

Interstate Highway 45 ZEV Corridor: Infrastructure Development

Agenda:

1. Welcome/Housekeeping
2. Review of Subgroup Role/Objectives
3. Discussion and Closing Remarks

November 10, 2020

11:00 am – 12:00 pm

Call-In Information: 1-346-248-7999

Meeting ID: 871 2822 6957

Please mute yourself when you are not speaking

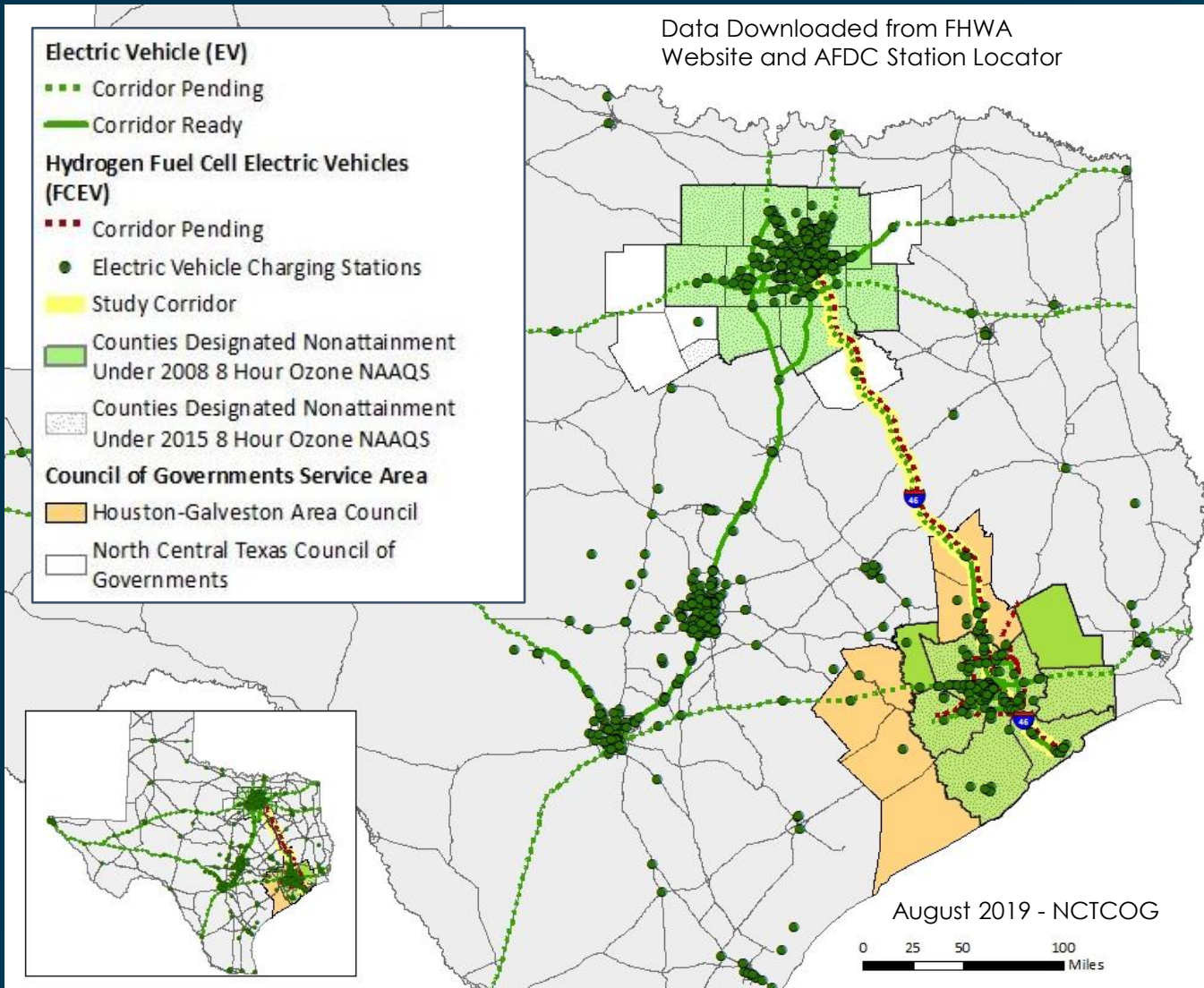


**Dallas-Fort Worth
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**North Central Texas
Council of Governments**

IH-45 ZEV Corridor Plan Goals



Create an Actionable Infrastructure Plan that Facilitates BEV and FCEV Pilot Projects Along the Corridor

