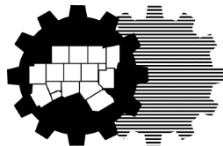


Enhancing Freight and Passenger Rail Coordination: Clear Path™ Technology

Regional Transportation Council
October 8, 2020



Jeff Hathcock, Program Manager
NCTCOG Transportation Department



REGIONAL BENEFITS

Clear Path™ Technology would:

Assist with Freight and Passenger Train Interactions

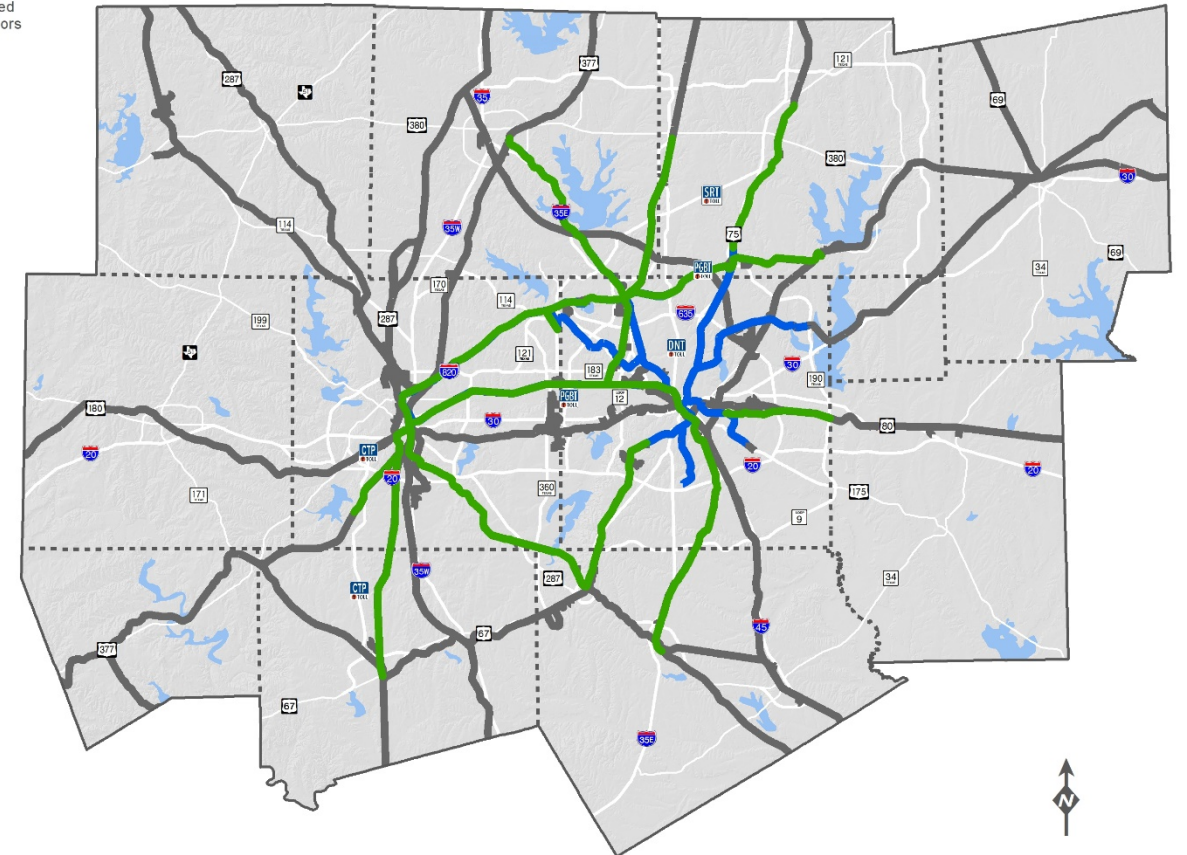
Increase Planned Freight and Passenger Rail Growth

Identify Rail Bottlenecks

Enhance Long-Term Mobility
Plan Projects – Road and Rail interactions

Importance of Clear Path™ In Shared Corridors

- Current and Planned Shared Use Corridors
- Passenger Only
- Freight Only



FUNDING TOTALS

Clear Path™ Technology	RTC Local	RTC (Federal)	BUILD Grant Federal	Regional Rail Agencies*	Total
Implementation, Operation & Maintenance	\$400,000	\$7,100,000	\$2,500,000	\$3,100,000	\$13,100,000
Total Requested for RTC Approval	\$7,500,000**				

*Cost Share to be determined by Potential Participating Regional Rail Agencies (BNSF Railway, Union Pacific Railroad, DART, Trinity Metro, Fort Worth and Western Railroad, Dallas Garland Northeastern Railroad, Denton County Transit Authority, Kansas City Southern)

**Amount subject to change based on continuing coordination with regional rail agencies

ACTION

Requested Action

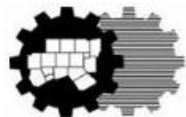
Recommend approval of funding outlined on slide 3 to implement the Clear Path™ Technology system

Direct staff to administratively amend the Transportation Improvement Program (TIP), the Statewide TIP, and other planning/administrative documents

2021 UNIFIED TRANSPORTATION PROGRAM (UTP) AND REGIONAL 10-YEAR PLAN UPDATE

Regional Transportation Council

October 8, 2020



North Central Texas
Council of Governments
Transportation Department

BACKGROUND

- The updated Regional 10-Year Plan project listing was approved by the Regional Transportation Council (RTC) on June 11, 2020.
- Approved changes included addressing cost overruns on existing projects with Category 2 and/or 4 funds and requesting Category 12 funds from the Texas Transportation Commission (TTC).
- The TTC approved the 2021 UTP at its August meeting.
- In the 2021 UTP, all Category 2 and 4 requests were funded, but only \$112M of new Category 12 funding was awarded to the region for the IH 30 Canyon project (From IH 35E to IH 45).

FUNDING CHANGES MADE SINCE RTC APPROVAL

- **New Projects**

- FM 545 from FM 2933 to BS-78D (Collin County) – Project funded with \$22,859,947 of Category 4 in the UTP

- **Category 2 Funding Changes**

- US 380 from SH 5 to FM 75 (Collin County) – Funding decreased from \$320,000,000 to \$278,000,000
- FM 2642 from FM 35 to SH 66 (Hunt County) – Funding increased from \$5,500,000 to \$7,314,160
- FM 157 from 8th Street to South of CR 109 (Johnson County) – Funding increased from \$3,227,157 to \$4,500,000
- FM 157 from US 67 to 8th Street (Johnson County) – Funding increased from \$4,124,338 to \$6,800,000

FUNDING CHANGES MADE SINCE RTC APPROVAL (CONT'D)

▪ Funding Changes

- IH 20 from FM 1187/FM 3325 to Tarrant/Parker County Line (Parker County) – Category 4 funding increased from \$7,200,000 to \$29,000,000
- SH 199 from West Fork of Trinity River to IH 820 (Tarrant County) – Funding increased from \$68,661,515 to \$100,000,000 (will be reduced next UTP cycle due to lower than anticipated construction cost)
- BU81-D from North of CR 1160 to North of CR 2090 (Wise County) – Funding increased from \$3,000,000 to \$3,600,000

