

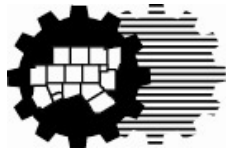
Air Quality Calls for Projects Recommendations

Surface Transportation Technical Committee

February 26, 2021

Jason Brown

Principal Air Quality Planner



**North Central Texas
Council of Governments**



Available Funding

Funding Source: Environmental Protection Agency (EPA) National Clean Diesel Funding Assistance Program

Calls for Projects	Project Types	Available Funding
Clean Fleets North Texas (CFNT) 2020 – Bucket 1	Replace Heavy-Duty Diesel Vehicles and Equipment	\$659,820*
North Texas Emissions Reduction Project (NTERP) 2020 – Bucket 2	Replace High-Use Diesel Vehicles/Equipment, Rail/Switch Yard Idle Reduction Technologies	\$2,350,000
North Texas Freight Terminal Electrification (NTFTE) 2020 – Bucket 3	Installation of Transport Refrigerated Unit Electrified Parking Spaces, Connection Kits, Power Monitoring	\$960,225

* Available from a prior EPA award. Some funding was previously awarded through CFNT 2018 and CFNT 2019 Calls for Projects.

Project Eligibility

	Bucket 1	Bucket 2	Bucket 3
Eligible Activities	<u>Replace On-Road Diesel Trucks*</u> 16,001 GVWR and Up; Model Year 1996-2006; (Model Year 2007-2009 if Replacing with Electric) <u>Replace Non-Road Diesel Equipment*</u> Must Operate >500 Hours/Year; Eligible Model Years Vary		Transport Refrigerated Unit Electrified Parking Spaces (EPS), Power Monitoring Equipment, Electric Power Kit
		Rail and Switch Yards Idling Control Technology Installation	
Funding Threshold	45% Cost if New is Electric; 35% Cost if New is Powered by Engine Certified to CARB Optional Low-NO _x Standards (Both Natural Gas and Propane Engines Currently Available); 25% Cost for All Others		30% of unit cost
		40% Cost Coverage	

*All old vehicles/equipment must be scrapped; other model years eligible on case-by-case basis.
 California Air Resources Board (CARB); Gross Vehicle Weight Rating (GVWR)

**All equipment and installation must be completed by EPA SmartWay Verified Technology Vendor.

Eligibility and Selection

	Bucket 1	Bucket 2	Bucket 3
Eligibility	Operate in Required Geographic Area		
	Clean Fleet Policy Adoption Purpose: Reserve Funding for Fleets that are Engaged Beyond Grant Opportunities; Consistent with RTC Adoption of Clean Fleet Policy		
Scoring Criteria	Cost Per Ton NO _x Emissions Reduced 75% Purpose: Maximize Emissions Reductions		
	Subrecipient Oversight Criteria 25% Purpose: Balance Project Benefits with Administrative Burden		Location and Oversight Criteria 25% Purpose: Balance Project Benefits with Administrative Burden

Bucket 1 - Summary of Applications

Applicant	Activities Requested	Applicant Eligible	Activities Eligible	Funds Requested	Recommended	
					Activities	Funds
City of Kennedale	1	Yes	1	\$165,000	1	\$165,000
City of Dallas*	6	Yes	0	\$689,786	0	0
Funds Remaining after Recommended Subaward**						\$494,820

Refer to Electronic Item 3.2 for more details.

*** City of Dallas May Submit a New Application in Next Round**

**** Next Round of Calls for Projects Currently Open for Remaining Balances**

Bucket 2 and Bucket 3 - Summary of Applications

Bucket 2						
Applicant	Activities Requested	Applicant Eligible	Activities Eligible	Funds Requested	Recommended	
					Activities	Funds
Alliance Aviation Services	2	Yes	2	\$108,770	2	\$108,770
Paccar Leasing	1	Yes	1	\$161,555	1	\$161,555
Funds Remaining after Recommended Subaward*					\$2,079,675	

Bucket 3

No Applications Received; EPA Funds Remaining \$960,225

Refer to Electronic Item 3.3 for more details.

***Next Round of Calls for Projects Currently Open for Remaining Balances**

Schedule

Milestone	Estimated Timeframe
STTC Action to Recommend Subaward and Rebate	February 26, 2021
RTC Approval of Recommended Subaward and Rebate	March 11, 2021
Executive Board Authorization	March 25, 2021
Next Interim Application Deadline (Rolling 90-Day Deadline until All Funds Awarded or Final Application Deadline Reached)	April 9, 2021
Final Application Deadline	October 8, 2021
Project Implementation Deadline	February 26, 2023*

*Deadline has been extended per EPA no cost time extension.

Action Requested

Action Requested: Recommend RTC Approval of Subaward and Rebate

Bucket 1 - Clean Fleets North Texas 2020

\$165,000 to the City of Kennedale to Replace One Firetruck

Any Funds Released From Prior Awards to be Applied to Balance Available to Future Awards

Bucket 2 - North Texas Emissions Reduction Project 2020

\$108,770 to Alliance Aviation Services to Replace Two Airport Support Equipment;

