

Zero Emission Vehicle & Infrastructure Workforce Initiatives Info Session

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January 13, 2026

Virtual Housekeeping Items

Welcome all!

- Please refrain from using any AI note-taking services. We will be recording the presentation.
- Please remember to keep microphones muted unless speaking.
- Please use the raise hand feature to chime in on the discussion.
- Feel free to ask questions throughout – there will be a designated Q & A after each presentation!
- There will be interactive polling throughout presentations. Please be ready to participate!
- For those who wish to call in:
 - **Dial in by phone**
 - [+1 903-508-4574](tel:+19035084574),[469111859#](tel:+1469111859#) ; Phone conference ID: 469 111 859#



Agenda

Welcome and Introductory Statements

- Housekeeping Items and Agenda
- Introduction of Organization
- Regional Context and Meeting Purpose

GUMBO Program

- Overview, Curriculum, Next Steps, and Q&A

North Texas Zero Emission Vehicle (NTxZEV) Workforce Development Task Force

- Project Overview, Tasks, Plan, and Task Force

Adjourn



Introduction of Organization

Who We Are

Regional Planning
Agency



Metropolitan Planning
Organization



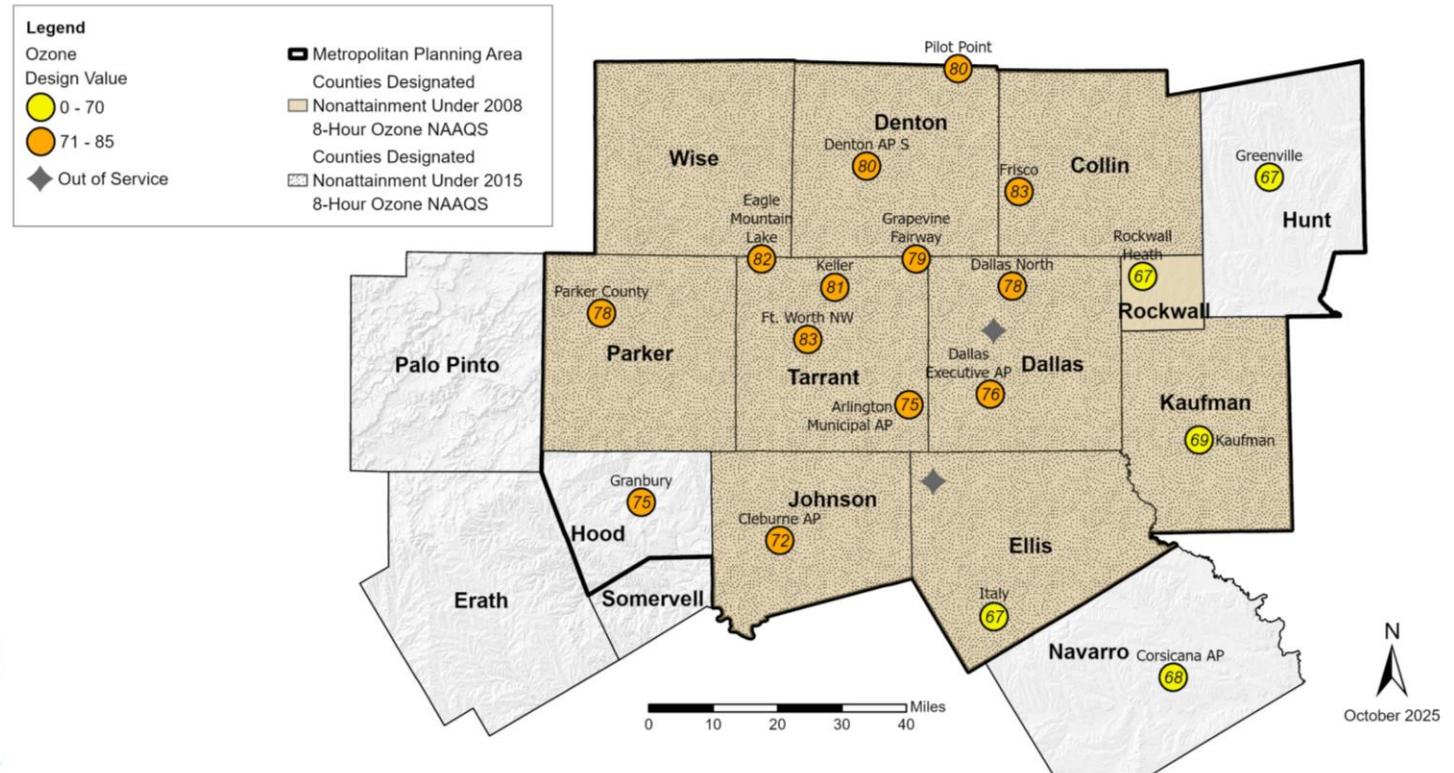
Department of Energy-
Designated Clean Cities
Coalition



Workforce Solutions
North Central Texas



North Central Texas Council of Governments (NCTCOG) Region and Nonattainment Areas



