UPDATE ON THE 2021-2024 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

SURFACE TRANSPORTATION TECHNICAL COMMITTEE

JANUARY 22, 2021

North Central Texas
Council of Governments
Transportation Department

DELAYS TO APPROVAL OF THE NEW TIP/STIP

- The 2021-2024 TIP/Statewide TIP (STIP) was submitted to the Texas Department of Transportation (TxDOT) in June 2020.
- Approval of the 2021-2024 STIP was delayed due to issues balancing project programming to available revenues statewide.
- In order to resolve this issue, the TxDOT Transportation Planning and Programming Division requested several changes to project fiscal years for selected projects.
- Until this issue can be resolved, the 2019-2022 TIP/STIP will remain in effect.

IMPACTS OF TIP/STIP APPROVAL DELAY

- The delay in approval will primarily impact projects that were newly added or changed substantially in the 2021-2024 TIP, as funding agreements or new federal/State actions for these projects will not be executed until the STIP is approved.
- Due to delays in TIP/STIP approval, changes requested through the November 2020 TIP modification cycle have also been delayed, and therefore have not been processed and approved by TxDOT or the US DOT.
- The February 2021 TIP modification cycle will also be impacted.

RESOLUTION AND UPDATED TIMELINE FOR TIP/STIP APPROVAL

- November 2020 and February 2021 TIP revisions are being incorporated into the original 2021-2024 TIP/STIP submission for TxDOT and FHWA in January/February 2021.
- Additional changes recommended by TxDOT to balance statewide fiscal constraints will also be incorporated into the listings in February 2021.
- TxDOT approval of the updated 2021-2024 TIP/STIP document is anticipated in late March 2021.
- The document will then be forwarded to the US DOT with approval anticipated in May 2021.

ADDITIONAL IMPACTS OF THE APPROVAL DELAY

- As the US DOT will likely still be reviewing the new TIP/STIP concurrently, TxDOT anticipates cancelling the May 2021 STIP Revision Cycle (which would normally start in January)
- Assuming this plan holds, the next deadline for TIP modifications to be submitted to TxDOT would be the August 2021 cycle
  - Modification requests for that cycle are due April 26, 2021 to NCTCOG staff
  - Resulting STIP revisions would be submitted to the State in late July 2021
  - US DOT approval is anticipated in late September or early October 2021
- This timeline means that new projects in FY 2021 are extremely limited and most new funding would not be available until FY 2022.

IDENTIFIED UPDATES TO THE TIP/STIP

- 13 projects TxDOT identified as needing to be moved due to financial constraints are not yet approved by the RTC.
- Since the 2021-2024 TIP/STIP project listing was approved by the RTC, 34 projects have obligated and no longer need to be “double listed” in the new TIP.
- 3 revisions from the November cycle were initially processed administratively, but have been amended and now require RTC approval
- 1 change to the original listing needs RTC approval

REQUESTED ACTION

- Recommend RTC approval of:
  - The changes to projects in the 2021-2024 TIP/STIP requiring RTC action
  - Administratively amending other planning and administrative documents, as needed.

CONTACT/QUESTIONS?

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FEDERAL TRANSIT ADMINISTRATION FUNDING ALLOCATIONS IN RESPONSE TO COVID RELIEF 2.0 FUNDING AUTHORIZATION

SURFACE TRANSPORTATION TECHNICAL COMMITTEE

JANUARY 22, 2021

EDGAR HERNANDEZ, SENIOR TRANSPORTATION PLANNER,

TRANSIT MANAGEMENT & PLANNING

CORONAVIRUS RESPONSE AND RELIEF SUPPLEMENTAL APPROPRIATIONS ACT OF 2021

- This is the second round of emergency 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 to the industry

- Primary objective is to ensure that public transit agencies receive sufficient funding under this bill, when combined with their CARES Act apportionments, to equal at least 75 percent of urbanized areas' public transit operating costs

- For North Texas, this impacts only the largest transit providers in the region

- NCTCOG will not be retaining any funds for administrative purposes to direct the maximum amount available to the transit providers

CORONAVIRUS RESPONSE AND RELIEF SUPPLEMENTAL APPROPRIATIONS ACT OF 2021

- The Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSAA) was signed by President Donald J. Trump 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 and provides a small amount of funding under the Enhanced Mobility of Seniors and Individuals with Disabilities Program (i.e., Section 5310)

- Funding is being provided at 100-percent federal share, with no local match required, and prioritizes the use of funds for operational and payroll needs but also supports expenses traditionally eligible under the funding programs to prevent, prepare for, and respond to COVID-19. Expenses incurred on or after January 20, 2020 are eligible for reimbursement

- Seeking RTC action as soon as possible; CRRSAA funding is not required to be included in the Transportation Improvement Program (TIP), but will be added later for informational purposes