\$161,555 to Paccar Leasing to Replace One Class 6-7 Service Truck

For More Information

Amy Hodges

Senior Air Quality Planner

817-704-2508

AHodges@nctcog.org

Jason Brown

Principal Air Quality Planner

817-704-2514

JBrown@nctcog.org

Lori Clark

Program Manager

DFW Clean Cities Coordinator

817-695-9232

LClark@nctcog.org

Chris Klaus


Senior Program Manager

817-695-9286

CKlaus@nctcog.org

Website

www.nctcog.org/aqfunding



COVID-19
Infrastructure
Program #015:
Transit Partnership

Surface Transportation
Technical Committee

February 26, 2021

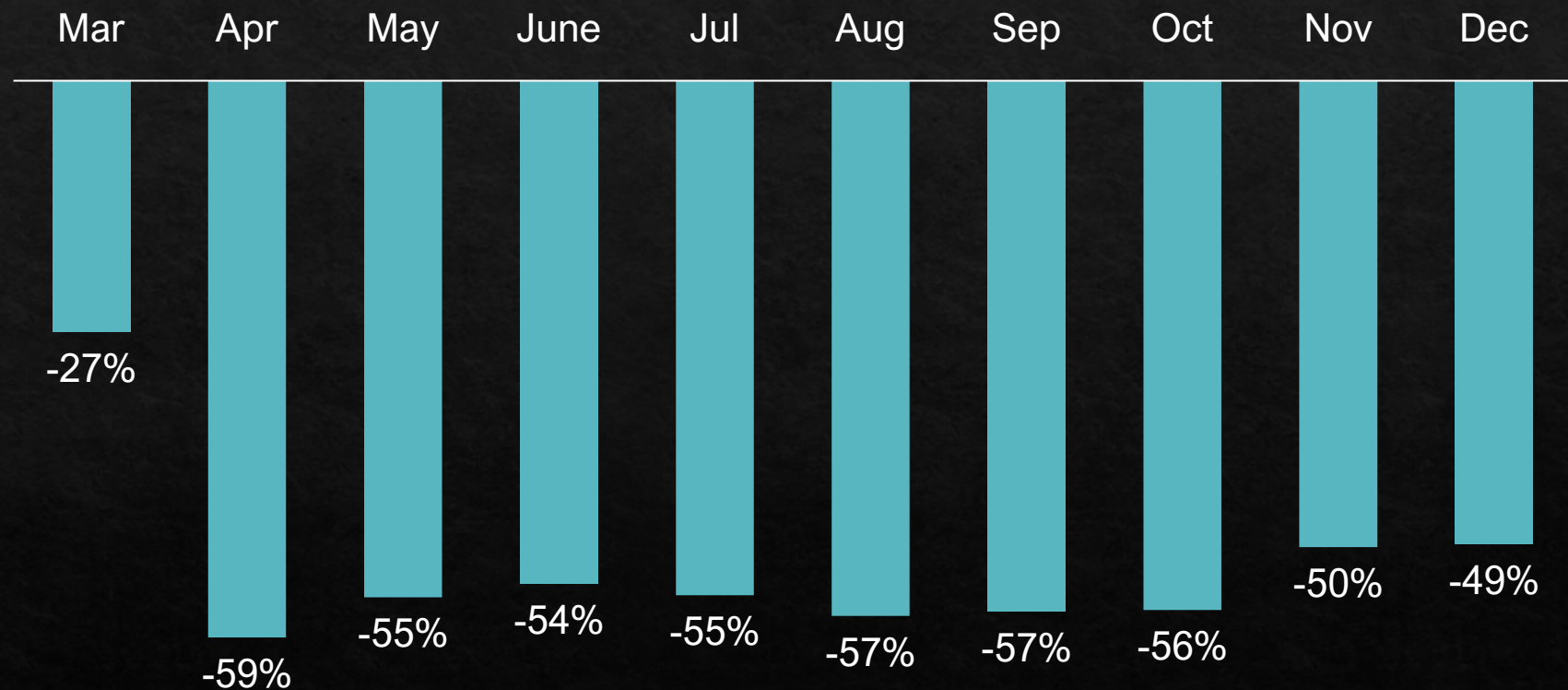
BACKGROUND

- Due to the recent COVID-19 outbreak, transit ridership has declined significantly.
- In response, the Regional Transportation Council (RTC) approved \$25,000,000 in Surface Transportation Block Grant (STBG) funds for investments in transit in the COVID-19 Round 3 Infrastructure Program in November 2020.
- Since then, discussions have occurred regarding how the funding should be allocated at the project level.

TRANSIT IMPACTS

Passenger Decrease : 2019 vs 2020

Weekday
Ridership



ORIGINALLY IDENTIFIED PROJECT CATEGORIES

- Scope: Specific scopes to be determined, but will focus on these areas:
 - Response to COVID-19 impacts
 - Insurance for passenger rail integration onto freight lines
 - Engineering funds for passenger rail/roadway interfaces
 - Next generation high-intensity bus expansion
 - Review of bus stop amenities
 - Partnership(s) with Class 1 Railroads on passenger rail corridors
- RTC Policies/Federal Performance Measures Addressed: Transit, Air Quality, Freight

REGIONAL TRANSIT EDUCATIONAL CAMPAIGN PROGRAM

- During the COVID-19 pandemic, transit ridership has remained approximately 50% of what it was for the same period in 2019.
- Bringing riders back to the system will require targeted outreach.
- A two-phased education campaign is proposed:
 - Phase 1 - focus on growing consumer confidence
 - Phase 2 - focus on increasing ridership
- Program involves seeking out partnerships in the business community and local news networks.
- \$1,000,000 STBG funds proposed for the program (to be matched with Regional Transportation Development Credits (TDC))
- In order to expedite funding, this program may be implemented by a funding exchange with the transit agencies.



The advertisement features the DCTA logo (Denton County Transportation Authority) at the top. Below it is a photograph of a person wearing a face mask and a beanie, looking at a smartphone while standing on a transit vehicle. A blue banner across the photo reads "RIDE SAFE, STAY SAFE." To the left of the main text are three icons: a face with a mask labeled "Mask Required", hands being washed labeled "Enhanced Cleaning", and an exclamation mark labeled "Stay Updated". The main text reads "COMMUTE WITH CONFIDENCE WHEN YOU #RIDEDCTA" followed by "We're taking the necessary precautions to make sure our vehicles are safe so that when you're ready, you can hop back on board." At the bottom right is a blue button with the text "LEARN MORE >>".

Source: DCTA

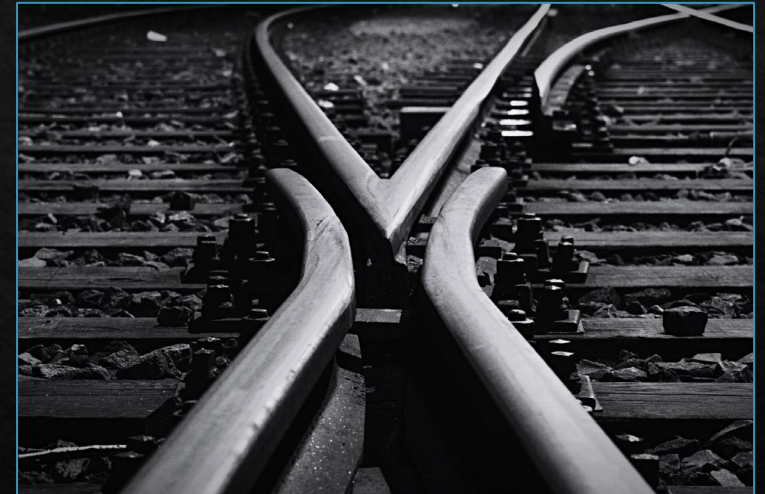
INSURANCE FOR PASSENGER RAIL INTEGRATION

- Transit authorities are required to have insurance for passenger operations on freight rail lines.
- Agencies in our region have previously had sufficient revenue for annual premiums, but revenue decreases have presented an issue.
- Additionally, premiums in the industry have increased dramatically.
- \$5,000,000 STBG funds are proposed to assist transit authorities in securing insurance until premiums level out.
- The funds would be matched with Regional TDCs.



