



DALLAS FORT WORTH ATTAINMENT DEMONSTRATION ON-ROAD EMISSIONS INVENTORIES AND LOCAL INITIATIVES

ANALYSIS YEARS 2019, 2023, and 2026

TCEQ AIR QUALITY TECHNICAL MEETING

AUGUST 24, 2022

VIVEK THIMMAVAJJHALA

North Central Texas Council of Governments

OUTLINE

EPA On-Road Models MPO Applications

Emission Calculation Process

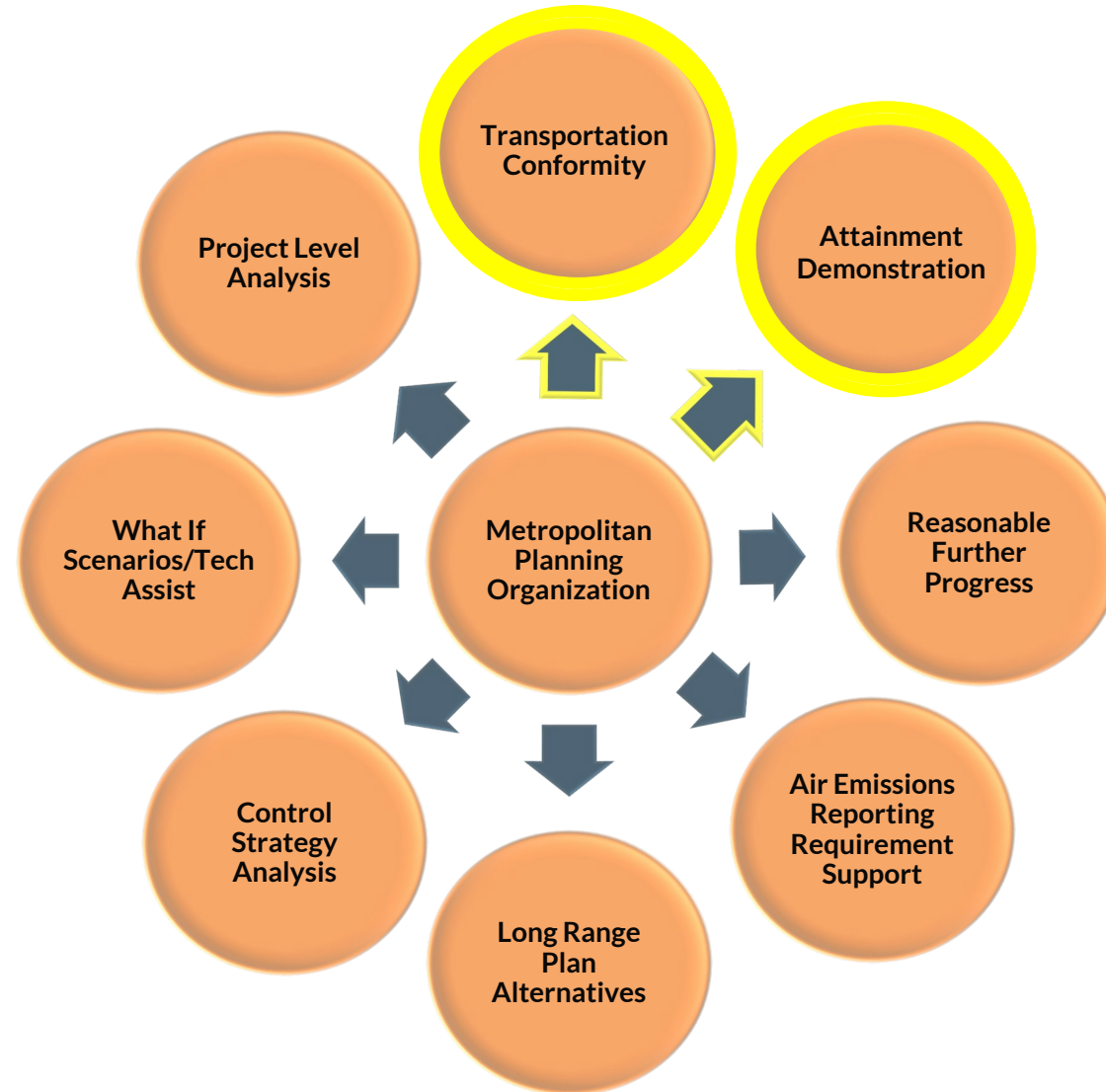
Resource Planning

Attainment Demonstration On-Road Emissions Inventories (EI)

