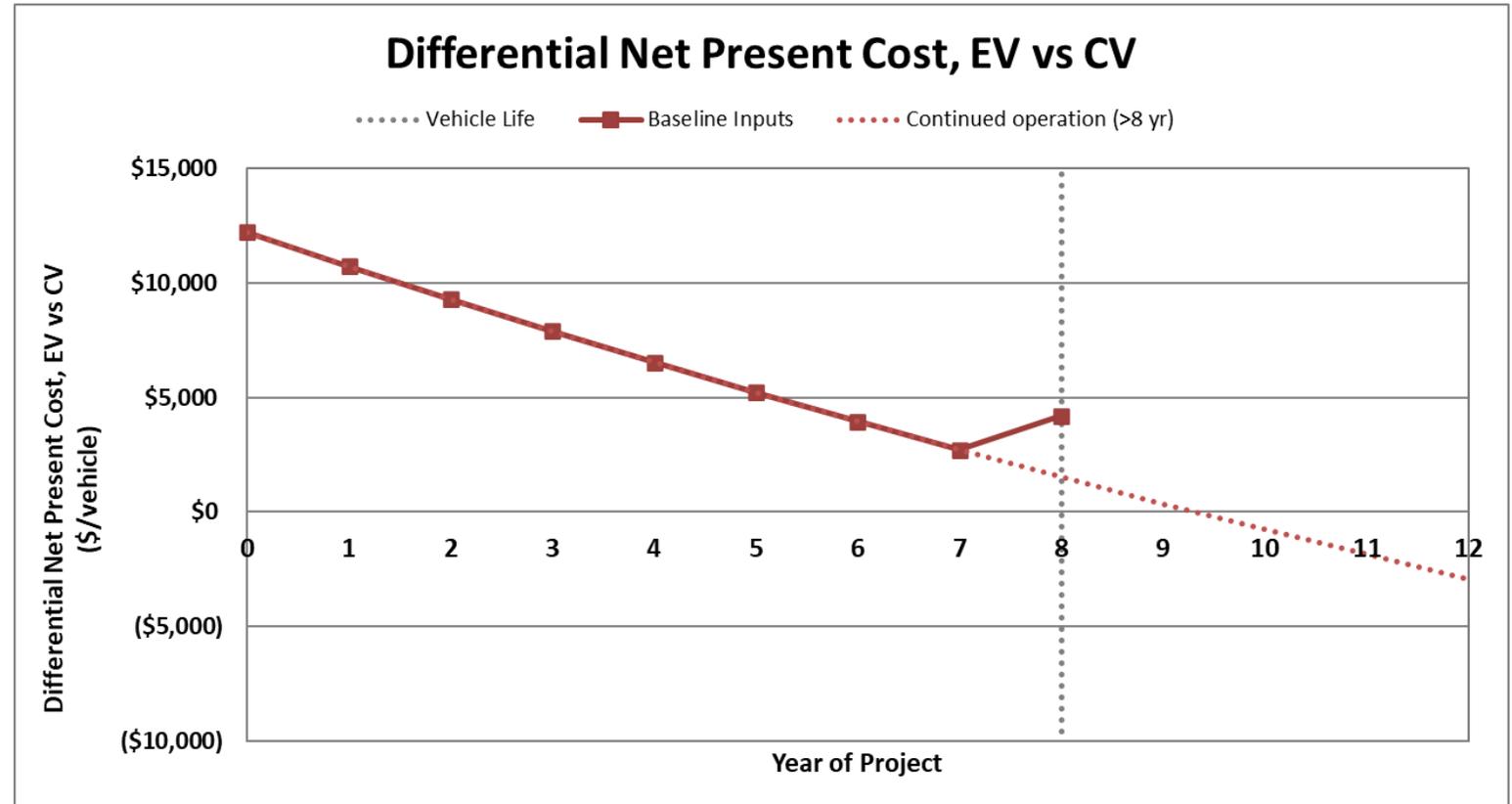
## Key Points from baseline pickup analysis:

EV+EVSE upfront investment is ~\$13k more than base Conventional Pickup

Total net present cost at end of expected life (year 8) = \$4,202 per vehicle (additional cost for EV option)

Current projections for EV end-of-life salvage value are lower than for conventional vehicle (net incremental cost)

Vehicle operation beyond year 8 continues to accrue savings



Electric Vehicle

2022 Ford F-150 Lightning



Conventional Vehicle

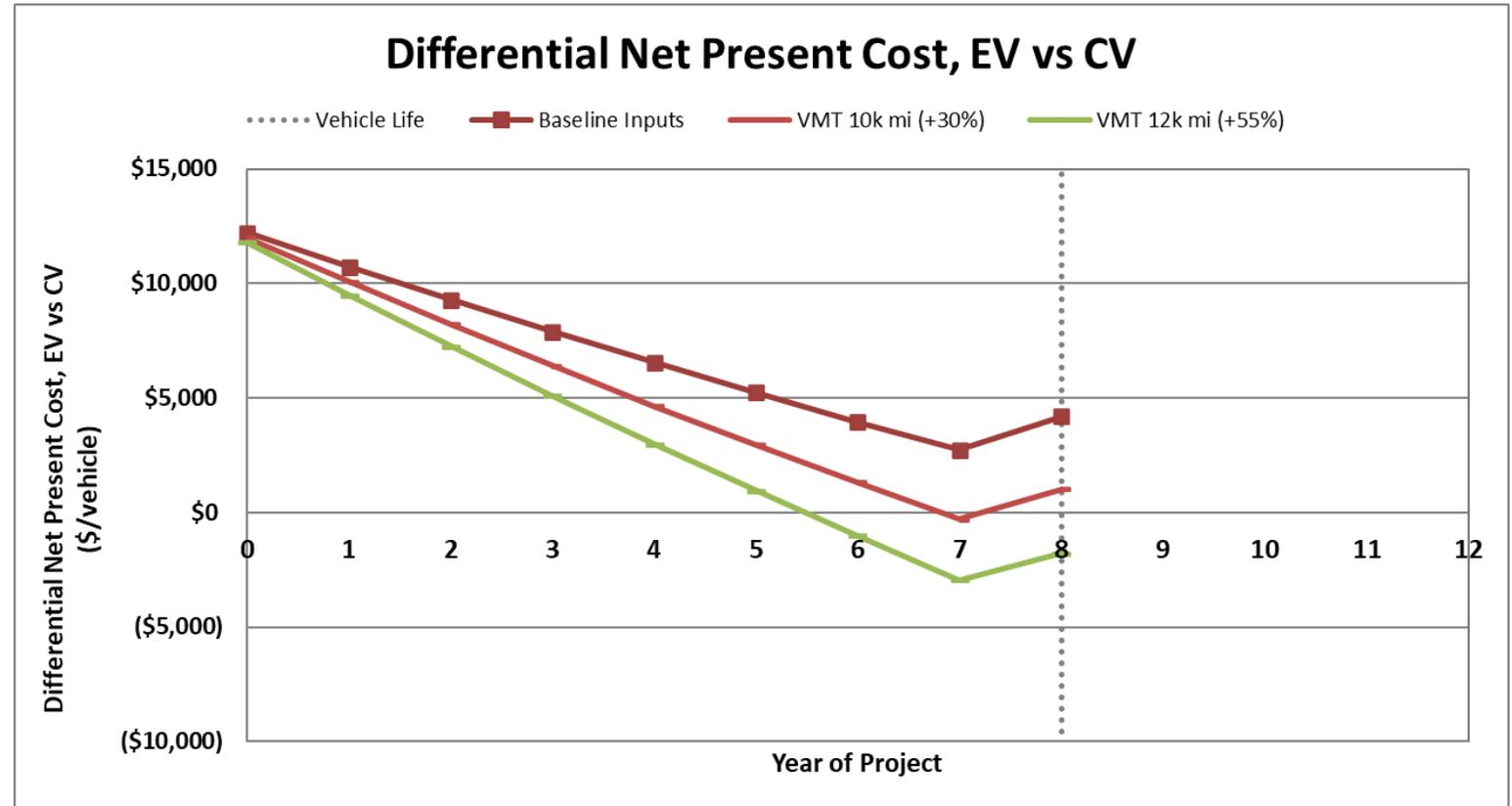
2022 Ford F-150

# VICE Model Results – Scenario 2 (trucks)

## Impact of annual vehicle miles traveled (VMT)

- Baseline VMT = 7,731 mi  
~ 30 miles/day
- VMT 10k mi represents approx. 30% increase  
~ 38.5 miles/day
- VMT 12k mi represents approx. 55% increase  
~ 46 miles/day

**Takeaway:** Operational savings accumulate faster when vehicles are driven more (well within estimated Ford F150 driving range of 230 miles)



**Electric Vehicle**

2022 Ford F-150 Lightning



**Conventional Vehicle**

2022 Ford F-150

# Estimation of Cost per ton GHG Offset

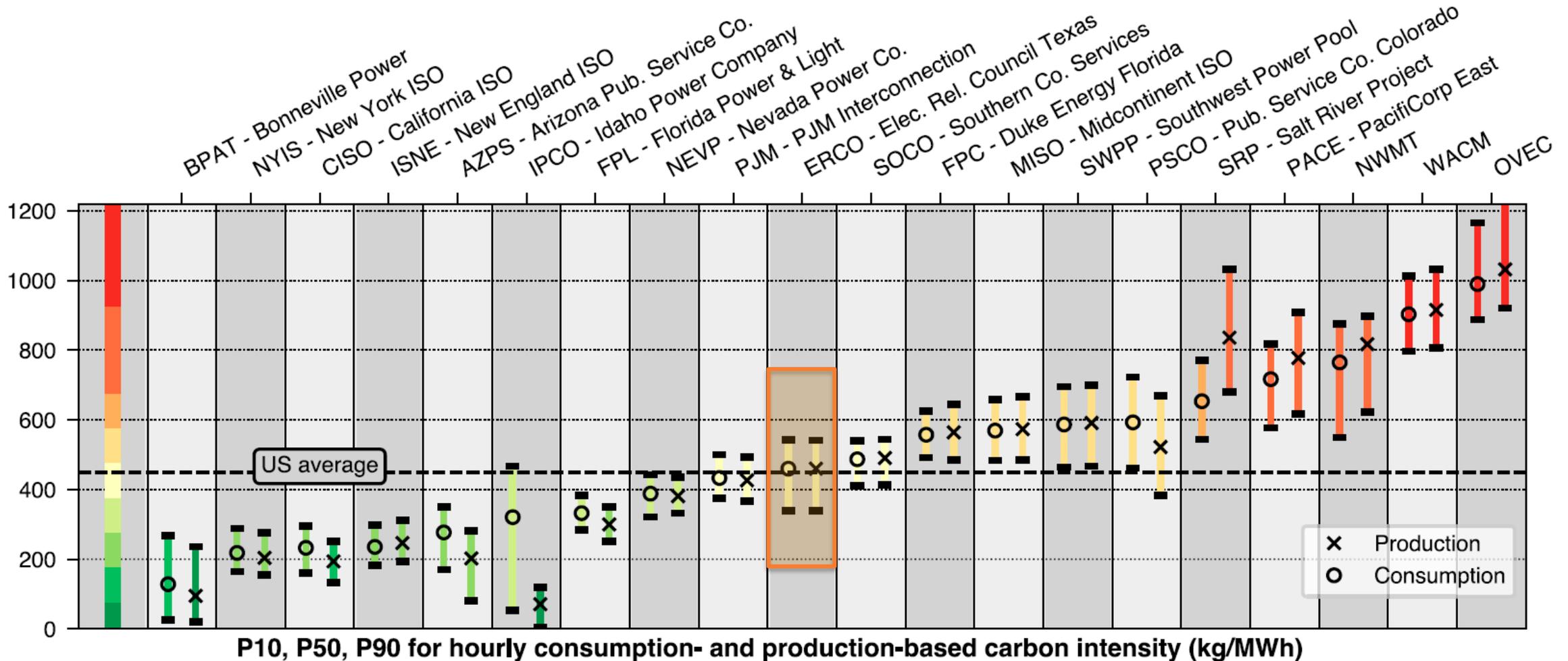
*assuming Texas electric grid mix*

Parameter	Units	Baseline Scenario 1 (sedans)	Baseline Scenario 2 (light trucks)
VICE model total project cost per vehicle	\$/vehicle	4,345	4,202
Lifetime emissions reduction (EV vs CV) per vehicle	metric ton CO <sub>2</sub> e/vehicle	8.93	23.33
Project cost per metric ton CO <sub>2</sub> e to achieve lifetime emissions reduction	\$/metric ton CO <sub>2</sub> e	486	180

- The VICE model estimates that purchasing EVs instead of CVs could reduce GHG emissions by
  - 8.93 metric tons CO<sub>2</sub>e per light-duty sedan over an eight-year expected lifetime
  - 23.33 metric tons CO<sub>2</sub>e per light-duty pickup truck over an eight-year expected lifetime
- Based on the per-vehicle lifetime costs baseline assumptions, GHG emissions reductions are estimated to be
  - \$486 per metric ton CO<sub>2</sub>e for the light-duty sedan scenario
  - \$180 per metric ton CO<sub>2</sub>e for the light-duty pickup truck scenario
- **Any improvement in EV cost will lower the cost to achieve GHG reductions**
  - Achieving EV **cost parity** (through grants or other means discuss previously) results in GHG emissions savings estimated above at no additional cost

# GHG Emissions Estimates

Carbon intensity of Texas electricity grid (ERCOT) is very similar to US average, per 2016 analyzed data<sup>1</sup>



<sup>1</sup> <https://www.pnas.org/doi/pdf/10.1073/pnas.1912950116>



**City of Dallas**

# **Fleet Electrification Study Update**

**Environment and  
Sustainability Committee  
August 1, 2022**

Donzell Gipson, Director  
Equipment and Fleet Management  
City of Dallas

Vincent Olsen, Assistant Director  
Equipment and Fleet Management  
City of Dallas

# Presentation Overview



- Background/History
- Purpose
- Issues/ Operational or Business Concerns
  - Consultant Recommendations
  - Action Plan Update
- Strategies for EV Conversion and Deployment
- Future policy and operational decisions impacting fleet management



# Background/History



## Electrification of Fleet Assets

In support of CECAP adoption, an amendment approved in the FY2021 Budget provided funds for an electric vehicle feasibility study (\$100k)

- On May 26, 2021, the City Council awarded a contract to the National Renewable Energy Laboratory (NREL) to conduct the study.
- NREL is a national laboratory of the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy. The Alliance for Sustainable Energy LLC., operates the NREL Laboratory.
- The study allows the City to develop the most effective and efficient policies and operational strategies for deployment and sustainment of electric vehicle technology in alignment with CECAP.