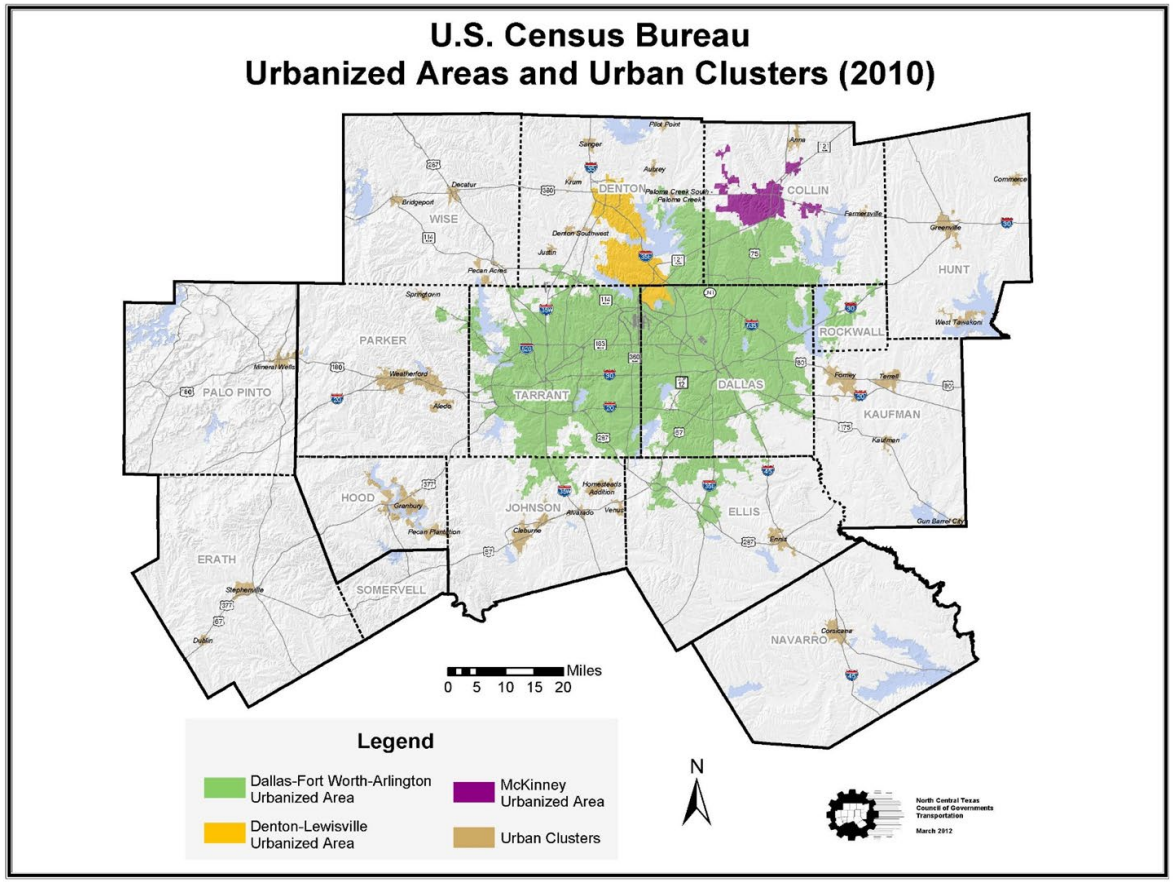
- Projects awarded under the Section 5310 Program must be included or be consistent with the coordinated public transit-human services transportation plan (Access North Texas)

CORONAVIRUS RESPONSE AND RELIEF FUNDING FOR THE REGION

NCTCOG: Designated Recipient of FTA Urbanized Area (UZA) Formula funds for North Texas[1]

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



[1]McKinney UZA was not allocated any funding by the FTA

ALLOCATION METHODOLOGY

- Qualifying recipients will receive Section 5307 funding based on their 2018 Operating Expenses
  - Section 5307 Emergency Assistance[1] funding for urbanized areas may not exceed 75% of total 2018 Operating Expenses
    - DART is only transit provider that has not exceeded 75% of 2018 operating expenses
    - All other transit providers exceed 75% of 2018 operating expenses due to CARES Act Funding
- Qualifying recipients will receive Section 5310 funding based on eligibility and overall need
  - Projects must be included or be consistent with Access North Texas
  - Project selection to be determined and will follow normal TIP process
- Apportionment Data
  - 2018 National Transit Database (NTD) Operating Expenses
  - CARES Act sub-allocation tables

[1]Emergency Assistance funding includes both CARES Act and CRRSAA apportionments

5307 ALLOCATION METHODOLOGY CONT.

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	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	No

NTD: National Transit Database

SCHEDULE

ACTION	DATE
CRRSA Act Signed into Law	December 27, 2020
FTA Released Funding Allocations	January 11, 2021
STTC Action	January 22, 2021
RTC Action	February 11, 2021

