North Central Texas Council of Governments

Regional Transportation Council

SMARTE
Saving Money and Reducing Truck Emissions

Saving Money and Reducing Truck Emissions Webinar Series

Drivers & Techs: Preparing the Workforce for the Electric Vehicle Transition

Date: Thursday, July 16, 2026

Time: 11 AM – 12 PM Central Time

Hosted by the North Central Texas Council of Governments (NCTCOG)

Register at https://forms.microsoft.com/r/tqeC4Mumf0

Webinar will be presented through **ZOOM**

Contact: Trey Pope, tpope@nctcog.org
Jason Brown, jbrown@nctcog.org

Presenters:

Angela Amirkhanian
TRC, Member of WSP

Jared Wright
North Central Texas Council of Governments

Overview


Image provided by Getty

Welcome, Introduction
Presenter: Trey Pope, Transportation/Air Quality Planner, NCTCOG

Driving the Future: Workforce and Innovation in the JETSI Electric Truck Initiative
Presenter: Angela Amirkhanian, Senior Program Manager, TRC Companies

NCTCOG Zero Emission Vehicle and Infrastructure Workforce Initiatives
Presenter: Jared Wright, Principal Transportation Planner, NCTCOG

Discussion

Updates and Close

Saving Money and Reducing Trucking Emissions Program

GOALS

Promote emissions reduction and cost saving strategies within the trucking industry

INITIATIVES

Build relationships within the trucking industry

Share information about emission reduction strategies

Connect SmartWay verified technology to trucking owner/operators and fleet managers

SMARTE

Saving Money and Reducing Truck Emissions

JETSI
JOINT ELECTRIC TRUCK SCALING INITIATIVE

Driving the Future

Workforce & Innovation in the Joint Electric Truck Scaling Initiative

The largest single deployment of battery-electric Class 8 trucks in North America to date

Presented By:

Angela Amirkhanian

Senior Program Manager

TRC, a Member of WSP

aamirkhanian@trccompanies.com www.trccompanies.com

Project Background

JETSI is a landmark deployment of battery-electric trucks in North America — dramatically increasing the number of zero-emission heavy-duty trucks moving goods across Southern California while achieving the emission and GHG reductions the region needs.

100 Class 8
Battery-electric trucks deployed

2 Fleets
NFI and Schneider operating at scale

#1 Largest
Single BET deployment in North America

Project Focus

Deploying battery-electric trucks at scale to cut emissions where Southern California breathes hardest.

100
Class 8 BETs
Volvo & Daimler, for drayage and regional haul

~5
Tons NOx + PM/yr
Criteria pollutants avoided each year

8,247
Metric tons GHG/yr
Greenhouse gas reduced each year

690K+
Diesel gallons/yr
Displaced each year vs diesel trucks

Goods Movement Corridor

San Pedro Bay port complex to Inland Empire distribution centers and warehouses

Priority Communities

Operating primarily in areas designated as overburdened by air pollution

Timeline Highlights

From first delivery to 10 million zero-emission miles.

April 2023

Trucks Delivered

100 Class 8 trucks delivered to NFI and Schneider: 20 Volvo VNR Electric and 80 Freightliner eCascadia.

June 2023

Schneider's Charging Depot Opens

Schneider hosts a ribbon cutting event for the debut of their BET depot to power their 50 JETSI trucks and BET fleet featuring 16 350 kW chargers in South El Monte, California

Feb 2024

NFI’s Charging Depot Opens

NFI hosts a ribbon cutting event for the opening of their BET charging depot to power their 50 JETSI trucks and BET fleet featuring 19 dual-port 350 kW chargers and 1 MW of solar battery storage in Ontario, California

Feb 2026

Fleets Hit 20M+ Zero-Emission Miles

NFI's zero-emission drayage fleet announces surpassing 10 million zero-emission miles in January 2026. Schneider's BET fleet surpasses 10 million zero-emission miles in February 2026

JETSI
JOINT ELECTRIC TRUCK SCALING INITIATIVE

Made Possible By

$73M+ **Total public agency + partner investment in clean goods movement**

JETSI is jointly financed by California Air Resources Board and California Energy Commission ($27 million), South Coast AQMD ($5 million), with an additional $41million from MSRC, Port of Long Beach, Port of Los Angeles, Southern California Edison, NFI, and Schneider.