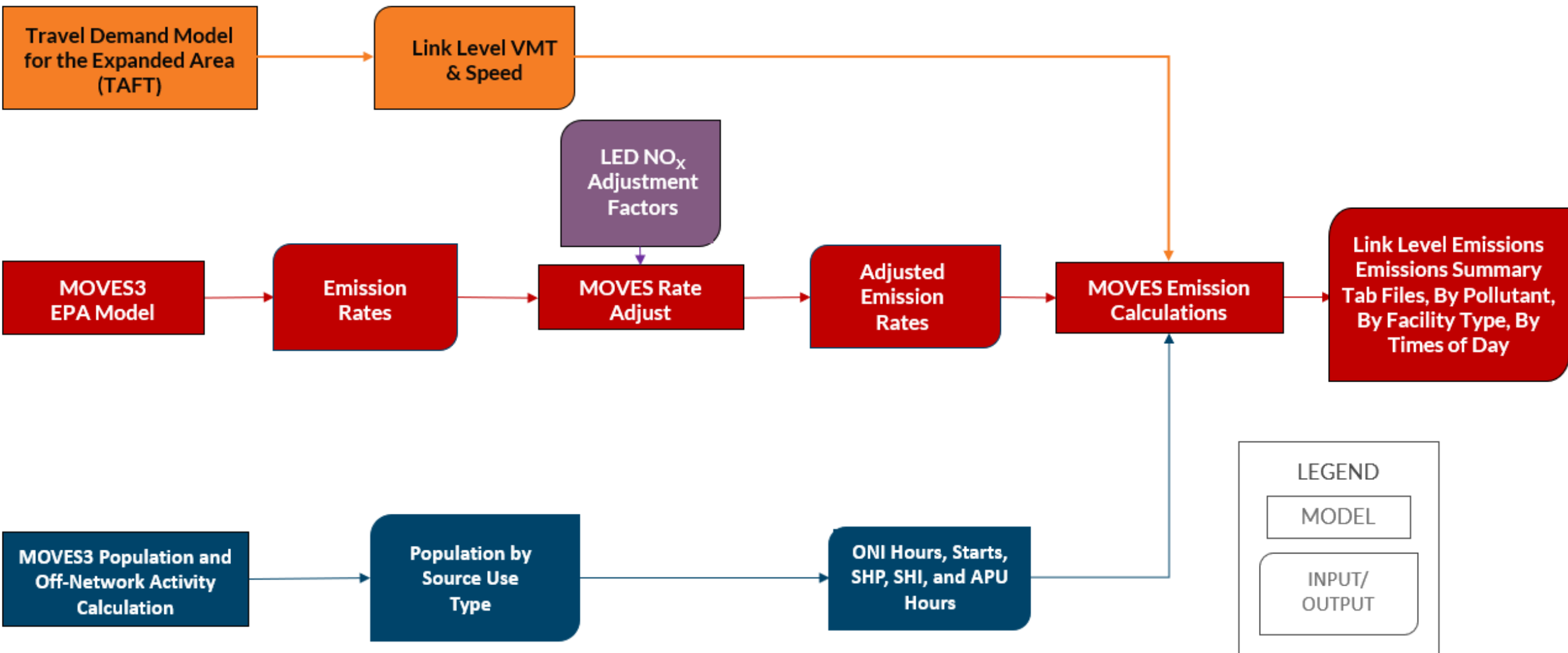
Observations

Local Initiatives

EPA ON-ROAD MODELS: NCTCOG APPLICATION



EMISSION CALCULATION PROCESS



RESOURCE PLANNING

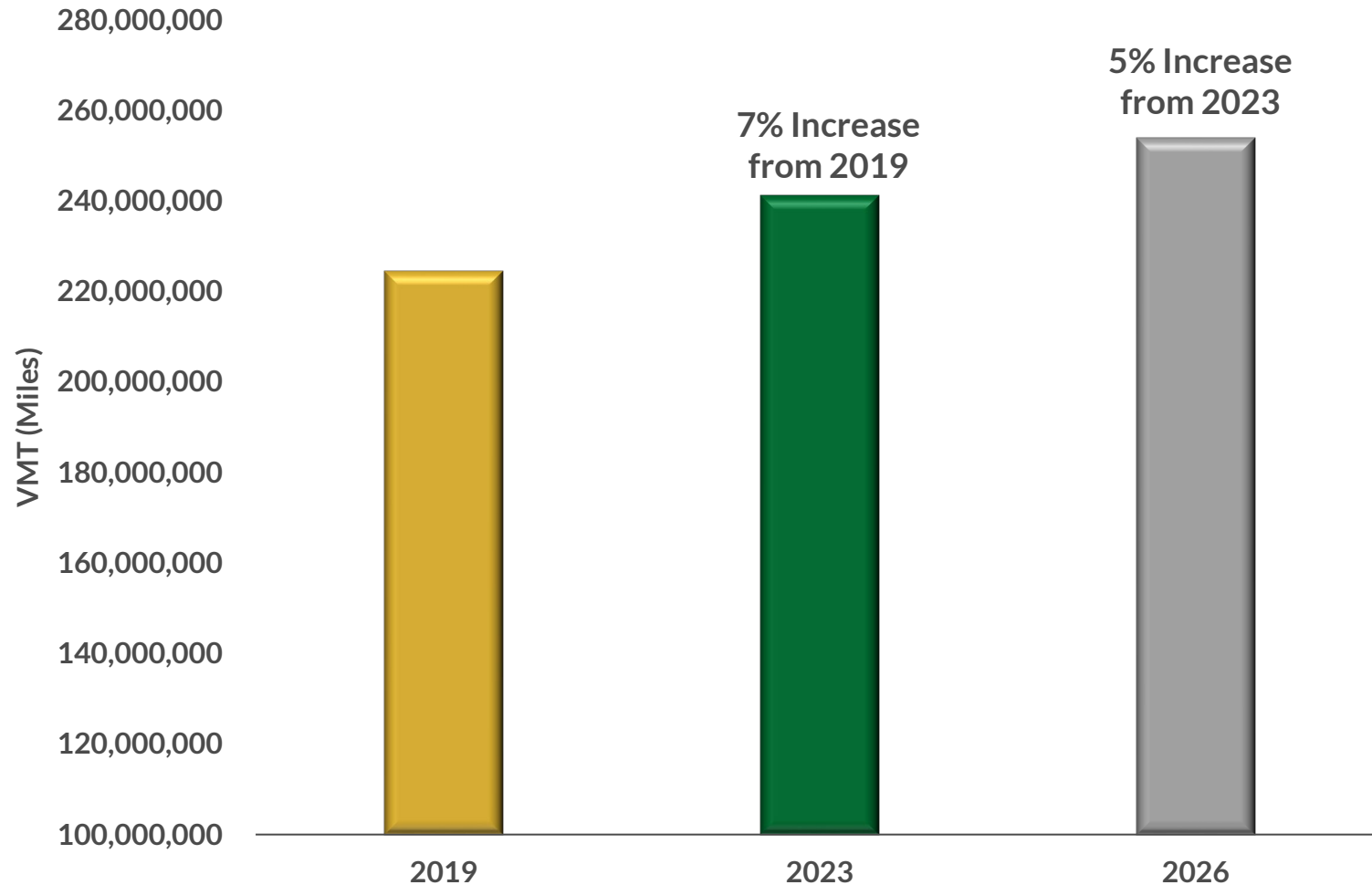
12-County DFW MPA

	Single Analysis Year	Conformity Analysis (4 analysis