# Background/History



## Timeline:

- City Council Budget Amendment – September 2020
- Contract award to NREL – May 2021
- Study Kickoff - August 2021
- Briefed EVNS Committee in January 2022
- Briefed Environmental Commission in June 2022



# Purpose



## This briefing will:

- Provide an update on the EV study in response to NREL recommendations
- Provide a summary of activities in preparation for EV conversion
- Next steps



# NREL Recommendations – Summary



- Implement VICE Model approach for each purchase decision
- Continue to test new technologies
- Benchmark from other agencies



# Issues/Operational Concerns



## Operational Concerns to address

- Develop Business Model/Policy
- Determine & Validate Vehicles for Conversion
- Install EV Infrastructure
- Purchase EV Vehicles
- Deploy & Monitor EV Vehicles (GPS install)
- EV Maintenance (in-house and third party)

## Issues to Address:

- Range Anxiety/Fueling Accessibility
- Educate Operators
- Parking/Site Plan
- Reduce the total number of vehicles
- Greenhouse gas reductions





# Strategies for EV Conversion and Deployment



# Outline of EV Conversion and Deployment Strategies



- EV Infrastructure Funding Strategies
- EV Infrastructure Operations and Maintenance
- EV Vehicle Funding Strategies
- EV Conversion Selection Strategy with End Users
- Review for Replacement - Electric Vehicles
- Electric Vehicle Make and Model Strategy
- Electric Vehicle End User Migration Strategy
  - Motor Pool as EV Migration Strategy



# EV Infrastructure Funding Strategies



Approved EV Charging Infrastructure Funding			
Funding Source	Amount	Install/Equipment	Location
NCTCOG - Call for Projects	\$ 193,676.00	(2) DCFC Stations	SE Service Center
NCTCOG - Call for Projects	\$ 182,658.00	(2) DCFC Stations	Central Service Center
FY22-23 Proposed Budget	\$ 581,027.00	Level II & DCFC Stations	(various - citywide)
<b>Total</b>	<b>\$ 957,361.00</b>		

Submitted Grant Applications for EV Charging Infrastructure Funding			
Funding Source	Amount Requested	Install/Equipment	Location
TCEQ	\$ 338,932.36	(7) DCFC Stations	SW, NE, NW, - Service Ctr Jack Evans
TCEQ	\$ 124,785.00	(30) Level II Chargers	CE, SW, NE, NW, SW, - Service Ctr Jack Evans
<b>Total*</b>	<b>\$ 463,717.36</b>	*Projects total \$927,434.71 (requires 50% cash)	





## Turn-Key Strategy

Use a third-party supplier(s) to design, install, operate and maintain the City's EV infrastructure

- Telematics (software to provide fleet management data)
- Standardization
- Infrastructure that supports any vehicle make
- Opportunity for long-term partnership with proven supplier





# EV Vehicle Funding Strategies

## VICE Model Strategy

The City will annually evaluate replacement eligible vehicles that meet the EV conversion criteria and examine them within the VICE Model. (use existing fleet replacement budget)

The City will apply for grants that will offset capital outlay and align with the VICE Model.

Examples include:

Grant Opportunities for EV Vehicles	
Funding Source	Description
NCTCOG - Call for Projects	Grant pays for approximately 25-50% cost of vehicle purchases
TCEQ – TERP and VW	Grant pays for approximately 25-50% cost of vehicle purchases



# EV Conversion Selection Strategy with End Users



Currently 500+ vehicles meet the initial study eligibility; however, only 76 are under consideration by departments for replacement

A decision tree or rubric will be used to determine/validate conversion of the 76 vehicles under initial review

Considerations	Concern/Comments
Replacement Eligible	Develop multi-year strategy as eligible vehicles become due for replacement
Request for replacement by End User	Policy to include use evaluation
Align with VICE Model	EV Study estimated \$4,202-\$4,375 gap between conventional and EV vehicle
Stakeholder Involvement	Executive Steering Committee (includes NCTCOG) Infrastructure Committee (includes TXU & Oncor) Education and Operator training (includes potential partnership with Tesla)
Charging Infrastructure Accessible	Logistics in timing, location, and demand
Validate Exceptions	Extended periods of Idling, significant energy consumption at job site
Green House Gases	Document emissions reductions





# Review for Replacement – Electric Vehicles

## Customer Department Engagement

Equipment and Fleet Management began meeting with departments in July 2022 to discuss the results of the Fleet Electrification study. Also, to evaluate the 76 vehicles under consideration for conversion.

NREL Recommendations:

Department Request Breakdown						
Department	Total Vehicles	Sedan	SUV	Light Truck	Van	Other
Building Services	7	2	0	2	3	0
Code Compliance Services	23	0	14	6	0	3
Public Works	15	0	1	13	0	1
Park and Recreation	12	0	1	2	6	3
Transportation	19	9	1	8	0	1
<b>Total</b>	<b>76</b>	<b>11</b>	<b>17</b>	<b>31</b>	<b>9</b>	<b>8</b>



# Electric Vehicle Make and Model Strategy



## EV Purchases

The City needs a mix of sedans, sport utility vehicles (SUV) and light duty trucks to conduct operations for successful service delivery.

Recommendations:

EV Vehicles			
Vehicle Type Choices	Make/Model	Fueling	Mile Range
Sedan	Nissan Leaf	100% BEV	149-226
SUV	Ford Escape Plug-In Hybrid	Gas/Electric	520 (37-38 electricity)
Light Duty Truck	Ford F-150 Lighting	100% BEV	230





# Electric Vehicle End User Migration Strategy

## EV Education and Awareness

The City needs to educate and inform end users on the safe use and operation of these vehicles to include the benefits to service delivery. Training of mechanics on EV maintenance will also be an important part of the migration strategy.

Recommendations:

EV Vehicles	
Plan	Comments
Ride and Drive Program	Allow end users to test drive Nissan Leaf, Ford Escape Plug-In Hybrid, and F-150 Lighting
Environmental Education	Benefits to the environment, efficiency, and life-time costs
EV Maintenance	Enhance existing training program and use third party suppliers
Pooling of Resources	Discuss the benefits of sharing vehicles to optimize use and reduce costs



# Motor Pool as an EV Conversion Strategy



Assess “Admin” vehicles at each Service Center or Co-located parking of City fleet

- Evaluate use and examine for fleet reductions
- Convert remaining selection to EV
- Centralize the parking of these assets
- Use Key Valet structure for end user access to vehicles
- Monitor utilization via GPS





# Future Policy & Operational Decisions





# Demonstrations of EV

Until operational needs and electrification options align within public safety and heavy-duty vehicles and equipment, hybrid and compressed natural gas technologies are the prudent alternatives.

## Electrification options and alternatives

- Mack Refuse EV Truck – One week pilot being planned for Sanitation Services
  - (Grant awarded for \$776k – CNG) – Clean Diesel Grant - NCTCOG
- Ford Explorer – Hybrids - Police Patrol (purchased 11 and anticipated to go into service within the next 90 days)
- Ford EV cargo van pilot – Offered a trial period by local dealer
- San Antonio and Dallas County – “Learn from them”





# Observation of EV Experiences

EFM will continue to monitor, research and benchmark the experiences, breakthroughs and lessons learned that impact the City's EV conversion plans.

## Recent Articles & Big Picture Items:

- Electric Grid concerns

City of Waco pauses on transition of EV for its Police Department

- [www.wacotrib.com/news/local/govt-and-politics/waco-city-council-to-vote-on-hybrid-police-cars-citing-issues-with-electric-models/article\\_39d1236a-ffd8-11ec-b3a3-037cd043bd1e.html](http://www.wacotrib.com/news/local/govt-and-politics/waco-city-council-to-vote-on-hybrid-police-cars-citing-issues-with-electric-models/article_39d1236a-ffd8-11ec-b3a3-037cd043bd1e.html)

San Antonio Police testing Tesla, Ford electric cars for official use

- [www.mysanantonio.com/business/article/San-Antonio-police-Tesla-ford-electric-cars-17261776.php](http://www.mysanantonio.com/business/article/San-Antonio-police-Tesla-ford-electric-cars-17261776.php)

Dallas County officials look to electric vehicles for help

- <https://www.keranews.org/government/2022-04-25/bad-air-climate-change-dallas-county-officials-look-to-electric-vehicles-for-help>



# Next Steps



- Continue work on action plan in response to consultant recommendations
- Continue to brief ENVS Committee on status of action plan
- Document Council feedback for development of future policy and operational plans
- Continue to look at emerging technologies like hydrogen and renewable natural gas to enhance the City's alternative fuel infrastructure





# **Fleet Electrification Study Update**

**Environment and  
Sustainability Committee  
August 1, 2022**

Donzell Gipson, Director  
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City of Dallas

Vincent Olsen, Assistant Director  
Equipment and Fleet Management  
City of Dallas





**City of Dallas**

# **GAS-POWERED LANDSCAPE EQUIPMENT POLICIES**

**Environment & Sustainability  
Committee**

**August 1, 2022**

Susan Alvarez, P.E. Assistant Director  
Office of Environmental Quality and Sustainability

# OVERVIEW

- Update from December 01, 2021 ENVS Briefing
- Park Board Information
- Environmental Health Committee Recommendations
- Impacts of Change
  - Environmental
  - Equity
  - Fiscal
- Policy Options



# TIMELINE to DATE



## Staff Research/ Stakeholder Engagement

Sustainable  
Procurement  
Policy  
Adopted  
May 5, 2021

ENVS Committee  
Briefing  
December 1, 2021  
Initial Program  
Information

Park Board  
Briefing,  
May 19, 2022  
Park Department  
Pilot Program

EVC  
Environmental  
Health Committee  
Recommendation  
June 8, 2022

EVC  
Recommendation  
August 10, 2022



# Types of Leaf Blowers



Type of Equipment	Primary Use		Windspeed	Material Moved (CFM)**	Operating Noise (dB)	Weight Range (lbs)	Cost Range (2021 \$)
	Comm'l	Resid'l					
*Gas-powered Hand-held	X	X	>180 MPH	400-450	73-100	9-12	~\$100 - 200
Backpack	X		~200 MPH	910-940	75-125	23-26	~\$300 - 550
Battery Electric - Handheld	X	X	110-165 MPH	530-580	64	8-9	\$150 - 200
Backpack	X		145 MPH	600	64	13-20	\$400 - 1,200

**Data Sources:** <https://www.protocolreviews.com/gas-vs-battery-powered-leaf-blowers/> | <https://www.popularmechanics.com/home/tools/g37442980/best-gas-leaf-blowers/>

\* Gas-powered data reflects more commonly used 2-stroke motor

\*\*CFM= Cubic Feet /Minute

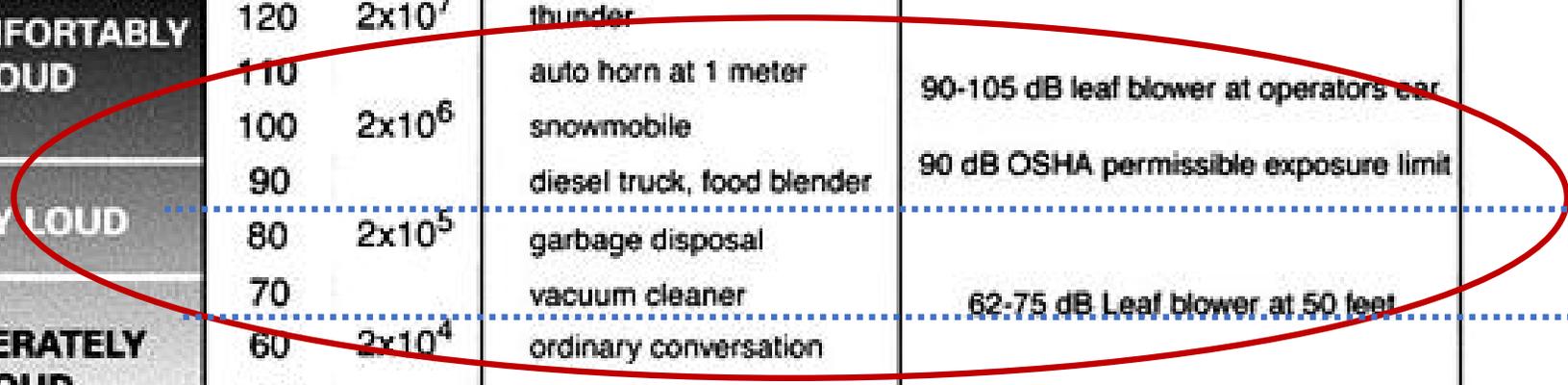




# Sound Level Chart

Perceived Sound Level	Sound Level	Examples	Leaf Blower Reference
<b>PAINFULLY LOUD</b>	160	2x10 <sup>9</sup>	OSHA limit for impulse noise
	150		
	140	2x10 <sup>8</sup>	
<b>UNCOMFORTABLY LOUD</b>	130	power drill	90-105 dB leaf blower at operators ear 90 dB OSHA permissible exposure limit
	120	2x10 <sup>7</sup> thunder	
	110		
<b>VERY LOUD</b>	100	2x10 <sup>6</sup> auto horn at 1 meter snowmobile	90 dB OSHA permissible exposure limit
	90		
<b>MODERATELY LOUD</b>	80	2x10 <sup>5</sup> diesel truck, food blender garbage disposal	62-75 dB Leaf blower at 50 feet
	70		
	60	2x10 <sup>4</sup> vacuum cleaner ordinary conversation	
<b>QUIET</b>	50	average home	
	40	2x10 <sup>3</sup> library	
<b>VERY QUIET</b>	30	quiet conversation	
	20	2x10 <sup>2</sup> soft whisper	
<b>BARELY AUDIBLE</b>	10	rustling leaves	
	0	2x10 <sup>1</sup> threshold of hearing	

dB= decibels  
μPa= micro Pascals



OSHA Hearing Protection Threshold

Typical Municipal Noise Ordinance Threshold



# Dallas Park & Recreation Overview



- ~2,600 pieces of small equipment
  - ~530 Leaf Blowers
- Majority of small equipment is **4-cycle**
  - Use gasoline and oil mixture
  - Comply with the California Act Resource Board (CARB) regulations
- Small number of **2-cycle** equipment that are specialized and used only a few times a year



# Dallas Park & Recreation Green Strike Teams



- **Piloting Green Strike Teams for two districts**
  - Use electric (lithium battery-powered) hand-held landscaping equipment
  - Blowers, line trimmers, hedge trimmer, small chainsaw and pole saw
- Strike Teams have 3 men crews
- District 1 maintains the area around White Rock Lake; areas are maintained on a two-week schedule
- District 3 maintains parks in the downtown area; each park is maintained once a week



# Dallas Park & Recreation Pilot Results



## District 1 – White Rock Lake

- Electric Equipment not sufficient
  - Not powerful enough to maintain growth after two weeks
  - Slowed down rate of work

## Employee buy-in was low

- Batteries are heavy
- Equipment is less powerful
- Prefer gas powered equipment

## District 3 – Downtown

- Using equipment for three years
  - Operating well
  - Batteries lasted as long as they should
  - Quality of work is good
  - Reliable
  - No repair cost, only cost to replace batteries
- **Significant emissions savings**



# Dallas Park & Recreation Pilot Results



## Emissions Savings of Green Strike Teams

### Based on Operating Equivalent Gas-Powered Equipment

Type	Model	Fuel Type	Units	Use	Annual Use (hrs)	HC Emissions (lb/yr)	NOX Emissions (lb/yr)	CO2 Emissions (T/yr)
Blower (Large)	BR600	4-Cycle Gas	1	3 hrs/day	540	37.91	27.82	9.61
Handheld blower (small)	BG86	4-Cycle Gas	1	3 hrs/day	540	10.67	7.83	2.71
Line trimmer	FS131	4-Cycle Gas	3	6 hrs/day	1,080	113.73	83.47	28.84
Chainsaw	MS170	4-Cycle Gas	1	3 times per year for 6 hrs each use	18	0.67	0.49	0.17
Hedge trimmer	HL91K	4-Cycle Gas	1	4 times per year for 6 hrs each use	24	0.53	0.39	0.13
Pole Saw	HT103	4-Cycle Gas	1	3 times per year for 6 hrs each use in Fall	18	0.47	0.34	0.12
<b>Total Annual Emissions</b>						<b>163.98 lbs</b>	<b>120.34 lbs</b>	<b>41.58 tons</b>