JETSI is part of California Climate Investments, putting billions of cap-and-trade dollars to work reducing GHG emissions, strengthening the economy and improving public health and the environment – particularly in overburdened communities.

CALIFORNIA AIR RESOURCES BOARD

STATE OF CALIFORNIA ENERGY COMMISSION

South Coast AQMD

THE PORT OF LOS ANGELES

SOUTHERN CALIFORNIA EDISON®
An EDISON INTERNATIONAL® Company

Clean Transportation Funding from the MSRC
Mobile Source Air Pollution Reduction Review Committee

Port of LONG BEACH
THE PORT OF CHOICE

JETSI Workforce Development

Built the ZEV Workforce Plan

Created a comprehensive data-collection framework and methodology to assess training needs and gaps, and documented delivery options and partnerships.

Analyzed Workforce Data

Documented employee classifications, job titles, wage rates, staffing levels, and training performance metrics across both fleets.

Designed & Digitized Surveys

Developed, digitized, and analyzed surveys for both training providers and participants to capture real outcomes.

Set Performance Indicators

Established KPIs for driver operations and truck maintenance, and identified EVSE planning, permitting, construction, and O&M needs.

JETSI Workforce Training

Ten training tracks spanning drivers, technicians, and charging infrastructure

- Driver Operations
- Train-the-Trainer
- EV & High-Voltage Safety
- Battery Safety & Maintenance
- EV Technical & Service Training
- Charger & Charging Management
- Fleet & Vehicle Orientation
- EVSE Operations & Maintenance
- Charging Infrastructure & Software
- Field Service

Key Findings at a Glance

1. Technology adoption improved over time
2. Hands-on, in-person training was most effective
3. Workforce development remains critical

7 KEY FINDINGS from the JETSI Workforce Study

4. New jobs emerging in charging infrastructure
5. Industry collaboration drives success
6. Continuous training is essential

7. BET deployment demonstrated strong potential

Our Workforce at a Glance

Surveyed JETSI workforce: drivers, maintenance technicians, and supervisors

Male-Dominant
Workforce

Primarily Hispanic/
Latino & White

Ages 25–50+
Younger & experienced mix

High School Diploma
Most common education level

2-Year Tenure
Average in current role

3 Core Roles
Drivers, techs & supervisors

KEY TAKEAWAY A diverse mix of drivers, technicians, and supervisors entered the program with varying experience — a strong foundation for upskilling and EV adoption.

Training Key Findings

Training Quality Highly Rated

Training quality, instructor delivery, and course length all earned positive ratings from most participants.

Workers Felt Prepared

Most felt ready to perform job duties, vehicle inspections, and maintenance tasks after training.

Drivers More Confident

Drivers reported higher confidence than technicians — pointing to room for added technical training.

Resistance Decreased

Initial resistance to BEVs, software, and automation fell with experience and hands-on use.

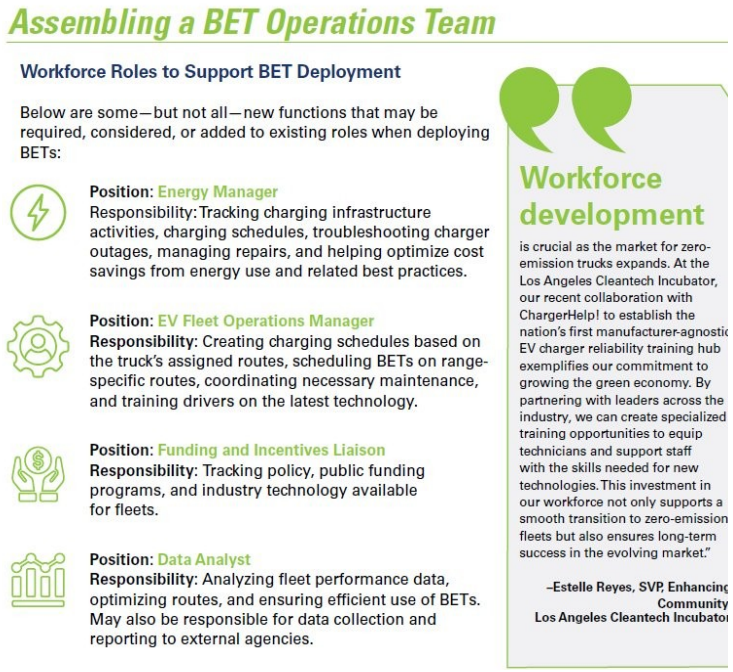
More Training Requested

Participants asked for refreshers on batteries, charging infrastructure, diagnostics, and maintenance.