REGIONAL CLASS 1 RAILROAD DESIGN REVIEW

- In recent months, a need has been identified to facilitate the review of engineering plans for transportation projects crossing or utilizing Class 1 railroad lines.
- Proposed project/program involves:
 - Funding professional engineering agreements with Class 1 railroads (i.e., Union Pacific, BNSF Railway, and Fort Worth and Western Railroad)
 - Agreements to expedite the design review of regionally significant projects throughout the region
 - \$7,000,000 of STBG funds (to be matched with Regional TDCs)



REGIONAL BUS STOPS

- Many bus stops leave transit riders waiting in the grass and dirt.
- Proposed project involves:
 - Funding concrete foundations and/or overhead shelters
 - \$1,000,000 STBG funds (to be matched with Regional TDCs) for bus stops in the Trinity Metro service area with specific locations to be identified by NCTCOG and Trinity Metro
- Stops in the DCTA and DART service areas to be identified for future improvement



NEXT STEPS

- Seek RTC action on the project list
- Add projects to the Transportation Improvement Program (TIP) and Statewide TIP
- Identify potential projects for the remaining \$11,000,000 of funding
- Bring proposals back to STTC and RTC for consideration

REQUESTED ACTION

- Recommend RTC approval of:
 - The proposed COVID-19 Infrastructure Program: Transit Partnership investments
 - Administratively amending the Transportation Improvement Program (TIP)/Statewide Transportation Improvement Program (STIP) and amending other planning/administrative documents to incorporate these projects.

CONTACT/QUESTIONS?

Christie J. Gotti
Senior Program Manager –
Transportation Project Programming
Ph: (817) 608-2338
cgotti@nctcog.org

Brian Dell
Senior Transportation Planner
Ph: (817) 704-5694
bdell@nctcog.org

Cody Derrick
Transportation Planner III
Ph: (817) 608-2391
cderrick@nctcog.org

**STATUS REPORT RELATED TO PREVIOUS ACTION ON
FEDERAL TRANSIT ADMINISTRATION FUNDING
ALLOCATIONS IN RESPONSE TO
COVID RELIEF 2.0 FUNDING AUTHORIZATION**

SURFACE TRANSPORTATION TECHNICAL COMMITTEE

FEBRUARY 26, 2021

SHANNON STEVENSON, SENIOR PROGRAM MANAGER

TRANSIT MANAGEMENT & PLANNING

CORONAVIRUS RESPONSE AND RELIEF SUPPLEMENTAL APPROPRIATIONS ACT OF 2021

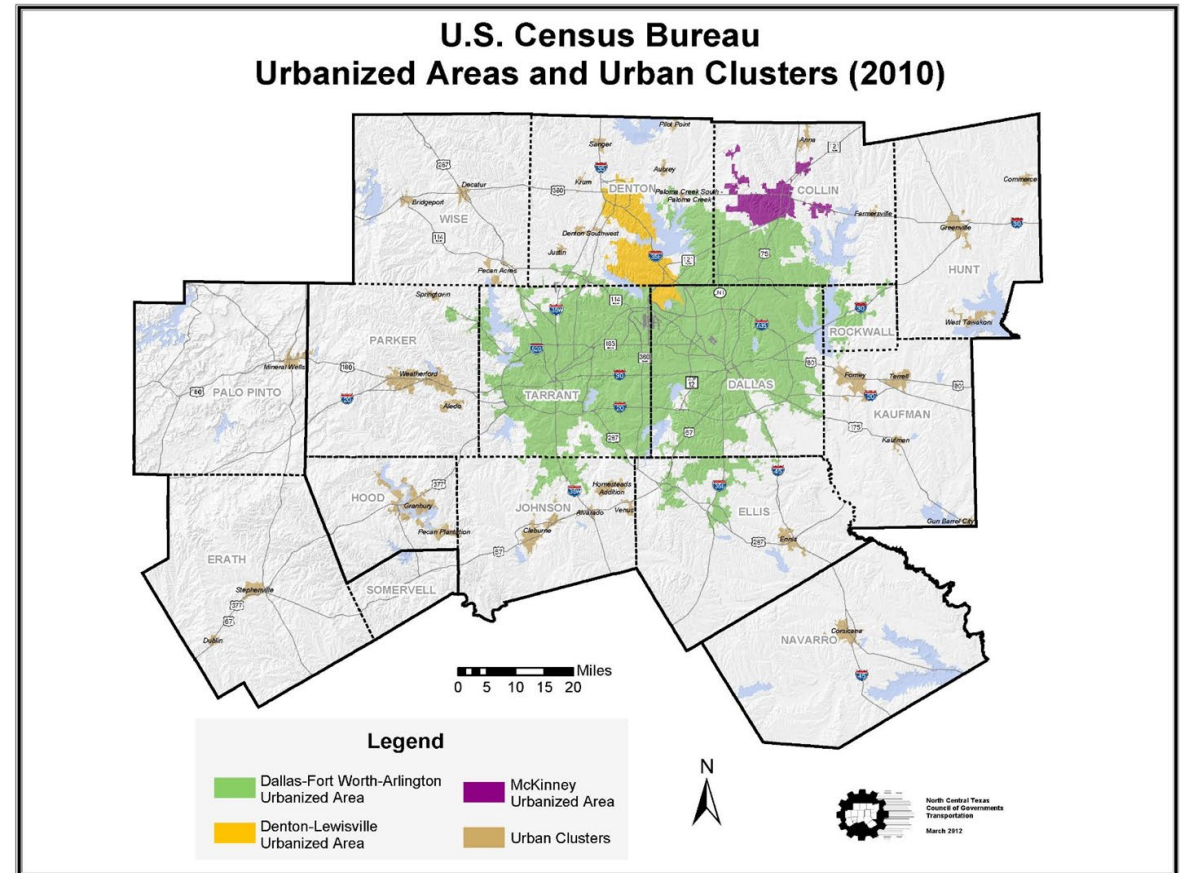
- The Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSAA) was enacted on December 27, 2020; providing \$14 billion nationwide in additional emergency funds to help alleviate funding shortfalls for the nation's largest public transportation systems due to the COVID-19 public health emergency through the Urbanized Area Formula Program (Section 5307) with a small amount of funding for the Enhanced Mobility of Seniors and Individuals with Disabilities Program (Section 5310)
- Second round of COVID-19 relief funding provided to the transit industry following the [Coronavirus Aid, Relief and Economic Security \(CARES\) Act](#), which was signed at the end of March 2020 and provided \$25 billion nationwide to the industry
- Primary objective is to ensure public transit agencies receive sufficient funding; under this bill, when combined with their CARES Act apportionments, to equal at least 75% of urbanized areas' public transit operating costs based on 2018 expenses
- The Dallas-Fort Worth-Arlington Urbanized Area is receiving Urbanized Area Formula Program funding (Section 5307) because only DART falls below the 75% threshold
- NCTCOG will not retain any funds for administrative purposes