- Focused on Medium and Heavy-Duty Applications

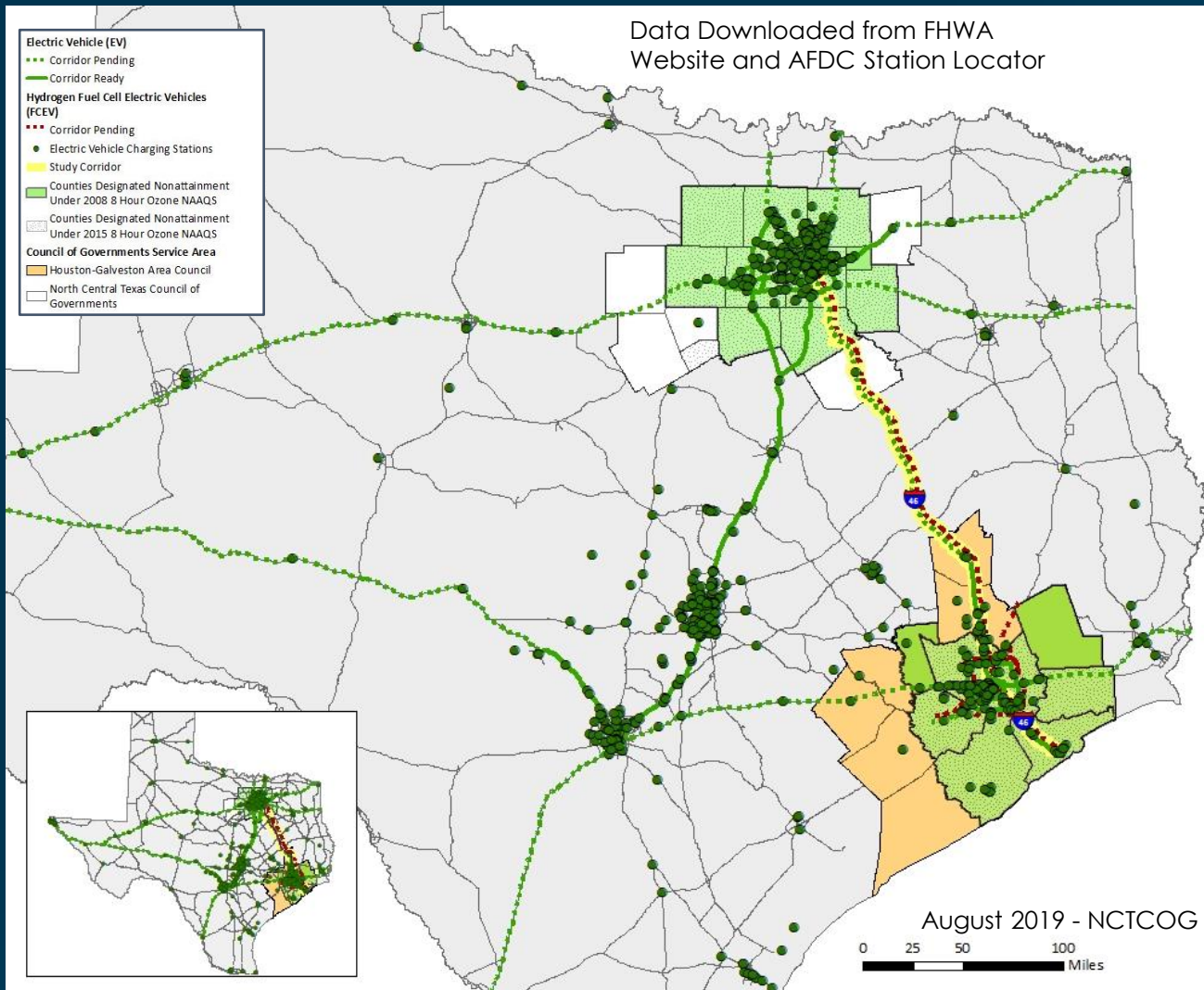
Support Future Strategic Initiatives in the Corridor

- AV Technology
- Truck Platooning

Expect Plan will Need Revisiting in 3-5 years

Stakeholder Role: Guide Plan Development, Lend Expertise, Ensure Appropriate Details Addressed