KEY TAKEAWAY Hands-on, continuous training builds confidence, reduces resistance, and is key to successful zero-emission truck adoption.

BET Fleet Toolkit

JETSI published a BET fleet tool kit for California fleets - a free, introductory resource for California fleets starting their zero-emission journey



Assembling a BET Operations Team

Workforce Roles to Support BET Deployment

Below are some—but not all—new functions that may be required, considered, or added to existing roles when deploying BETs:

Position: Energy Manager
Responsibility: Tracking charging infrastructure activities, charging schedules, troubleshooting charger outages, managing repairs, and helping optimize cost savings from energy use and related best practices.

Position: EV Fleet Operations Manager
Responsibility: Creating charging schedules based on the truck's assigned routes, scheduling BETs on range-specific routes, coordinating necessary maintenance, and training drivers on the latest technology.

Position: Funding and Incentives Liaison
Responsibility: Tracking policy, public funding programs, and industry technology available for fleets.

Position: Data Analyst
Responsibility: Analyzing fleet performance data, optimizing routes, and ensuring efficient use of BETs. May also be responsible for data collection and reporting to external agencies.

Workforce development

is crucial as the market for zero-emission trucks expands. At the Los Angeles Cleantech Incubator, our recent collaboration with ChargerHelp! to establish the nation's first manufacturer-agnostic EV charger reliability training hub exemplifies our commitment to growing the green economy. By partnering with leaders across the industry, we can create specialized training opportunities to equip technicians and support staff with the skills needed for new technologies. This investment in our workforce not only supports a smooth transition to zero-emission fleets but also ensures long-term success in the evolving market."

–Estelle Reyes, SVP, Enhancing Community
Los Angeles Cleantech Incubator

BET Taskforce Guidance

How to form a dedicated team to manage your EV transition.

Vehicle Procurement Tips

Criteria for selecting the right battery-electric trucks.

Funding Insights

Grants and incentives to help offset deployment costs.

Infrastructure Guidance

Planning and building the charging your fleet needs.

Public Resources

A curated list to help you navigate the ZEV transition.