CORONAVIRUS RESPONSE AND RELIEF FUNDING FOR THE REGION

NCTCOG: Designated Recipient of FTA
Urbanized Area (UZA) Formula funds for
North Texas¹

Available Funding for North Texas

UZA	Section 5307	Section 5310	TOTAL
DFW-Arlington	\$128,511,228	\$661,250	\$129,172,478
Denton-Lewisville	\$0	\$41,938	\$41,938



¹McKinney UZA was not allocated any funding by the FTA

5307 ALLOCATION METHODOLOGY

DFW-Arlington UZA	2018 Operating Expenses	75% of 2018 Operating Expenses	CARES Act Allocation	Recommended for CRRSAA Funding?
City of Arlington	\$3,291,878	\$2,468,909	\$10,955,694	No
City of Grand Prairie	\$801,084	\$600,813	\$3,852,375	No
City of Mesquite	Reported to NTD by STAR Transit	N/A	\$3,442,401	No
City/County Transportation	\$310,255	\$232,692	\$899,600	No
Community Transit Services	\$193,513	\$145,135	\$1,781,036	No
Dallas Area Rapid Transit	\$527,011,156	\$395,258,367	\$229,627,520	Yes
Trinity Metro/ Fort Worth Transportation Authority (FWTA)	\$54,709,434	\$41,032,076	\$55,161,034	No
North Central Texas Council of Governments	N/A	N/A	\$796,572	No
Northeast Transportation Services (NETS)	Reported to NTD by FWTA	N/A	\$4,813,723	No
Public Transit Services	\$472,239	\$354,180	\$396,081	No
Span, Inc.	\$1,026,700	\$770,025	\$2,204,136	No
STAR Transit	\$3,869,114	\$2,901,836	\$4,698,957	No
Denton-Lewisville UZA	2018 Operating Expenses	75% of 2018 Operating Expenses	CARES Act Allocation	Recommended for CRRSAA Funding?
Denton County Transportation Authority	\$28,350,849	\$21,263,137	\$23,461,867	Not Available

METHODICAL REVIEW OF FUNDING ALLOCATIONS

STEP 1: FORMULA ALLOCATIONS

Are annual formula allocations correct and accurately account for TRE?

Yes

STEP 2: CARES ACT ALLOCATIONS

Did the RTC correctly allocate CARES Act funding and account for TRE?

Yes

STEP 3: CONGRESSIONAL EVALUATION

Did Congress allocate any CRRSAA funding to North Texas because any agencies were below the 75% threshold?

Yes

STEP 4: AGENCIES BELOW 75% THRESHOLD

Was DART the only transit agency in North Texas below the 75% threshold?

Yes

STEP 5: RTC DISCRETION

Does the RTC have discretion on how to distribute CRRSAA funds?

Yes

Other than 2018 NTD
Authorities with Disparate Tools
Federal Awareness of TRE

STEP 5: RTC DISCRETION CONTINUED

Agency	2018 Operating Expenses*	75% of 2018 Operating Expenses	CARES Act Allocation	Percent of 2018 Operating Expenses (CARES Act Only)	Recommended CRRSAA Allocation	Total Recommended COVID-19 Relief Funding (CARES Act + CRRSAA)	Percent of 2018 Operating Expenses (Total COVID-19 Relief Funding)
DART	\$527,011,156 - \$16,742,596 = \$510,268,560	\$382,701,420 \$395,258,367	\$229,627,520	45%	\$128,511,228	\$358,138,748	70%
Trinity Metro	\$54,709,434 + \$16,742,596 = \$71,452,030	\$53,589,023 \$41,032,076	\$55,161,034	77%	<i>Not Recommended</i>	\$55,161,034	77%

*Adjustment for Trinity Metro's TRE operating expenses (\$16,742,596) shown in green, which are reported by DART to NTD

CONTACT INFORMATION

Shannon Stevenson

Senior Program Manager

sstevenson@nctcog.org

817-608-2304

Edgar Hernandez

Senior Transportation Planner

ehernandez@nctcog.org

817-704-5640

CHANGING MOBILITY

DATA, INSIGHTS, AND DELIVERING
INNOVATIVE PROJECTS DURING COVID
RECOVERY

Surface Transportation Technical Committee
February 2021

Michael Morris, PE
Director of Transportation

TRAVEL BEHAVIOR BY MODE



Bicycle/Pedestrian (+36%, December)



Freeway Volumes (-9%, November)

Toll Road (-19%, November)

Airport Passengers (-46%, November)