▪ Projects with Funding Category Changes

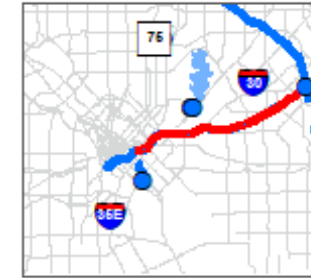
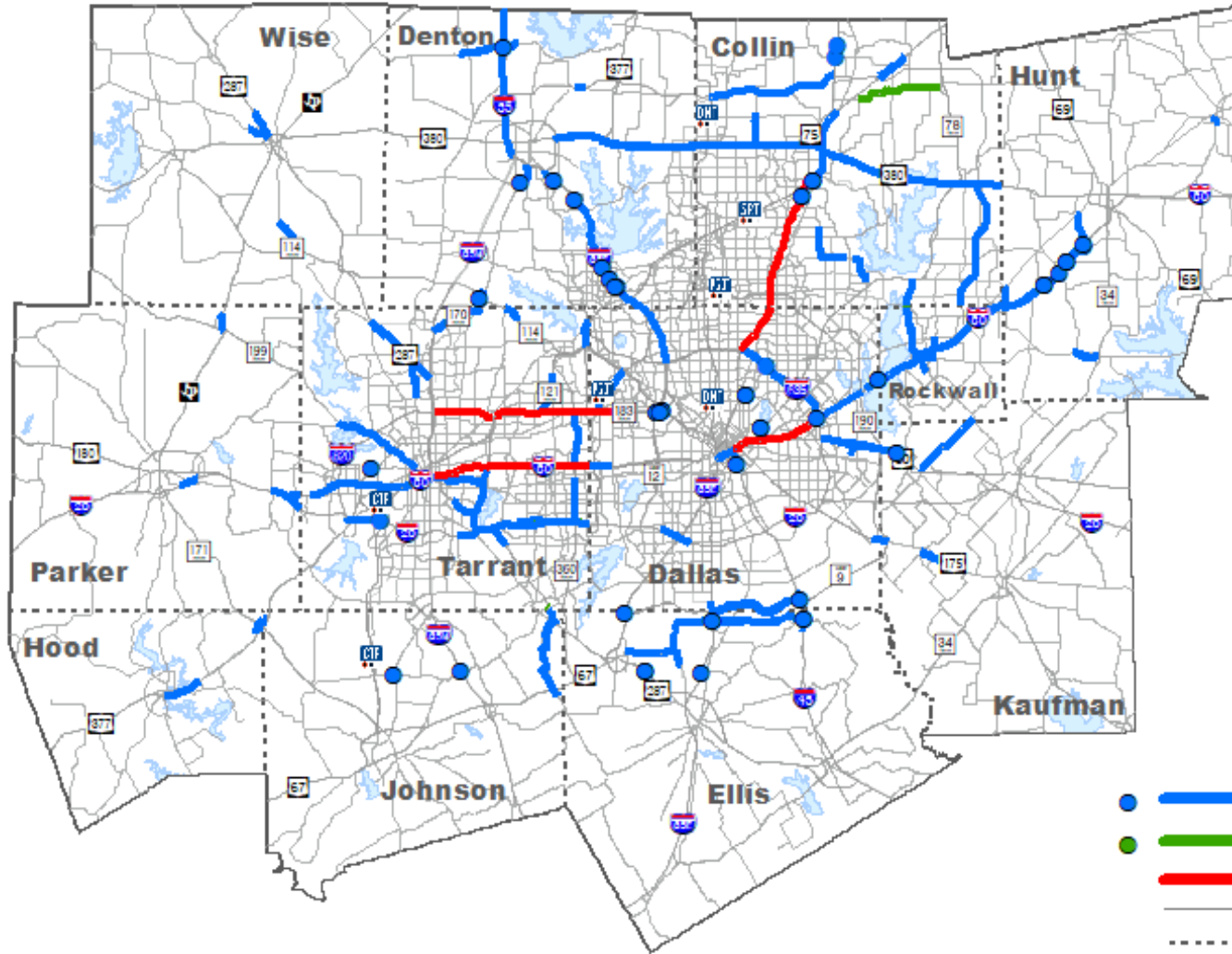
- US 80 from Lawson Road to FM 460 (Kaufman County) – Category 12 request funded with Category 11 funding instead

FUNDING IN COLLIN COUNTY ON US 380 AND NORTH-SOUTH ROADWAYS (\$ in Millions)

	2016 10 Year Plan	2017 10 Year Plan	2018 10 Year Plan	2019 10 Year Plan	2020 10 Year Plan
RTC Approved Amount	\$452	\$452	\$600	\$632.5	\$784.6
Amount Approved in the UTP	\$0	\$0	\$0	\$32.5	\$560.6

Dallas-Fort Worth Regional 10 Year Plan Projects

FY 2017 - FY 2030









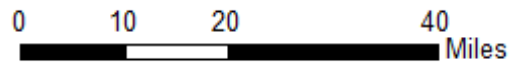
Dallas CBD



Fort Worth CBD

Legend

-  Approved 10 Year Plan Projects
-  Approved New Category 4 Projects
-  Proposed Tolled Projects
-  Mobility 2045 Roadways
-  County Boundary
-  Lakes



North Central Texas
Council of Governments

Date: 9/16/2020

NEXT STEPS

- TxDOT recently initiated discussions regarding development of the next UTP for FY 2022
- NCTCOG will continue to coordinate with TxDOT on the next round of 10-Year Plan changes, including continuing efforts to re-fund projects that had funding removed in previous 10-Year Plans
 - Anticipate very few new projects
 - Funding targets will likely not be available until after a draft project list is due to TxDOT Austin

PROPOSED 2022 UTP SCHEDULE

MEETING/TASK	DATE
TxDOT Funding Analysis	Oct. 2020-Feb. 2021
Initial Draft List Due to TxDOT	January 2021
Anticipated Receipt of Funding Targets	February 2021
NCTCOG Public Meeting	April-May 2021
STTC Action	April-May 2021
RTC Action	May-June 2021
TxDOT Public Meetings for 2022 UTP	June-August 2021
Anticipated TTC Approval of 2022 UTP	August 2021

REQUESTED ACTION

- RTC approval of:
 - The updated 2020 Regional 10-Year Plan project listing
 - Administratively amending the Transportation Improvement Program (TIP)/Statewide Transportation Improvement Program (STIP) and amending other planning/administrative documents to incorporate these changes.

CONTACT/QUESTIONS?

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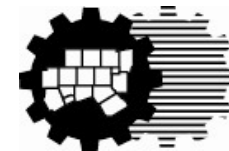
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Calls for Projects to Reduce Diesel Emissions

**Regional Transportation Council Meeting
October 8, 2020**

**Chris Klaus
Senior Program Manager**



**North Central Texas
Council of Governments**

Air Quality Emphasis Areas

High-Emitting Vehicles/Equipment	✓
Low Speeds	
Idling	✓
Vehicle Miles of Travel	
Energy and Fuel Use	✓
Cold Starts	
Hard Accelerations	

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	Replace Heavy-Duty Diesel Vehicles and Equipment	\$659,820*
North Texas Emissions Reduction Project (NTERP) 2020	Replace High-Use Diesel Vehicles/Equipment, Rail/Switch Yard Idle Reduction Technologies	\$2,350,000
North Texas Freight Terminal Electrification (NTFTE) 2020	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.

Applicant Eligibility

	Clean Fleets North Texas 2020	North Texas Emissions Reduction Project 2020	North Texas Freight Terminal Electrification 2020
Applicants	Local Governments; Private Companies who Contract with Local Governments	Private Fleets and Companies	Freight Terminals and Distribution Centers
Clean Fleet Policy	Must Adopt RTC Clean Fleet Policy or Similar		
Geographic Area	10-County Nonattainment Area	12 Counties (10-County Nonattainment + Hood & Navarro)	10-County Nonattainment Area

Eligibility and Selection

	Clean Fleets North Texas 2020	North Texas Emissions Reduction Project 2020	North Texas Freight Terminal Electrification 2020
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

Schedule

Milestone	Estimated Timeframe
STTC Action to Recommend Opening CFPs	September 25, 2020
RTC Approval of Recommended Opening of CFPs	October 8, 2020
CFPs Open	October 9, 2020
Application Deadline (Rolling 90-Day Application Deadline Until Fully Awarded)	January 8, 2021
Staff Funding Recommendations Finalized	January-February 2021
STTC Action	March 2021
RTC Action	April 2021
Executive Board Authorization	April 2021
Project Implementation Deadline	March 31, 2022

Action Requested

Request RTC Approval Of:

Call for Projects Details
Eligibility Screens
Selection Criteria

Schedule

Calls for Projects Estimated Open: October 9, 2020
Rolling 90-Day Application Deadline to Fully Award Funds

Clean Fleets North Texas 2020 Call for Projects

North Texas Emissions Reduction Project 2020 Call for Projects

North Texas Freight Terminal Electrification 2020 Call for Projects

For More Information

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CHANGING MOBILITY

DATA, INSIGHTS, AND DELIVERING
INNOVATIVE PROJECTS DURING COVID
RECOVERY

Regional Transportation Council
October 2020

Michael Morris, PE
Director of Transportation



POLICY METRICS: CHANGING MOBILITY

METRIC 1: Travel behavior response to COVID-19

METRIC 2: Financial implications to traditional revenue sources

METRIC 3: Benefits of travel behavior responses to areas of RTC responsibility

METRIC 4: Prioritization of infrastructure improvements that offset unemployment increases

Metric 1:

TRAVEL BEHAVIOR RESPONSE TO COVID-19

TRAVEL BEHAVIOR BY MODE



Bicycle/Pedestrian (+40%, August)



Freeway Volumes (-9%, August)

Toll Road (-26%, July)

Airport Passengers (-56%, August)