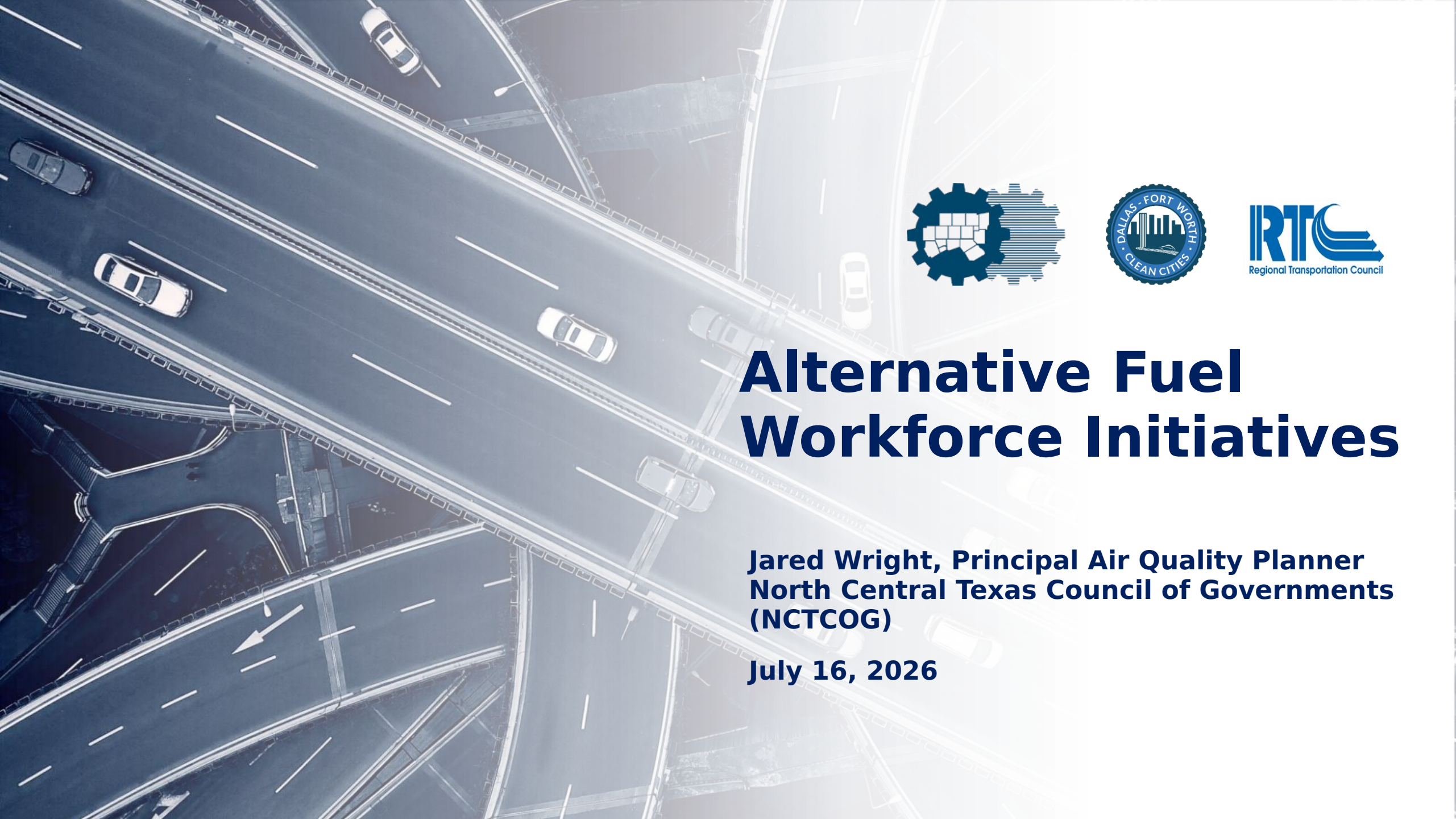
Learn More

Explore electric trucks, charging infrastructure, workforce development, environmental benefits, and more.

www.JETSIproject.com

Driving economic & environmental sustainability across the commercial transportation sector.

www.trccompanies.com



Alternative Fuel Workforce Initiatives

Jared Wright, Principal Air Quality Planner
North Central Texas Council of Governments (NCTCOG)

July 16, 2026

About Us

Regional Planning Agency

North Central Texas Council of Governments

Metropolitan Planning Organization (MPO)