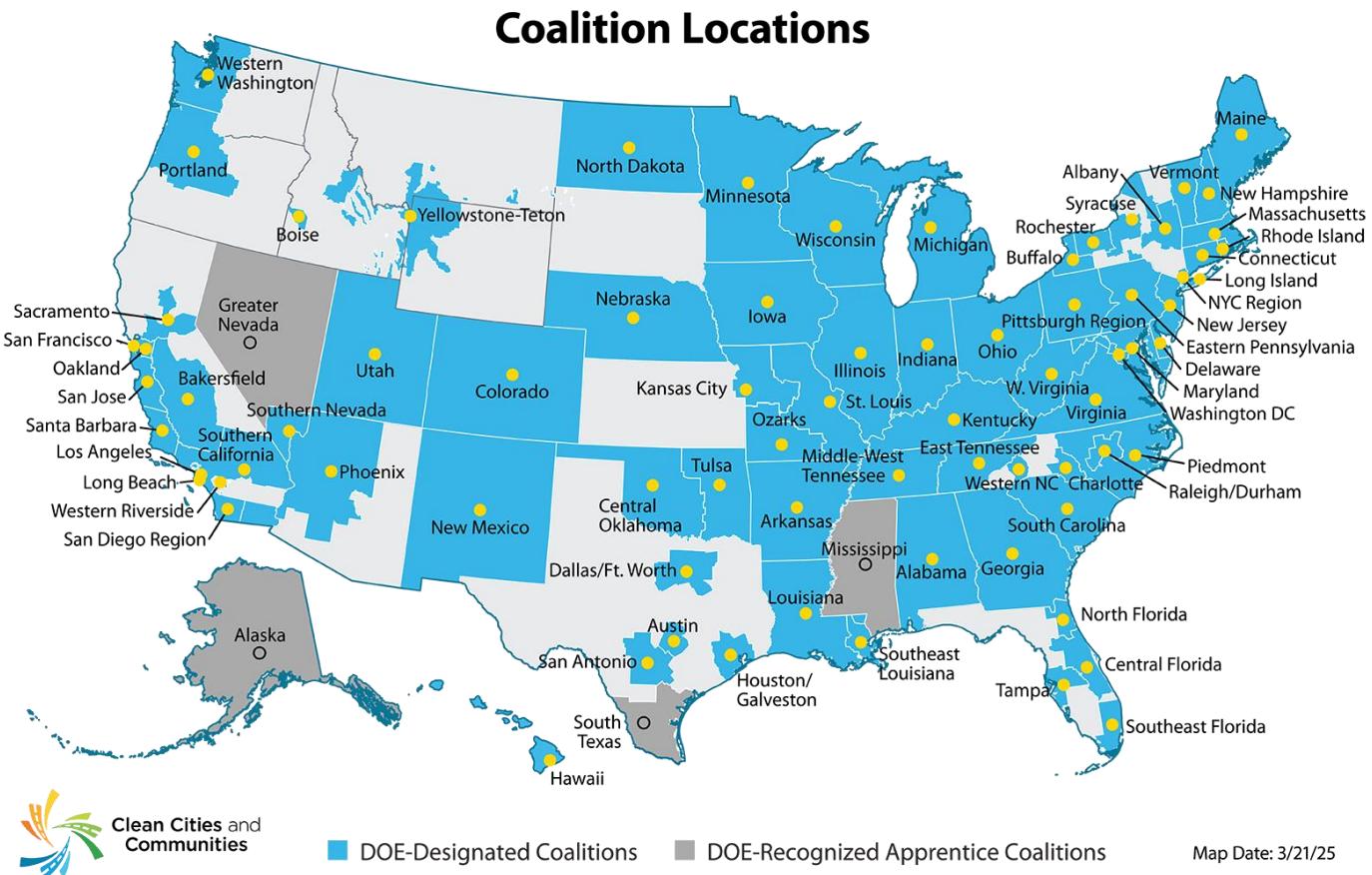
Source: NCTCOG



Clean Cities and Communities

A U.S. Department of Energy (DOE) partnership to foster transportation energy choices nationwide

More than 75 DOE-designated Clean Cities and Communities coalitions



Clean Cities and
Communities

DOE-Designated Coalitions

DOE-Recognized Apprentice Coalitions

Map Date: 3/21/25



Zero Emission Vehicle & Infrastructure Workforce Initiatives Info Session

DFWCC Goals

Reduce transportation energy use and improve air quality by:

- Supporting the deployment of alternative fuel vehicles
- Coordinating infrastructure planning and readiness
- Facilitating best practices around transportation-energy integration