IH-45 ZEV Corridor Plan Goals



Infrastructure Development:

- Solicit Infrastructure Needs and Criteria
- Identify and Contact Property Owners

Customer Identification:

- Identify and Engage End-User Fleets
- Match User Needs to Vehicle Availability

Vehicle Availability:

- Identify Best Technologies Suitable for Vocational Needs
- Evaluate Commercialization Status of Suitable Vehicles

Policy/Incentives:

- Identify and Prioritize Non-Monetary Policies/Incentives
- Assess Existing and Needed Monetary Incentives

What we Have Now/Work in Progress

Developing Surveys

Fueling Providers
Fleets

Origin/Destination Data

[Heavy-Duty Diesel Inspection & Maintenance Pilot Program](#)

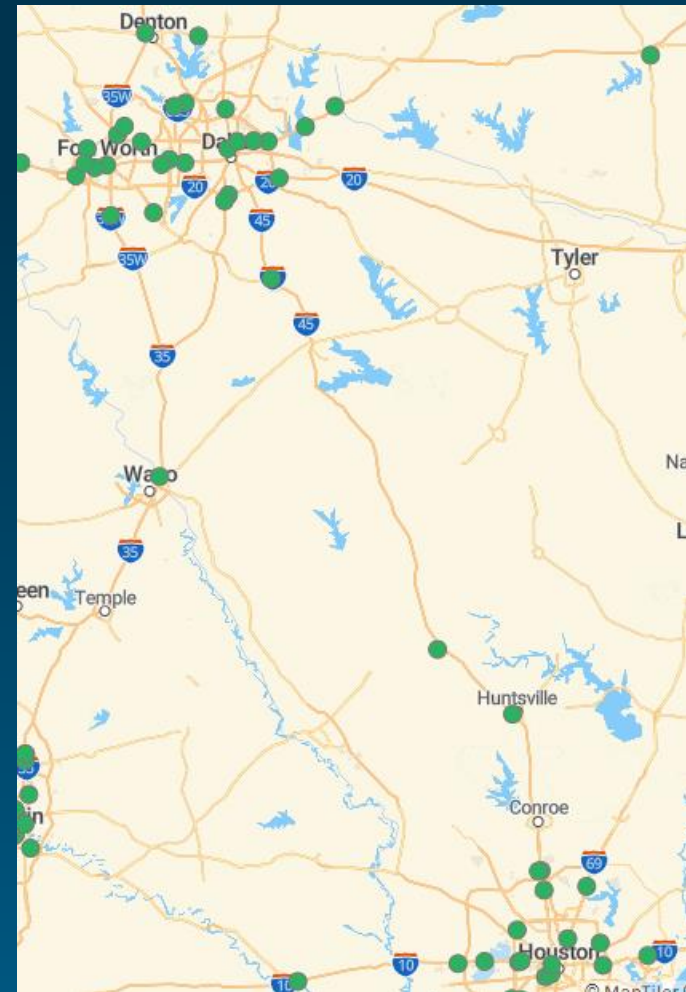
Data from 496 Trucks at New Waverly Weigh Station
~46% Destined for DFW as Final Destination
~23% Passing Through DFW, not Final Destination
Remaining ~31% Not Passing Through DFW

Total Truck Volumes Along Corridor (current and future forecasted volume)

Potential Fuel Volumes Needed (calculated from truck volume and origin/destination fraction)

Total Truck Volume -> Trucks Suitable for BEV or FCEV
Transition based on Weight Class/Type and
Origin/Destination