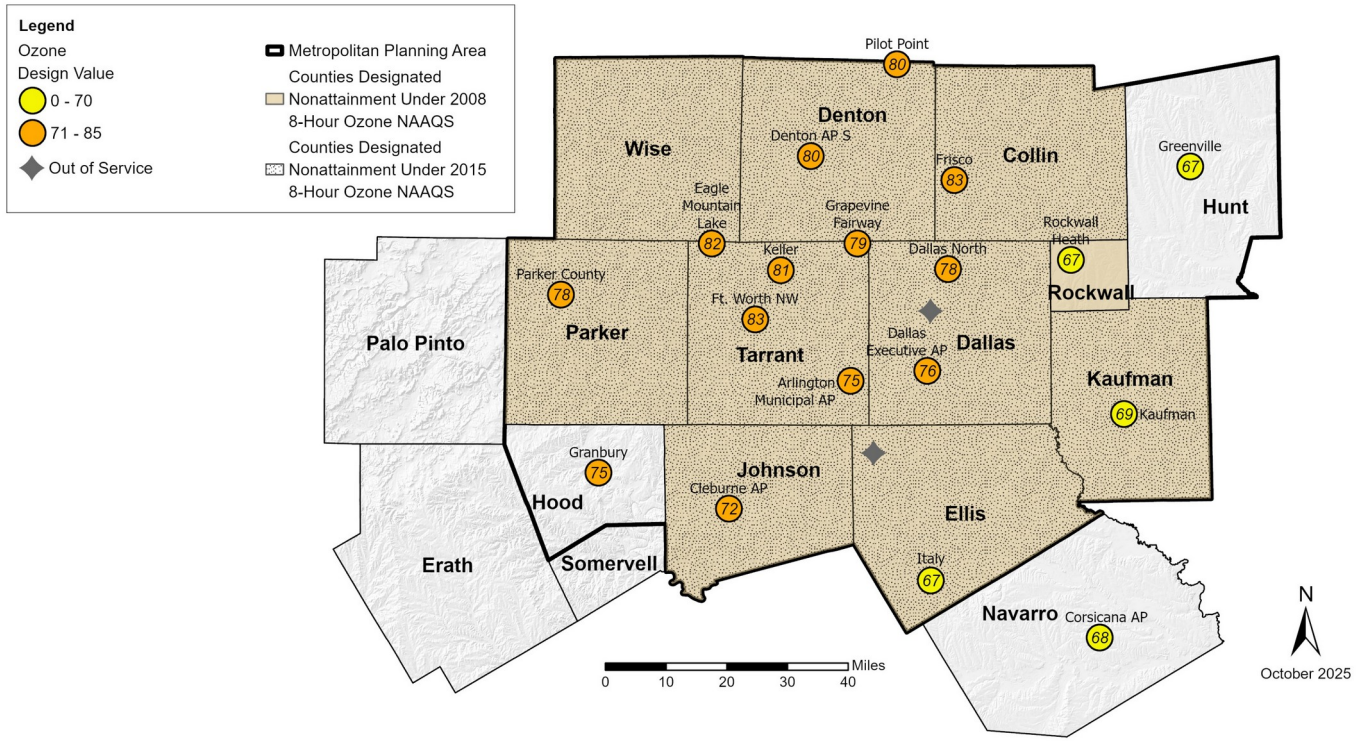
Regional Transportation Council

Transportation Policy Department of Energy-Designated Clean Cities Coalition

Sister Coalitions in Texas:

Alamo Area Clean Cities (San Antonio)
Central Texas Clean Cities (Austin)
Houston-Galveston Clean Cities
Apprentice Coalition: South Texas Clean Cities (Rio Grande Region)

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



Source: NCTCOG

Dallas Fort-Worth Clean Cities (DFWCC)

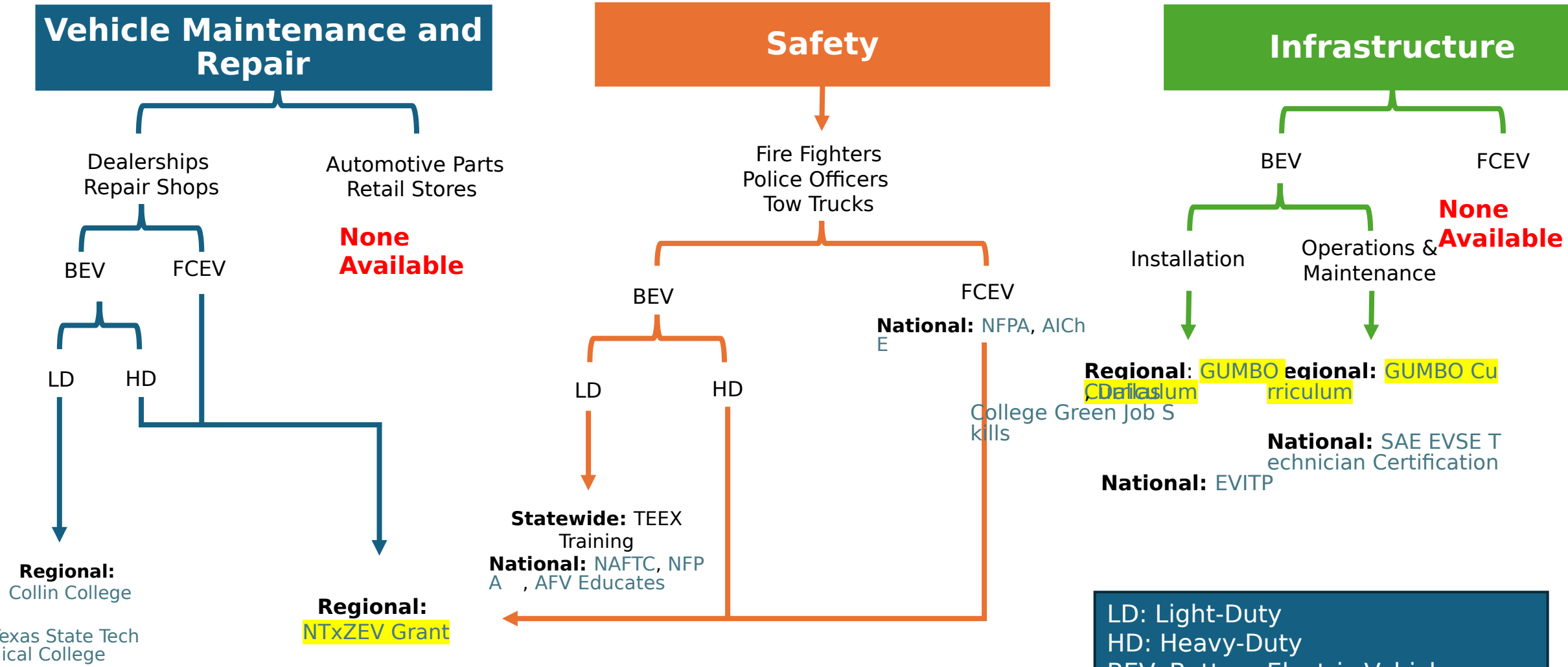
DFWCC Mission - Improve air quality by promoting clean, reliable, accessible, and sustainable transportation technologies