years)	ADSIP (link-level Emissions 3 analysis years)
MOVES Input Setup (hours)	12	48	36
MOVES Rate Runs (hours)	24	96	72
Hard drive Space (GB)	10	40	1800



ATTAINMENT DEMONSTRATION ON-ROAD EI

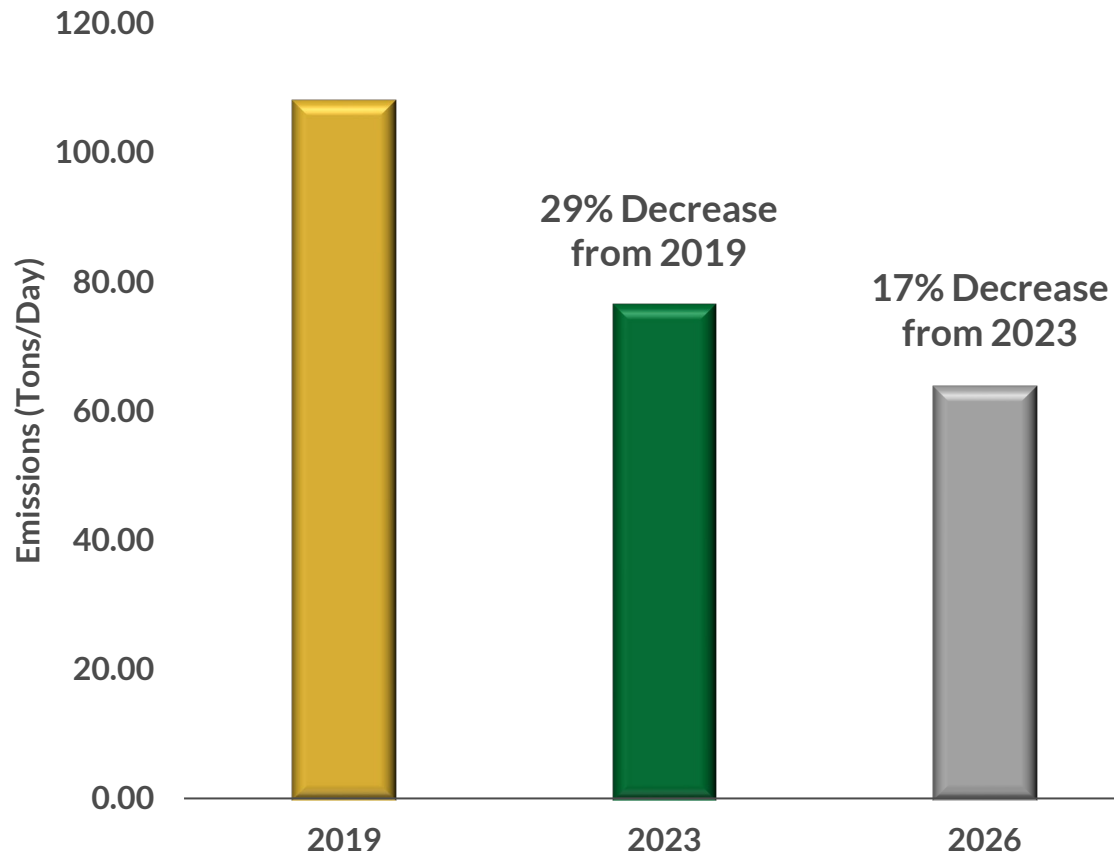
12-County MPA, Vehicle Miles Traveled (VMT)