Photo Credit: DFWCC



Workforce Solutions North Central Texas

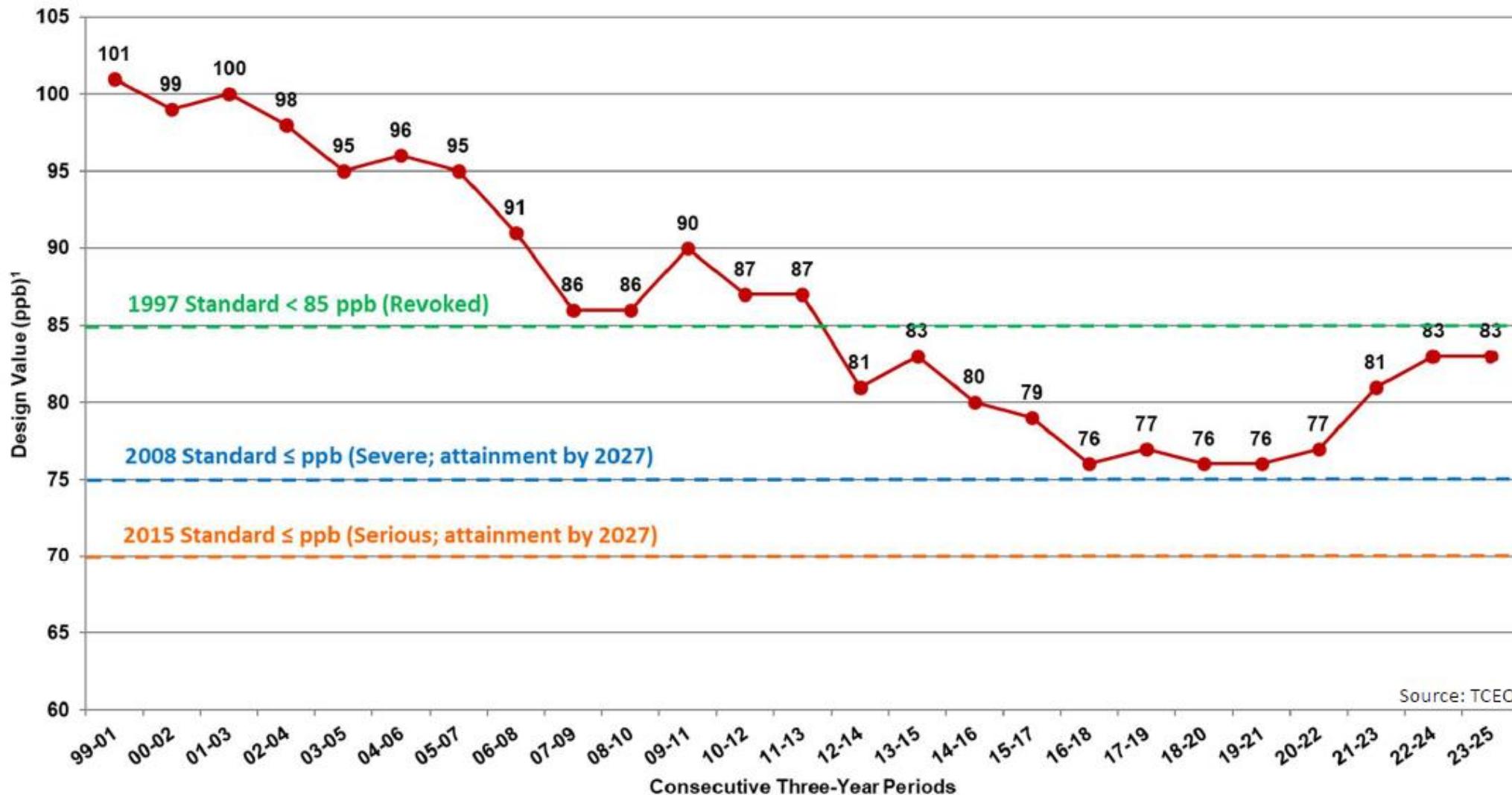
WSNCT oversees programs to ensure that **businesses** in our 14-county region **remain competitive** and **grow jobs**, that **workers** have opportunities to **obtain skills and a career** that will help them become or remain self-sufficient, and that our **communities prosper** and are **economically resilient**.



A grayscale aerial photograph of a complex highway interchange. The image shows multiple levels of overpasses, ramps, and traffic moving in various directions. The perspective is from above, looking down at the intricate network of roads.

Regional Context and Meeting Purpose

8-hour Ozone NAAQS Historical Trends



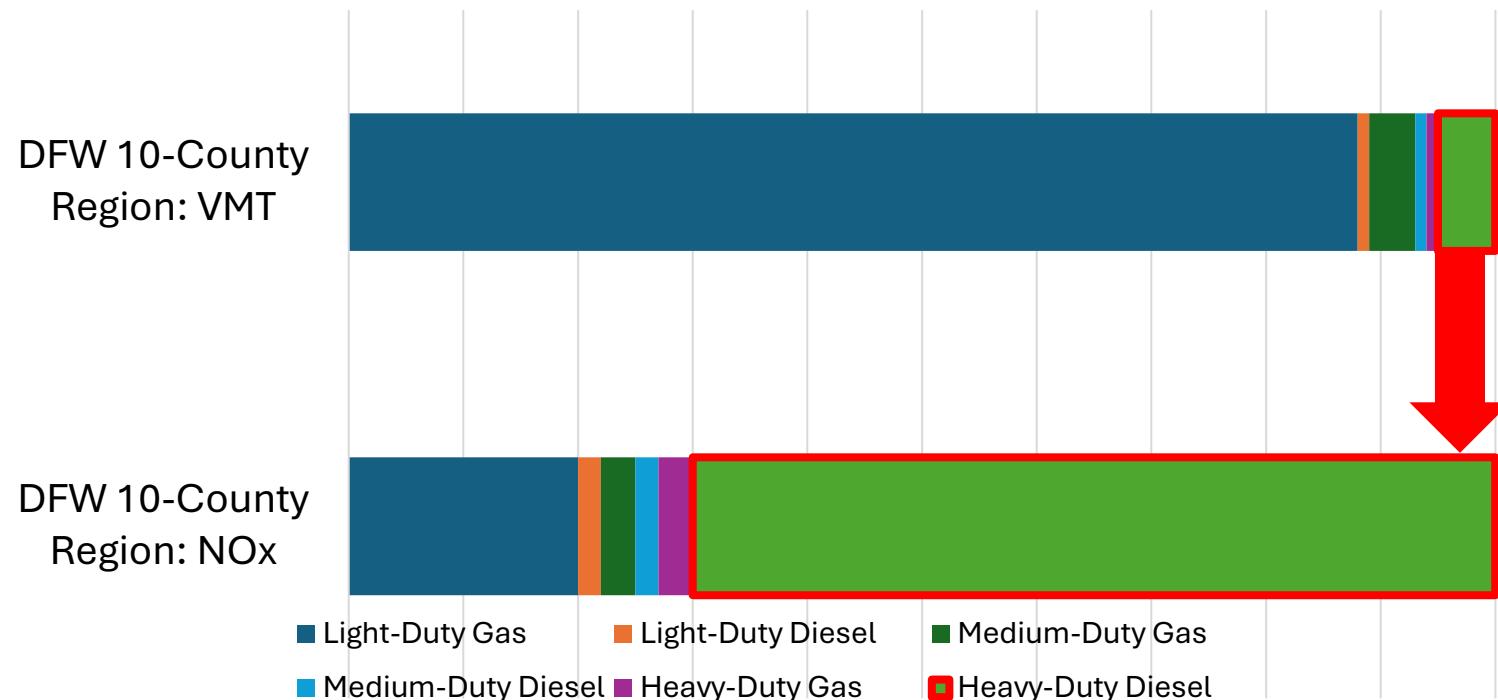
¹Attainment Goal - According to the US EPA National Ambient Air Quality Standards, attainment is reached when, at each monitor, the *Design Value* (three-year average of the annual fourth-highest daily maximum eight-hour average ozone concentration) is equal to or less than 70 parts per billion (ppb).