- Increase efficiency and reduce emissions from transportation
- Partner with public and private fleets
- Team structure:
  - Fleet/driver guidance and planning
  - Infrastructure planning and readiness
  - Energy integration

Fleet Support - Enable more efficient, greener fleets

- Match vehicles & equipment to funding
- Train on tools and resources
- Plan for fleet transition – detailed recommendations

NCTCOG Zero Emission Vehicle Training Efforts



LD: Light-Duty
HD: Heavy-Duty
BEV: Battery Electric Vehicles
FCEV: Fuel Cell Battery Electric

North Texas Zero Emissions Vehicles (NTxZEV)

North Texas Zero Emissions Vehicles Project (NTxZEV Project)

2025
Awarded Funding for NTxZEV Project

→

2025 - 2027
Implementation of Project Activities

→

January 31, 2028
NTxZEV Project Concludes

NCTCOG Project Activity	Status	Target Audience	Funding
Rebates for zero emission vehicles (ZEV) & supporting infrastructure	**Call for Projects Open:** www.nctcog.org/NTxZEV Next deadline is Friday, July 19, 2026, 5:00 PM CT. Subsequent deadlines will continue every 3rd Friday of the month until funds are exhausted.	Public and Private Fleets	$58.6 million
ZEV Training Facilitate training sessions regarding heavy-duty ZEV to teach emergency response mitigation tactics	In the process of securing trainer(s)	First responders, public safety stakeholders, post-incident responders, fleet staff	~$50k
Workforce Development Activities Provide funding to address key ZEV workforce	Meeting with regional industry partners and education partners to provide input on key priorities to build workforce programs.	Current or Future ZEV Training Providers	$1.35 million

North Texas Zero Emissions Vehicles Call for Projects

Rebates to Replace Class 6 or Class 7 "vocational vehicles" with zero-emissions trucks

- Both battery electric and hydrogen fuel cell electric trucks eligible
- Funding ranges from 35% to 80%
- Can fund supporting charging/fueling infrastructure if needed
- Both public and private sector fleets eligible

Example "vocational vehicles" include:

Sales

Step Van

Septic/Bucket Truck

Street

Transit Bus

Refuse Hauler

Other Vocational Vehicles*

Photo Credit: NCTCOG/Trinity Metro

*School bus eligible only if NOT operated as a typical school bus as defined in Guidelines Appendix A

North Texas Zero Emissions Vehicles Call for Projects

Next application deadline: Friday, July 17 at 5 pm
Subsequent application deadlines: 3rd Friday of every month at 5 pm, until funds are exhausted