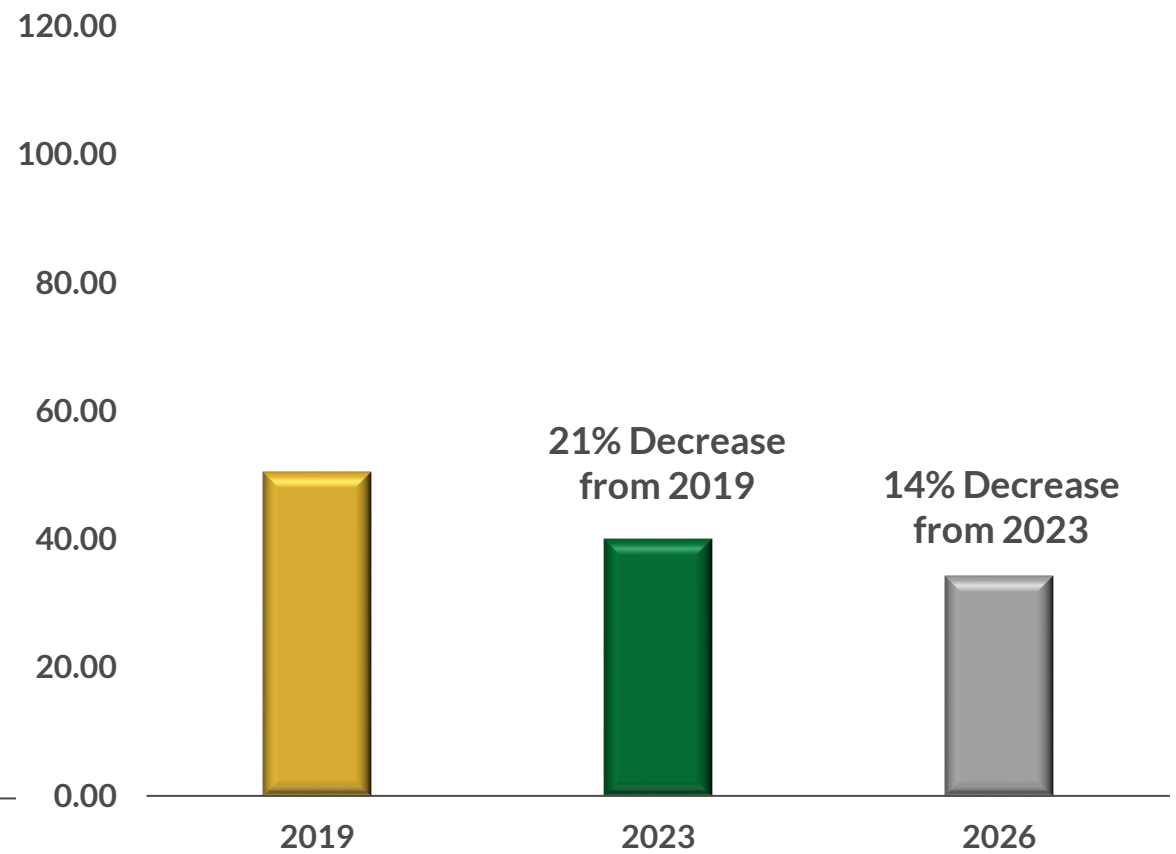
ATTAINMENT DEMONSTRATION ON-ROAD EI

12-County MPA, Emissions

NO_x Emissions

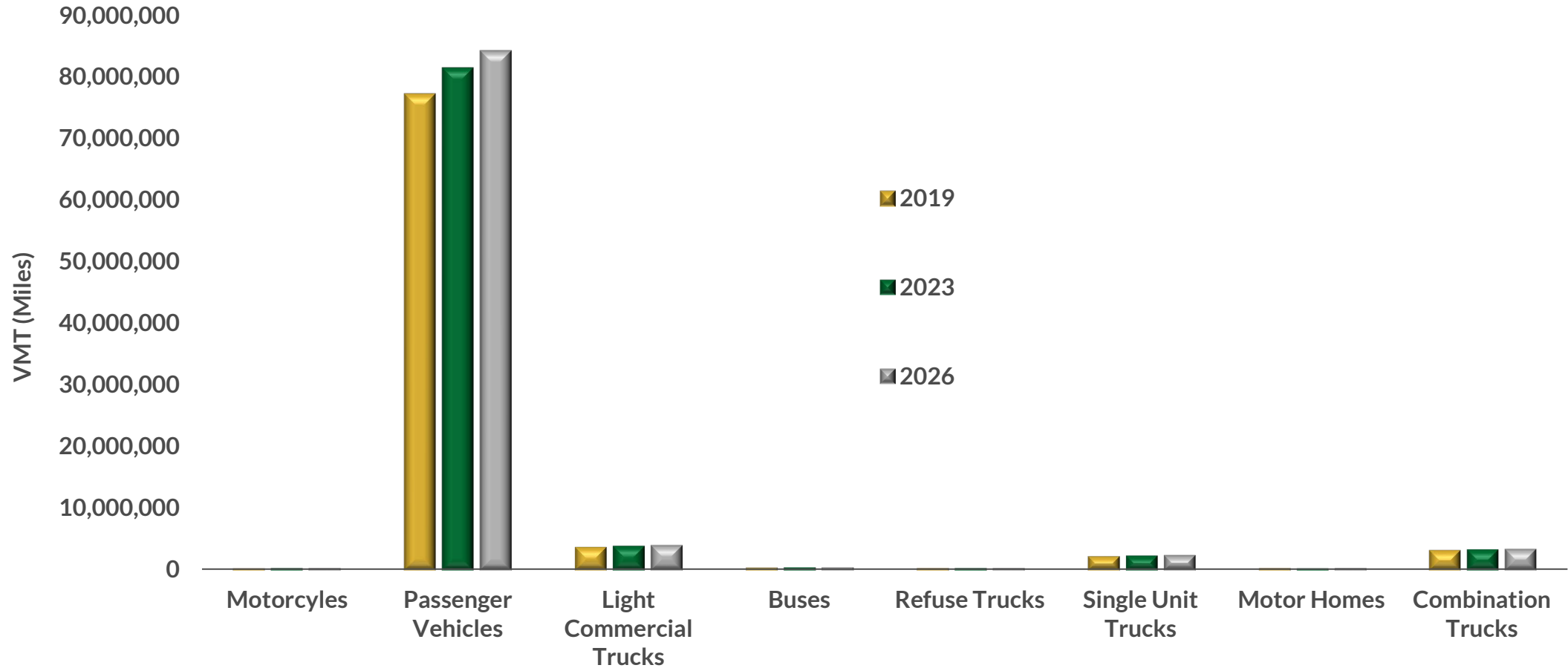


VOC Emissions



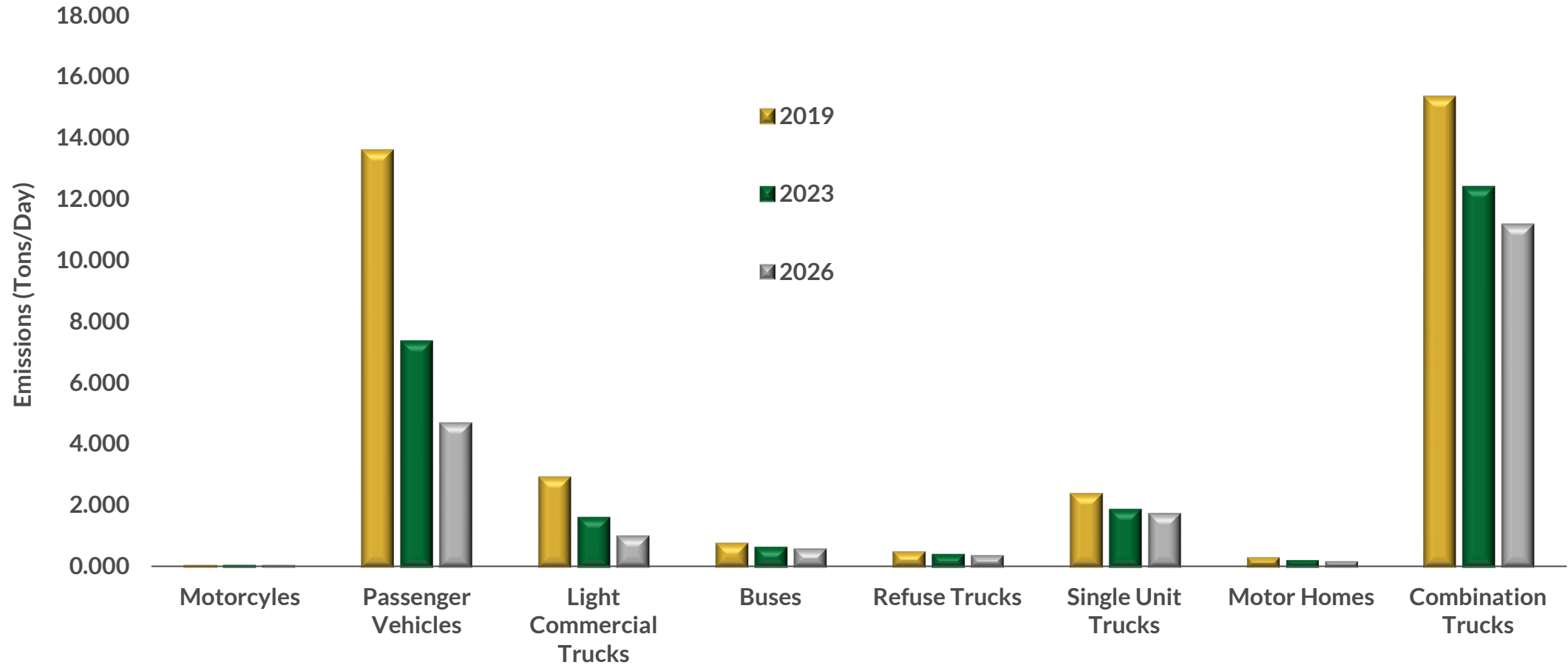
ATTAINMENT DEMONSTRATION ON-ROAD EI

Dallas County, VMT, Vehicle Types



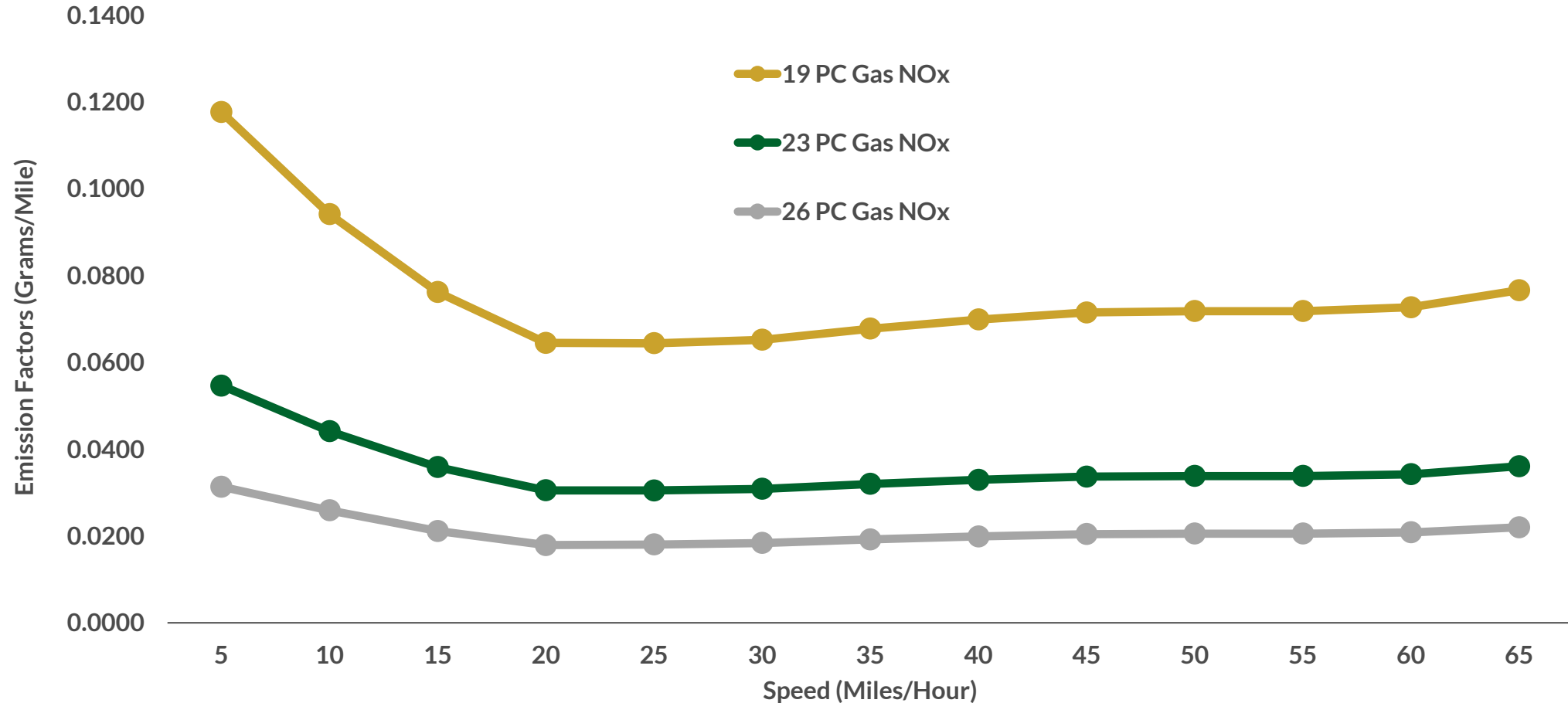