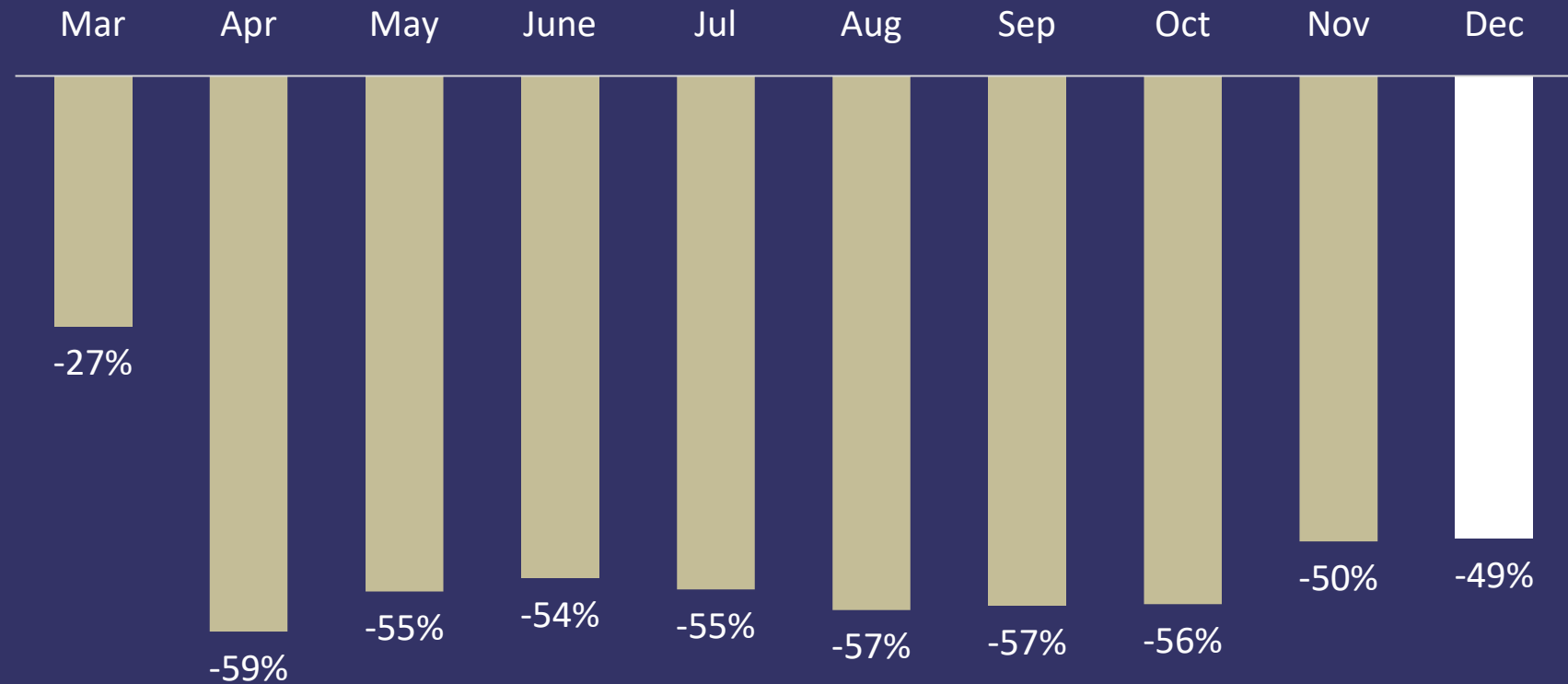
Transit Ridership (-49%, December)



TRANSIT IMPACTS

Weekday
Ridership

Passenger Decrease : 2019 vs 2020



Source: DART, DCTA, and Trinity Metro

FINANCIAL IMPLICATIONS



Transit Sales Tax Allocations (0.34%, September)



Sales Tax (-0.3%, January)

Motor Fuel Tax (-4.7%, January)

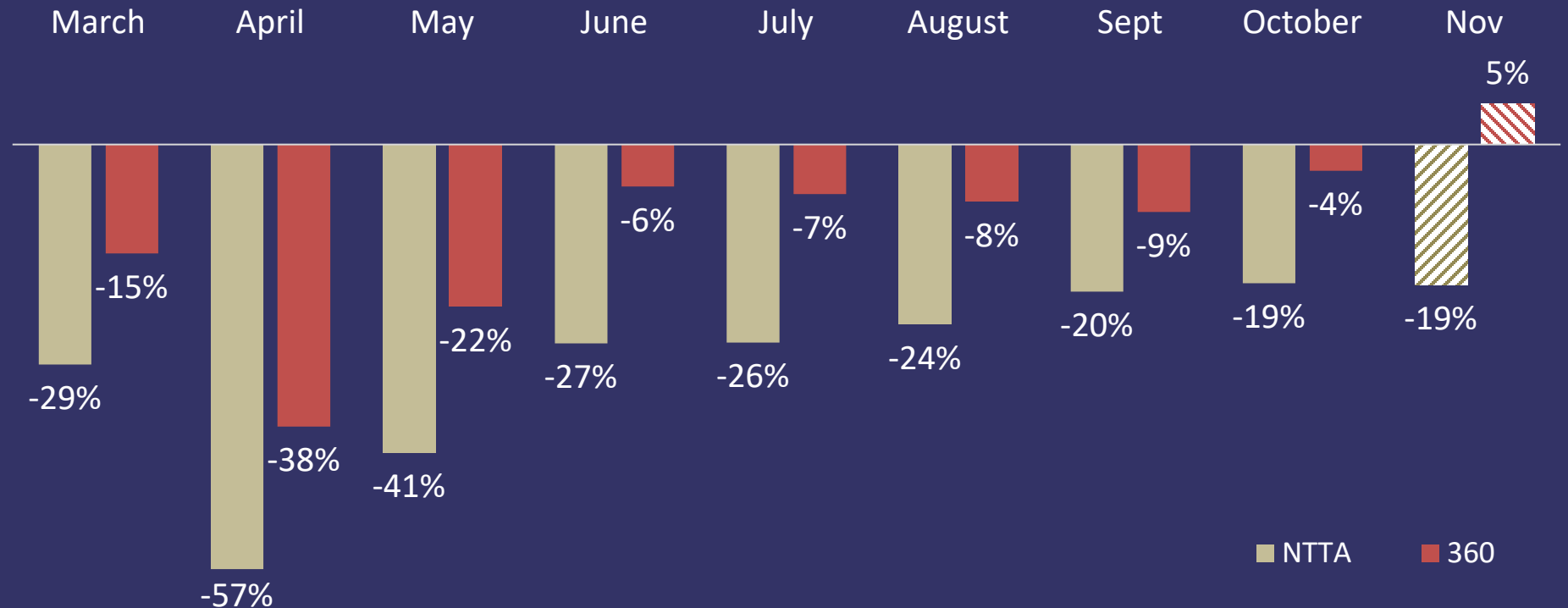
Motor Vehicle Sales and Rental Tax (-13.4%, January)