ACTION REQUESTED

STTC Approval:

- Recommendation for RTC approval of funding allocation
- To revise administrative documents as appropriate to incorporate additional funds

METROPOLITAN PLANNING ORGANIZATION (MPO) MILESTONE POLICY IMPLEMENTATION (ROUND 2)

Surface Transportation Technical Committee

January 22, 2021

North Central Texas Council of Governments
Transportation Department

BACKGROUND

- The Regional Transportation Council (RTC) has been selecting projects since 1992.
- The first round of the MPO Milestone Policy was adopted by the RTC in June 2015, and it reviewed projects selected from 1992 to 2005 that had not yet gone to construction.
- That initiative was successful in getting 51 out of 57 projects to construction.
- A second round of the Milestone Policy was initiated to review projects currently over 10 years old that have not been implemented.
- In November 2019, the second round of Milestone Policy Projects was introduced.

INTENDED OUTCOMES OF THE MILESTONE POLICY

- Providing a realistic assessment of project status for decision-making
- Balancing project construction schedule capacity within the current financial constraints
- Increasing the amount of available funds for priority, "ready-to-go" projects, rather than long delayed projects
- Getting old projects to construction/implementation

MILESTONE POLICY ROUND 2 OVERVIEW

- Affected projects:
  - Funded between 2006 and 2010 that had not let or obligated as of December 2019
  - Funded prior to 2006 that had let, but have had implementation issues (e.g., re-bid, utility delays)
  - Funded with RTC-selected sources
  - Locally funded and added to the Transportation Improvement Program (TIP) prior to 2010
  - Funded with Congressional Earmarks that are subject to rescission
- 41 projects needed to be reconfirmed or cancelled

THE REAPPROVAL PROCESS

- Agencies with projects on the Milestone Policy Project List were notified via letter (in addition to STTC & RTC agenda items in 2019)
- Agencies were required to reconfirm the projects as a priority by:
  - Providing a *realistic and achievable schedule*, which must receive NCTCOG & TxDOT concurrence
  - Providing documentation of policy board support
    - If projects are advancing imminently or have policy board approval within the last six months, new action was not needed (just submit latest approval documentation)
    - If policy support documentation is greater than six months old, new action was requested
  - Documenting the availability of local matching funds

PROJECTS SUMMARY

PROJECT CATEGORIES	NUMBER OF PROJECTS	TOTAL FUNDING OF PROJECTS
Proposed for Cancellation	11	$75,790,204
Under Construction or Complete	8	$246,173,091
Scheduled Letting FY 2021	4	$8,314,073
Scheduled Letting FY 2022	5	$120,812,094
Scheduled Letting FY 2023	11	$131,149,692
Scheduled Letting FY 2024 or Beyond	2	$28,287,880
Total	**41**	**$610,527,034**

Note: Some projects have let but actual construction has not begun. Staff will continue to monitor those projects.

UPDATES TO THE MILESTONE POLICY PROCEDURES

- In the Round 1 effort, the action included a one-year grace period after the fiscal year in which each agency indicated their project would be ready.
  - Now that the program is established and agencies understand the implications of setting their schedules, staff proposes that this grace period not be continued.
- Also, when NCTCOG staff briefed STTC and RTC about the status of projects in Round 1, further extensions were offered to projects that had missed their deadlines.
  - Now that the program is fully understood, staff proposes that failure to meet the schedules set forth will result in automatic removal of funding from a project.

ACTION REQUESTED

- Recommend RTC approval of:
  - The proposed recommendations outlined in the electronic item including:
    - Cancellation of certain projects
    - Established deadlines for each project (i.e., the end of the fiscal year in which it is scheduled to let)
  - Revised Milestone Policy procedures
  - Administratively amending the Transportation Improvement Program (TIP)/Statewide Transportation Improvement Program (STIP) and other administrative/planning documents as needed

TIMELINE

- January 2020 – Notification to project sponsors
- July 31, 2020 – Formal responses due to NCTCOG staff
- December 4, 2020 – STTC Information Item
- December 10, 2020 – RTC Information Item
- December 2020 – Public Meeting
- January 22, 2021 – STTC Action Item
- February 11, 2021 – RTC Action Item

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Section 214/USACE Update

Expediting Regional Transportation Projects

Surface Transportation Technical Committee
January 22, 2021

Jeff Neal
Senior Program Manager

North Central Texas
Council of Governments

Program Background

Funding

- Original MOA signed in October 2008; $500,000 RTC local funds
- Current MOA signed October 2011; will expire September 2022
- Additional funding approved in 2015 and 2018
- Latest funding was approved in May 2019 for an additional $800,000
- A total of $3,100,000 have been dedicated to the program since its inception
- Funds used for one USACE staff person dedicated to program