No-Cost Applicant Resources

- Weekly Office Hours on Mondays at 10:00am
- Technical assistance from the National Lab of the Rockies
- Resources to help identify vendors/vehicles
- Call for Projects Workshop Recordings
- ZEV Workshop Materials

Details at www.nctcog.org/NTxZEV

Spread the word! Share information at meetings, newsletters, chambers, etc.
Staff available to support local events/outlets
Contact cleancities@nctcog.org

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

We're requesting regional experts to help create a workforce development plan to facilitate the successful adoption of zero-emission vehicles in our region

Goals:

- Identify regional roadblocks to ZEV adoption
- Analyze labor needs
- Identify priority investments to address training gaps

Expectations:

- Provide expertise and insight
- Attend periodic meetings
- Promote and distribute workforce materials

Learn more at www.dfwcleancities.org/activities/ntxzev.

Industry Sector Partnership Process

Kickoff – Industry Lead (June 3)

- Employers identified a lack of skilled technicians, industry-education misalignment and equipment/infrastructure gaps as the main challenges

Education Reconvened (June 17)

- Education partners identified an uncertain workforce pipeline, lack of standardized nomenclature/skillsets, and equipment/resource gaps as the main challenges

Next Steps to ZEV Workforce Development Plan Creation

- Additional discussions with education partners not already represented
- Circle back with both industry and education partners in July

Education Partners' Requests for Funding

Letters of Support Submitted in 2024 as part of NTxZEV Project Application included:

- Curriculum development
- Instructional materials
- Training equipment
- Student scholarships
- Certification development
- Books
- Other tools

Equipment Requests	Estimated Cost
Vehicle Lift	$60k
Level 3 Charger	$50-150k
EV Simulation Trainer	$60k
Battery Fire Extinguishing System Nozzle	$40k
EV Technician Student Scholarships	$3-5k per student

NTxZEV Workforce Feedback

1. What is the biggest workforce challenge your organization faces related to the ZEV transition?
2. How prepared is your organization to support ZEV workforce needs?
3. What barriers make it difficult for your organization to collaborate with partners?
4. What type of partnership is needed to move this work forward?
5. What support would help your institution take action?

Reach out to cleancities@nctcog.org to submit


GUMB
O
ELECTRIC VEHICLE
CHARGING ONLY
ELECTRIC VEHICLE
CHARGING ONLY

GUMBO Overview

Workforce development program that offers curriculum to higher education institutions and workforce development programs to train a workforce to maintain and repair electric vehicle supply equipment (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 pilot class
  - Now ready for adoption by higher education institutions
    - Operations and maintenance course
    - Installation course (under development)

Curriculum Topics

Electric Vehicles and Batteries
Electrical Energy
Fundamentals of Electrical Codes and Safety
Charging Stations and EVSE
Preventative Maintenance
Corrective Maintenance
EVSE Commissioning
Industry Standards

DFW Clean Cities Role

Activities:

- Connect with community-based organizations that can recruit students
- Assist community colleges and workforce development programs:
  - As they implement the curriculum
  - Through ongoing coordinative assistance post-implementation
- Connect graduates of the program with employment opportunities

Deliverables:

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

Transportation Contacts

Jared Wright
Principal Air Quality Planner
NCTCOG
jwright@nctcog.org

Lori Clark
Senior Program Manager & DFWCC Director
NCTCOG
lclark@nctcog.org

Carolyn Burns
Air Quality Planner III
NCTCOG
cburns@nctcog.org

North Central Texas Council of Governments

dfwcleancities.org

@NCTCOGTrans

cleancities@nctcog.org

linkedin.com/dfwcleancities/

Next SMARTE Webinar Session:

Sustainability Metrics and Reporting: Best Practices for Fleets

Wednesday, 9/16/26, 1 p.m. CT

Presenters: TBD

Register here in Microsoft Forms: https://forms.microsoft.com/r/vpr8JmvkPV

Image provided by Getty

Contact Us

Trey Pope
Transportation/Air Quality Planner
tpope@nctcog.org | 817-695-9297

Jason Brown
Program Manager
jbrown@nctcog.org | 817-704-2514