FUNDING IMPACT

NTTA
Transactions,
Including
SH 360

Change in Tollway Transactions: 2019 vs 2020



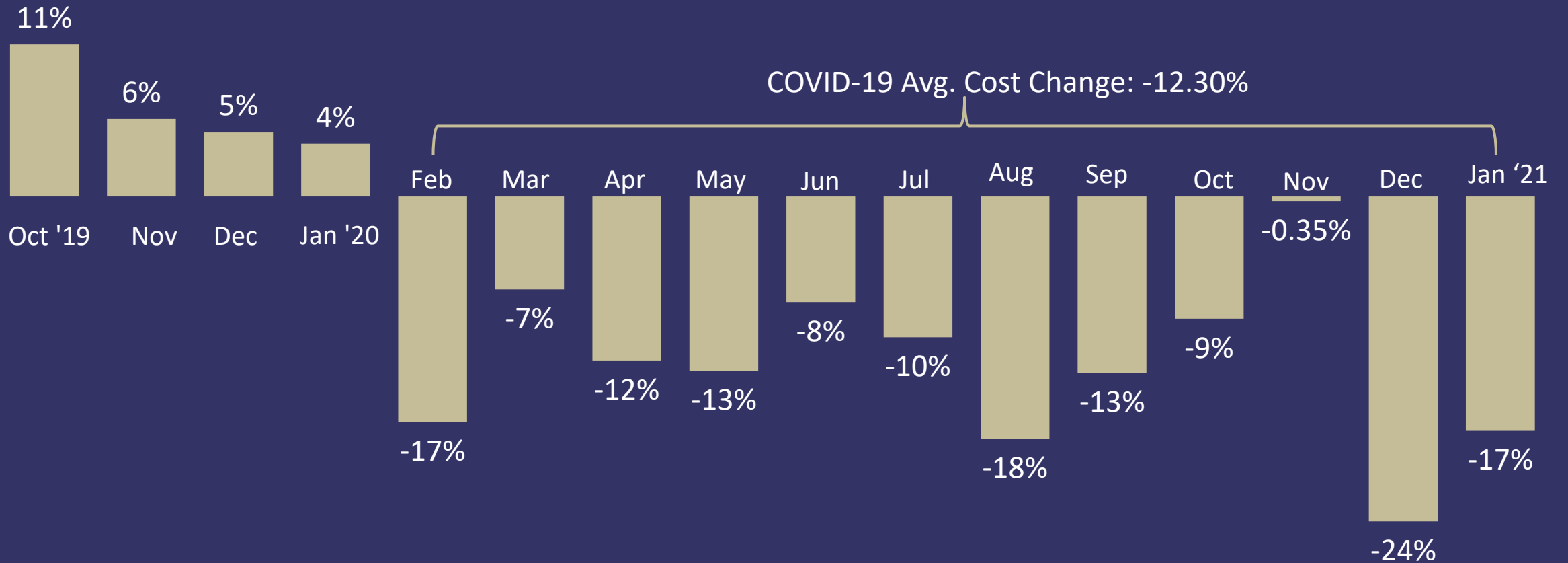
Source: NTTA

Note: Change for NTTA includes 360 Tollway

Additional Note: Despite decline in transactions, the revenues are sufficient to meet debt service for SH 360. No current impact to RTC backstop expected.

Construction Cost Changes October 2019 to January 2021

Monthly Average Construction Cost Changes
(Letting Low Bid vs. Sealed Engineer's Est.)



Sources: TxDOT Connect and Monthly TxDOT Letting Reports

Notes: Does not include CSJ 2266-02-151; Includes grouped and non-grouped projects; Includes Dallas and Fort Worth District data

CANDIDATE PROJECTS

High Speed Rail: Dallas to Houston

High Speed Rail: Dallas to Fort Worth

Autonomous Transit (Tarrant, Midtown)

Technology (Freeway Induction Loops)

State Highway 183 (Section 2E+)

Y Connector (IH820/IH20)

COVID-19 #00X Program



Status of Federal Discretionary Grant Program Project Proposals – Not Awarded (2016-20)

YEAR	EAST/ WEST	GRANT TYPE	PROJECT	TOTAL COST	GRANT FUNDS	UPDATED STATUS (VIA OTHER MEANS)		
						NEPA	FUNDING	DELIVERY
2016	WEST	TIGER	East Lancaster Ave. Complete Streets	\$107.0M	\$25.0M	NO	YES (partial)	2021 UTP (FY 2021-24 Let Date)
2020	EAST	BUILD	Enhancing Mobility Within the Southern Dallas Inland Port	\$12.0M	\$9.3M	NO	YES (partial)	COVID-19 #00X Round 3 (partial)
2021 (NEW)	EAST	INFRA	IH 30 Downtown (Co-Sponsor)			FONSI	YES (partial)	2021 UTP (FY 2021-24 Let Date)

LEGISLATIVE UPDATE

Nicholas Allen, Communications Coordinator

NCTCOG

Surface Transportation Technical Committee

February 26, 2021

FEDERAL UPDATE

Biden Administration

- Pete Buttigieg has been confirmed as Secretary of Transportation by the US Senate
- The House Budget Committee has approved President Biden's "American Rescue Plan" totaling \$1.9 trillion
- \$50.7 billion will go to transportation and infrastructure; transit and airport relief with \$30.5 billion in dedicated funds

Executive Orders

- Established the White House Office of Domestic Climate Policy and National Climate Task Force
- Promoted COVID-19 safety during travel; face masks now required on public transportation

TEXAS LEGISLATURE

House and Senate Committee Assignments

Senate Transportation

- No change to Chair, Senator Robert Nichols
- North Texas Members: Senators Hancock & West

House Transportation

- No Change to Chair, Representative Terry Canales
- North Texas Members: Representatives Yvonne Davis, Glenn Rogers

TEXAS LEGISLATURE

Upcoming Committee Hearings

- Senate Finance & Redistricting; House Appropriations, Redistricting, Transportation, & State Affairs

Governor Abbott's Emergency Items

- Broadband expansion
- Prohibiting cities from defunding the police
- Bail system reform
- Election integrity
- Pandemic liability protections for businesses
- *ERCOT reform

TEXAS LEGISLATURE

Bill Topics

- Tolls / CDAs
- Roadway Safety
- Gas / Diesel Fuel Tax Increases
- Electric Vehicle Charging Station Infrastructure, Emissions Reductions
- Eminent Domain