Projects Considered for Inclusion

Projects requested by NCTCOG partners

Program Participants

TxDOT	Union Pacific	City of Denton
NTTA	BNSF	City of Irving
DART	City of Corinth	City of McKinney
Trinity Metro	City of Dallas	City of Prosper
USACE		

Program Success

Coordination

- Partner agencies have expressed a high level of satisfaction with the program
- All performance measures under MOA have “exceeded expectations”
- Total number of actions taken by USACE has increased

Permitting

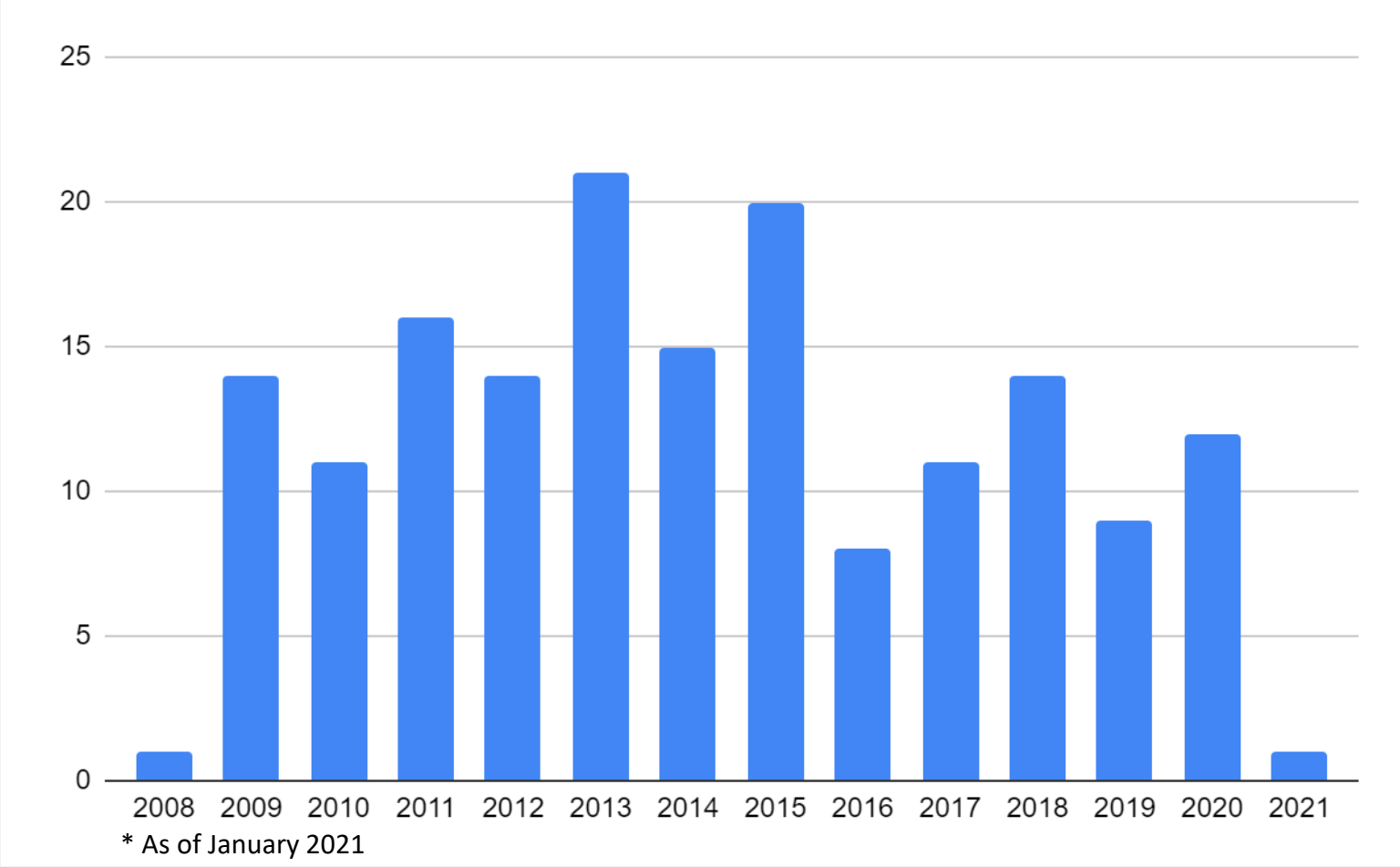
- Withdrawal of unnecessary permits
- Reduction in permit type (IP -> NWP)
- Reduction of time for permit decisions
- Developed Regional General Permit (RGP) to expedite 404 permits during the 408 permit process

Mitigation

- Reduction in mitigation requirements
- Cost Savings
- Reduction of impact to aquatic environment