# Dallas Park & Recreation Future Efforts



- Increase employee buy-in through communication of the benefits of reduced emissions, less noise, and health benefits
- Conduct a side-by-side comparison of fuel powered equipment versus new electric equipment since technology has advanced in the last three years
- Add Green Strike Teams to Park Maintenance Districts with parks that have a weekly maintenance schedule and moderate grass/vegetation growth
- Funding/grant for an electric Zero-Turn mower for District 3, downtown parks that will further reduce emissions

Mower	Model	Fuel Type	Units	Daily Use (hrs)	Annual Use (hrs)	HC Emissions (lb/yr)	NOX Emissions (lb/yr)	CO2 Emissions (T/yr)
Scag – Zero Turn	STTII-72-31KB/DF	3 - cylinder duel fuel	1	5	900	161.77	97.80	130.71

**Conclusion: Electric equipment was successfully used for the maintenance of some parks but not all parks**



# EVC – Environmental Health Committee

*“The committee recommends that the Environmental Commission support a phased transition from gas-powered landscaping equipment to battery-operated or electric-hybrid equipment to reduce particulate matter and other pollutants that affect health and contribute to poor air quality.”*

- Candace Thompson, Chair

Memorandum to the Environmental Commission, June 8, 2022



# Leaf Blower Impacts on Air Quality



- 1,2 billion gallons of gas are burned per year by United States garden equipment.  
(5)
- About 1/3 of this material is discharged as aerosols during equipment use.
- Leaf blowers emit pollution levels comparable to automobiles<sup>(1)</sup>
- A 2011 test by the car experts at Edmunds showed that “a consumer-grade leaf blower emits more pollutants than a 6,200-pound 2011 Ford F-150 SVT Raptor.”  
(1)(4)
- The two-stroke engine (in the Edmunds study) emitted nearly 299 times the hydrocarbons of the pickup truck and 93 times the hydrocarbons of the sedan.
- Leaf blowers emit carbon monoxide and nitrogen oxides. <sup>(1)</sup> Nitrogen oxides are precursors to ground level ozone; North Texas is in Severe Non-Attainment status.
- Switching to electric (battery or plug in) leaf blowers would sharply reduce air pollution<sup>(1)</sup>



# Leaf Blower Impacts on Public Health



- Children and the elderly are especially vulnerable to the dust (particulate) and toxic emissions from leaf blowers
- Manufacturers recommend a 50 feet minimum safe distance for bystanders.
- The low frequency noise from leaf blowers can penetrate most barriers such as walls. This contributes to hearing loss for adjacent residents.
- In densely populated neighborhoods, a gas blower can affect up to 15 times the number of households as an electric leaf blower.
- Equity impacts can be associated with both the use, and the potential transition away from using two-stroke landscape equipment.



# Potential Impacts of Change: Environmental



<i>Estimated Probable Reductions in GHG Emissions</i>				
<b>Municipal Equipment</b>	<b>#Gas</b>	<b>#Electric</b>	<b>Reduction in #CO2e/Unit/ Year</b>	<b>Reduction in MTCO2e/Year</b>
Push Mowers	2,400		25	30
Ride-on Mowers	980	1	131	64
Handheld Blowers	189	19	5,420	512
Back Pack Blowers	245		19,220	2,354
Line Trimmers/ Edgers	594	14	28,950	8,598
Hedge/ Pole Trimmers	299	21	260	39
Chain Saws	395	17	340	67
MISC	323	14	240	39
			<b>Total:</b>	<b>11,665</b>
<b>Community Equipment</b>	<b>#Gas</b>	<b>#Electric</b>	<b>Reduction in CO2e/Unit/ Year</b>	<b>Reduction in CO2e/Year</b>
Push Mowers	117,100	70,260	25	1,464
Ride-on Mowers	3,407	75.7	131	223
Handheld Blowers	63,725	59,125	5,420	172,695
Back Pack Blowers	6,813	757	19,220	65,473
Line Trimmers	6,813	757	28,950	98,618
Pole Trimmers	776.25	86.25	260	101
Chain Saws	776.25	86.25	240	93
			<b>Total:</b>	<b>338,666</b>



# Potential Impacts of Change: Fiscal



Municipal Equipment`	#Gas	Cost/Unit	Conversion Cost
Push Mowers	2,400	\$ 400	\$ 960,000
Ride-on Mowers	980	\$ 5,000	\$ 4,900,000
Handheld Blowers	189	\$ 300	\$ 56,700
Back Pack Blowers	245	\$ 600	\$ 147,000
Line Trimmers/ Edgers	594	\$ 250	\$ 148,500
Hedge/ Pole Trimmers	299	\$ 450	\$ 134,550
Chain Saws	395	\$ 450	\$ 177,750
MISC	323	\$ 350	\$ 113,050
		<b>Total: \$</b>	<b>6,525,000</b>
Community Equipment	#Gas	Rebate	Implementation Cost
Push Mowers	46,840	250	11,710,000
Ride-on Mowers	1,363	2500	3,406,500
Handheld Blowers	25,490	250	6,372,500
Back Pack Blowers	2,725	300	817,560
Line Trimmers	2,725	200	545,040
Pole Trimmers	310.5	200	62,100
Chain Saws	310.5	200	62,100
		<b>Total: \$</b>	<b>22,976,000</b>

*Estimated  
Probable Cost  
Impacts  
Associated with  
Conversion*

# Impacts of Change: Equity



- Most landscapers using gas-powered lawn care equipment are subject to exposures to toxic gas & oil, carcinogenic emissions, noxious exhaust, and unsafe noise levels .
- Most lawn crews are unprotected and work full-time at the source of emissions and noise. Workers have few options and little agency. <sup>(5)</sup> Failure to act continues this legacy.
- Between 2002 and 2016, the number of professional ground maintenance workers, including supervisors, grew by 85 percent to 1.6 million, according to Quiet Communities. <sup>(6)</sup>
- A large portion of landscape workers are Hispanic<sup>7</sup>.
- In 2021 the average annual income for landscape workers was \$30,160 and the average hourly wage was \$14.50 an hour<sup>(8)</sup>
- ***Any movement towards reducing or eliminating gas-powered leaf blowers in Dallas will need to address equity considerations related to potential impacts to local landscape crews.***



# Related City of Dallas Codes and Ordinances:



- **Does not directly ban gas-powered lawn equipment....**
- **Stormwater Ordinance:** Section 19-118.2(f)(5) of the Dallas City Code prohibits discharge of garbage, rubbish and yard waste into the storm drain with fines of up to \$2,000 per occurrence.
- **Code enforcement:** Chapter 30 and Chapter 51A-6.102 for noise violations. 51A-6.102 regulates noise by decibel level. These regulations have maximum decibel thresholds that change dependent on the property zoning.

*(F) **Exceptions:** the following activities, as long as they are conducted between the hours of 7:00 AM. – 10:00 PM., M-F and between 8:00 AM. and 7:00 PM – weekends and holidays:*

*(i) **Lawn maintenance.***

(1) A person may not conduct a use that creates a noise level that exceeds the levels established in Subsections (b) through (e) or that exceeds the background level by five dB(A), whichever is greater.

Decibel Limit	A Scale
(dBA re 0.0002 Microbar)	<b>56</b>

Maximum Permissible Daytime Decibel Limits at the Bounding Lot Line of an Office, Retail, Mixed Use, Multiple Commercial, P(A), WR with a Shopfront Overlay, or WMU District

Decibel Limit	A Scale
(dBA re 0.0002 Microbar)	<b>63</b>

Maximum Permissible Daytime Decibel Limits at the Bounding Lot Line of a Use in a CS, LI, or IR District

Decibel Limit	A Scale
(dBA re 0.0002 Microbar)	<b>65</b>

Maximum Permissible Daytime Decibel Limits at the Bounding Lot Line of a Use in the IM District



# Common Approaches in Use/ Dallas Options:



- **Bans on gas-powered lawn equipment:** some are complete bans; some are partial bans related to towards blowers and mowers.
- California implemented state-wide policy in 2018 promoting “*sale and use of emissions free landscape equipment after July 1, 2022*” and relied on local Air Boards to implement local action; rather than “a ban”.
- Most cities address equity challenges through **equipment exchanges, rebates and incentives;**
- Some **cities worked with local merchants /landscape professionals** to develop and implement program.
- Many programs included an **implementation time lapse of 6 months to 2 years** between ordinance adoption and the date for enforcement, to allow for: budgeting, public education, exchange/replacement activities, and training.
- Many **worked with local landscape equipment stakeholders** towards conversion.



# Sustainable Procurement Policy



**Sustainable Procurement Policy** adopted by City Council through CR 21-098 in May 26, 2021 to guide City procurement decisions that positively impact the City's social, economic, and environmental health.

- Working group formed to:
  - maintain an environmentally preferred products lists,
  - identify sustainability labels and standards for specifications,
  - analyze citywide purchases for efficiency and waste reduction opportunities,
  - and make other recommendations related to the social, economic, and environmental aspects of contracting.
- These measures have been incorporated into AD4-05, and apply to current efforts related to landscape equipment.



# Sustainable Procurement Actions



Citywide Landscaping /Landscape equipment contracts:

- Landscape Equipment Contract - used by 12 departments; includes options for electric, battery-electric and two-stroke equipment including a variety of mowers, string-trimmers, leaf blowers and other ancillary equipment. The City expends approximately **\$135,000 per year** for this equipment.
- Landscaping Services Contract - 11 current contracts for landscape services, that are used by 19 departments. These contracts rely primarily on traditional gas-powered equipment. The City expends approximately **\$1.2 million per year** for these services.
- Landscape Services Procurement (underway): Advertised in January 22, 2022; includes options for gas- and non-gas powered equipment line items:
  - 15 City properties identified for electric equipment pilot.
  - 2 contracts totaling about **\$32.3M**, are on the draft September 14, 2022 City Council Agenda.





# Questions or Comments?



# References



- <sup>1</sup> Palmer, Brian. Washington Post. September 16, 2013: [https://www.washingtonpost.com/national/health-science/how-bad-for-the-environment-are-gas-powered-leaf-blowers/2013/09/16/8eed7b9a-18bb-11e3-a628-7e6dde8f889d\\_story.html?utm\\_term=.e68f5b5d5284](https://www.washingtonpost.com/national/health-science/how-bad-for-the-environment-are-gas-powered-leaf-blowers/2013/09/16/8eed7b9a-18bb-11e3-a628-7e6dde8f889d_story.html?utm_term=.e68f5b5d5284)
- <sup>2</sup> <https://science.howstuffworks.com/transport/engines-equipment/two-stroke.htm>
- <sup>3</sup> Sapate, K.D, et al Pollution Aspects of Emissions From Small Two-Stroke Automobile Engines, Nature Environment and Pollution Technology, 2008: <https://neptjournal.com/upload-images/NL-19-6-6-comB-112.pdf>
- <sup>4</sup> Su, Tanli. “Lifestyle Eco-Actions: “Gas-Powered Leaf Blowers” Sierra Club: <https://www.sierraclub.org/loma-prieta/blog/2017/08/lifestyle-eco-actions-gas-powered-leaf-blowers>
- <sup>5</sup> <https://www.momscleanairforce.org/leaf-blowers-health/>
- <sup>6</sup> Kaysen, Ronda. “On Banning Leaf Blowers” New York Times. March 17, 2017: <https://www.nytimes.com/2017/03/17/realestate/on-banning-on-leaf-blowers.html>
- <sup>7</sup> <https://www.osha.gov/SLTC/landscaping/index.html>
- <sup>8</sup> Time, Forest. “Pay Rate for Lawn Care Workers”. Houston Chronicle. <https://work.chron.com/pay-rate-lawn-care-workers-2784.html>; updated to 2021 through Zip recruiter data for Dallas, TX.
- <sup>9</sup> <https://panethos.wordpress.com/2018/05/11/it-is-time-to-ban-gas-powered-leaf-blowers/>  
<https://www.quietcleanpdx.org/leaf-blowers-facts-myths/>  
<https://www.theatlantic.com/magazine/archive/2019/04/james-fallows-leaf-blower-ban/583210/>  
<https://www.protoolreviews.com/gas-vs-battery-powered-leaf-blowers>  
<https://www.popularmechanics.com/home/tools/g37442980/best-gas-leaf-blowers/>



# References (Continued)



<sup>10</sup>National Emissions from Lawn and Garden Equipment, US Environmental Protection Agency, Region 1, September 2015, Jamie L Banks, Robert McConnell. <https://www.epa.gov/sites/default/files/2015-09/documents/banks.pdf>

<sup>11</sup>American Heart Association. Facts: Danger in the Air -Air Pollution and Cardiovascular Disease. Accessed 1/6/14 at [http://www.heart.org/HEARTORG/Advocate/IssuesandCampaigns/Advocacy-Fact-Sheets\\_UCM\\_450256\\_Article.jsp](http://www.heart.org/HEARTORG/Advocate/IssuesandCampaigns/Advocacy-Fact-Sheets_UCM_450256_Article.jsp)

<sup>12</sup>American Lung Association. State of the Air 2018. <https://www.lung.org/research/sota/city-rankings/msas/dallas-fort-worth-tx-ok#ozone>

<sup>13</sup>Integrated Science Assessment for Particulate Matter- Final Report, US Environmental Protection Agency, December 2009, EPA/600/R-08/139F.

<sup>14</sup>Provisional Assessment of Recent Studies on Health Effects of Particulate Matter Exposure, US Environmental Protection Agency, December 2012, EPA/600/R-12/056F.

<sup>15</sup>Integrated Science Assessment for Ozone and Related Photochemical Oxidants, US Environmental Protection Agency, 2013, EPA/600/R-10/076F.

<sup>16</sup>Air Pollution and Cancer, K Straif, A Cohen, J Samet (Eds), Scientific Publication 161, International Agency for Research in Cancer, World Health Organization, Lyon Cedex FR:IARC, 2013.

<sup>17</sup>Shah ASV, Lee KK, McAllister DA, et al. "Short Term Exposure to Air Pollution and Stroke: Systematic Review and Meta-Analysis," BMJ 2015;350:h1295.



# References (Continued)



<sup>18</sup>Cook Children’s (website). Asthma: Six-county profile. content from their regular Community-wide Children’s Health Assessment and Planning Survey (CCHAPS). <https://www.centerforchildrenshealth.org/en-us/HealthIssues/asthma/Pages/Asthma.aspx>. Retrieved online May 18, 2018.