On-Road Vehicle Impact on Ozone

- Current Ozone design value of 83 ppb* continues to exceed the EPA standard
- Heavy-duty diesel vehicles have a disproportionate impact on regional air quality

For more information on North Texas Air Quality, check out the 2025 AQ Handbook at: www.nctcog.org/airquality

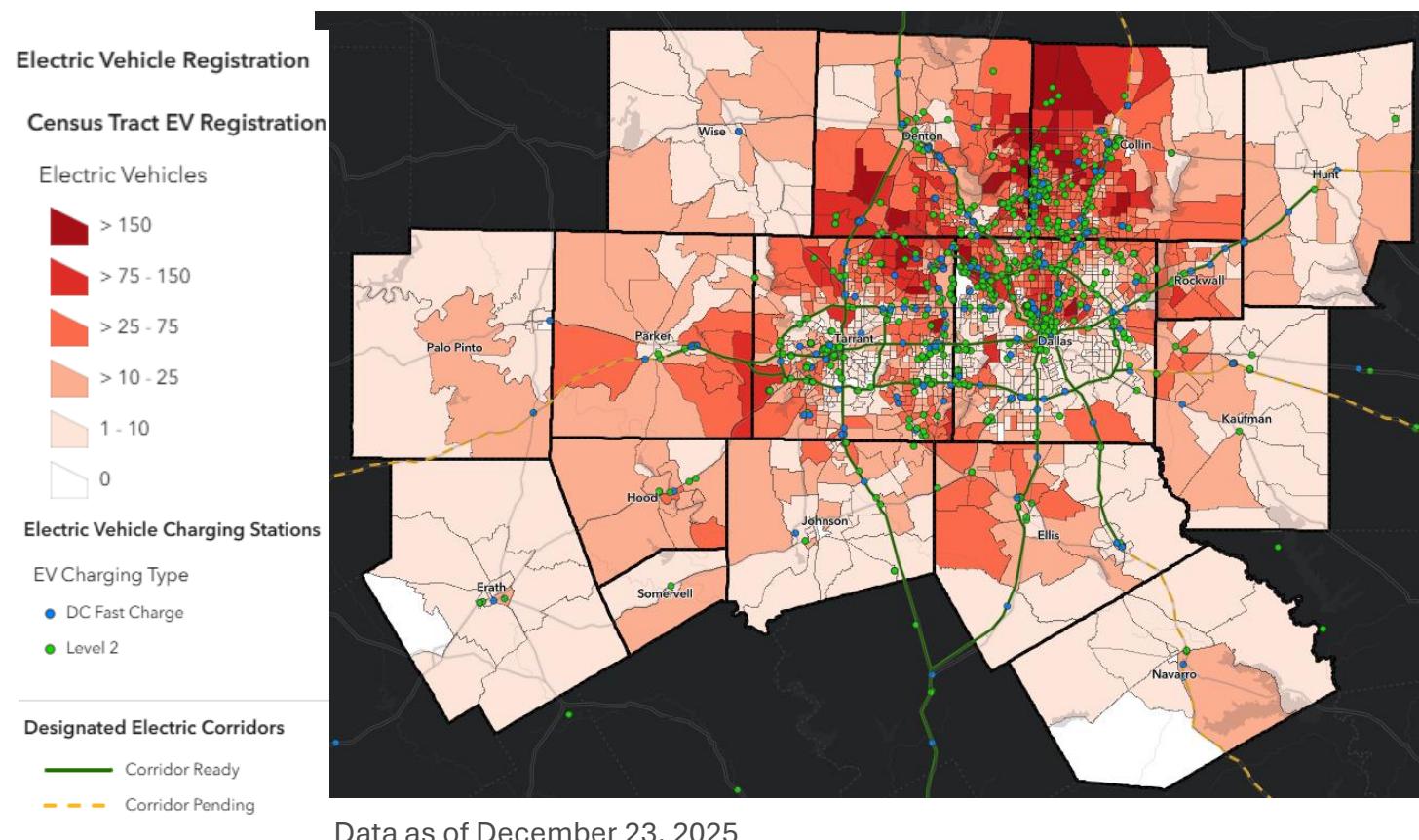
Vehicle Miles Traveled (VMT) Versus Nitrogen Oxides (NO_x) Contribution by On-Road Vehicle Type in Dallas-Fort Worth Analysis Year 2026



*www.nctcog.org/ozone



North Texas Electric Vehicle Adoption



Electric Vehicle (EV) Registration Data

Region	December 2024	December 2025	Increase
Texas	331,292	451,175	36%
Dallas-Fort Worth (DFW)	120,798	166,349	38%

1.75% of registered vehicles in Texas are EVs
227 electric heavy-duty vehicles registered in Texas

Charging Ports Regionwide (includes Tesla):

- 1,884 Level 2
- 705 DC Fast

afdc.energy.gov/stations



The Need for Workforce Development

Increased adoption of zero emissions vehicles (ZEVs) and supporting infrastructure exposes a need for new training and workforce development

Two initiatives seeking to address the need:

GUMBO	Offers free curriculum on maintenance and repair of electric vehicle supply equipment (EVSE)
North Texas Zero Emission Vehicles Project	Includes funding to draft a workforce development plan and make priority investments to support deployment of ZEV



Introduction of Staff and Programs

Transportation Staff



GUMBO Program:

Jared Wright
Carolyn Burns



North Texas Zero Emission Vehicle Project:

Savana Nance
Hannah Thesing

Industry & Workforce Engagement Team (Both Programs):



Fred Schmidt
Jacob Jimenez



GUMBO Overview



ELECTRIC VEHICLE
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ELECTRIC VEHICLE
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GUMBO Program

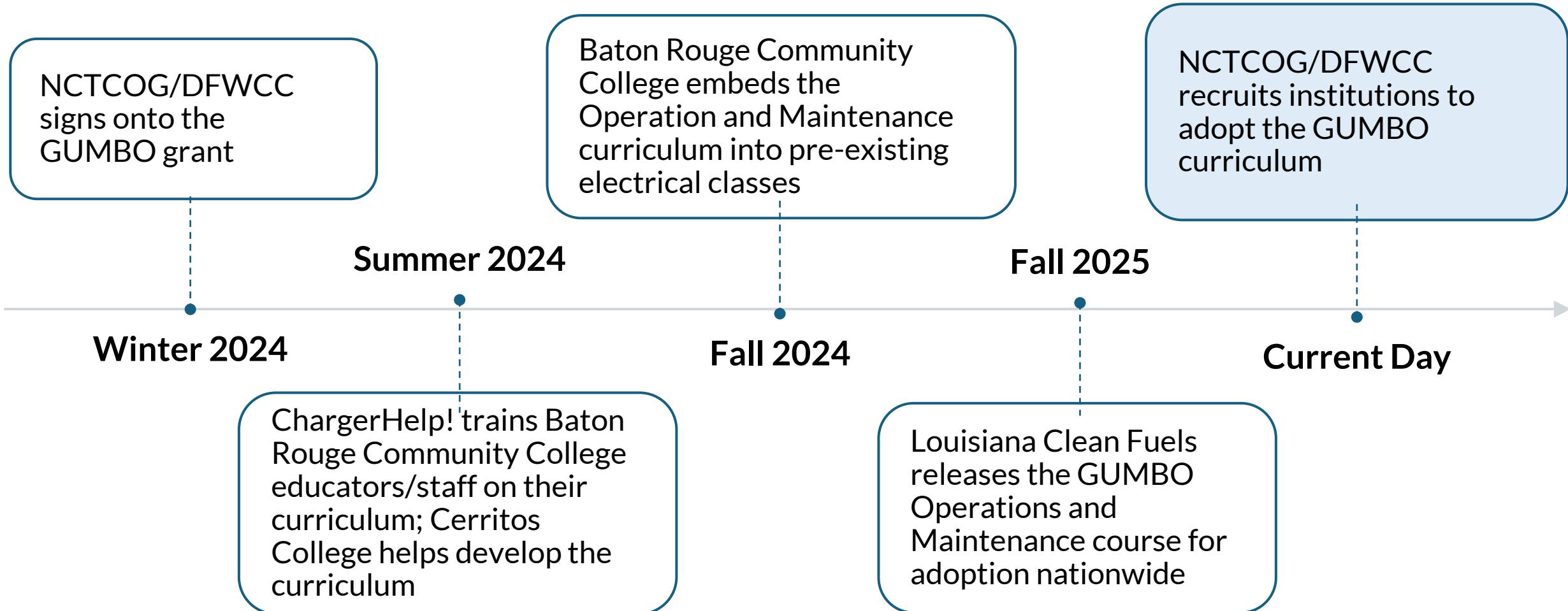
Overview: Workforce development grant led by Louisiana Clean Fuels and funded by the Department of Energy

Purpose: Offer free curriculum to local colleges to train a workforce to maintain and repair EVSE

- Curriculum:
 - Developed by Cerritos College and ChargerHelp!
 - Preparatory course for the SAE International EVSE Technician Certification Exam
 - Louisiana Clean Fuels partnered with Baton Rouge Community College to host the curriculum
 - Developed into two courses:
 - Operations and Maintenance (now ready for adoption)
 - Installation (under development)



Grant Timeline



DFW Clean Cities Role

Goals:

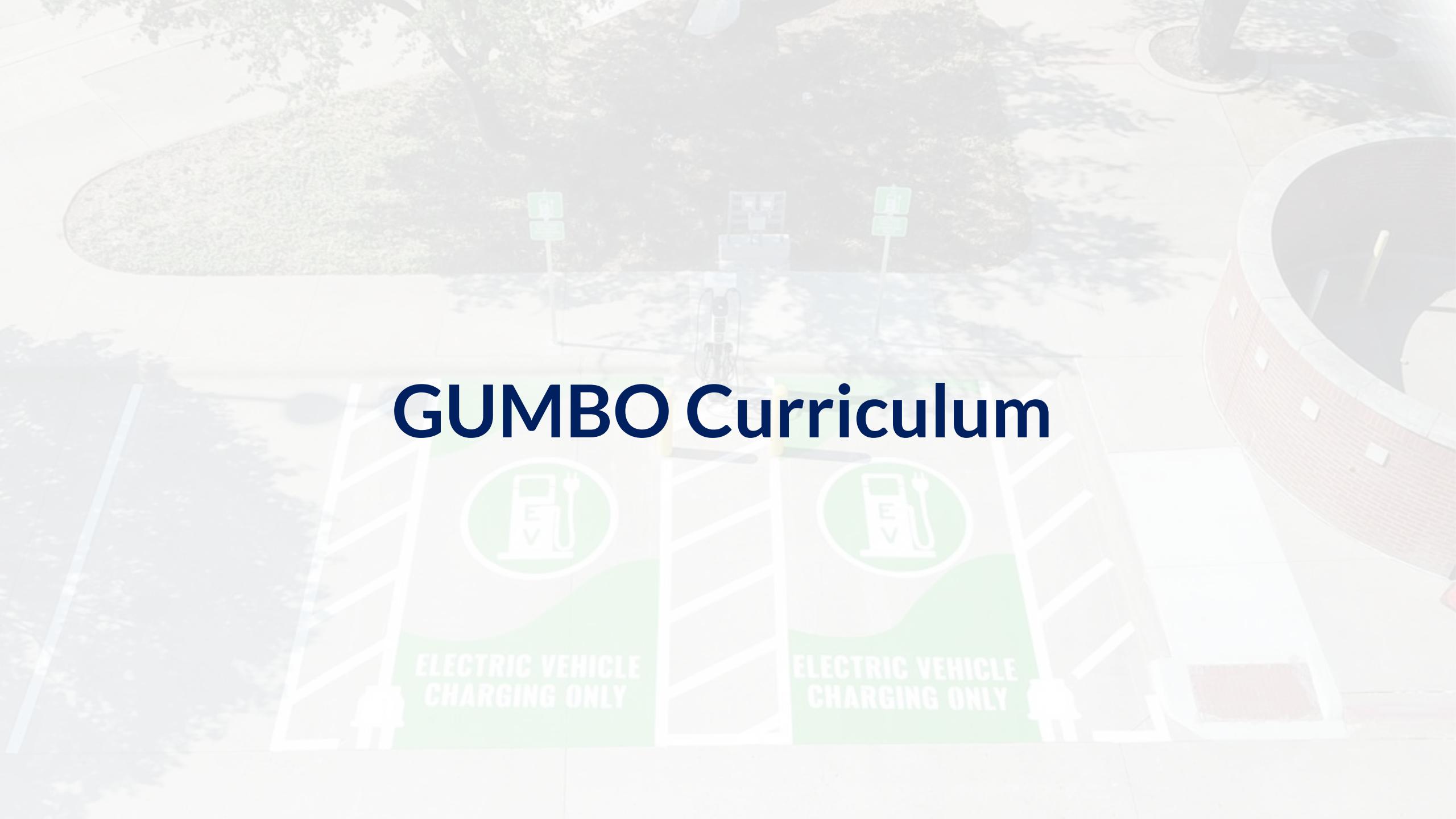
- Connect with community-based organizations that can recruit students
- Assist community colleges and workforce development programs during and after implementation through:
 - Relevant resources
 - Networking with other organizations
- Connect graduates of the program with employment opportunities

Deliverables:

- Secure at least one pledge from a community college/workforce development program to commit to introducing this curriculum at their school
- Secure at least four pledges from local stakeholders that support the program
 - Stakeholders: community-based organizations, local organizations, EVSE companies, utilities, cities, etc.



GUMBO Curriculum



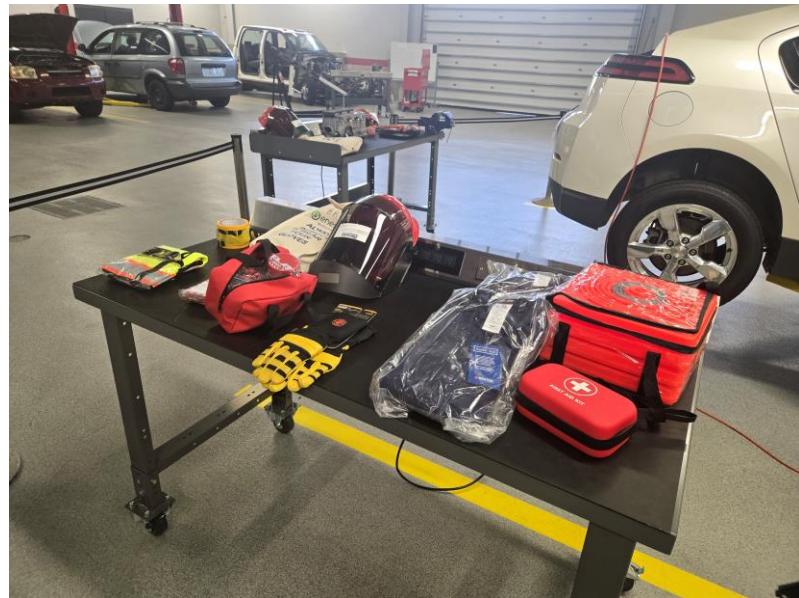
**ELECTRIC VEHICLE
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**ELECTRIC VEHICLE
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Basic Course Structure

Standard Structure (may be modified to suit needs):

- Four-week course, Monday through Friday, 8 AM to 5 PM
 - Typical day is split between the professor's lecture in the morning and lab activities/guest lecture
 - Approximately 1 learning module per week
- Review days and quizzes at the end of each weekly module, as well as a final test after all modules are completed
- [SAE International EVSE Technician Certification Exam](#) (optional but encouraged)
- Each student should be placed in a 1-year internship with an EVSE maintenance/ repair employer



Photos taken at Baton Rouge Community College:
Ardendale Campus



Modules and Standard Course Schedule

Pre-Requisite: OSHA 10/NFPA 70e Electrical Training Certification

Topic	Week	Existing Class Content
Module 1: Electrical Principles and Safety Suggested Guest Lecture: Entrepreneurship/Electrician	1	116 slides
Module 2: Understanding Power Supply Suggested Guest Lecture: Business Management/Marketing	2	97 slides
Module 3: Roles, Repair Orders, and Communication Standards Suggested Guest Lecture: Industry Expert/Role Play	3	97 slides
Module 4: Field Practices and Documentation Suggested Guest Lecture: Resume-Interviewing/Professionalism	4	83 slides