ATTAINMENT DEMONSTRATION ON-ROAD EI

Dallas County, NO_x Emissions, Vehicle Types



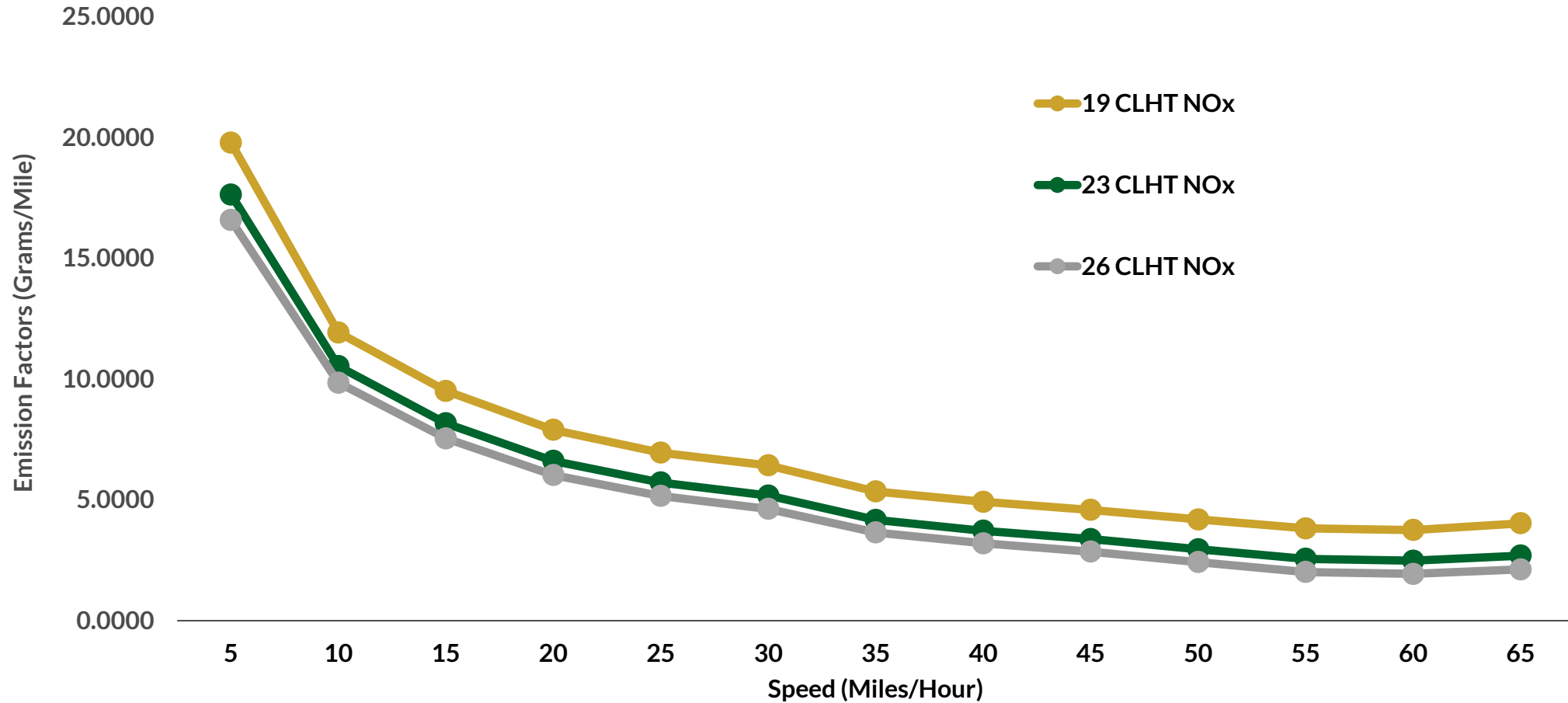
ATTAINMENT DEMONSTRATION ON-ROAD EI

Dallas County, Freeway, Passenger Car Gas, NO_x Emission Rates



ATTAINMENT DEMONSTRATION ON-ROAD EI

Dallas County, Freeway, Combination Long-Haul Truck Diesel, NO_x Emission Rates



OBSERVATIONS

Emissions

Comparing the 2019, 2023, and 2026 Analysis Years, even with increasing VMT, both NO_x emissions and VOC emissions continue to decrease from the base year (primarily due to fleet turnover)

Combination Trucks (especially diesel) are still a significant source of NO_x emissions

Emission Rates

Lower NO_x rates for Passenger Cars and higher NO_x rates for Combination Trucks for all three 2019, 2023, and 2026 Analysis Years

Higher NO_x rates when the vehicles are idling or driven below 10 miles/hour

SAMPLE OF AIR QUALITY INITIATIVES



Rideshare. Record. Reward.