<sup>19</sup>University of Arkansas, Office of Sustainability. Gas Vs Battery Powered Maintenance Tools on the University of Arkansas Campus. [https://sustainability.uark.edu/resources/publication-series/project-reports/reports-electric\\_power\\_tools\\_ua-2017-ofs.pdf](https://sustainability.uark.edu/resources/publication-series/project-reports/reports-electric_power_tools_ua-2017-ofs.pdf)

<sup>20</sup>Blumenstiel, Alexander D. Gasoline Engine Leaf Blower Health Hazards, Environmental Harm, Legislation and Alternatives For the White House Environmental Justice Advisory Council, Ph.D. December 7, 2021. EPA-HQ-OA-2021-0683-0049. <https://www.regulations.gov/document/EPA-HQ-OA-2021-0683-0049>

<sup>21</sup>Report on Bill 22-234, “Leaf Blower Regulation Amendment Act of 2018”, Washington, DC, <http://chairmanmendelson.com/wp-content/uploads/2018/10/B22-234-Leaf-Blower-Regulation-Amendment-Act-of-2018-CIRCULATION-PACKET.pdf>

<sup>22</sup>Assembly Bill Report on Bill 22-234, “Leaf Blower Regulation Amendment Act of 2018”, State of California. [https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=202120220AB1346](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB1346)





# Cities With Leaf Blower Restrictions

Arlington, MA	Lawndale, CA	Santa Monica, CA
Aspen, CO	Los Altos, CA	Scarsdale, NY
Belvedere, CA	Los Angeles, CA	Scottsdale, AZ
Berkeley, CA	Malibu, CA	Sunnyvale, CA
Beverly Hills, CA	Mamaroneck, NY	Tampa, FL
Boulder, CO	Maplewood, NJ	Tiburon, CA
Brookline, MA	Menlo Park, CA	Toronto, ON
Cambridge, MA	Mill Valley, CA	<b>San Antonio, TX</b>
Carmel, CA (banned in 1975 – first city in the USA)	Montclair, NJ	Sunnyvale, CA
Claremont, CA	New Rochelle, NY	Tampa, FL
Del Mar, CA	Oyster Bay, NY	Tiburon, CA
Dobbs Ferry, NY	Palm Beach, FL	Toronto, ON
Evanston, IL	Los Altos, CA	Vancouver BC
Foster City, CA	Palo Alto, CA	Washington, DC
Framingham, MA	Pelham Manor, NY	Westchester County, NY
Hastings, NY	Pelham, NY	West Hollywood, CA
Honolulu, HI	Portland, OR	White Plains, NY
<b>Houston, TX</b>	Portsmouth, NH	Winnetka, IL
Indian Wells, CA	Rye, NY	Yonkers, NY
Laguna Beach, CA	Santa Barbara, CA	<b>(Highland Park, TX – under consideration)</b>





# **GAS-POWERED LANDSCAPE EQUIPMENT POLICIES**

**Environment & Sustainability  
Committee**

**August 1, 2022**

Susan Alvarez, P.E. Assistant Director  
Office of Environmental Quality and Sustainability



# Memorandum



CITY OF DALLAS

DATE July 25, 2022

TO Honorable Chair and Members of the Environment & Sustainability Committee

SUBJECT **Bachman Lake Dredging Update**

In 2016, City Council authorized a feasibility study that yielded three alternatives for Bachman Lake. A Task Force made up of City staff and council district appointed representatives evaluated the alternatives and recommended to "Maintain the Lake." This recommendation was briefed to the Mobility Solutions, Infrastructure and Sustainability Committee on April 8, 2019, who voted to approve the recommendation. Dredging improvements were bid in June 2021 and a construction contract was awarded to Renda Environmental, Inc. on October 27, 2021.

The contractor began removing debris from the lake in February 2022 and initiated hydraulic dredging in June. Approximately 400 tons of debris has been removed from the lake and shoreline as the contractor is encountering large amounts of trash and plastic bags. The dredge barge is working eastward toward the narrow area of the lake where deposits are thickest, and islands of sediment have formed. Dredged material is screened and dewatered before being hauled for disposal. The Contractor is hauling the material to privately owned land to dry, test, and mix with native soil to produce a potential low-cost product for public use. If successful, this effort will eliminate disposal of the dredged material in local landfills.

The contractor's staging area is located at the Bachman Lake parking lot off Shorecrest Drive and the dewatering site is located on City of Dallas property between Denton Drive and Harry Hines Boulevard. Water removed from the dredged silt is clarified and pumped back into Bachman Lake.

The project is anticipated to take about 12 months to complete and will remove approximately 370,000 cubic yards of accumulated sediment. Sediment removal will restore the lake to recreational levels and prevent invasive vegetation, improving water quality. Park users have been advised to keep clear of the barge and floating pipe during the project. The latest information on the Bachman Lake Dredging Project can be found on the project website at <https://bachmanlakedam.com>.

If you have any questions, please contact Terry Lowery, Director of Dallas Water Utilities.

A handwritten signature in black ink, appearing to read 'Kimberly Bizer Tolbert'.

Kimberly Bizer Tolbert  
Deputy City Manager

C: T.C. Broadnax, City Manager  
Chris Caso, City Attorney  
Mark Swann, City Auditor  
Biliera Johnson, City Secretary  
Preston Robinson, Administrative Judge  
Jon Fortune, Deputy City Manager

Majed A. Al-Ghafry, Assistant City Manager  
M. Elizabeth (Liz) Cedillo-Pereira, Assistant City Manager  
Robert Perez, Assistant City Manager  
Carl Simpson, Assistant City Manager  
Jack Ireland, Chief Financial Officer  
Genesis D. Gavino, Chief of Staff to the City Manager  
Directors and Assistant Directors

# Memorandum



CITY OF DALLAS

DATE August 1, 2022

TO Honorable Members of the Environment & Sustainability Committee: Paula Blackmon (Chair), Paul Ridley (Vice Chair), Carolyn King Arnold, Adam Bazaldua, Jaime Resendez, Jaynie Schultz, Chad West

SUBJECT **City Forestry Quarterly Update**

The City Forestry Taskforce (Forestry Taskforce) has been working on several initiatives since the June 6<sup>th</sup> Briefing to the Environment and Sustainability Committee meeting. This memo serves as an overview of actions taken during this time.

## **Partnering Sessions**

The City met with multiple departments and our local, state, federal, and non-profit partners/stakeholders in June as part of our Quarterly Partnering Session. The focus of this meeting was to address the confirmation of the Emerald Ash Borer (EAB) within the City of Dallas, discuss upcoming planting activities for the fall, and to brainstorm ways to continue to diversify the tree canopy.

EAB discussions included an overview of the City's approach to assess and treat, and the development of education and outreach materials and videos for use by the City and others. All material produced by the City is reviewed and approved by the Texas A&M Forest Services (TFS) to ensure accurate and consistent messaging. Several non-profits have offered to distribute all materials to their members and volunteer groups, and to work with the private community of arborists and nurseries. The group discussed the ability of non-profits or non-municipal entities to provide funding assistance to residential property owners for treatment, removals, and potential replacement.

## **Emerald Ash Borer Update**

Staff from various departments met with the TFS on site at Camp Broadway to observe the impact of EAB infestation five years after the initial confirmation. This visit provided an opportunity to review TFS outreach and education efforts, how to increase our partnerships, and explore the next steps. In conjunction with the TFS, the City will continue to assess and inventory the existing ash canopies on public property and treat when significant ash or grove of ash is present. TFS confirmed the approach and is encouraged by the number of actions taken by the City and is using our EAB Action Plan and planting plans as a template for other communities. However, TFS has stressed that it is important to recognize the long-term strategies as the EAB will likely be prevalent for the next decade and that planting new and diverse canopies is integral to the overall health of urban forests for future generations.

The staff has been assessing and inventorying the ash canopies in areas most at risk for infestation (Northwest, West, and Southeast) and will be moving strategically through the City over the next six months. To date, staff is primarily seeing weather-related damage to the ash population that will warrant additional follow-up assessments over time but has identified and will be treating certain significant ash trees over the next month in these areas. All work is inputted into Tree Keeper.

It has been determined that updates to Article X to address EAB will require Zoning Ordinance Advisory Committee (ZOAC), City Plan Commission (CPC), and City Council. This action is anticipated to occur in August for ZOAC, and September/October for CPC and City Council. The requested actions will:

- Modify the definitions of Class 3 tree and Unprotected tree to remove Arizona ash from Class 3 to Unprotected
- Amend acceptable plant materials to prohibit nursery stock ash trees from required landscaping and city property to allow for control of regulated landscaping and city tree species
- Amend Reforestation Fund definition of “natural deforestation event” to include invasive insect under Texas Department of Agriculture (TDA) determination to allow for providing trees to damaged private property
- Include the provision of defense to prosecution for vulnerable or threatened tree species as determined by the TDA to allow for removal of protected ash prior to infestation, as needed

### **Public Education and Outreach Efforts**

Efforts to publicize and encourage residents and businesses to utilize the City Forestry website continue through our social media campaign, Council newsletters, and our public, private and non-profit partners. Over 2,200 people have viewed the website, which was soft launched in March 2022 and officially launched in May 2022.

Community meetings were held in July with interested residents to provide information on EAB by the City of Dallas. Several non-profit partners also held informational meetings with their members to provide an overview of EAB and instructions on how to tell if an ash tree is on your private property.

EAB water bill inserts have been prepared and will be in the August billing insert. In addition, the City’s electronic billboard messaging contract includes an EAB message that will run during the next several months. Also, the website continues its updates with information for the general public.

City staff and TFS will participate in a series of filmed PSA and panel discussions on Urban Forestry and EAB in August for use on public channels, websites, and social media. The short PSAs will be a future One Dallas Update.

The City–Wide Forestry Technical Team will be conducting trainings with all Code Compliance staff to train them on EAB to better educate residents during community meetings and presentations. Also, the team will partner closely with CCS’s Citizens Code Academy and the Community Clean Trash–Off program to increase messaging on EAB to residents.

Annual training’s such as Park Maintenance, Arborist School and Community Forester Academy all include EAB training and updates.

### **Tree Assessments and Survey**

City staff has completed training associated with Tree Keeper and has begun to utilize the assessment and inventory software as part of the daily activities related to inspections and inventory. Additionally, the Forestry Taskforce has been working with the Fund Development Unit in the Office of Government Affairs to seek funding opportunities for tree inventory and assessment of City of Dallas properties. Several options are being pursued, including a direct Congressional appropriation via a Community Project request in the House budget and grant opportunities.

## Fall Planting Efforts

Branch Out Dallas, the program providing 2600 trees for residents in Dallas, is scheduled for Dallas Arbor Day on November 5, 2022. This program will be open for registration on September 1 and more information will be shared as we move closer to the overall program.

Branching Out Dallas, the program for public parks and open space has finalized the fall planting schedule will be planting 300 trees, and Texas Tree Foundation are in the planning stages for Cool School Program. As a reminder, the reforestation fund provides supports for these two programs and has provided 1700 trees in FY22 with a similar level of support in FY23.



Carl Simpson  
Assistant City Manager, City of Dallas

c: Chris Caso, City Attorney  
Mark Swann, City Auditor  
Biliera Johnson, City Secretary  
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Directors and Assistant Directors

# Memorandum



CITY OF DALLAS

DATE August 1, 2022

TO Honorable Members of the Environment & Sustainability Committee: Paula Blackmon (Chair), Paul Ridley (Vice Chair), Carolyn King Arnold, Adam Bazaldua, Jaime Resendez, Jaynie Schultz, Chad West

SUBJECT **Environmental Justice Updates**

The Office of Environmental Quality & Sustainability (OEQS) has previously provided information on work being done regarding several sites in Dallas that have produced environmental justice and community public health concerns. This memorandum will serve as a status update on several of these sites:

## **Former Blue Star Site**

Recent activities at the former Blue Star property include the following:

- Surface soil screening was performed on May 6, 2022, to supplement prior investigative work and inform the placement of additional soil borings.
- Sixteen additional soil borings were completed on May 10, 2022, which confirmed no elevated lead concentrations in soil extended off-site to the north, east, or south.
- Oncor was contacted in June 2022 to allow additional investigation to the west.
- On July 11, 2022, five (5) additional soil borings were completed in the west adjacent Oncor right-of-way with none of these exceeding residential criteria of 500 mg/Kg.
- The assessment report is anticipated to be submitted to the Texas Commission on Environmental Quality (TCEQ) Voluntary Cleanup Program in September 2022.

## **Lane Plating, U.S. Environmental Protection Agency (EPA) Superfund Site**

The EPA is planning additional sampling near the Lane Plating Superfund Site. The plan is to install five additional monitoring wells for further characterization of the groundwater. Two of the proposed monitor-well locations are on City of Dallas property. The drilling will likely occur the week of September 12, 2022, and samples will be collected the following week.

## **Texas Vermiculite Facility Site**

The former site of the Texas Vermiculite Facility may contain asbestos. The operator of that facility, W. R. Grace & Co.-Conn. (WR Grace), is working with the EPA to test for and remediate the presence of possible asbestos at the property and the surrounding area.

The WR Grace Texas Vermiculite plant operated from 1953-1992 and processed vermiculite, a mineral containing asbestos, into a variety of products including fire retardant and insulation materials. The plant was dismantled sometime during 2001 or 2002.

# Memorandum



CITY OF DALLAS

DATE August 1, 2022

TO Honorable Members of the Environment & Sustainability Committee: Paula Blackmon (Chair), Paul Ridley (Vice Chair), Carolyn King Arnold, Adam Bazaldua, Jaime Resendez, Jaynie Schultz, Chad West

SUBJECT **OEQS Legislative Priorities**

The 88<sup>th</sup> Session of the Texas Legislature will convene in January 2023 and many issues affecting local governments will be considered. This memorandum provides information on recommendations the Office of Environmental Quality and Sustainability submitted to the Office of Government Affairs for possible inclusion in the City of Dallas Legislative Program. Items included in the adopted legislative program will be submitted the Texas Legislature for their consideration.

As background, In May 2020, the City adopted the Comprehensive Environmental and Climate Action Plan (CECAP) that established the pathway to guide the city towards addressing climate and environmental risk with effective, equitable, and common-sense solutions. The CECAP has established a goal to reduce the City of Dallas greenhouse gas emissions by 43 percent by 2030 and 100% by 2050. The following recommended environmental legislative priorities support the actions in the City's CECAP:

- Support legislation related to batch plants that require, for example: buffers between the plant and neighborhoods; onsite air monitoring; controls on stacks; annual inspections.
- Support legislation related to grid improvements and distributed energy resources (e.g., battery, solar, wind).
- Supporting legislation related to climate and climate mitigation and adaptation actions.
- Supporting legislation that advances the use of electric vehicles and EV infrastructure.
- Supporting legislation that advances environmental justice, such as: incentives for infrastructure investment in populations disproportionately impacted by pollution; enhanced community engagement by State agencies; and fund an Office of Environmental Justice in the Office of the Public Interest Counsel.
- Support legislation that encourages the donation of pre-consumer edible food from food service vendors directly to those in need.
- Prevent the narrowing of the definition of State waters.