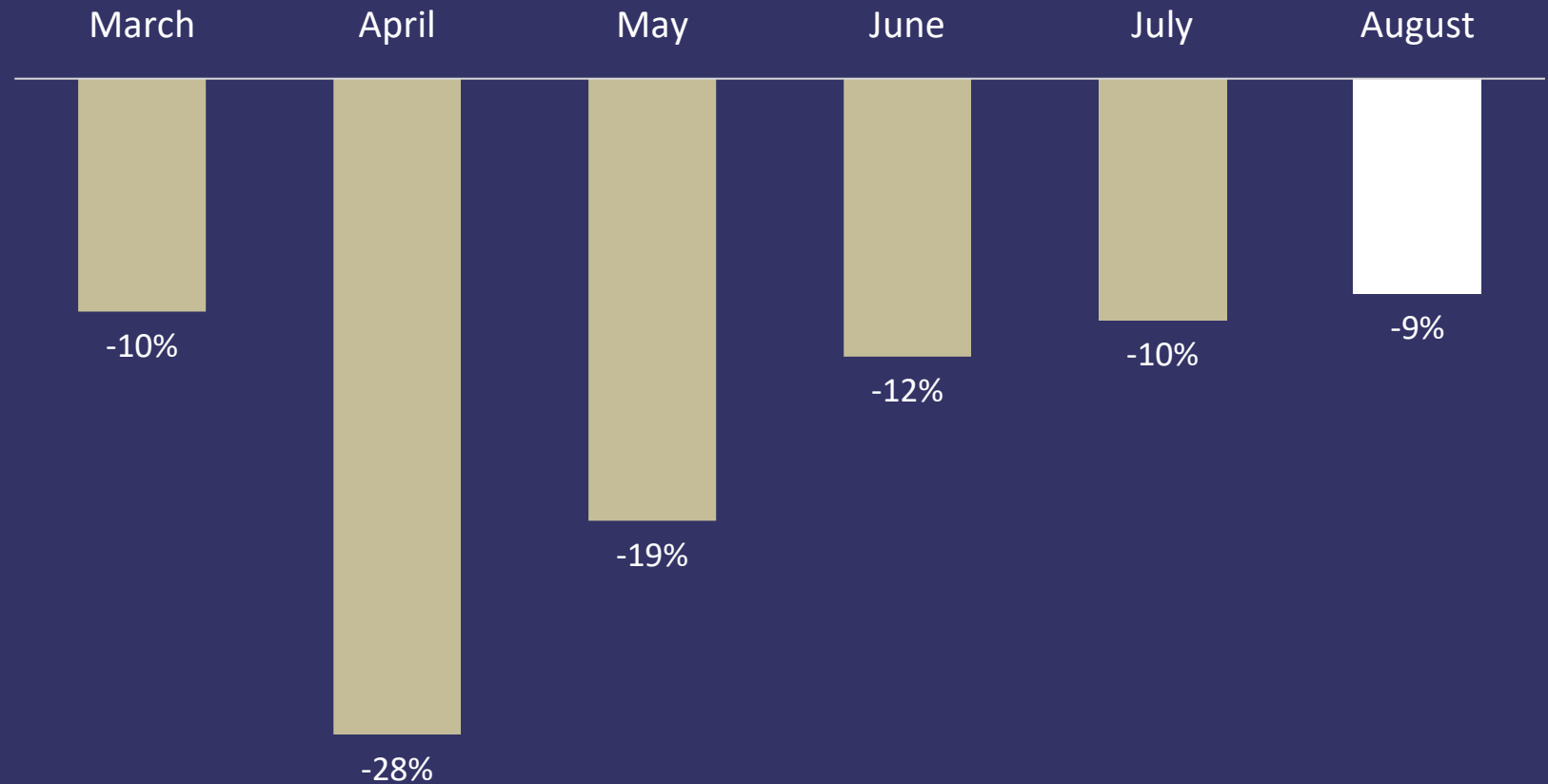
Transit Ridership (-57%, August)