LOCAL INITIATIVES

Air Quality Public Education and Communication

Communication efforts strategically created and implemented to educate and inform the region on:

- Current air quality levels and associated impacts
- Funding opportunities
- New programs and/or policies



Air North Texas Coalition

- Created in 2007
- Strives to create a unified message and brand related to air quality with regional partners
- Teaches local governments and the general public about health impacts of emissions and encourages the use of voluntary measures that help reduce emissions such as:

- Vehicle maintenance
- Combining errands
- Ridesharing
- Reducing idling

- Promoting existing NCTCOG emission reduction programs, like TryParkingIt.com, Engine Off North Texas, and Regional Smoking Vehicle Program (RSVP)



www.airnorthtexas.org

Air pollution alerts

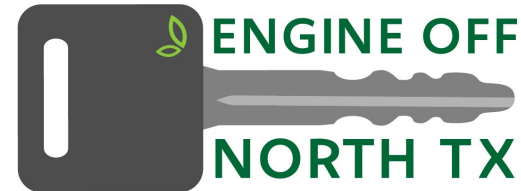
Clean Air Action Day

LOCAL INITIATIVES

Engine Off North Texas

Designed to reduce emissions by reducing vehicle idling efforts focus on:

- Enhancing awareness of regulatory options and campaign strategies organizations can use to reduce idling from various vehicle types
- Educating local governments of the State Idling Rule
 - 25 entities have adopted Local Enforced Idling
- Educating the public on the impacts of idling
- Improving public awareness of idle-reduction technologies
- Promoting idling restrictions
 - Adoption
 - Education
 - Enforcement



<https://www.nctcog.org/life/air-quality/for-everyone/engine-off-north-texas>

LOCAL INITIATIVES

Saving Money and Reducing Truck Emissions (SMARTER)

Aims to improve awareness of freight traffic effects on air quality, promote the use of SmartWay-verified technologies, and encourage industry-specific best practices in the freight industry:

- Focus on idle reduction
- Emission reduction
- Fuel saving strategies in the heavy-duty trucking industry
- Educate drivers and fleet managers through public interaction and engagement in the field to ensure large audience is reached
- SMARTER representatives provide:
 - Informational materials on a variety of NCTCOG initiatives suitable for the trucking industry
 - Clean Fleet Policy
 - Environmental Protection Agency (EPA) SmartWay Transport Partnership
 - SmartWay-verified technologies
 - Information on relevant funding opportunities on financial assistance with obtaining capital-intensive items



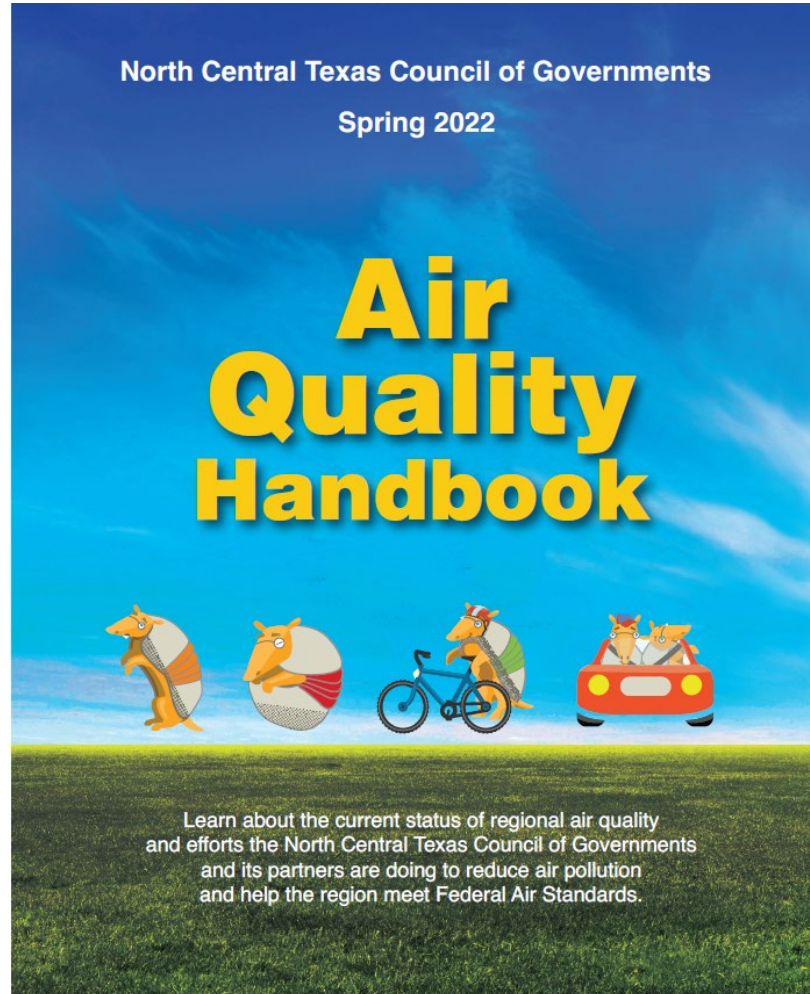
www.nctcog.org/trans/quality/air/for-fleets/smartere

AIR QUALITY HANDBOOK

English

Bilingual

Spanish



https://nctcog.org/getattachment/trans/quality/air/AQ2022printer_Spring.pdf.aspx?lang=en-US

<https://nctcog.org/getattachment/trans/quality/air/AQ2022SPANISH.pdf.aspx?lang=en-US>

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