- Support legislation that expands public participation/community involvement in State decision-making processes.
- Support legislation that expands producer responsibility.
- Support legislation that advances the reduction of harmful greenhouse gas emissions.
- Support legislation that bans the disposal into landfills of certain recyclable and organic materials.
- Support legislation to update substandard home stock (e.g., weatherization, energy efficiency, health and safety upgrades).
- Support legislation that promotes clean energy job creation and training.
- Support legislation that bans single use food containers (e.g., polystyrene).
- Support legislation that ensures greater coordination between TCEQ departments when issuing permits.
- Support legislation that requires and incentivizes the recycling of certain construction, remodeling, and demolition debris.
- Support legislation that encourages the use of alternative modes of transportation.
- Support legislation that requires the incorporation of reusable and recyclable materials into municipal road construction and maintenance projects.
- Support legislation that encourages the pickup and delivery of food and organic waste from food service vendors for composting.
- Support legislation that allows per ton surcharges on materials disposed in landfills to fund a variety of waste reduction and diversion activities.

The Office of Government Affairs is currently reviewing recommendations from all City departments. An update on the City of Dallas Legislative Program will be presented to the Legislative Ad Hoc Committee August 2, 2022. The final program will be presented to the full Council during the first quarter of FY23. If you have questions, or need additional information, please contact Carlos Evans, OEQS Director (214-670-1642), Susan Alvarez, OEQS Assistant Director (214-671-9505) or Sr. Climate Coordinator, Pharr Andrews (214-670-3291).



M. Elizabeth (Liz) Cedillo-Pereira, J.D.  
Assistant City Manager, City of Dallas

cc: T.C. Broadnax, City Manager  
Chris Caso, City Attorney  
Mark Swann, City Auditor  
Biliera Johnson, City Secretary  
Preston Robinson, Administrative Judge  
Genesis Gavino, Chief of Staff to the City Manager  
Majed A. Al-Ghafry, Assistant City Manager

Jon Fortune, Assistant City Manager  
Robert Perez, Assistant City Manager  
Dr. Eric A. Johnson, Chief of Economic Development and Neighborhood Services  
Jack Wade Ireland, Jr., Chief Financial Officer  
Kimberly Tolbert, Deputy City Manager  
Directors and Assistant Directors

EPA sent out 30 access agreements for 60 properties. 40 agreements have been signed totaling 90% of the square footage within the study area. 38 properties have been sampled. The remaining two properties are on Oncor and Dallas, Garland & Northeastern (DGNO) Railroad properties.

The EPA attempted to obtain access agreements on several occasions:

- Three separate mailers were sent to the surrounding community on November 8, 2021, December 16, 2021, and February 28, 2022.
- Phone calls were made continuously on a weekly basis to property owners from November 8, 2021, through March 2, 2022.
- Two in-person visits were performed with support from Singleton United on March 2, 2022, and March 22, 2022.
- Three separate community meetings were held to solicit more people to sign access agreements. Two were virtual and one was in-person.

Soil samples were found at, or more than, soil clearance standard (asbestos >.25%) on seven (7) properties. Because these seven (7) properties exceed the standard, they will require soil removal followed by backfill with clean soil and sod. The EPA anticipates removal work beginning at the site in early September 2022 with a goal of completing all properties by November 2022. The EPA will continue to share information as it becomes available.

### **General Aniline & Film (GAF) Materials Corporation**

Deputy Mayor Pro Tem Omar Narvaez and community members are having conversations with GAF related to their plans to vacate the site. Discussions are ongoing.

### **Contacts**

If you have questions, or need additional information, please contact OEQS staff:  
Carlos Evans, Director, 214-670-1642  
Paul White II, Superintendent – Air, Soil, and Groundwater Division, 214-948-4189  
Lori Frauli Trulson, Senior Environmental Coordinator, 214-671-8967



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Assistant City Manager, City of Dallas

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Kimberly Tolbert, Deputy City Manager  
Directors and Assistant Directors



# City of Dallas

1500 Marilla Street  
Council Chambers, 6th Floor  
Dallas, Texas 75201

## Agenda Information Sheet

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**File #:** 22-1953

**Item #:** A.

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OEQS Environmental Legislative Priorities Update

[Carlos Evans, Director, Office of Environmental Quality & Sustainability; Pharr Andrews, Senior Climate Coordinator, Office of Environmental Quality & Sustainability]

# Memorandum



CITY OF DALLAS

DATE September 6, 2022

TO Honorable Members of the Environment & Sustainability (ENVS) Committee

SUBJECT **OEQS Legislative Priorities Update**

This memorandum provides recommendations from the Office of Environmental Quality and Sustainability (OEQS) to the Office of Government Affairs (OGA) for possible inclusion in the City of Dallas Legislative Program, highlights activities by external partners to improve the environment through legislative action, and summarizes legislative priorities identified by ENVS Committee members during the August 1, 2022 meeting.

## **INTRODUCTION**

As background, the Comprehensive Environmental and Climate Action Plan (CECAP) is a comprehensive roadmap that outlines specific activities that the City plans to undertake to improve quality of life for all residents, to reduce greenhouse gas emissions, to prepare for the impacts of climate change, and to create a healthier and more prosperous community. In May 2020, the City Council adopted the CECAP and a suite of actions that point Dallas in the direction of achieving carbon neutrality by 2050. Many of the actions in the CECAP plan would benefit from State legislative support. The 88<sup>th</sup> Session of the Texas Legislature will convene in January 2023 and many issues affecting local governments and environmental improvements will be considered.

## **CECAP ALIGNMENT**

The following recommended environmental legislative priorities support the actions in the CECAP. OEQS provided this information to the OGA in June 2022.

- Support legislation related to batch plants that require, for example: buffers between batch plants and neighborhoods; onsite air monitoring; controls on stacks; and annual inspections.
- Support legislation related to power grid improvements and distributed energy resources (e.g., battery, solar, wind).
- Supporting legislation related to climate and climate mitigation and adaptation actions.
- Supporting legislation that advances the use of electric vehicles and associated infrastructure.
- Supporting legislation that advances environmental justice, such as: incentives for infrastructure investment in populations disproportionately impacted by pollution; enhanced community engagement by State agencies; and fund an Office of Environmental Justice in the Office of the Public Interest Counsel.
- Support legislation that encourages the donation of pre-consumer edible food from food service vendors directly to those in need.
- Prevent the narrowing of the definition of State waters.
- Support legislation that expands public participation/community involvement in State decision-making processes.

DATE September 6, 2022

SUBJECT **OEQS Legislative Priorities Update**

- Support legislation that expands producer responsibility.
- Support legislation that advances the reduction of harmful greenhouse gas emissions.
- Support legislation that bans the disposal into landfills of certain recyclable and organic materials.
- Support legislation to update substandard home stock (e.g., weatherization, energy efficiency, health and safety upgrades).
- Legislation that supports clean energy job creation and training.
- Supporting legislation that bans single use food containers (e.g., polystyrene).
- Support legislation that ensures greater coordination between the Texas Commission on Environmental Quality (TCEQ) and local governments when issuing permits.
- Support legislation that requires and incentivizes the recycling of certain construction, remodeling, and demolition debris.
- Support legislation that encourages the use of alternative modes of transportation.
- Support legislation that requires the incorporation of reusable and recyclable materials into municipal road construction and maintenance projects.
- Support legislation that encourages the pickup and delivery of food and organic waste from food service vendors for composting.
- Support legislation that allows per ton surcharges on materials disposed in landfills to fund a variety of waste reduction and diversion activities.

## **PARTNER ALIGNMENT**

OEQS collaborates with multiple internal and external partners on the local, state, and national level to advance climate action. External partners such as C40, Climate Mayors, Urban Sustainability Directors Network, and other local stakeholders are also prioritizing support for legislation that, for example, improves environmental justice, increases use of renewable sources of energy, promotes reduced water and energy consumption, and reduces global climate impacts. Adding the City of Dallas voice to this call for action will amplify these items and help produce results for local residents.

## **ENVS COMMITTEE ALIGNMENT**

During the August 1, 2022 ENVS Committee meeting, committee members raised the legislative priorities listed below. Many of the priorities echo concerns raised by OEQS and external partners.

- Legislation that addresses gaps regarding renewables (West vs. East Texas). (CM Blackmon)
- Legislation related to climate and climate mitigation and adaptation actions. (CM Ridley)
- Legislation that advances the use of electric vehicles and EV infrastructure to, for example, expand state and municipal EV fleets. (CM Ridley)
- Legislation related to polluting facilities that require, for example: buffers between facilities and neighborhoods; increased monitoring, testing, recordkeeping, and reporting; increased use of pollution controls; increased inspections; and engaging communities early in the permitting process. (CMs Schultz, Bazaldua)
- Legislation that reduces the use of impervious surfaces to, among other things, reduce stormwater impacts. (CM Schultz)

DATE September 6, 2022  
SUBJECT **OEQS Legislative Priorities Update**

- Legislation that addresses facilities that were zoned using predatory/discriminatory zoning practices to reduce, among other things, disproportionate environmental and health impacts on communities of color. (CM Bazaldua)
- Legislation that reduces urban sprawl. (CM West)
- Legislation that expands state and municipal parks. (CM West)
- Legislation that helps protect our urban forests and tree canopy from the emerald ash borer. (CM Resendez)

### **NEXT STEPS**

OGA is currently reviewing recommendations from all City staff and Councilmembers. The next update on the City of Dallas Legislative Program will be presented to the Legislative Ad Hoc Committee on September 13, 2022. The final program will be presented to the full Council during the first quarter of FY23.

If you have questions, or need additional information regarding this memo, please contact Carlos Evans, OEQS Director (214-670-1642), Susan Alvarez, OEQS Assistant Director (214-671-9505), or Pharr Andrews, OEQS Senior Climate Coordinator.



M. Elizabeth (Liz) Cedillo-Pereira, J.D.  
Assistant City Manager, City of Dallas

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Carl Simpson, Assistant City Manager  
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Genesis D. Gavino, Chief of Staff to the City Manager  
Directors and Assistant Directors



# City of Dallas

1500 Marilla Street  
Council Chambers, 6th Floor  
Dallas, Texas 75201

## Agenda Information Sheet

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**File #:** 22-1954

**Item #:** B.

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Solar PV Projects Update

[John Johnson, Director, Building Services Department; Srinivas Vemuri, Senior Program Manager, Building Services Department]



# City of Dallas

1500 Marilla Street  
Council Chambers, 6th Floor  
Dallas, Texas 75201

## Agenda Information Sheet

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**File #:** 22-1955

**Item #:** C.

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Comprehensive Urban Agriculture Plan (CUAP) Recommendations  
[Rabekha Siebert, Urban Agriculture Coordinator, Office of Environmental Quality & Sustainability;  
Christian Kanlian, Agritecture; Jeffrey Landau, Agritecture; Mikel Wilkins, TBG Partners; Jordan  
Clark, TBG Partners; Scott Snodgrass, The Edible Group, LLC]



**City of Dallas**

# **COMPREHENSIVE URBAN AGRICULTURE PLAN (CUAP)**

## **Urban Agriculture Plan Recommendations**

### **Environment and Sustainability Subcommittee September 6, 2022**

Prepared for: Environmental Commission  
| City of Dallas, OEQS

By Agritecture

# AGENDA



1. Project Team
2. Project Objectives
3. Where are we?
4. Review of Recommendations
5. Timeline





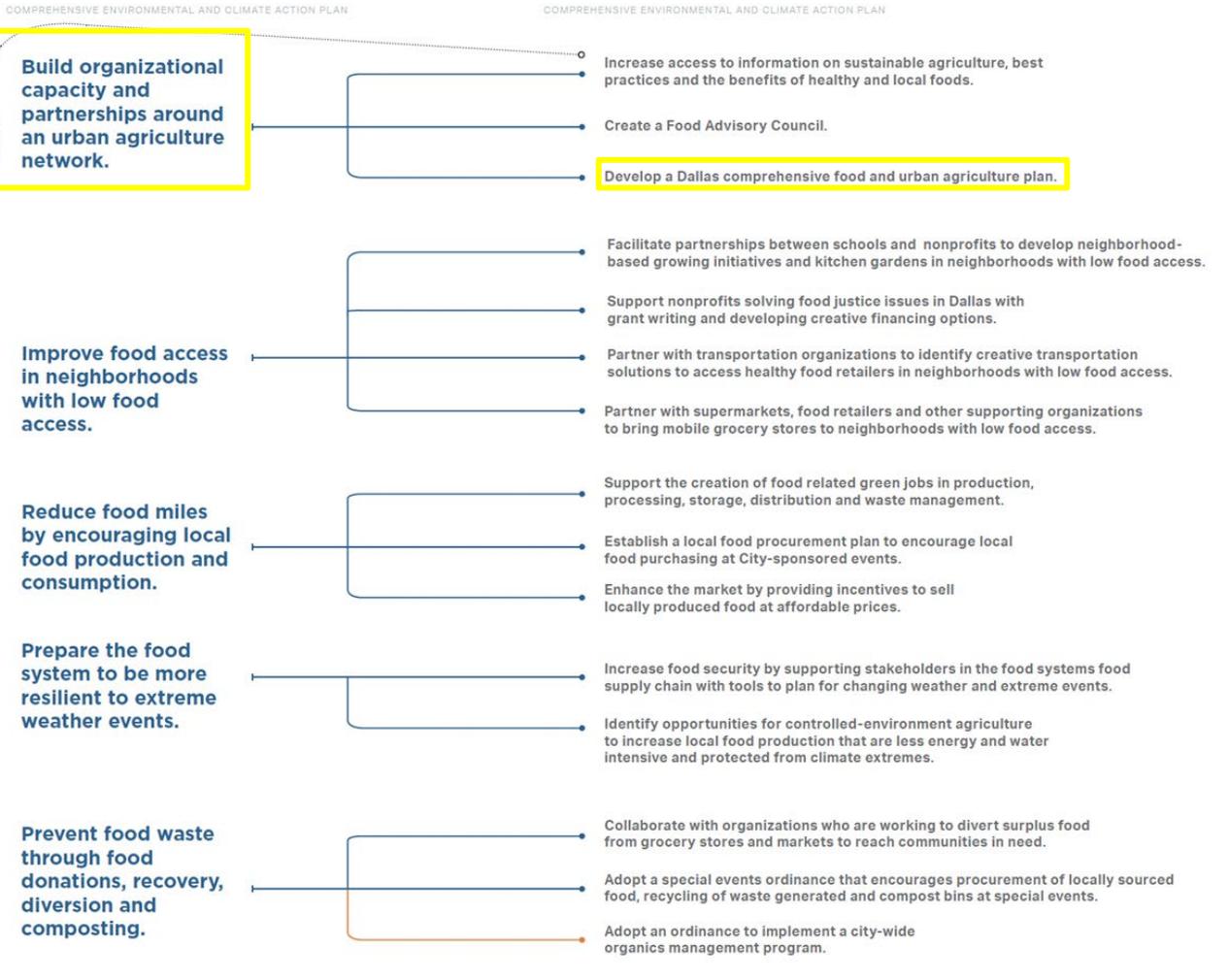
# PROJECT TEAM



# PROJECT OBJECTIVES



SELECT ANY ACTION TO SKIP DIRECTLY TO THAT PAGE



## CECAP SECTOR TARGETS

### 1. HEALTHY AFFORDABLE ACCESS

50% by 2030/100% by 2050

### 2. INCREASE URBAN GARDEN ACREAGE

20% by 2030/75% by 2050

### 3. INCREASE LOCAL COMMERCIAL FOOD SOURCING

10% by 2030/50% by 2050



07 | All Dallas' communities have access to healthy, local FOOD.