ROADWAY TRENDS

Average Weekday
Freeway Volumes

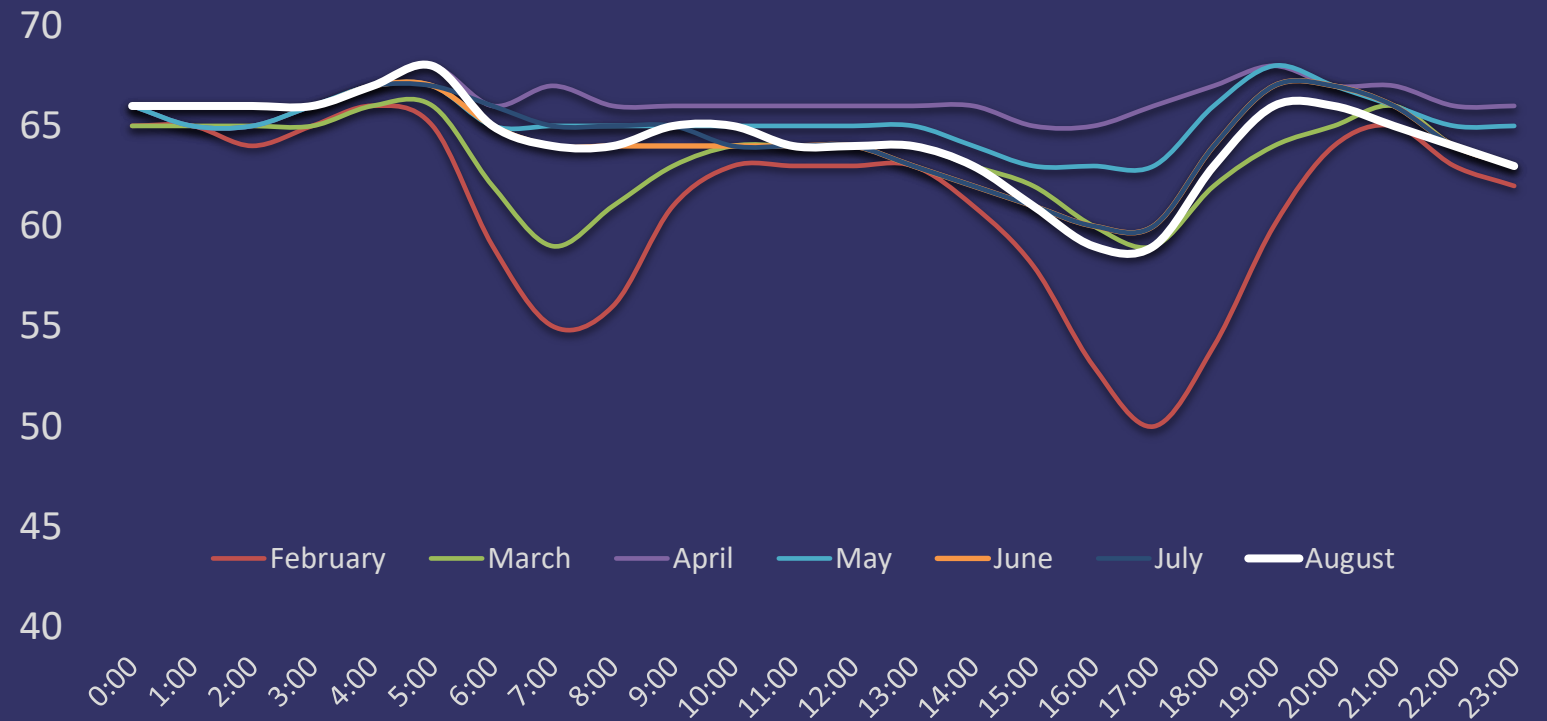
Traffic Decrease vs 2019



ROADWAY TRENDS

Regional Average
Freeway Speeds

Average Weekday Speeds, Weighted by Traffic Volumes

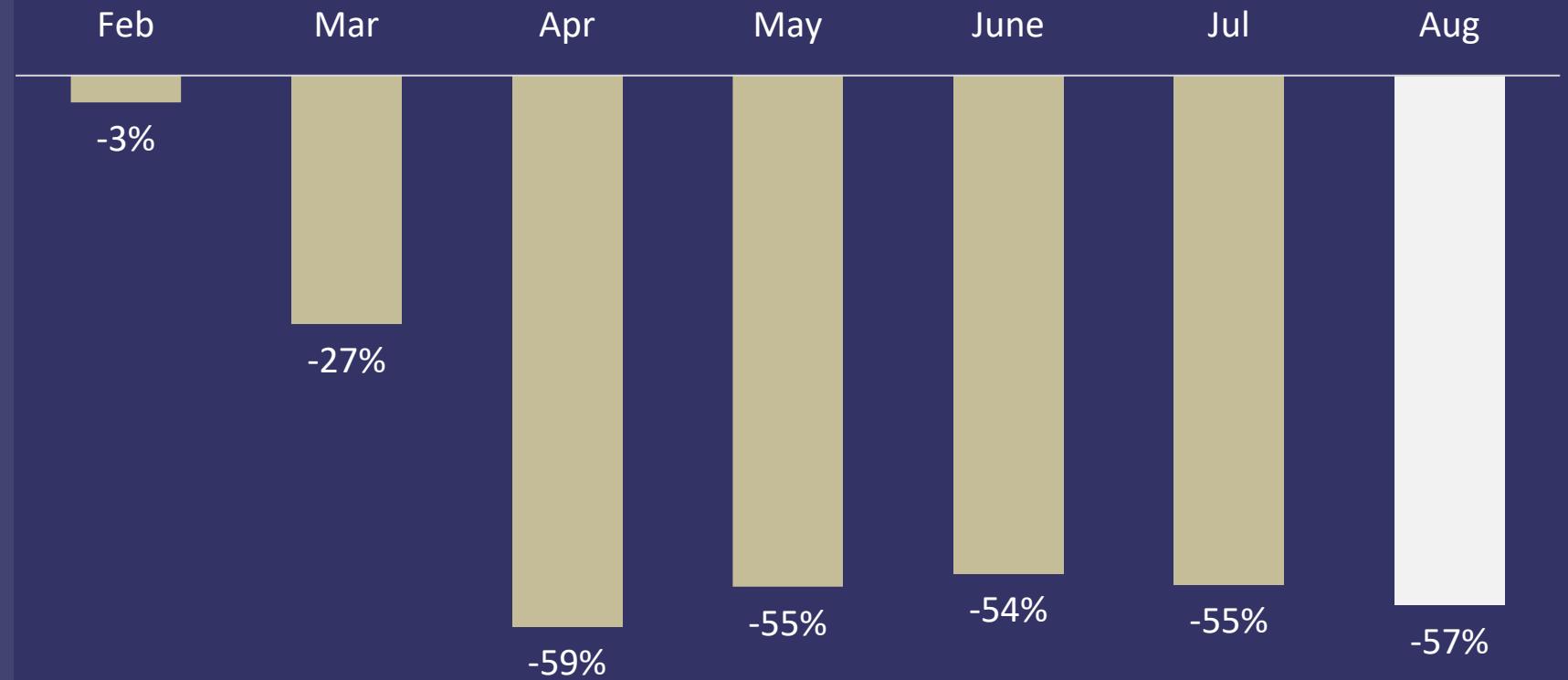


Source: TxDOT Sidefire Devices

TRANSIT IMPACTS

Weekday Ridership

Passenger Decrease : 2019 vs 2020

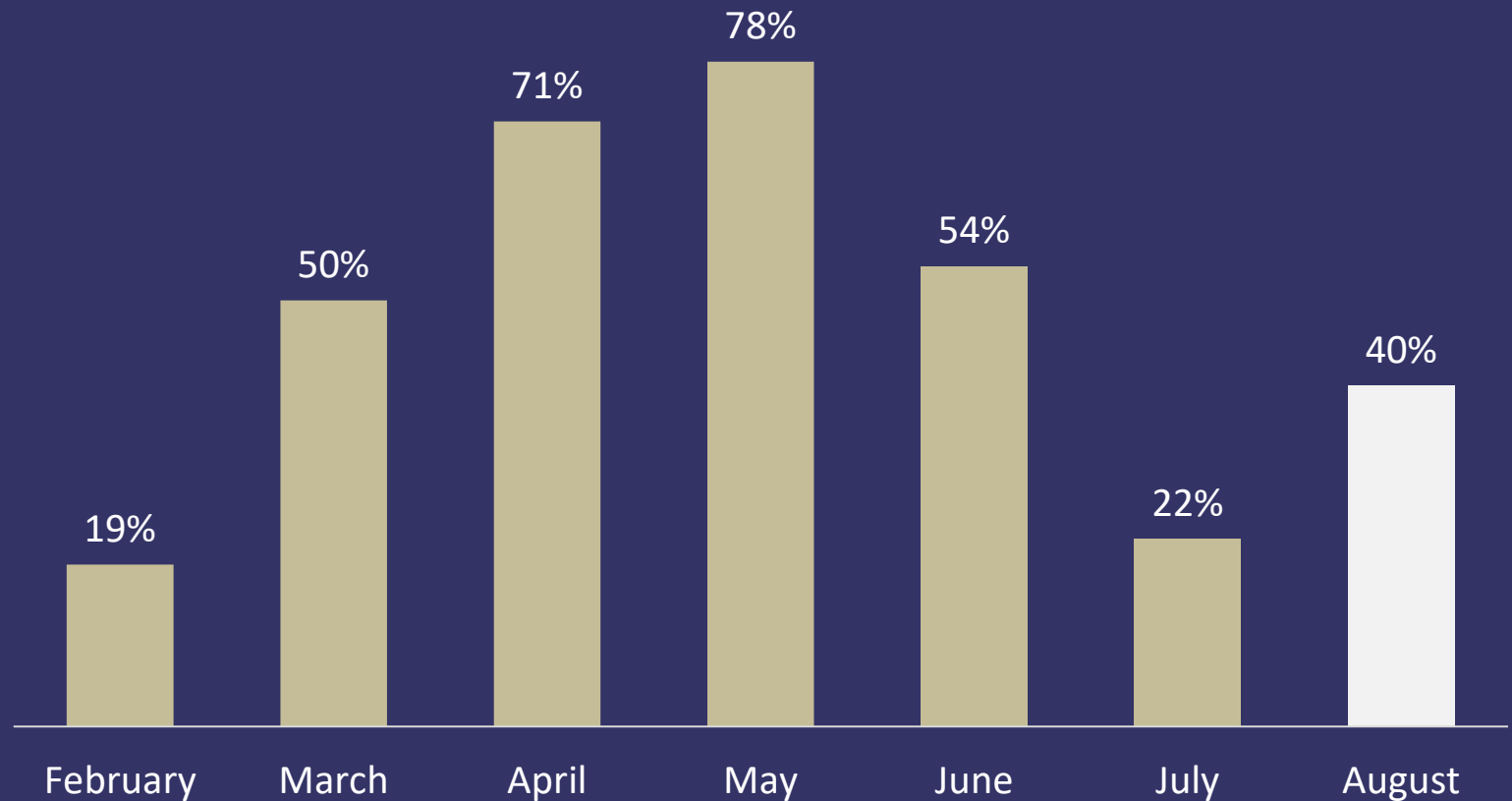


Source: DART, DCTA, and Trinity Metro