Snapshot of Success

Number of Permit Decisions under MOA to Date



Includes permits withdrawn as a result of enhanced coordination

Snapshot of Success

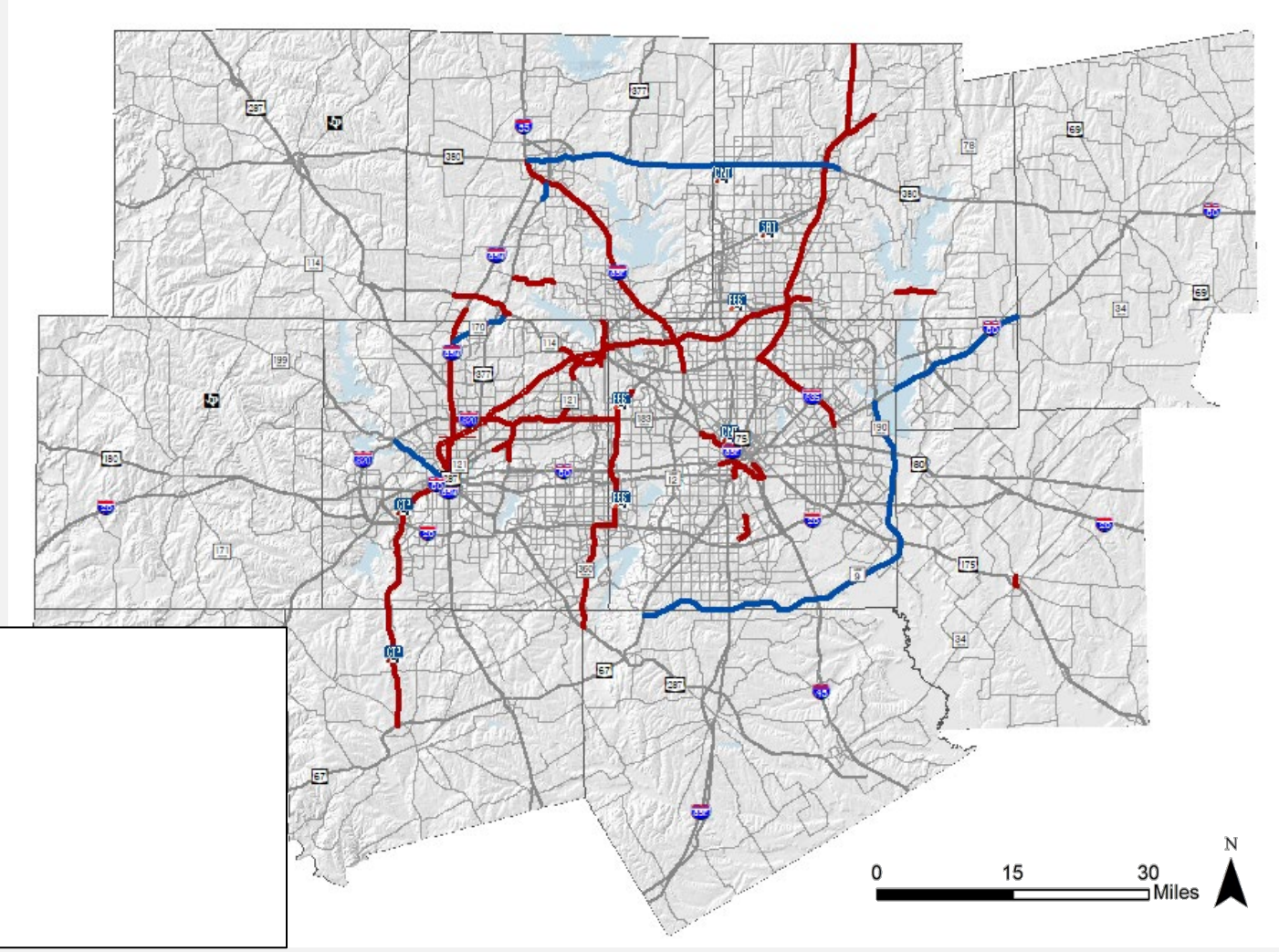
USACE Fort Worth District Statistics as of October 2020

Actions taken by USACE (counts)	Before Agreement	FY14	FY15	FY16	FY17	FY18	FY19	FY20
Finalized Action	14	115	107	152	177	208	204	176
Coordinate External Agency	1	138	143	144	140	169	172	124
Site Visit	0	10	10	3	6	4	2	5
Applicant Information Request	4	73	69	68	67	59	53	47

Completion Timeframes	Processing Time for Branch	Processing Time for MOA Projects
Total Processing Time	36.8 days	2.3 days

Regional Program Significance

Major Projects Benefitting from Expedited Permits



Future of the Program

Program Extension

- Remaining funds from current agreement plus approved funds in FY2019 will cover the program until FY2022.
- Staff is working on creating a new agreement after FY2022 instead of an extension of the existing agreement.