Suitable Trucks -> Fuel Consumption



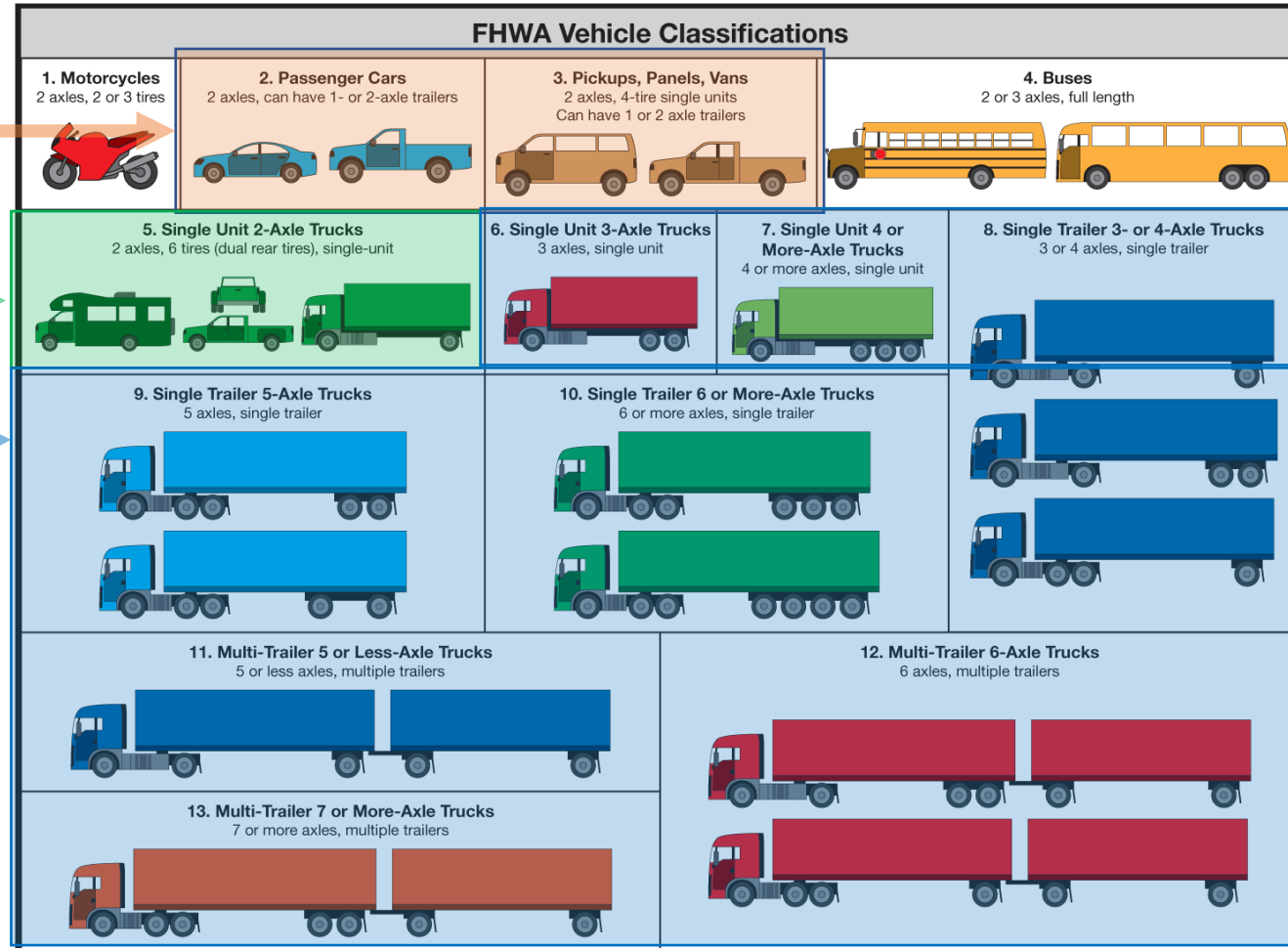
Three Commercial Vehicle Classes

Light CV

Medium CV

Heavy CV

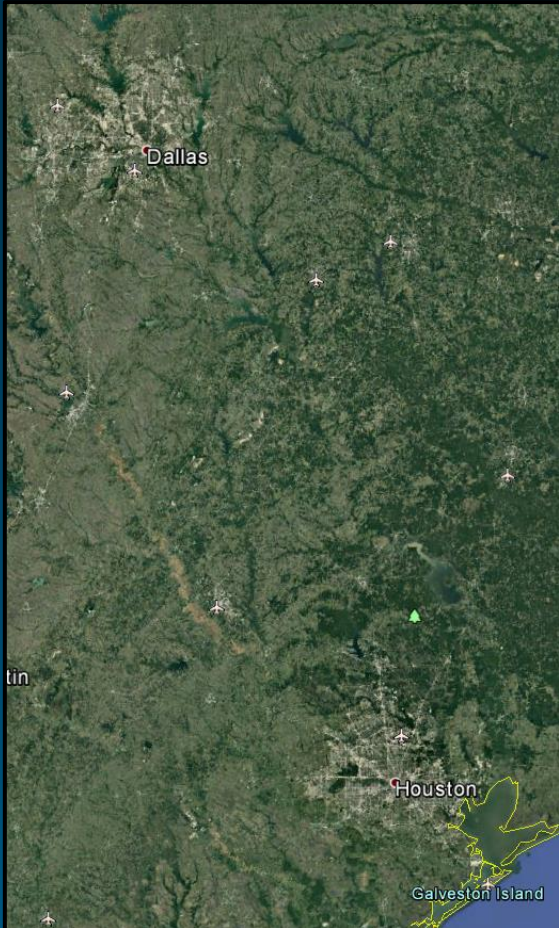
Why GVWR?