Alternative Course Timelines

Total Length of Course (Weeks)	Hours/Day	Days/week	Hours/Week	Total Hours	Total Duration	Target Audience
4	8	5	40	160	1 month	Best for Unemployed Adults
7	5	5	25	175	A little less than 2 months	
8	4	5	20	160	2 months/Half Semester	Manageable for professionals who have full-time jobs
8	5	4	20	160	2 months/Half Semester	
16	2	5	10	160	4 months/Full Semester	Likely best option for professionals



Next Steps



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Call to Action

Fill out the interest form to let us know how you'd like to participate in GUMBO:

- Implement the curriculum at your higher education institution
- Help spread awareness and recruit students to take the course
- Provide apprenticeship/internship opportunities to graduates of the course
 - EVSE maintenance companies can receive funding through the Workforce Innovation & Opportunity Act (WIOA) to provide training opportunities
- Become a stakeholder and affirm support of the program



GUMBO Replication Toolkit

Once the curriculum is requested through chargertraining.com, access will be granted to the GUMBO Replication Toolkit, which includes:

- Curriculum white papers
- Instructor guides and student modules
- Supplemental resources such as slide decks, assessment tools, lab exercises, and instructor training webinars
- Access to peer support networks and ongoing updates/revisions as the field evolves



Implementing the Curriculum

- Add as a Credit or Non-Credit Program
 - Credit courses lead to a degree or certificate, generate a college transcript, and are eligible for financial aid.
 - Non-credit courses offer certificates of completion, focusing on skills development and continuing education, but do not count towards a degree and are generally not eligible for traditional financial aid.
 - Typical programs: Technical Education, Workforce (Electrical), Adult Education, Continuing Education
- Add curriculum to pre-existing electrical classes



Pathways

- Educational:
 - Stackable credentials and bridge programs
 - Transfer agreements for associate and bachelor's degrees
 - Academic Fields: Electrical Engineering, Renewable Energy, Mechatronics, etc.
 - Technical Fields: Power Systems, Automation, Solar PV, etc.
- Career:
 - EVSE Maintenance Technician
 - Power Systems and Smart Grid Technician
 - Broadband and Network Cabling Specialist
 - Clean Energy Workforce and Utility Line Technician



Question & Answer Session

If you have a question, please raise your hand or post questions in the chat box!



A white North Texas Zero Emission Vehicle Project (NTxZEV) truck is shown in the background, slightly out of focus. The truck has the number 9145 on the front fender and 'DFW ETAM GROUNDS' printed on the side of the cab. The truck is a flatbed or similar utility truck.

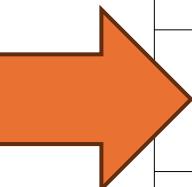
North Texas Zero Emission Vehicle Project (NTxZEV)

North Texas Zero Emission Vehicle Project (NTx-ZEV)

Overview: \$60 million award from the Environmental Protection Agency (EPA) Clean Heavy-Duty Vehicles Grant: Vocational Vehicles Sub-Program

Purpose: Incentivize deployment of Class 6 and 7 Zero-Emissions Vehicles

NCTCOG Project Activity	Federal Funding
Rebates for Zero Emission Vehicles & Supporting Infrastructure Awarded via Call for Projects- OPEN NOW; Applications due February 13, 2026 Go to www.nctcog.org/NTxZEV for more information on the Call for Projects	\$58.6 million
First Responder Training Activities Awarded via Request for Proposals; Opening Early 2026	~\$50 thousand
Workforce Development Task Force, Plan, and Investments Award Process TBD by NCTCOG and Task Force	~\$1.35 million
Total Federal Funding Awarded to NCTCOG:	\$60 million



Workforce Development via the NTx-ZEV Project

~\$1.35 million allocated for workforce development will be used for:

Participant	Key Project Activity	Timeline
Led by NCTCOG; Participation from the region	Form the NTxZEV Workforce Development Task Force	Winter 2025 - Spring 2026
Led by NCTCOG; Assisted by WF Development Task Force	Develop a DRAFT ZEV Workforce Plan	Winter 2025 - Summer/Fall 2026
Led by NCTCOG; To be completed through partnerships with public institutes of higher education or contractors, as appropriate	Implement priorities identified by plan, i.e. <ul style="list-style-type: none">Curriculum developmentTraining stipends, etc.	Fall 2026- Winter 2027
Led by NCTCOG; Assisted by WF Development Task Force	Develop a FINAL ZEV Workforce Plan	Winter 2026 - Winter 2028



Program Focus: Eligible Vehicle Types

Class 6 and 7 Zero-Emission (Battery-Electric and Hydrogen Fuel Cell) Vocational Vehicles*