Satisfaction

- USACE and NCTCOG have been pleased with the program results.
- Partner agencies have been satisfied with the program.
- All parties have expressed interest in continuing the program.

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USACE Website

www.swf.usace.army.mil/Missions/Regulatory/North-Central-Texas-Council-of-Governments-NCTCOG/

HIGH-SPEED TRANSPORTATION

Dallas-Fort Worth

01.22.2021 – Surface Transportation Technical Committee

Topics

- Draft Preliminary Project Purpose
- Screening Process and Level 1 & 2 Results
- Public and Agency Engagement Opportunities
- Technology Update
- Project Schedule
- Next Evaluation & Design Steps

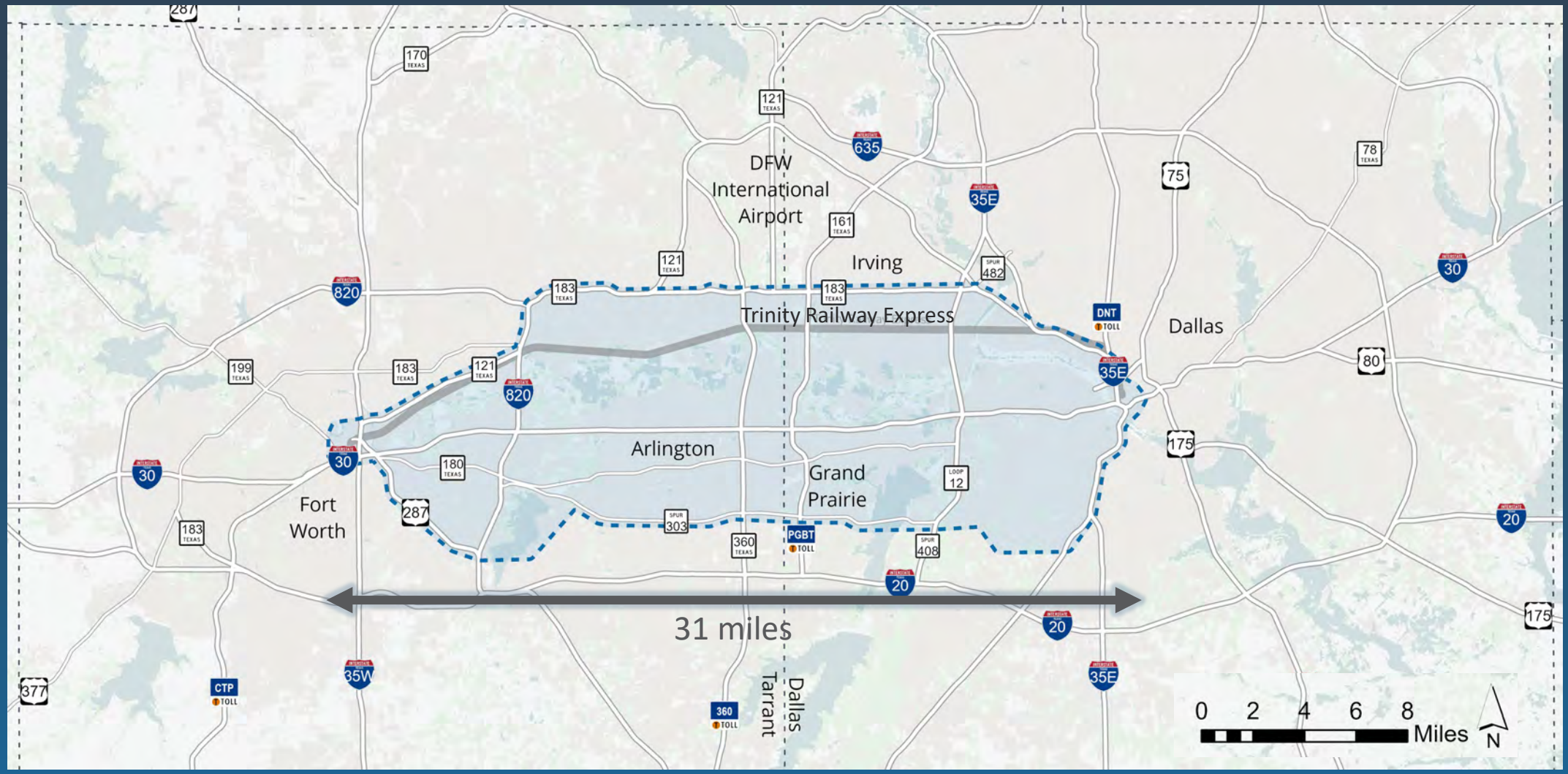
Study Objective

Evaluate high-speed transportation alternatives (both alignments and technology) to:

- Connect Dallas-Fort Worth to other proposed high-performance passenger systems in the state
- Enhance and connect the Dallas-Fort Worth regional transportation system