CONTACT INFORMATION

Amanda Wilson

Program Manager

(817) 695-9284

awilson@nctcog.org

Rebekah Hernandez

Communications Manager

(682) 433-0477

rhernandez@nctcog.org

Nicholas Allen

Communications Coordinator

(817) 704-5699

nallen@nctcog.org

Kyle Roy

Communications Coordinator

(817) 704-5610

kroy@nctcog.org

www.nctcog.org/legislative



NCTCOG PRESENTATION

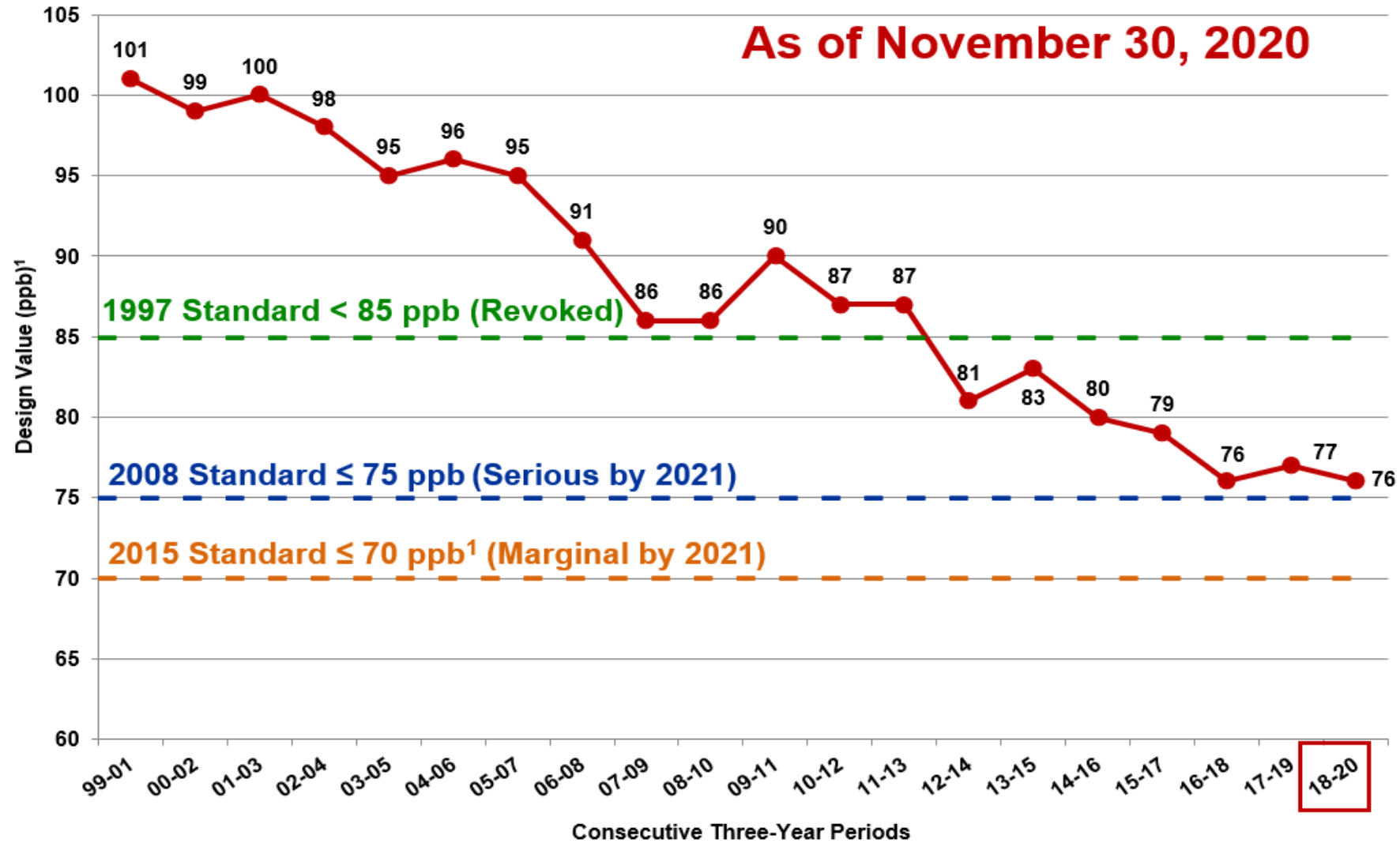
REQUIREMENTS OF OZONE RECLASSIFICATIONS

SURFACE TRANSPORTATION TECHNICAL COMMITTEE

FEBRUARY 26, 2021

VIVEK THIMMAVAJJHALA

OZONE DESIGN VALUE TREND



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).

NEW ATTAINMENT DEADLINES

2008 NAAQS Attainment Date (≤ 75 ppb):

Reclassify from Serious to Severe

No later than **July 20, 2027**, to reach attainment

Based on 2024-2026 Ozone Monitor Data

Air Quality Plan (SIP) based on analysis year 2026 modeling

2015 NAAQS Attainment Date (≤ 70 ppb):

Reclassify from Marginal to Moderate

No later than **August 3, 2024**, to reach attainment

Based on 2021-2023 Ozone Monitor Data

Air Quality Plan (SIP) based on analysis year 2023 modeling

AIR QUALITY PLANS

State Implementation Plans (SIPs) need to be updated by the Texas Commission on Environmental Quality (TCEQ) as a result of reclassifications

SIPs include emissions from multiple sectors such as on-road vehicles, non-road engines, off-road engines, area sources, point sources, oil and gas, and biogenic sources. The two types of SIPs are:

Reasonable Further Progress SIP – To ensure at least 3% reduction of Ozone precursor emissions (Oxides of Nitrogen – NO_x and Volatile Organic Compounds – VOC) per year

Attainment Demonstration SIP – Forecasts compliance to Ozone NAAQS

On-Road EI's generate Motor Vehicle Emission Budgets (MVEB) for use in future transportation conformity analyses

NCTCOG SUPPORTING EFFORTS

ACTIVITIES	2008 STANDARD	2015 STANDARD	TCEQ CONTRACT
On-road Emission Inventory for Reasonable Further Progress (RFP) SIP	✓	✓	YES
On-road Emission Inventory for Attainment Demonstration (AD) SIP	✓	✓	YES
VMT Growth Offset	✓	✗	YES
Weight of Evidence	✓	✓	NO
Transportation Control Strategies	?	?	?