BICYCLE AND PEDESTRIAN IMPACTS

Trail Counts

Increase in Full Week Trail Usage : 2019 vs 2020



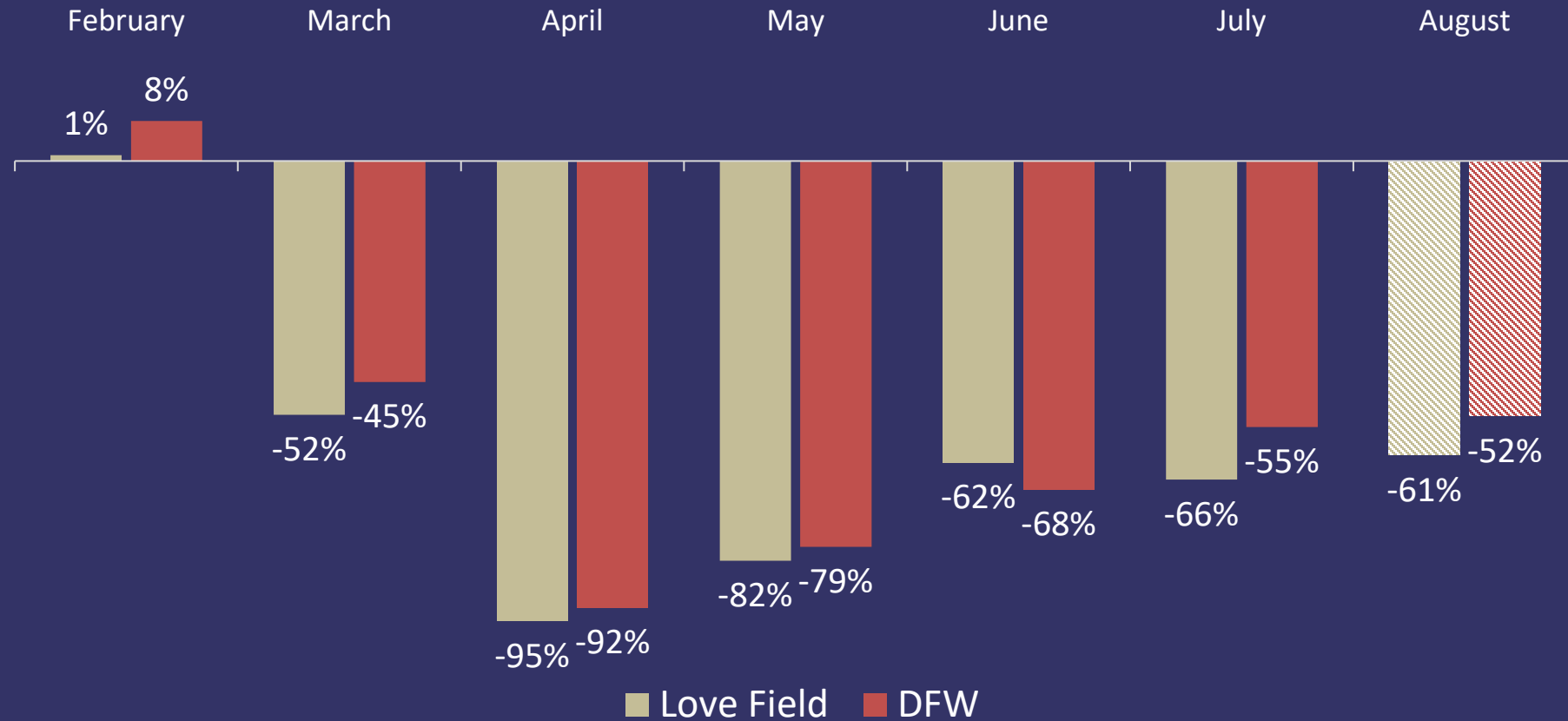
Source: NCTCOG - collected at 8 sites located in Plano, North Richland Hills, Denton, Dallas, Fort Worth, and Allen.

Note: No adjustments for weather were applied.

AIRPORT TRENDS

Passengers

Change in Airport Passengers - 2019 vs 2020



Source: Dallas Love Field and DFWIA Websites

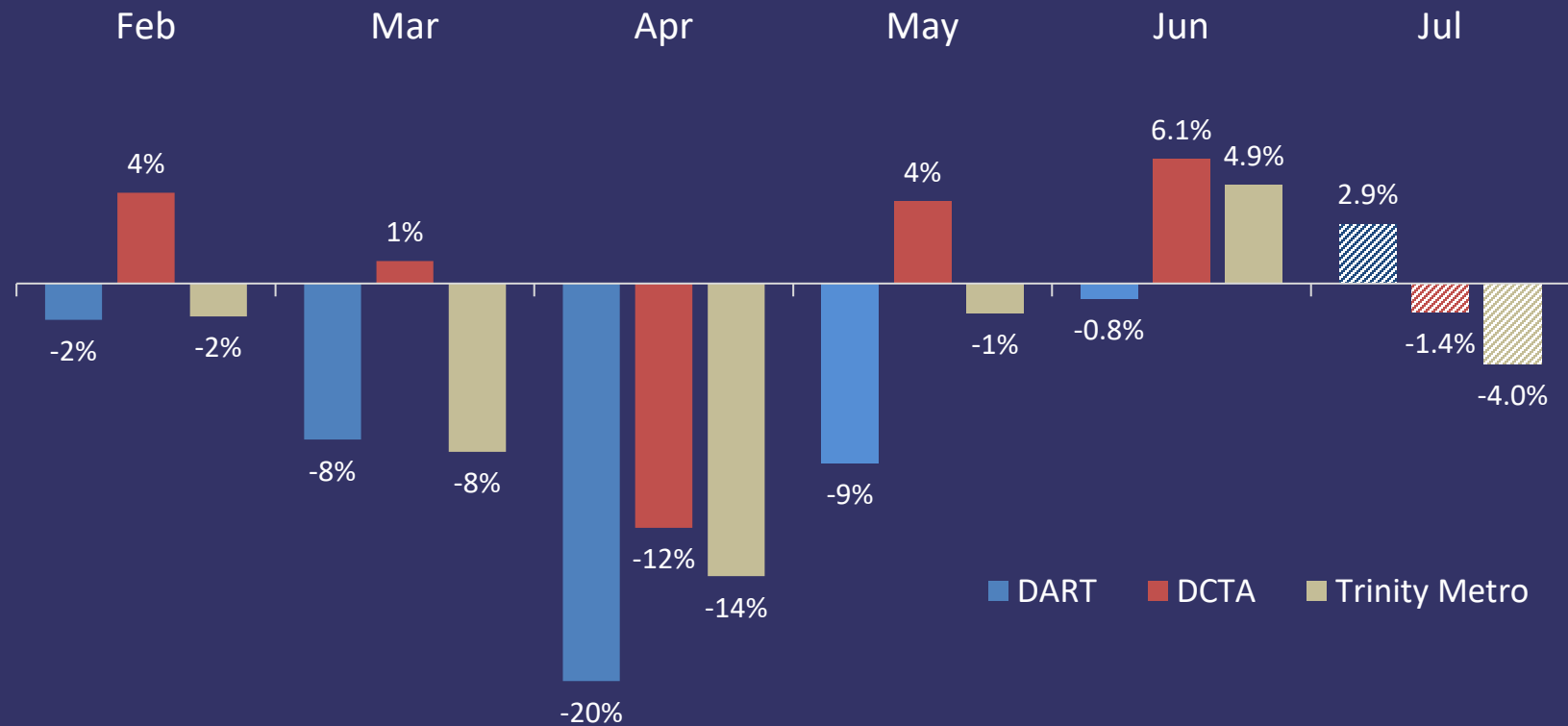
Metric 2:

FINANCIAL IMPLICATIONS TO TRADITIONAL TRANSPORTATION REVENUE

FUNDING IMPACT

Transit - Sales Tax Allocations

Sales Taxes Allocated For Transit: 2019 vs 2020

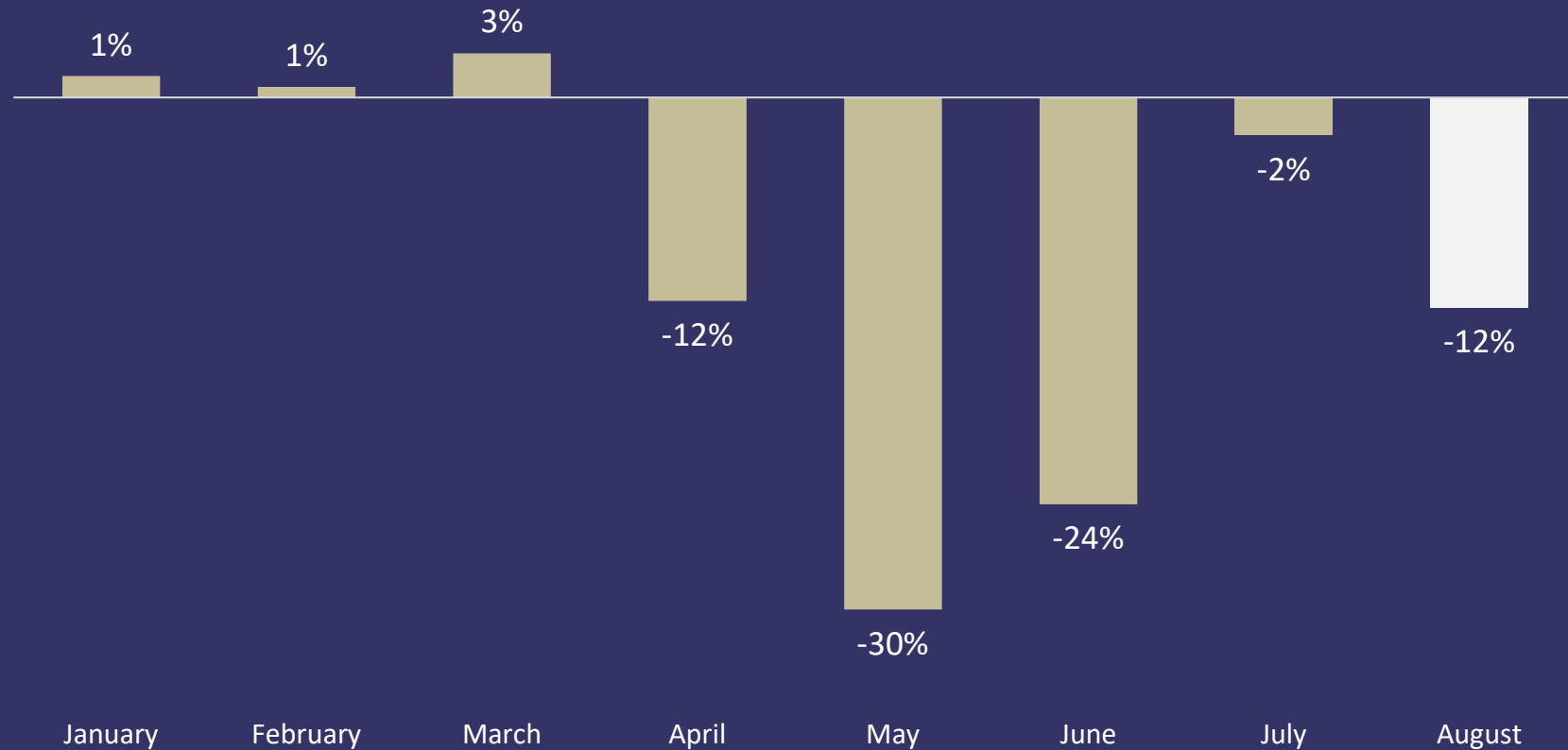


Source: DART, DCTA, and Trinity Metro

FUNDING IMPACT

Motor Fuel Tax
Decrease

Change in Motor Fuel Tax: 2020 vs 2019

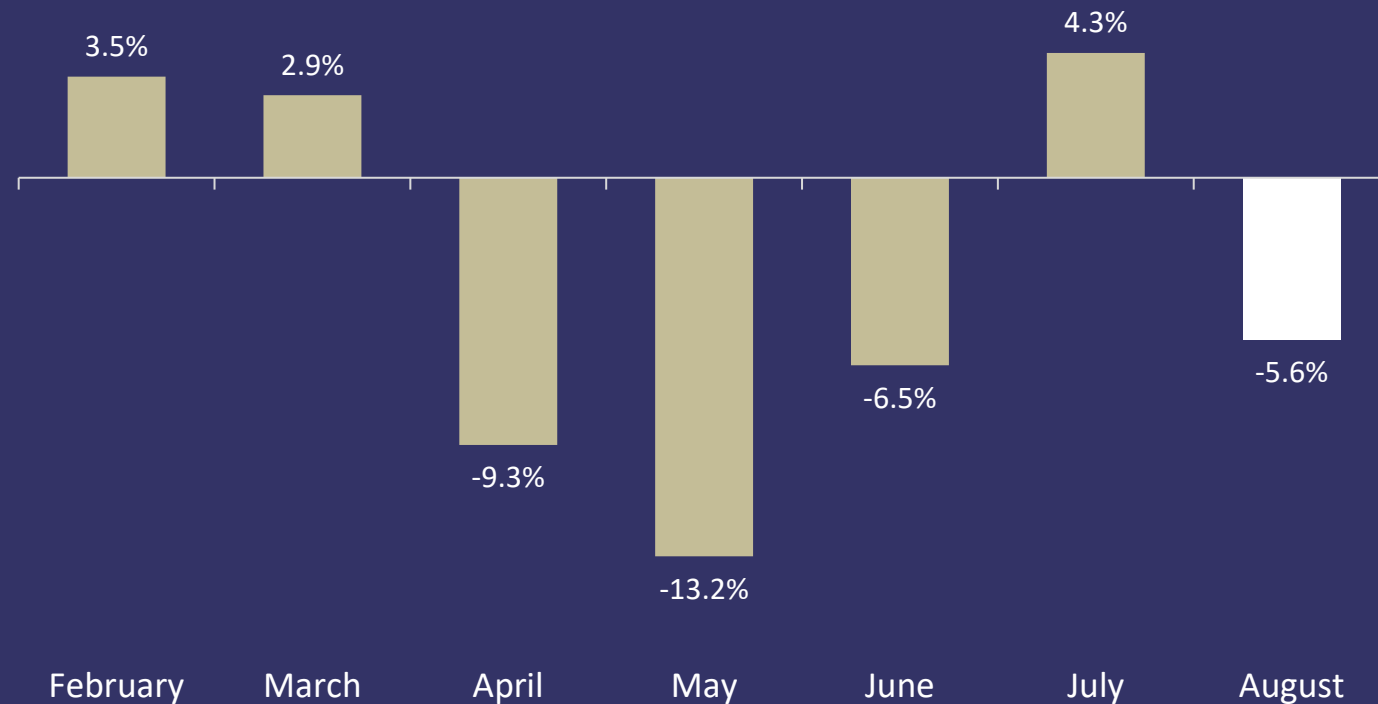


Source: Texas Comptroller of Public Accounts
Month reflects reporting data, not collection date

FUNDING IMPACT

Sales Tax
(Component of
Proposition 7¹)

Change in Fuel Tax: 2019 vs 2020



Source: Texas Comptroller of Public Accounts

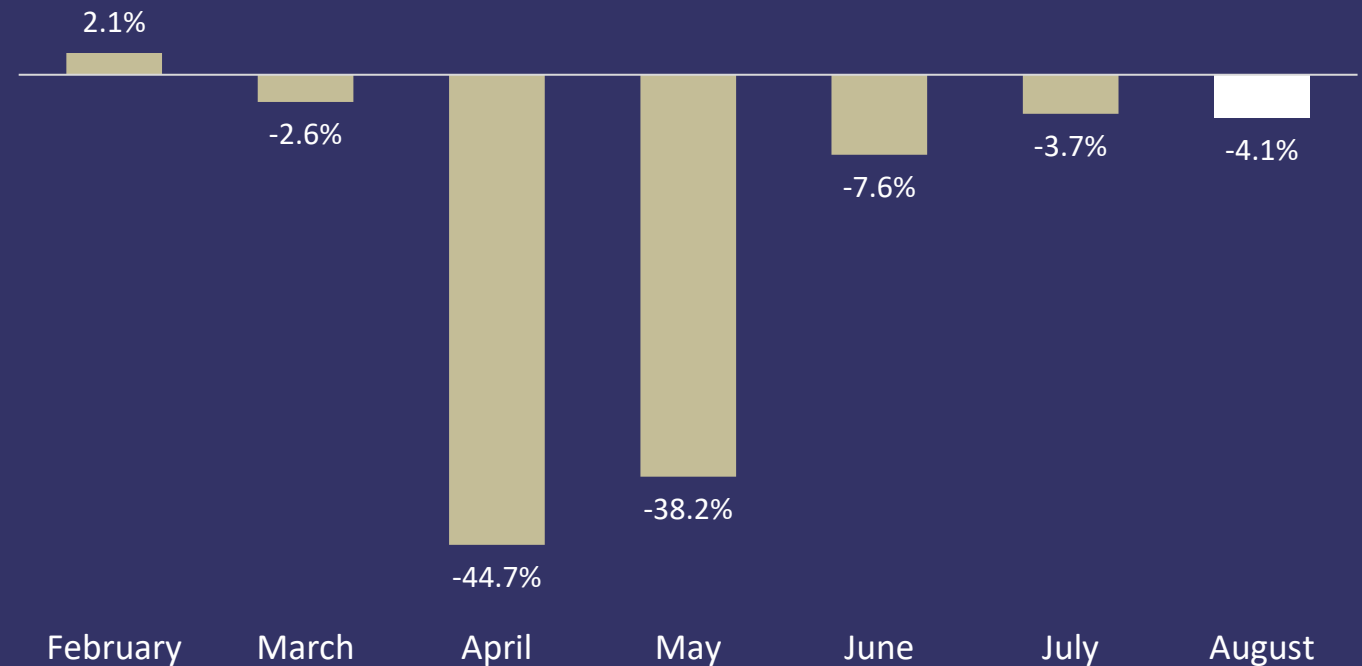
¹ Proposition 7 includes General State Sales Tax and Motor Vehicle Sales Tax

Month reflects reporting date, not collection date

FUNDING IMPACT

Motor Vehicle Sales
and Rental Tax
(Component of
Proposition 7¹)