# DEFINE URBAN AGRICULTURE

---

**"Urban agriculture generally refers to the cultivation, processing and distribution of agricultural products in urban and suburban settings, including things like:**



- Vertical production
- Warehouse farms
- Community gardens
- Rooftop farms
- Hydroponic
- Aeroponic
- Aquaponic facilities
- Other innovations.



**Urban farmers and gardeners work among diverse populations to expand access to nutritious foods, foster community engagement, provide jobs, educate communities about farming, and expand green spaces."**

- *USDA. Farmers.gov*



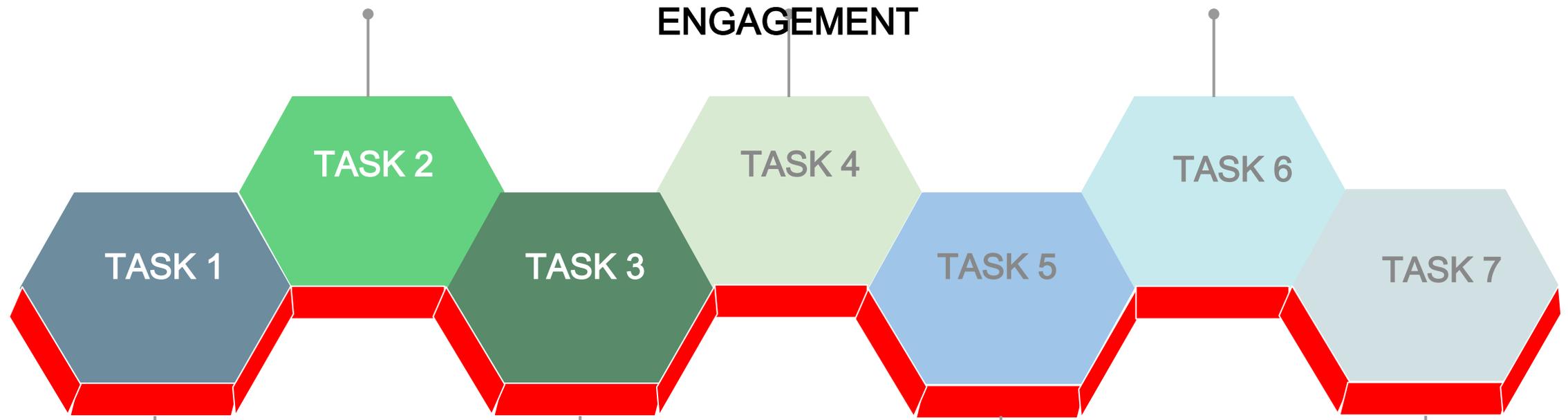


# WHERE ARE WE?





**COMMUNICATION & COORDINATION**    **COORDINATE COMMUNITY OUTREACH & ENGAGEMENT**    **COMPREHENSIVE URBAN AGRICULTURE PLAN**



**TASK 1**

**TASK 2**

**TASK 3**

**TASK 4**

**TASK 5**

**TASK 6**

**TASK 7**

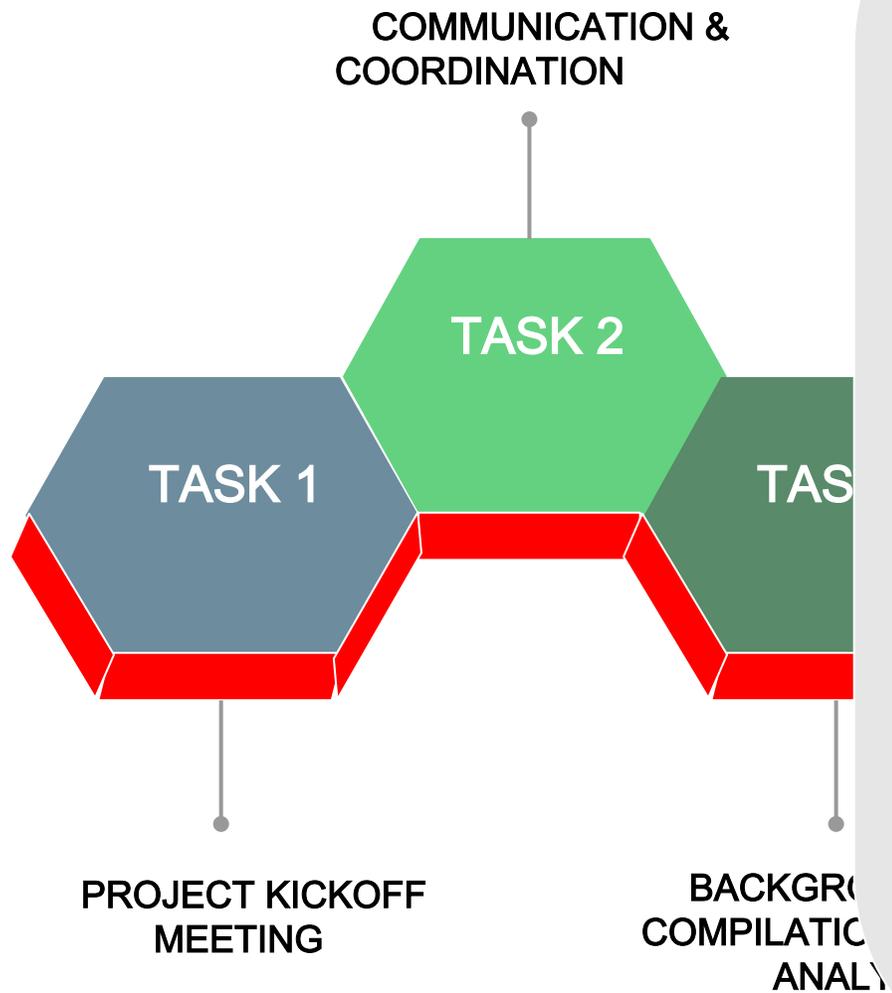
**PROJECT KICKOFF MEETING**

**BACKGROUND DATA COMPILATION & MAPPING ANALYSIS**

**COMPILE AND UPDATE GOALS, INITIATIVES, & CRITICAL STEPS**

**IDENTIFY APPLICABLE POLICY & CODE AMENDMENTS**





- *~55 STAKEHOLDER INTERVIEWS COMPLETED*
- *TWO PUBLIC ENGAGEMENT SURVEYS*
  - *URBAN AG PUBLIC SURVEY ~700+ SURVEY RESPONSES*
  - *GARDEN VERIFICATION RECENTLY LAUNCHED*
- *BACKGROUND RESEARCH COMPLETED*
  - *Review of Local Food, Local Places*
  - *4 OTHER UA PLANS REVIEWED*
- *GISWEB APP BUILT*
  - *OPPORTUNITY ZONES ANALYSIS IN PROGRESS*
- *5 RECOMMENDATION WORKSHOPS COMPLETED*
- *FIRST ROUND ON SITE VISITS COMPLETED*
  - *2ND VISIT SEP/OCT '22*





# URBAN AG PUBLIC SURVEY

- Intended to gauge public demand in the City of Dallas for local foods, as well as interest in Urban Farming and awareness of its benefits
- Data collected will support the recommendations made in CUAP
- Provided in both English and Spanish.

This survey has 11 questions:

- 8 Mandatory Questions
- 1 question for zipcode
- 3 questions on Local Food demand
- 4 questions on interest in Urban Agriculture

There are three additional optional demographic questions on age, language, and email for Dallas Urban Ag Newsletter.

In the last year, have you gardened or farmed in Dallas?

Yes

No

Are you interested in volunteering, learning, or working in gardening or farming?

Yes

No

How should the City support urban agriculture?

Provide money or resources to start a garden/farm

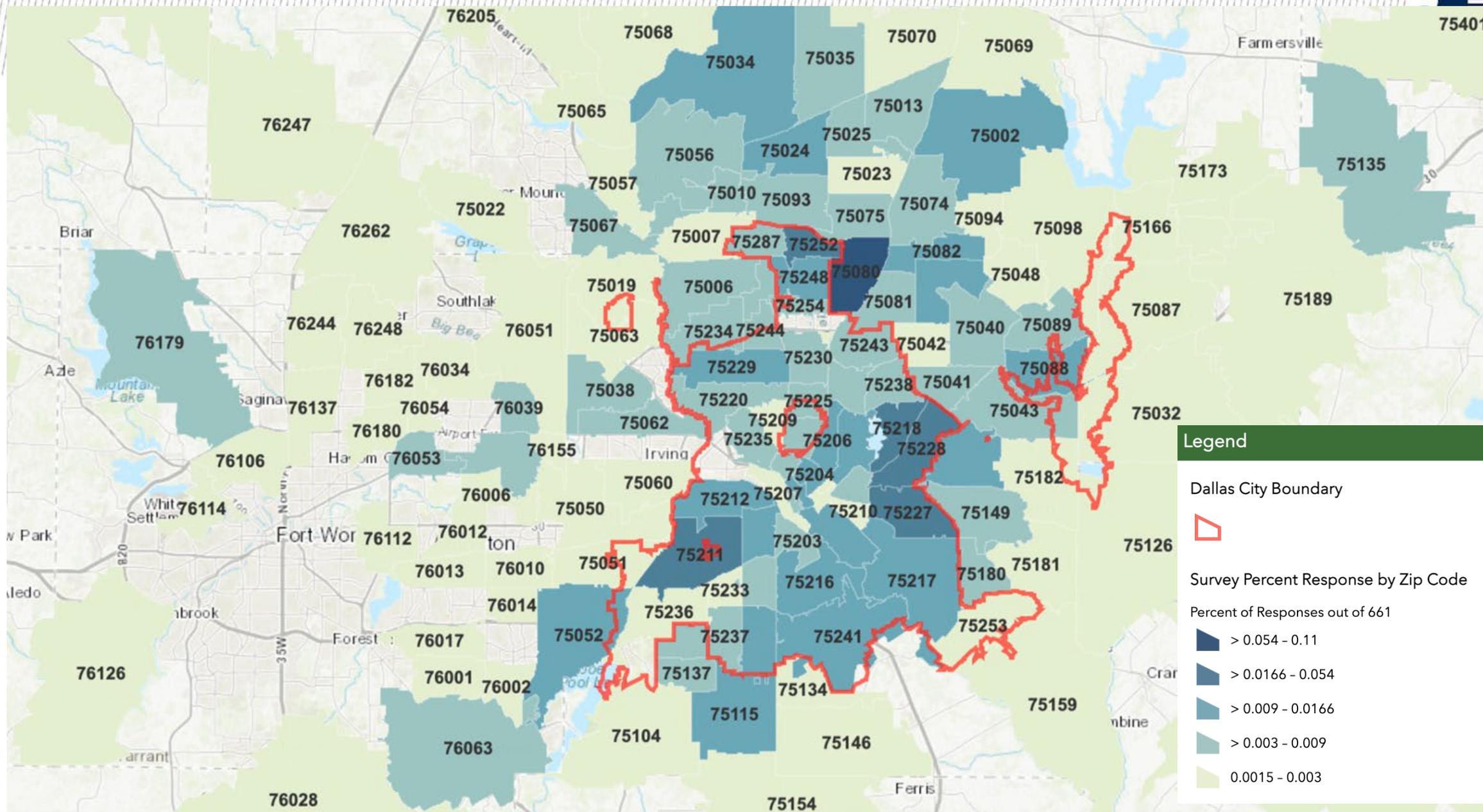
Reduce cost of fresh produce to public

Make land/space available

Provide education/training

Other







# CUAP Recommendations & Framework

RECOMMENDATION	1	2	3	4	5
DESCRIPTION	<div style="border: 1px solid gray; border-radius: 20px; padding: 20px; background-color: #f0f0f0;"> <p>Recommendations</p> <ol style="list-style-type: none"> <li>1. Reduce regulatory barriers to urban food production.</li> <li>2. Support land access for growers and food-related activities.</li> <li>3. Provide education, resources, and support to urban farmers</li> <li>4. Build market opportunities for urban growers.</li> <li>5. Facilitate collaboration among urban agriculture stakeholders.</li> </ol> </div>				
RELATED CECAP GOAL					
SOLUTION					
Description/ Rationale					
Timeline					
Who Leads/					
Who Supports					
Initial Actions					
Model(s) from other cities					
Success metrics/ indicators					





# City of Dallas - Urban Ag Plan - Recommendation 1 - Reduce Regulatory Barriers To Urban

Prepared for **City of Dallas - Food Advisory Council**

Prepared by **Agriitecture**

Created on **July 2022**



<b>WHICH RECOMMENDATION?</b>	Reduce regulatory barriers to urban food production.
<b>DESCRIPTION</b>	<p>Urban farmers currently operate in legal-limbo or petition for exemptions through City Managers and/or City Council. This tedious and confusing process discourages potential new growers from establishing new commercial and community-based UA projects. Moreover, City officials themselves have stated that they do not make permitting and zoning processes easy for citizens. There is a need for clear and inclusive ordinances that provide farmers and City employees clear guidance on how to efficiently establish new UA sites.</p>
<b><u>RELATED CECAP GOALS</u></b>	<p>Goal 7 Targets: Increase <i>Urban Agriculture Acreage</i>: 20% by 2030 / 75% by 2050</p> <p>Additional CECAP Goals Impacted:</p> <ul style="list-style-type: none"><li>- Goal 7 FA8 - Support The Creation Of Food Related Green Jobs In Production, Processing, Storage, Distribution And Waste Management.</li><li>- Goal 6 EG8 - Improve The Quality Of Urban Ecosystems In Dallas Through The Sustainable Appropriate Design, Creation And Planting Of Urban Habitats.</li><li>- Goal 6 EG9 - Support Public And Private Partnerships Using Naturebased Solutions To Address Public Health Challenges.</li><li>- Goal 1 B13 - Establish Urban Greening Factor Requirements For New Developments That Quantify How Projects Contribute To Urban Greening For Reduced Stormwater Runoff And Urban Heat Island Improvements.</li></ul>



# RECOMMENDATION REDUCE REGULATORY BARRIERS TO URBAN FOOD PRODUCTION.



1

2

3

## SOLUTIONS

Update Urban Ag Code Ordinance & Agriculture land use description, in compliance with the City of Dallas Planning & Urban Design

Change CO/Permitting Process (PLAT map, water meter) (may or may not fall under solution 1)

Create incentives for developers to include Urban Agriculture within new developments.

Catalyst for us to move towards updates to the ordinances/ CO easements.

Easing CO and development review process on owned properties for new structures, new growing and unowned for full permitting

Developers have a significant influence on land use, stand to benefit from Urban Agriculture (amenity benefits, heat island reduction, stormwater infiltration, etc) and have the capital resources to support urban agriculture.

There are likely goals in existing comprehensive plan (PUD) that could be cited as support for UA.

Well-designed city development incentives can encourage more urban agriculture in COD at no cost to the City.