NECESSARY TOOLS, INPUTS, & TIMEFRAME

New In-House Travel Demand Model – TAFT

New EPA Emission Factor Model – MOVES3

New Post Processing Utilities

Updated Local Data –

Vehicle Registration,

Vehicle Classification/Automatic Traffic Recording Data,

Meteorological Data,

Fuel Formulations, etc.

Demographics (population/employment)

Network Analysis Years –

2011, 2017, 2018, 2019, 2020, 2023, 2024, 2026, 2027

Draft Emission Inventories Due In April, Final Due In June/July

FOR MORE INFORMATION



Chris Klaus

Senior Program Manager

cklaus@nctcog.org

817-695-9286



Jenny Narvaez

Program Manager

jnarvaez@nctcog.org

817-608-2342



Vivek Thimmavajjhala

Transportation System Modeler II

vthimmavajjhala@nctcog.org

817-704-2504



Nicholas Van Haasen

Air Quality Planner II

nvanhaasen@nctcog.org

817-608-2335

<https://www.nctcog.org/trans/quality/air/ozone>

Discussion on Proposed Amendments to the Manual on Uniform Traffic Control Devices for Streets and Highways

Michael Morris, P.E. and NCTCOG Staff

Surface Transportation Technical Committee

February 26, 2021



MUTCD DISCUSSION OVERVIEW

A notice of proposed amendments to the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) was recently published in the Federal Register.

The proposed changes would promote uniformity, safety, efficiency, and incorporate technology advances.

NCTCOG Senior Program Managers will be submitting comments in their areas of expertise and will each provide a short overview today.

Deadline to submit comments is May 14, 2021

Chair Brian Moen wishes to initiate discussion with STTC members

NCTCOG AREAS OF COMMENT

Staff Member	Section	Comments
Thomas Bamonte	Part 5: Automated Vehicles (New)	AV Guidance
Natalie Bettger	Sections 2G.16 – 2G.19: Managed Lane Signage	No Comments
	Part 6: Temporary Traffic Control (Traffic Incident Management)	Traffic Incident Duration Classes (Section 6O.01) Temporary Traffic Control Plans for Unplanned Activity (Section 6B.01)

NCTCOG AREAS OF COMMENT, CONTINUED

Staff Member	Section	Comments
Lori Clark	Section 2B.54	Design of Parking, Standing, and Stopping Signs
	Sections 2H.14	Alternative Fuel Corridor Signage
	Sections 2I--2J	General Service and Specific Service Signs

Thomas Bamonte, Senior Program Manager
Automated Vehicles Program

MUTCD Part 5: Automated Vehicles

Surface Transportation Technical Committee
February 26, 2021



Part 5A: General

The MUTCD does not address standardizing several areas that might be important to AV technologies such as digital infrastructure, geometric road design, setting maintenance levels for all traffic control devices, and setting minimum condition levels for paving materials. [5A.01]

Improvements to traffic control device uniformity and improved maintenance policies and practices that keep traffic control devices in good working order with high levels of conspicuity that benefit the human vehicle operator will benefit DAS vehicles as well. [5A.04]

Part 5B: Provisions for Traffic Control Devices

Signs: *Refresh rate of the LEDs should be greater than 200 Hz [5B.01]*

Markings: Good markings assist machine vision [5B.02]

Traffic Signals: Consistent design; *Where possible, CAV needs...are better addressed through vehicle to infrastructure (V2I) [5B.03]*

Temporary Traffic Control: Clear, complete channelization [5B.04]

RR Crossings: Consistent signage; *V2I communication should be used to relay information on the arrival or presence of a train at a highway-rail grade crossing [5B.05]*

Bicycles: *To better accommodate machine vision..., bicycle facilities should be segregated from other vehicle traffic using physical barriers where practicable. [5B.06]*

Part 5C: Future Considerations

(Reserved)

Questions

Contact Information

Thomas Bamonte, NCTCOG

Senior Program Manager

Automated Vehicles

tbamonte@nctcog.org

[@TomBamonte](https://www.instagram.com/TomBamonte)

Clint Hail, NCTCOG

Transportation Planner

Automated Vehicles

chail@nctcog.org



MUTCD Part 2G and 6

Natalie Bettger, Senior Program Manager

Surface Transportation Technical Committee
February 26, 2021



Managed Lanes Signage and Traffic Incident Management

Sections 2G.16 – 2G.19 – Managed Lane Signage

No Comments

Part 6: Temporary Traffic Control (Traffic Incident Management

Traffic Incident Duration Classes (Section 6O.01)

Temporary Traffic Control Plans for Unplanned Activity (Section 6B.01)

Questions

Contact Information

Natalie Bettger

Senior Program Manager

nbettger@nctcog.org

Sonya Landrum

Program Manager

slandrum@nctcog.org



MUTCD Section 2B.54
Section 2H.14
Section 2I
Section 2J

Lori Clark, Program Manager

Surface Transportation Technical Committee
February 26, 2021



Section 2B.54 Design of Parking, Standing and Stopping Signs



R7-111



R7-111a



R7-113



R7-113aP



R7-113bP

Signage for Electric Vehicle Parking

Express Support



R7-112



R7-112a



R7-112b



R7-114



R7-114a



R7-114b

Section 2H.14 Alternative Fuel Corridor Signage

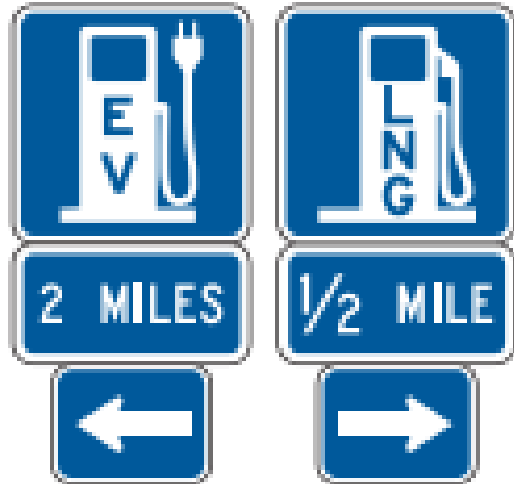
Section 2I General Service Signs

Section 2J Specific Service Signs

Corridor Signage
Potential Comments



General Services Signage
Express Support



Specific Services Signage
Potential Comments