Motor Vehicle Sales and Rental Tax
Change: 2020 vs 2019



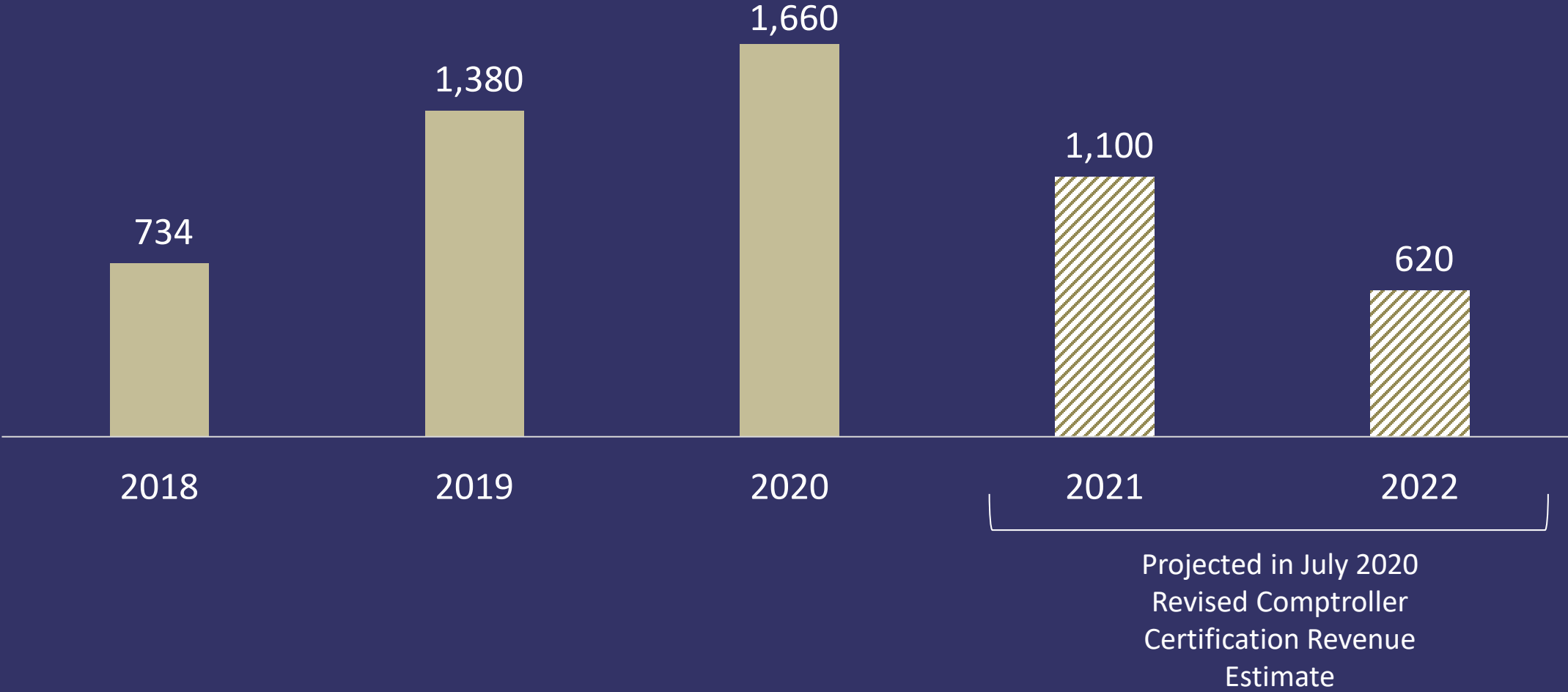
Source: Texas Comptroller of Public Accounts

¹ Proposition 7 includes General State Sales Tax and Motor Vehicle Sales Tax

Month reflects reporting date, not collection date

Proposition 1 (Oil & Gas Severance Tax)