## DESCRIPTION

## TIMELINE

12 - 18 Months

12 - 18 Months

6-12 Months



# RECOMMENDATION REDUCE REGULATORY BARRIERS TO URBAN FOOD PRODUCTION.



1

2

3

## SOLUTIONS

Update Urban Ag Code Ordinance and Agriculture land use description

Change CO/Permitting Process

Create incentives for developers

## INITIAL ACTIONS

- 1. Grant program to cover fees for COs/Permits
- 1. Temporary process internally for AG or non-profit exemption (waiving fees) from CO/permitting process
- 1. Formalize policy/process change
- 1. Allow commercial sales of produce from residential property
- 1. Coordinate with PUD/Housing to explore future opportunities through HUD grants that could potentially support expansion of UA

*These action items are currently in work between the Project Team and the Planning and Urban Design Agency at the City of Dallas.*

- 1. Convene developers to identify meaningful benefits
- 1. Meet with PUD to determine acceptable incentives
- 1. Design accountability process to ensure program moves the needle on UA

## WHO LEADS/ WHO SUPPORTS

OEQS| Planning & Urban Design (PUD) | Cit Attorney's Office

OEQS| Sustainable Development and Construction Department Building Inspection Division | PUD

OEQS | PUD | Sustainable Development and Construction Department



# RECOMMENDATION 2 SUPPORT LAND ACCESS FOR GROWERS AND RELATED ACTIVITIES.



1

2

3

4

## SOLUTIONS

<p><b>Visualize the COD UA landscape</b> in geographic context, framed with equity.</p>	<p><b>Tree Tops Down Approach</b> Matchmaking for city-owned lots</p>	<p><b>Roots Up Approach</b> Matchmaking model for private landowners.</p>	<p><b>Co-Design Approach</b> Co-design Urban Agriculture Zoning and Land Use educational events/materials</p>
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## DESCRIPTION

<p>A visual representation of land opportunities suitable for UA, overlaid with the existing UA infrastructure, community assets, and community social determinants of health</p>	<p>Utilizing city owned sites for either permanent or temporary agricultural use would meaningfully advance the CECAP targets of local food production and climate resilience.</p>	<p>Collaborate with established UA practitioners to design a RFP for a decentralized database/matchmaking service between aspiring farmers and landowners, for private, non-COD owned land in the North Texas region.</p>	<p>In order to prevent unintended consequences such as causing nuisances, the COD could partner with residents and UA practitioners to understand land use and zoning guidelines for the diverse set of UA land opportunities.</p>
---	--	---	--

## TIMELINE

Ongoing	12-18 Months	18-24 Months	TBD
---------	--------------	--------------	-----



# RECOMMENDATION 2 SUPPORT LAND ACCESS FOR GROWERS AND RELATED ACTIVITIES.



1

2

3

4

## SOLUTIONS

## INITIAL ACTIONS

## WHO LEADS/ WHO SUPPORTS

	Visualize the COD UA landscape	Tree Tops Down Approach	Roots Up Approach	CoDesign Approach
	<ol style="list-style-type: none"> <li>1. Create GIS Web App</li> <li>1. Produce Citywide and City Council District reports</li> <li>1. Establish COD ownership of the GIS Web App</li> </ol>	<ol style="list-style-type: none"> <li>1. Use identified UA Priority Area Tracts</li> <li>1. Develop a public version of the GIS Web App</li> <li>1. Develop urban farm/garden programs</li> <li>1. Put in place an audit/maintenance system</li> <li>1. Create an incentive program, <a href="#">joint use agreements</a> &amp; Interim-</li> </ol>	<ol style="list-style-type: none"> <li>1. Reach out to existing farmland matchmaking services and inquire about best practices</li> <li>1. Perform targeted area land use studies in Tier 2 and Tier 1 tracts</li> <li>1. Convene UA practitioners and peri-urban small farmers in focus groups</li> <li>1. Determine the most feasible implementation plan</li> </ol>	<ol style="list-style-type: none"> <li>1. Create an UA land opportunity workshop</li> <li>1. Create a second workshop and brief series for land opportunities.</li> <li>1. A third workshop brief series could showcase successful production and community engagement techniques</li> </ol>
	OEQS   Other related City agencies and affiliates	OEQS   Other related City agencies and affiliates	TBD Community Partner(s)	OEQS   Other related City agencies and affiliates (PUD)



# UA GIS Web Application

Infographic of Productive Acres

ESTIMATED PRODUCTIVE ACRES



16.78

Productive Acres are estimated by satellite imagery

City of Dallas Urban Agriculture and Community Health Explorer A project in collaboration with AGRITECTURE

Find address or place

Legend

- City Owned Parcels with High UA Potential
- HUD Public Housing Developments
- Farmers Market Stands
- Urban Agriculture Sites
- Estimated Productive Acres
  - > 0.7 - 2.07
  - > 0.34 - 0.7
  - 0 - 0.34
- UAPA Tracts Tier 1
- UAPA Tracts Tier 2

About this App

Welcome to the Urban Agriculture and Community Health Explorer for the City of Dallas (COD)!

The purpose of this map application is to assist COD stakeholders to explore, identify, edit, and add urban agriculture (UA) projects in Dallas.

2mi

-97.047 32.716 Degrees

Hutchins POWERED BY esri





# RECOMMENDATION BROVIDE EDUCATION, RESOURCES, AND SUPPORT TO URBAN FARMERS

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3

## SOLUTIONS

### UA Resource Page

Create clear, accessible documents that educate urban farmers

### UA Education

Develop and implement a cohesive UA education strategy

### UA Workforce Development

Increase internship and traineeship opportunities

## DESCRIPTION

Creating a central website will help reduce the siloing and lack of clarity.

Community members can find available land and resources, funding opportunities, training programs, related events, and outside resources.

Working with DISD, HUD, local Colleges will help disseminate knowledge to a widerange of audiences.

Topics can include: optimal growing practices, familiarity with the benefits of UA, and providing more experience for job opportunities in UA.

Increasing internship and traineeship opportunities in urban agriculture will build a pipeline of talent to support local nonprofit and for profit farms.

## TIMELINE

12 Months

12-18 Months

< 6 Months



# RECOMMENDATION BROVIDE EDUCATION, RESOURCES, AND SUPPORT TO URBAN FARMERS



1

2

3

## SOLUTIONS

### UA Resource Page

### UA Education

### UA Workforce Development

## INITIAL ACTIONS

- 1. Determine website host
- 1. Establish a public input process
- 1. Develop/Gather resources
- 1. Organize a central calendar
- 1. Devote staff members to maintain
- 1. Host workshops and print summaries for those without internet access

- 1. Create Pilot education program with CityLab school
- 1. Identify experts and institutions who can add value to this process
- 1. Convene local experts to develop region-specific UA best practices.
- 1. Identify and train communications/ programming partners to share information

- 1. Get website setup from Solution 1
- 1. Consult with established UA Operators to determine qualifications
- 1. Contact stakeholders to gather job offerings
- 1. Upload and maintain

## WHO LEADS/ WHO SUPPORTS

OEQS | FAC

OEQS | Office of Equity and Inclusion  
FAC

OEQS | FAC | Office of Equity and Inclusion



# RECOMMENDATION BUILD MARKET OPPORTUNITIES FOR URBAN GROWERS.



1

2

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4

## SOLUTIONS

Facilitate connections between local buyers and producers

“Buy Local” campaign with consumer and business facing elements

Reduce barriers to operating farmers markets

Seek funding for nutrition assistance programs to increase purchasing power of low-income consumers

## DESCRIPTION

Helping smaller growers access wholesale customers is one of the most impactful ways to develop a local food system. **Institutions represent huge opportunities** to change eating habits at scale and decrease food imports.

By developing a “Buy Local” label or initiative, COD can help give local producers a **marketing and branding advantage**, making them more competitive with producers outside the region.

**Reducing the costs and complexity of obtaining a market permit**, and financially supporting UA farmers with other marketing costs, will help growers scale up production and allow new farmers to access new markets.

Existing programs like **Double Up Bucks** already demonstrate the power of coupling government assistance funding with local food production.

## TIMELINE

Can begin soon, to ramp up as production increases

Long term, wait for increase in local production first

In progress, FAC to support

1-2 years



# RECOMMENDATION BUILD MARKET OPPORTUNITIES FOR URBAN GROWERS.



1

2

3

4

## SOLUTIONS

### Facilitate connections

- 1. Convene chefs and growers to discuss challenges with current procurement strategies and opportunities for collaboration.
- 1. Develop and disseminate a list of active producers and buyers. Share best practices
- 1. Host a section on the UA website about procurement opportunities and providers.

### “Buy Local” campaign

- 1. Establish relationship with existing local labels
- 1. OEQS to promote the chosen label and participants on the UA resource page
- 1. Establish procedures to prevent abuse of the label and erosion of consumer faith

### Reduce barriers

- 1. Ordinance change, Chap 42, sec. 22
- 1. Explore options for supporting farmers with marketing and distribution costs
- 1. Provide nocost spaces for marketing on city-owned properties.
- 1. Collaborate with DART to promote local producers.

### Seek funding for nutrition assistance programs

- 1. Understand current barriers to expansion (believed to be identifying financial matching partner)
- 1. Explore funding opportunities, including: LFPP grant Restorative Farms
- 1. The GusNIP Nutrition Incentive Program
- 1. Produce prescription program Lexi Uribe UT
- 1. Distribution/Market at West Dallas Community Center

## INITIAL ACTIONS

## WHO LEADS/ WHO SUPPORTS

Partnership b/w COD & community partner

TBD  
(COD supports, not leads)

OEQS | PUD | FAC

OCC | OEQS



# RECOMMENDATION 5 FACILITATE COLLABORATION AMONG URBAN AGRICULTURE STAKEHOLDER



1

2

3

## SOLUTIONS

Continue a Food Advisory Council that represents a range of UA production systems, funding schemes, and organizational structures	Share knowledge about useful UA events and qualified content experts	Develop a series of Workshops held by Urban Agriculture stakeholders or other industry experts to increase knowledge sharing
---	--	--

## DESCRIPTION

Continuing building a Food Advisory Council that represents UA stakeholders assures that there is a central entity within the Dallas community that can serve to strengthen collaboration amongst stakeholders and ease communication with related City Departments and affiliates.	Organizing UA related events and publicizing them provides transparency to UA resources and knowledge and builds organization capacity in the UA community.	Creating a workshop series run by the proposed Urban Agriculture or Food Advisory Council to feature experts and native Dallas Urban Agriculture Stakeholders that address commonly held problems and attempts to find agreed upon solutions. Specifically in the areas of grant writing, shared distribution and/or processing infrastructure.
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## TIMELINE

Ongoing	Ongoing	6- 12 Months
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# RECOMMENDATION 5 FACILITATE COLLABORATION AMONG URBAN AGRICULTURE STAKEHOLDERS

1

2

3

## SOLUTIONS

Continue a Food Advisory Council	Share knowledge about useful UA events	Develop a series of Workshops held by Urban Agriculture stakeholders
----------------------------------	--	--

## INITIAL ACTIONS

<ol style="list-style-type: none"> <li>1. Set in place a meeting schedule</li> <li>1. Solicit initial feedback from stakeholders regarding priorities and objectives</li> <li>1. Implement processes for auditing and receiving recommendations</li> </ol>	<ol style="list-style-type: none"> <li>1. Develop a list of useful UA events and find qualified facilitators</li> <li>2. Create an overarching event (“Harvest Fest”) in February</li> <li>1. Publish this information on the UA Resource Page mentioned in recommendation three (3)</li> <li>1. Solicit feedback on which trainings and events are the most useful</li> </ol>	<ol style="list-style-type: none"> <li>1. Conduct an activation event on the state of Urban Agriculture in Dallas, sharing existing operations, opportunities to volunteer and different business models</li> <li>1. Solicit feedback on what future workshops would be the most helpful</li> </ol>
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## WHO LEADS/ WHO SUPPORTS

OEQS   Urban Agriculture Stakeholders	OEQS   Office of Community Care	OEQS   FAC
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# Comprehensive Urban Agriculture Plan, City of Dallas- Feedback Form

Thank you for taking the time to provide feedback on the City of Dallas's first Comprehensive Urban Agriculture Plan.

This plan is driven by FA3 of Goal 7 of the Dallas Comprehensive Environmental And Climate Action Plan (CECAP).

The targets for Goal 7 are:

- Healthy Affordable Access: 50% by 2030/100% by 2050
- Increase Urban Acreage: 20% by 2030/ 75% by 2050
- Increase Local Commercial Food Sourcing: 10% by 2030/ 50% by 2050

It is essential that this plan provide recommendations that are feasible and actionable for the City of Dallas and local Urban Agriculture stakeholders. This form has been created purposely to allow open ended comments to capture as much detail and nuance as possible.

Please provide your careful review with this in mind. We thank you in advance for your time and consideration.

If you have any questions or wish to speak with the Project Team, please contact [Jeffrey@agritecture.com](mailto:Jeffrey@agritecture.com)

Overview of Sections:

- (1) General Information
- (2) Recommendation 1: Reduce regulatory barriers to urban food production.
- (3) Recommendation 2: Support Land Access For Growers And Food-Related Activities



## Recommendation 1: Reduce regulatory barriers to urban food production.

Do you understand the reasoning behind this recommendation after reading the Description?

"Urban farmers currently operate in legal-limbo or petition for exemptions through City Managers and/or City Council. This tedious and confusing process discourages potential new growers from establishing new commercial and community-based UA projects. Moreover, City officials themselves have stated that they do not make permitting and zoning processes easy for citizens. There is a need for clear and inclusive ordinances that provide farmers and City employees clear guidance on how to efficiently establish new UA sites."

Yes

No

Other: \_\_\_\_\_

Do you believe Solution 1 is actionable and appropriate?

Please answer yes or no and give an explanation.

Your answer \_\_\_\_\_

Do you believe Solution 2 is actionable and appropriate?

Please answer yes or no and give an explanation.