INFRASTRUCTURE DEVELOPMENT

Minimum for Initial Pilots	Early Adopter Build-Out/ Mature Pilot Project Phase	Target for Full Deployment
1 Hydrogen station in each metro area	Houston station, DFW Station + one in middle	Houston Cluster, DFW Cluster + One/Two in Middle
1 HD BEV station in each metro area + one in center area of corridor	Houston station, DFW station + two/three in middle	Full Cluster + one or two in the middle

Discussion: Path to Hydrogen Buildout



Production Methods

Distribution Methods

What are the driving cost factors?

Land

Installation

Hardware/Equipment

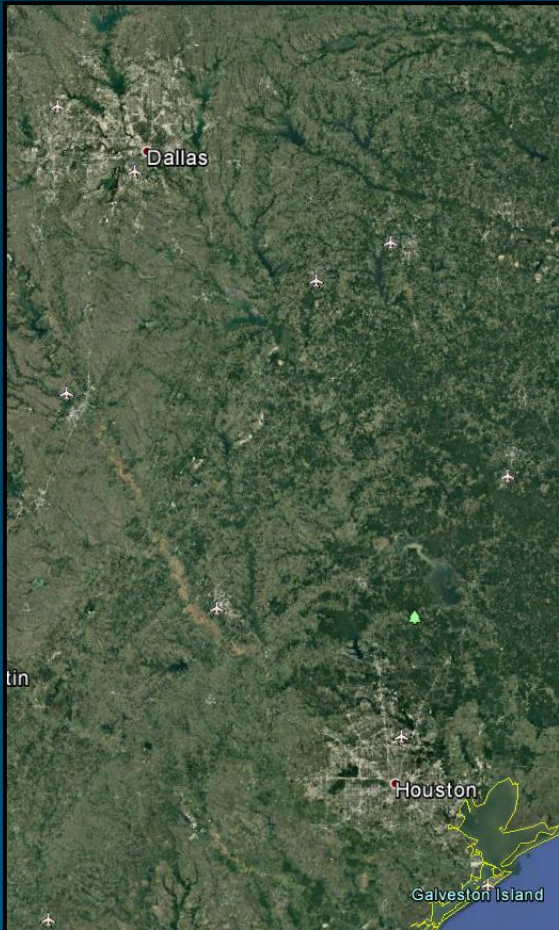
Utility Needs

What information do we need from the utility perspective?

What is the critical minimum of trucks needed to support a station? (or, minimum fuel throughput?)

Discussion:

Ideal Siting/ Location Selection



What are the most critical factors in a location for a driver to stop to fuel?

Location
Amenities

Are there special autonomous truck considerations that are impactful?

Should we focus on co-locating hydrogen refueling stations with existing sites (truck stops)?

If a greenfield site, how much space is needed?

For greenfields, where can we get property ownership data?

Counties
TxDOT

Who is the best strategist here?

ZEV Incentives



Volkswagen Environmental Mitigation Program Level 2 Charging Infrastructure

Funds: Up to \$2,500, Not to exceed 70% Funding per Activity

Deadline: First-Come, First-Served Until August 11, 2021

Texas Light-Duty Motor Vehicle Purchase or Lease Incentive Program

Funds: Up to \$2,500 for Electric or Hydrogen

Deadline: First-Come, First Served Until January 7, 2021 or Until all Funds are Awarded

North Texas Emissions Reduction Project

Funds: Up to 45% Funding to Replace Diesel Trucks with Electric Trucks

**Includes charging pedestal and installation cost, one per purchased vehicle*

Deadline: January 8, 2021

For a full list of available funding opportunities, visit www.nctcog.org/aqfunding

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www.dfwcleancities.org/altfuelcorridors

www.nctcog.org/IH45-ZEV

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