Transfers to the State Highway Fund, Millions

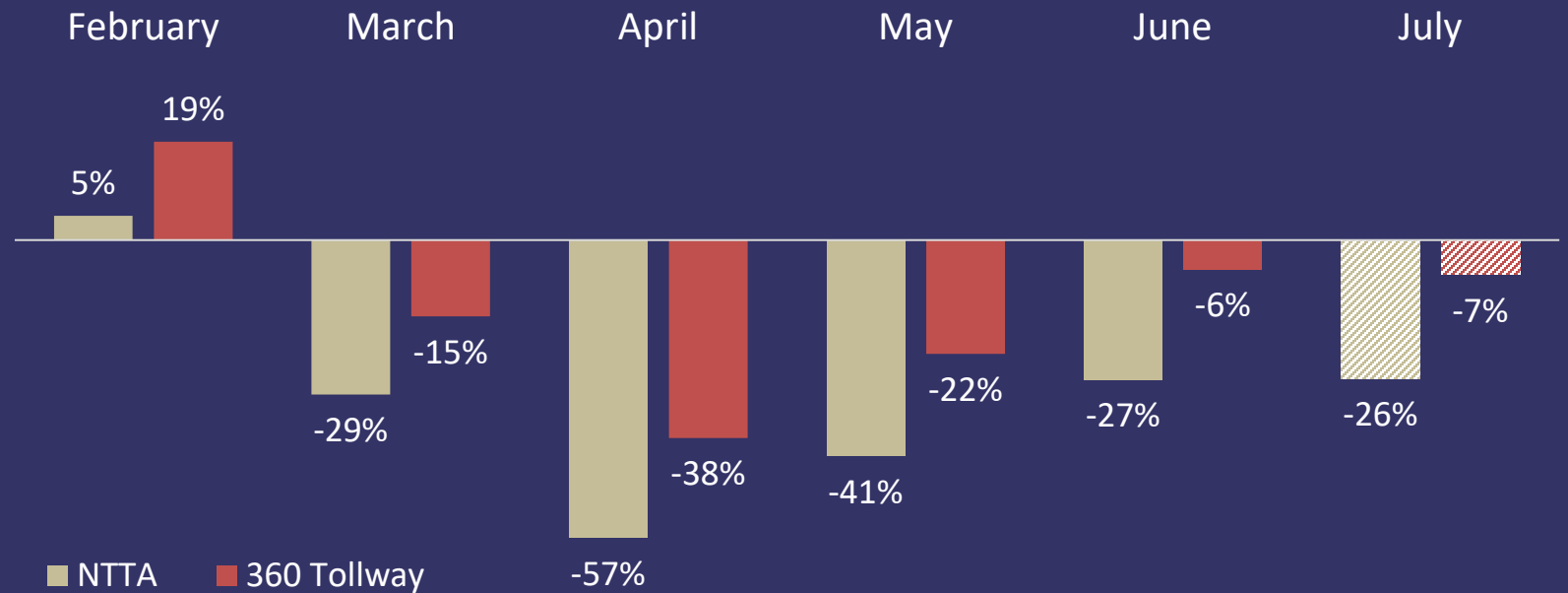


Source: Texas Comptroller of Public Accounts

FUNDING IMPACT

NTTA Transactions,
Including SH 360

Change in Tollway Transactions: 2019 vs 2020



Source: NTTA

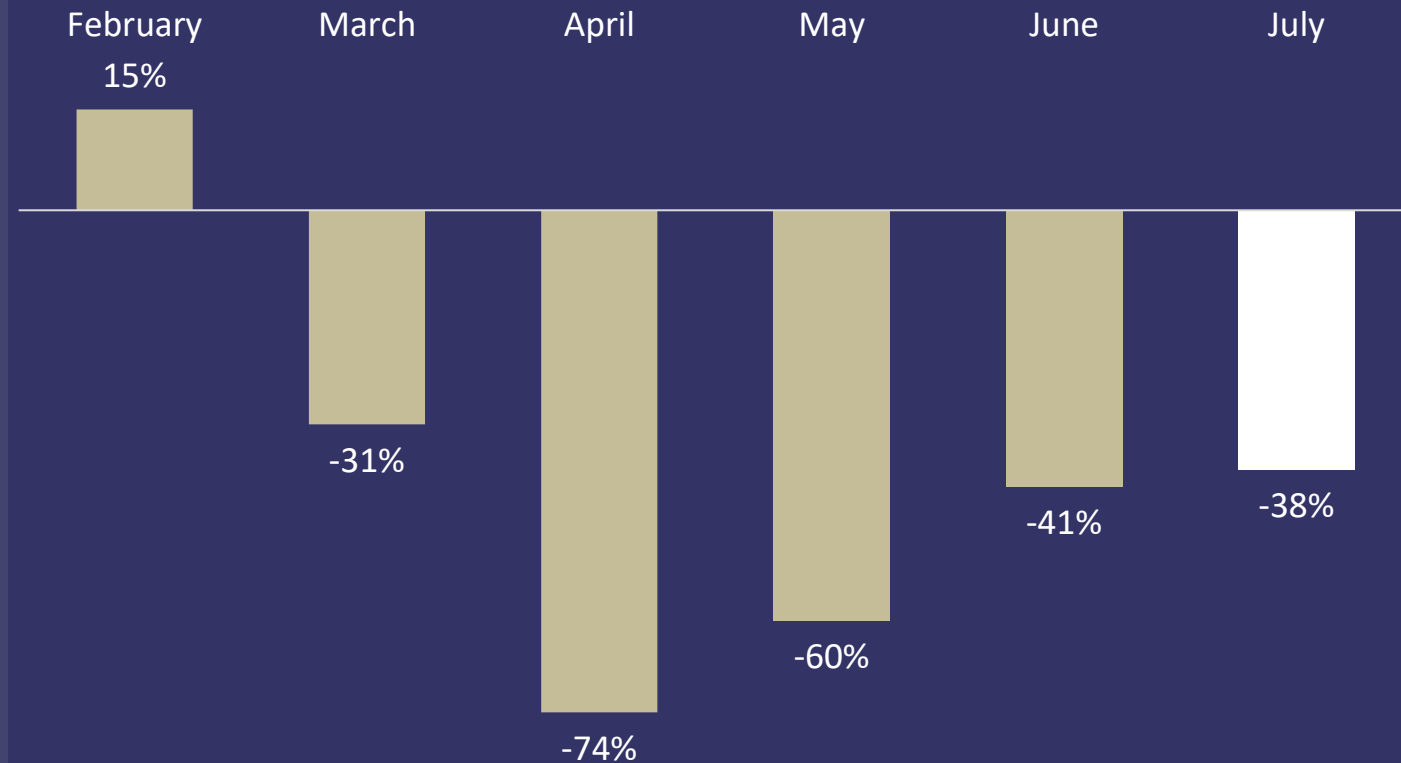
Note: Change for NTTA includes 360 Tollway

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

FUNDING IMPACT

I-35E TEXpress Lane Transactions

Change in Transactions: 2019 vs 2020



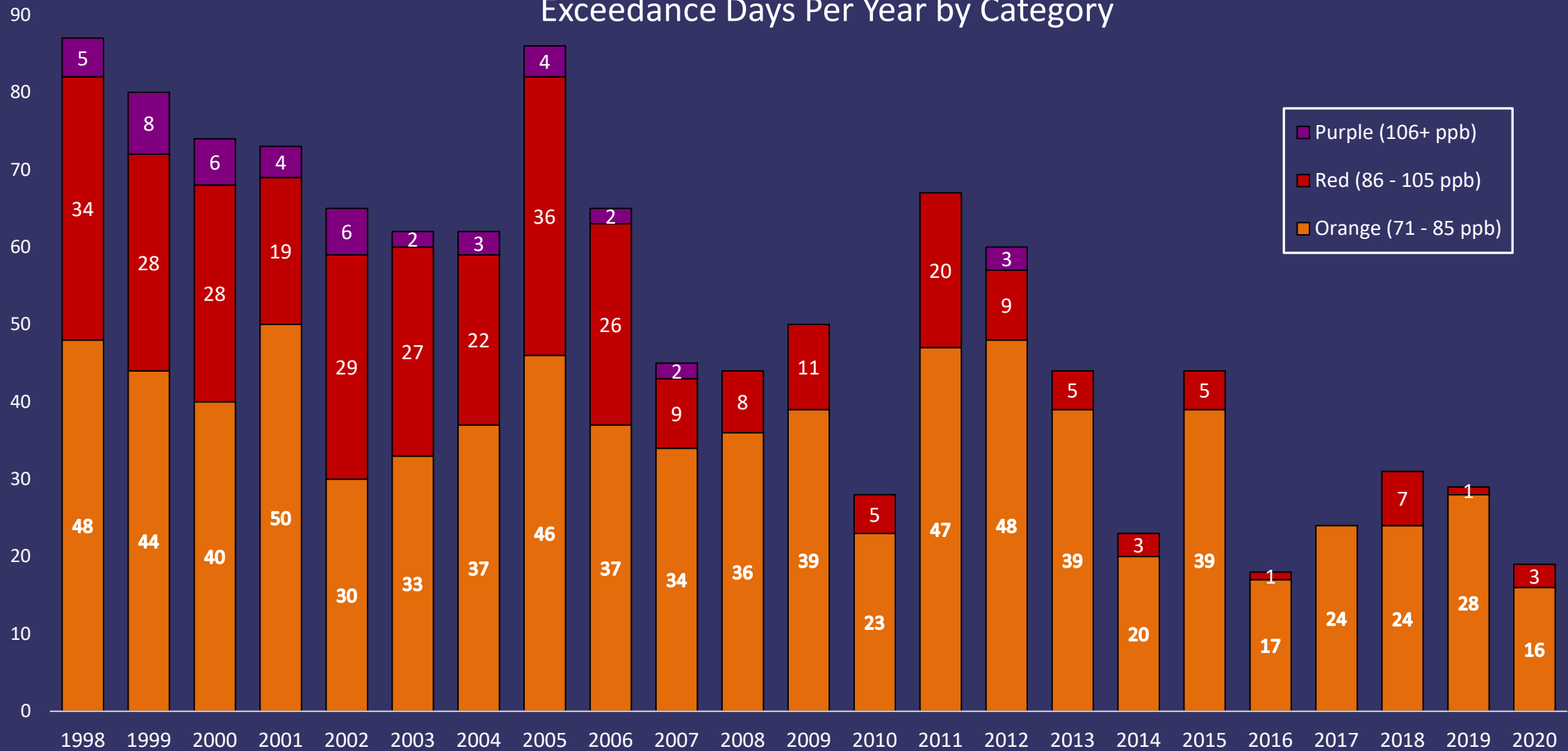
Source: TxDOT

Note: TIFIA loan not impacted at this time as interest only payment period does not begin until May 2022

Metric 3: Benefits of Travel Behavior Responses to Areas of RTC Responsibility

8-HOUR OZONE NAAQS HISTORICAL TRENDS

Exceedance Days Per Year by Category



Source: Texas Commission on Environmental Quality

Exceedance Level indicates daily maximum eight-hour average ozone concentration as of August 18, 2020.

Exceedance Levels are based on Air Quality Index (AQI) thresholds established by the EPA for the revised ozone standard of 70 ppb.

Metric 4:

Prioritization of

infrastructure improvements

that offset unemployment

increases

\$1 billion in transportation investment = 12,000-15,000 jobs

No conclusive evidence of different types of construction projects generating more/fewer jobs

For a long-term unemployment event, need near-term and long-term transportation investment for maximum benefit

Transportation impact on the economy

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



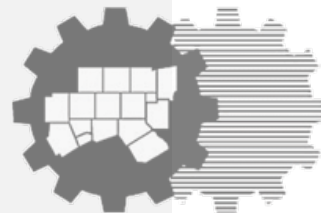


North Texas Center for Mobility Technologies:

Research Project Funding Standards

Thomas Bamonte, Senior Program Manager
Automated Vehicles Program

Regional Transportation Council
October 8, 2020



Background

February 2020: RTC approves \$2.5M in seed funding for university research projects in mobility technologies

- Goal: Provide R&D network for mobility-related companies (e.g., Hyperloop)
- North Texas universities have deep and wide-ranging research capabilities

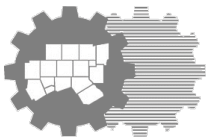
North Texas Center for Mobility Technologies (NTCMT) formed

- Comprised of DFW major research universities (UTA, UNT, UTD, SMU)
- Organized by Texas Research Alliance
- NCTCOG will sit on NTCMT advisory committees
- NTCMT will recommend research projects for NCTCOG funding
- Goal is for NTCMT to become self-sustaining initiative



Proposed Evaluation/Reporting Process

1. NTCMT submits research project proposal to NCTCOG for funding consideration, following NTCMT advisory board evaluation
2. NCTCOG staff subject matter expert(s) evaluate proposal
3. Funded research projects described in Director's Report (STTC and RTC)
4. Description includes NCTCOG contribution amount and how project meets selection criteria



Proposed Selection Criteria for Research Projects Advanced by NTCMT

Project must be:

1. Sponsored by an outside party (e.g., industry);
2. Related to mobility technology;
3. Supported by contributions from industry sponsor and university; and
4. Advance a regional goal:
 - Improved access to jobs and other destinations
 - Environmental protection/resiliency
 - Economic development
 - Equity
 - Technology innovation leadership



Questions | Contact Information

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