Your answer \_\_\_\_\_

# TIMELINE



Present Recommendations  
to Food Advisory Council

FAC & EC Deadline to Submit  
Feedback on CUAP

Onsite Public Engagement

JULY 26

AUGUST 26

MID OCTOBER



AUGUST 10

SEPTEMBER 6

LATE  
OCTOBER/NOVEMBER

Submit draft plan to City Council

Present Recommendations  
Environmental  
Commissioners

Environmental and Sustainability  
Committee



# Questions?



All follow-up questions may be sent to

Rabekha Siebert - [rabekha.siebert@dallas.gov](mailto:rabekha.siebert@dallas.gov)

Jeffrey Landau - [Jeffrey@agritecture.com](mailto:Jeffrey@agritecture.com)





# City of Dallas

1500 Marilla Street  
Council Chambers, 6th Floor  
Dallas, Texas 75201

## Agenda Information Sheet

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**File #:** 22-1956

**Item #:** D.

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City Deployment of Electric Vehicle Charging Infrastructure for Public Use  
[Carlos Evans, Director, Office of Environmental Quality & Sustainability; Susan Alvarez, Assistant Director, Office of Environmental Quality & Sustainability; Pharr Andrews, Senior Climate Coordinator, Office of Environmental Quality & Sustainability]



**City of Dallas**

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

**September 6, 2022**

Pharr Andrews,  
Senior Climate Coordinator,  
Office of Environmental Quality &  
Sustainability

# 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?



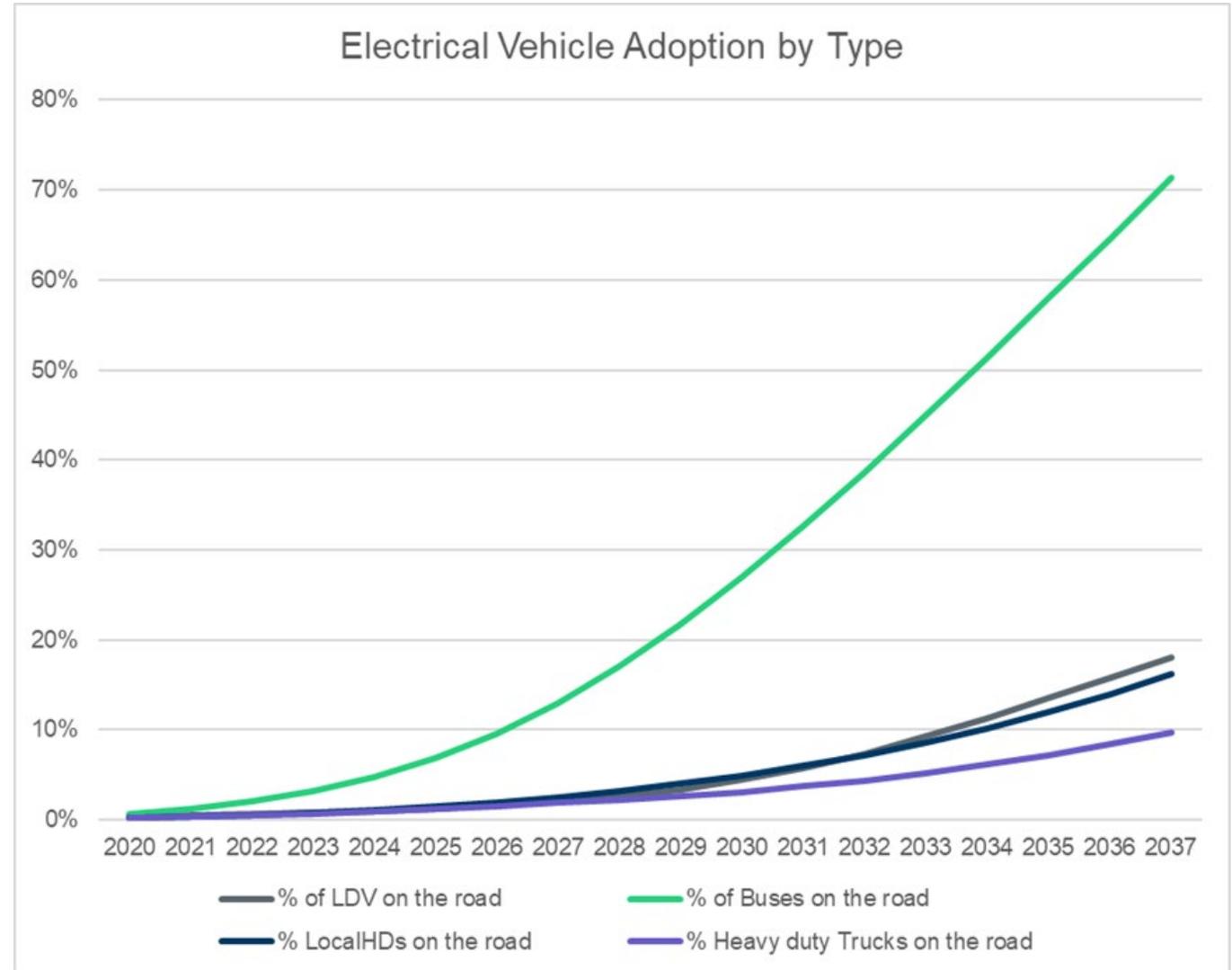
# Why does Dallas need more EV infrastructure?



## 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/>).





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

### Objectives

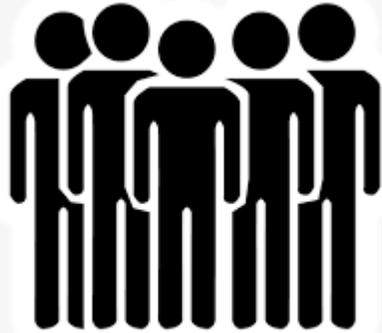
- Shift the surface transportation system to move people and goods in **fuel-efficient vehicles**.
- **Reduce trips** where people drive alone.
- **Synergize jobs and housing** with transportation infrastructure to increase access to walking and biking options, and public transit.
- Ensure that walking,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



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



CITY  
FLEET



PUBLIC



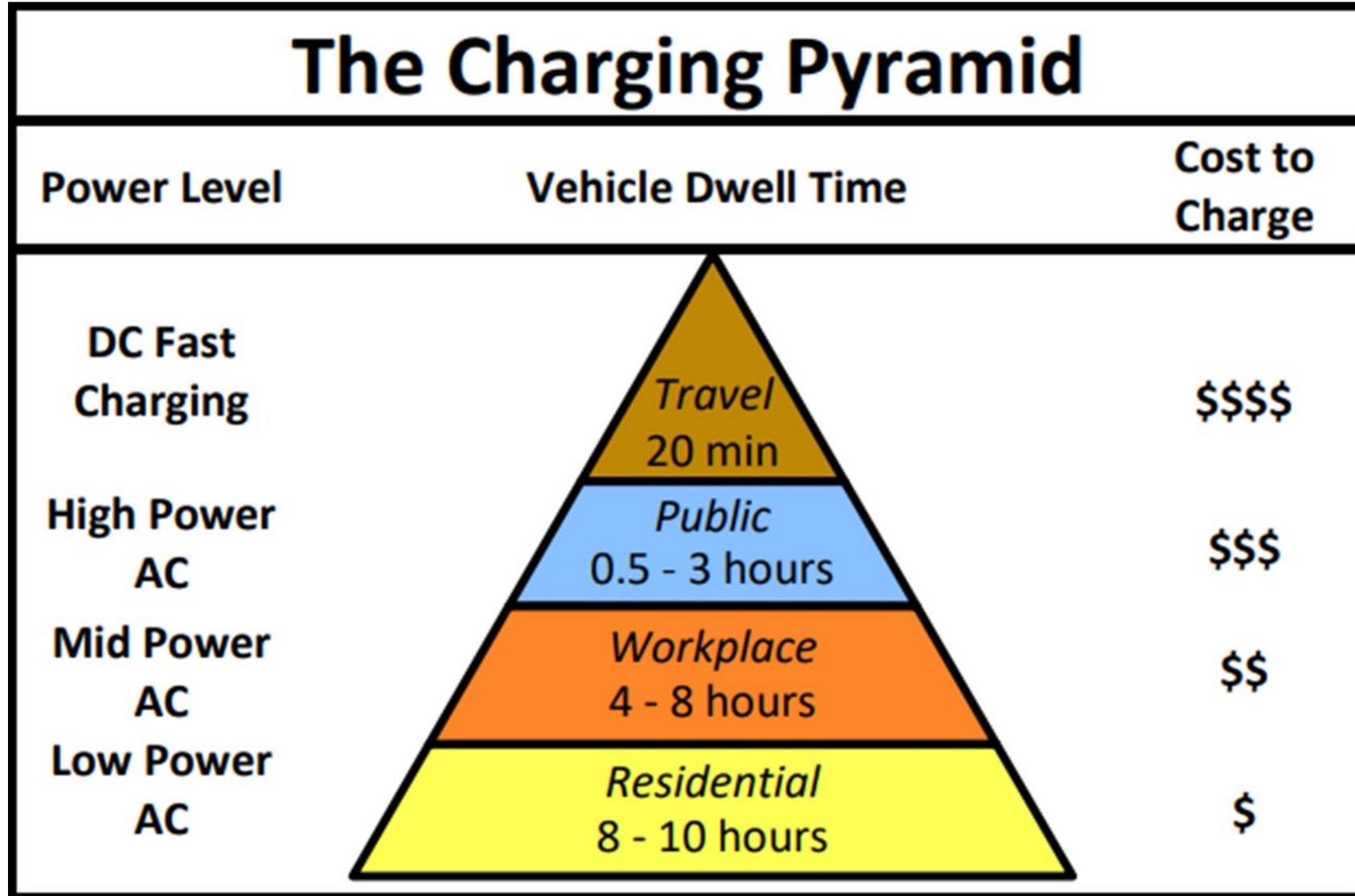
CITY  
STAFF



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](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 )	3431 Grand 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](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 <b><i>with MPOs</i></b> 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

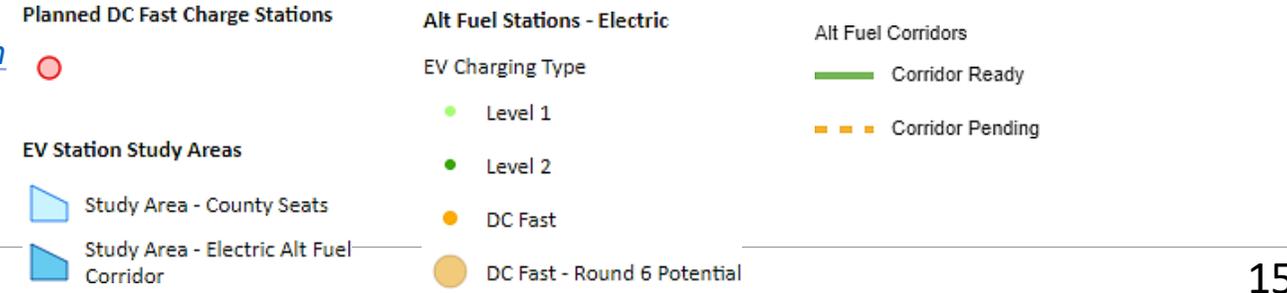
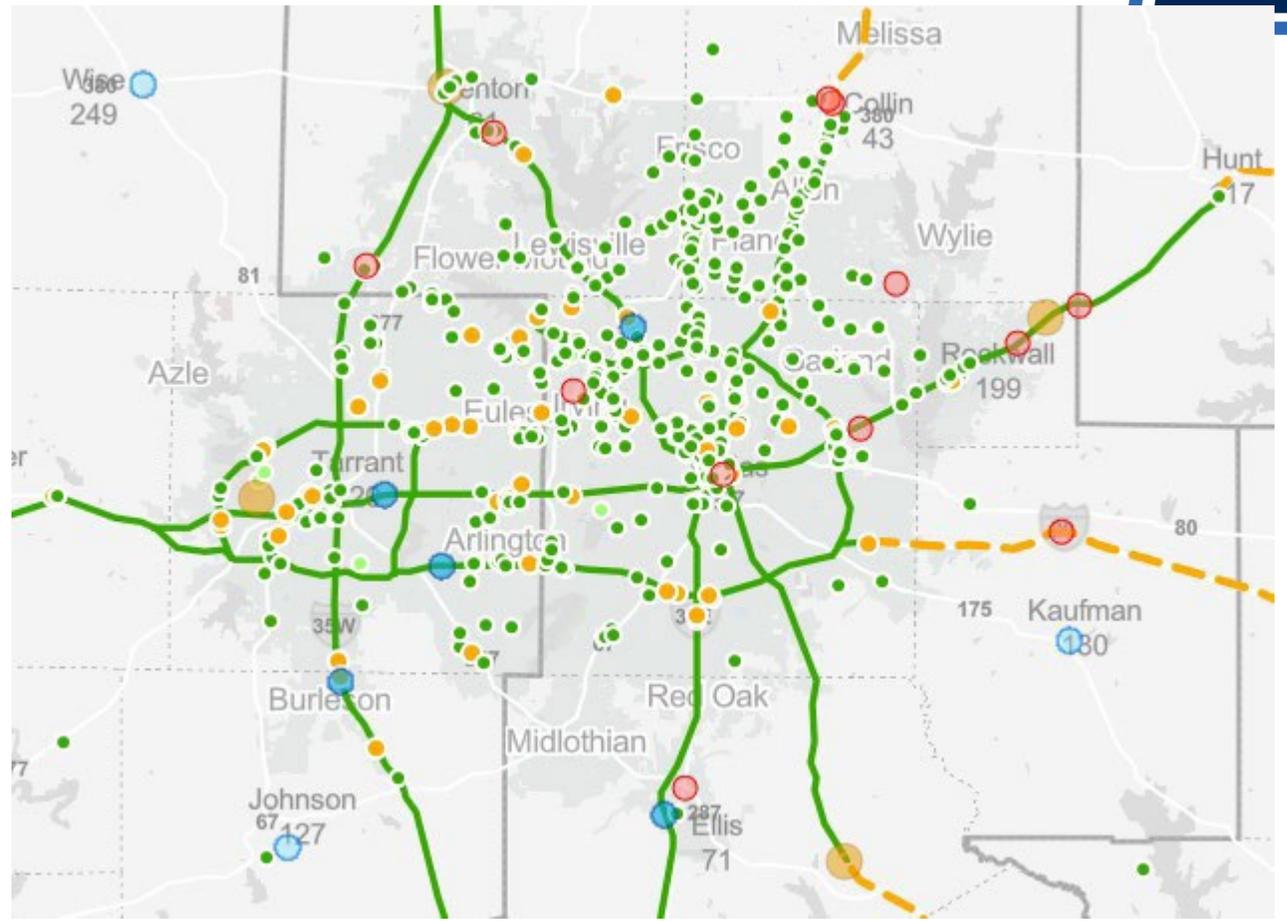


Image Source: TxDOT Statewide Planning Map,  
[https://www.txdot.gov/apps/statewide\\_mapping/StatewidePlanningMap.htm](https://www.txdot.gov/apps/statewide_mapping/StatewidePlanningMap.htm)



# 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





# City Deployment of Electric Vehicle Charging Infrastructure for Public Use

**September 6, 2022**

National Drive Electric Week



Pharr Andrews,  
Senior Climate Coordinator,  
Office of Environmental Quality &  
Sustainability





# City of Dallas

1500 Marilla Street  
Council Chambers, 6th Floor  
Dallas, Texas 75201

## Agenda Information Sheet

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**File #:** 22-1957

**Item #:** E.

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Environmental Commission Update  
[Kathryn Bazan, Chair, Environmental Commission]



# City of Dallas

1500 Marilla Street  
Council Chambers, 6th Floor  
Dallas, Texas 75201

## Agenda Information Sheet

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**File #:** 22-1987

**Item #:** F.

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A public hearing to receive comments on a proposed municipal setting designation to prohibit the use of groundwater as potable water beneath property owned by Jubilee Park Clinic Holdings, LLC located near the intersection of Parry and Ann Avenues and adjacent street rights-of-way; and an ordinance authorizing support of the issuance of a municipal setting designation to Jubilee Park Clinic Holdings, LLC by the Texas Commission on Environmental Quality and prohibiting the use of groundwater beneath the designated property as potable water - Financing: No cost consideration to the City

Recommendation of Staff: Approval



# City of Dallas

1500 Marilla Street  
Council Chambers, 6th Floor  
Dallas, Texas 75201

## Agenda Information Sheet

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**File #:** 22-1988

**Item #:** G.

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A public hearing to receive comments on a proposed municipal setting designation to prohibit the use of groundwater as potable water beneath property owned by SCP/OI Good Latimer OZ Owner, LLC located near the intersection of South Good Latimer Expressway and Dawson Street and adjacent street rights-of-way; and an ordinance authorizing support of the issuance of a municipal setting designation to SCP/OI Good Latimer OZ Owner, LLC by the Texas Commission on Environmental Quality and prohibiting the use of groundwater beneath the designated property as potable water - Financing: No cost consideration to the City  
Recommendation of Staff: Approval