Straight/Box Truck



Step Van



Septic/Bucket



Street Sweeper



Transit Bus



Photo Credit: NCTCOG/Trinity Metro

Refuse Hauler



Other Vocational Vehicles**



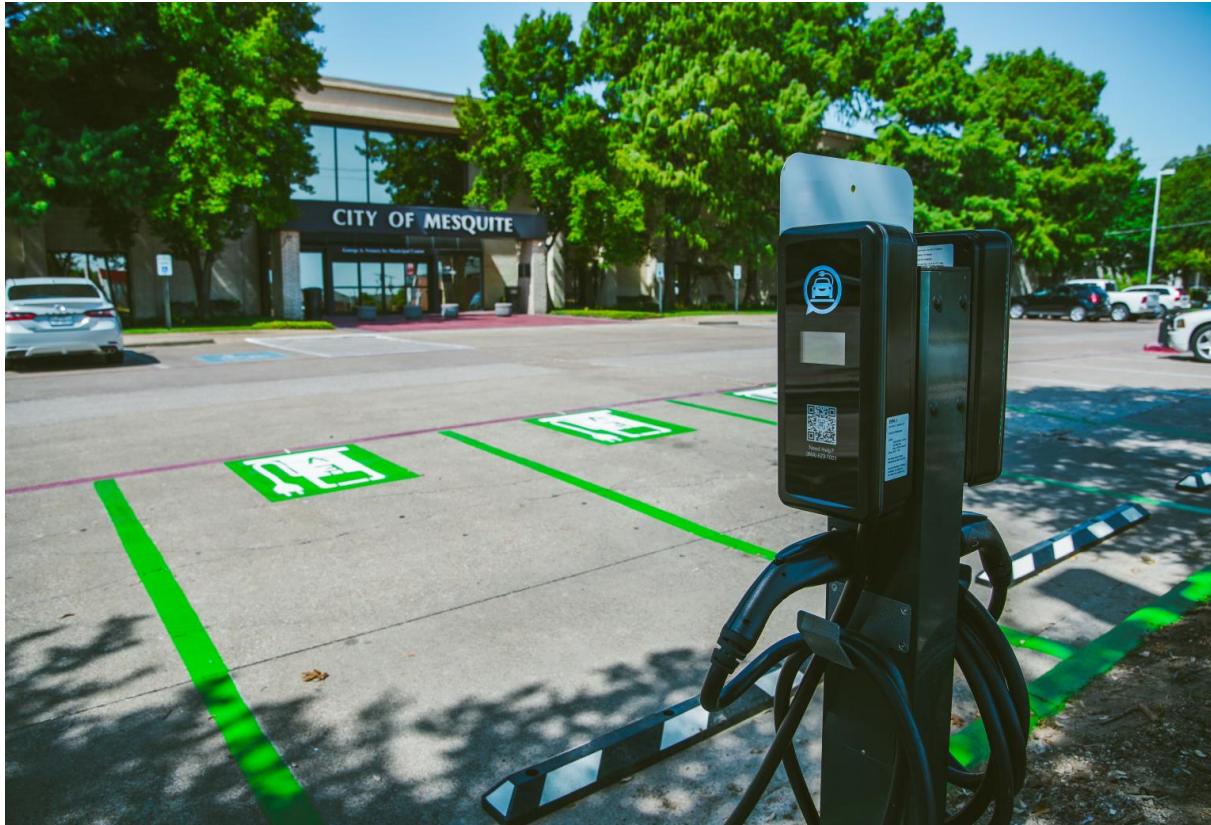
*Vocational Vehicle is defined under the [49 CFR Part 523](#)

**School bus may be an eligible vehicle type if not operated as a typical school bus as defined by in the [Call for Projects Guidelines Appendix A](#)



Program Context: Supporting Infrastructure

EVSE



Hydrogen Refueling Stations



Photo Credit: DFWCC



Zero Emission Vehicle & Infrastructure Workforce Initiatives Info Session

Workforce Development Plan

Consists Of:

- Assessment of labor needs
- Identification of “gaps” for key investments to support ZEV adoption, including existing programs
- Development of “priority actions” to begin addressing those gaps
- Other items as recommended by Task Force

Potential needs identified by the assessment could include:

- Development of new ZEV-related curricula
- Acquisition of ZEVs or equipment (lifts, chargers, fire blankets, etc.) to facilitate hands-on instruction
- Simulation training equipment
- Tuition reimbursement/training stipends
- Expansion of existing or new ZEV-related apprenticeship programs in the region



A large white dump truck is shown in the background, angled towards the left. The truck has 'DFW ETAM GROUNDS' printed on the side of the cab and '9145' on the front fender. The background is a light gray.

Polling Question



Workforce Development Task Force

Creation of a task force to evaluate roadblocks to Zero-Emission Vehicle (ZEV) adoption including labor needs and propose action to remedy those gaps.

- **Ideal participants include but are not limited to:**
 - Workforce service providers/worker representatives
 - Institutes of higher education
 - Non-profits
 - Regional and local entities (including fleet management staff)
- **Meetings are expected to start Spring 2026; Members will:**
 - Attend meetings
 - Provide input into the assessment of regional gaps in ZEV adoption and supporting workforce development efforts
 - Connect entities or programs who may benefit from this work with our team
 - Distribute the Workforce Development Plan and public outreach



Polling Question



Summary of Programs

GUMBO	NTxZEV
<p>Focus Area: Offer a free curriculum that trains a workforce to maintain and repair EVSE</p> <p>Target Participants: Higher education institutions, community-based organizations, EVSE employers, and other stakeholders</p> <p>Resources Available: GUMBO Replication Toolkit, which features:</p> <ul style="list-style-type: none">• Curriculum white papers• Instructor guides and student modules• Supplemental resources• Access to peer support networks, coordinative assistance	<p>Focus Area: Includes funding to draft a workforce development plan and make priority investments to support deployment of ZEV</p> <p>Target Participants: Workforce service providers/representatives; Institutes of higher education; Non-profits; Local and Regional Governments; Fleet Managers</p> <p>Resources Available: \$1.35M towards:</p> <ul style="list-style-type: none">• Workforce Development Plan• Implementation of priorities identified by plan

Question & Answer Session

If you have a question, please raise your hand or post questions in the chat box!



Moving Forward

1. If you haven't already, please fill out the [Interest Form: Zero Emission Vehicles and Infrastructure Workforce Initiatives](#) and indicate what initiatives you would like to participate in
2. We will reach out with dates for the next meeting when available, participation is expected to commence Spring 2026



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North Central Texas
Council of Governments



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