Obtain federal environmental approval of the viable alternative

Study Area


DFW International Airport
Irving
Trinity Railway Express
Dallas
Arlington
Grand Prairie
Fort Worth
31 miles
Dallas Tarrant
0 2 4 6 8
Miles
N

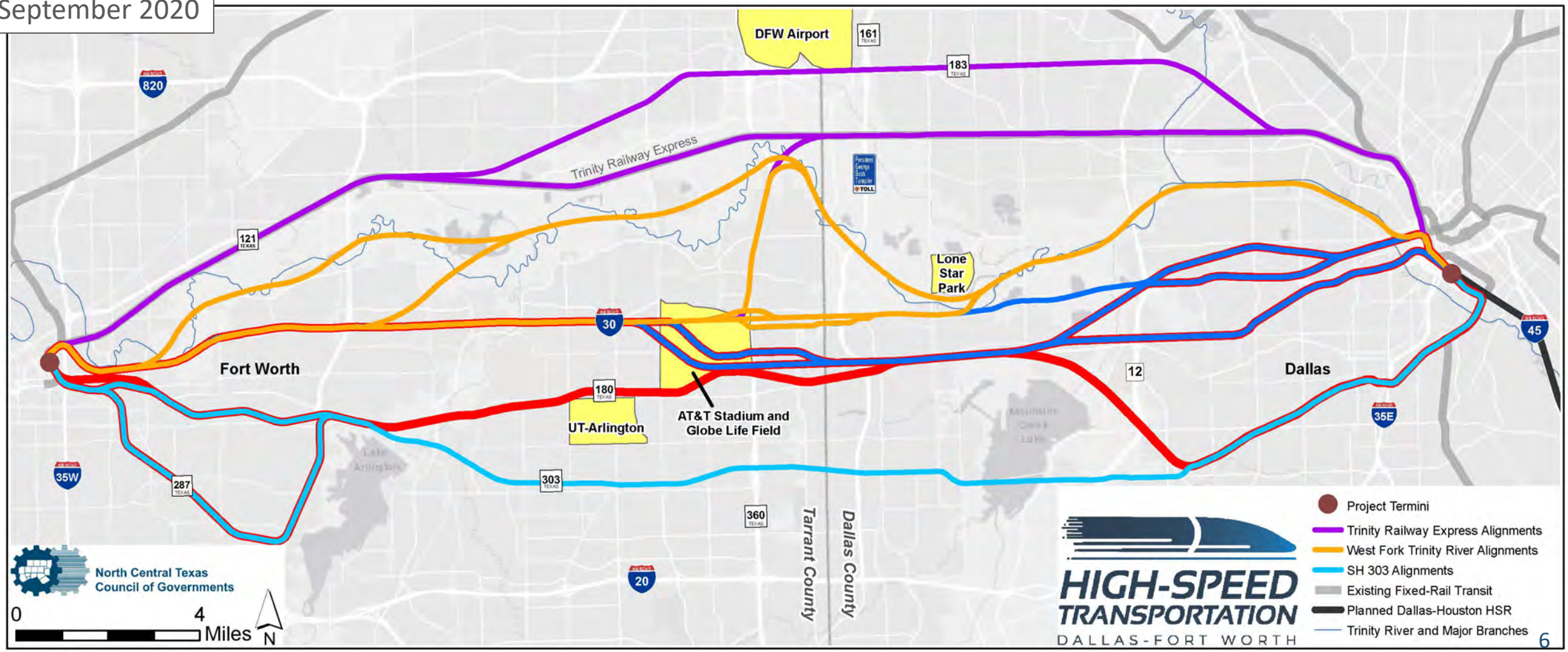
DRAFT Preliminary Project Purpose

Connect downtown Dallas and downtown Fort Worth with high-speed intercity passenger rail service or an advanced high-speed ground transportation technology to:

- Provide an alternative to travel by automobile
- Advance the state high-performance rail transportation network
- Support economic development opportunities
- Enhance connectivity

Initial Set of Alignments/Corridors

September 2020



Initial Modes of Transportation

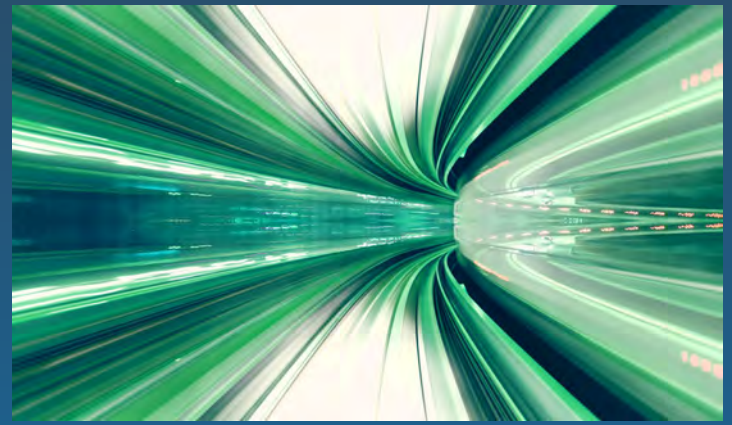
Conventional

Higher-Speed

High-Speed

Maglev

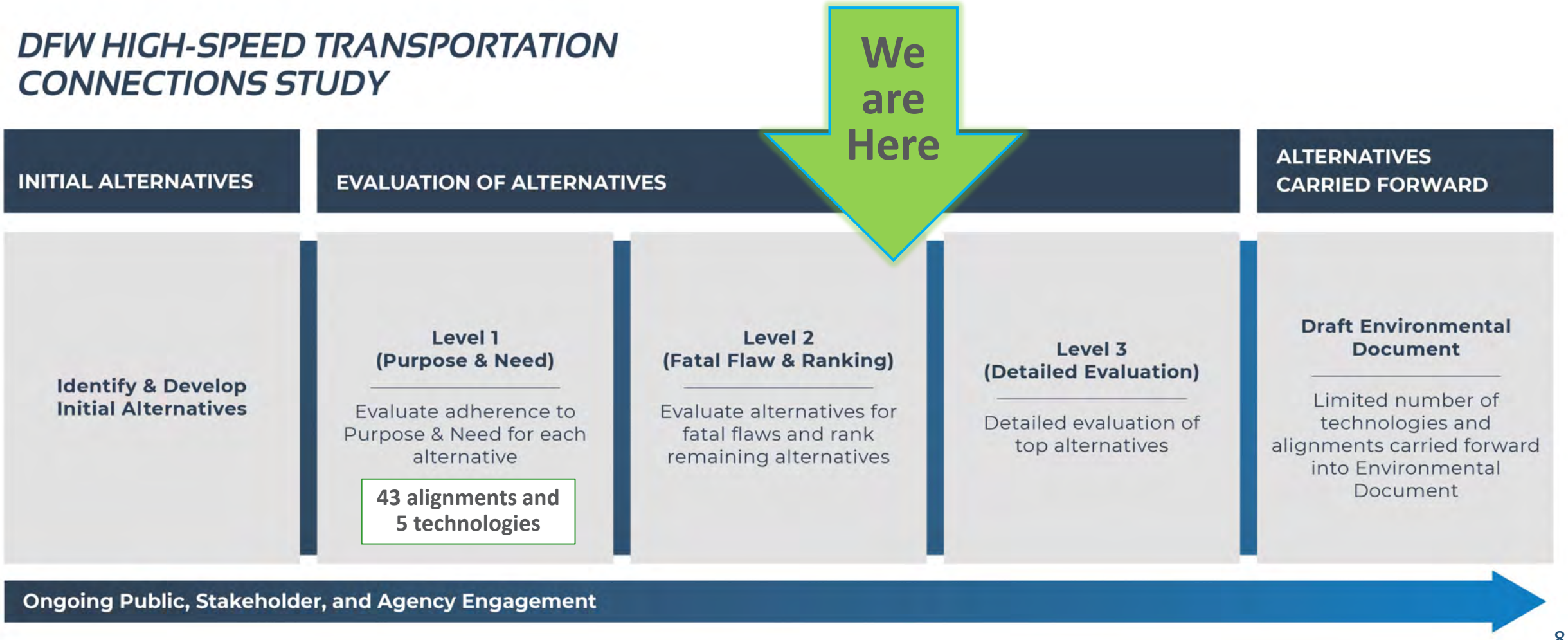
Hyperloop



Emerging Technologies

Imagery provided by NCTCOG Staff, Schon Noris Photography, Texas Central Partners, Ren Long/China Features Photos, AECOM, Virgin Hyperloop

Evaluation Methodology



Level 1 Screening Results

Level 1 (Primary)

Serve downtowns of Dallas and Fort Worth?

All 43 alignments pass

Faster Travel Time (20 mins or faster)?

- Conventional Rail: No alignments pass; eliminated from further consideration
- Higher-Speed Rail: 8 out of 43 alignments pass
- High-Speed Rail: 39 out of 43 alignments pass
- Maglev: All 43 alignments pass
- Hyperloop: All 43 alignments pass

Level 1 (Secondary)

Recommended eliminating from further considerations:

- All Trinity Railway alignments
- All West Fork Trinity River alignments
- All SH 303 alignments
- Five IH 30 alignments
- Two SH 180 alignments

Recommending only IH 30 (12 alignments) and SH 180 (11 alignments) corridors be carried forward into Level 2 screening

Alignment/Corridor Recommendations Based on Level 1 Screening

December 2020

Alignment/Corridor Recommendations Based on Level 1 Screening

Conventional

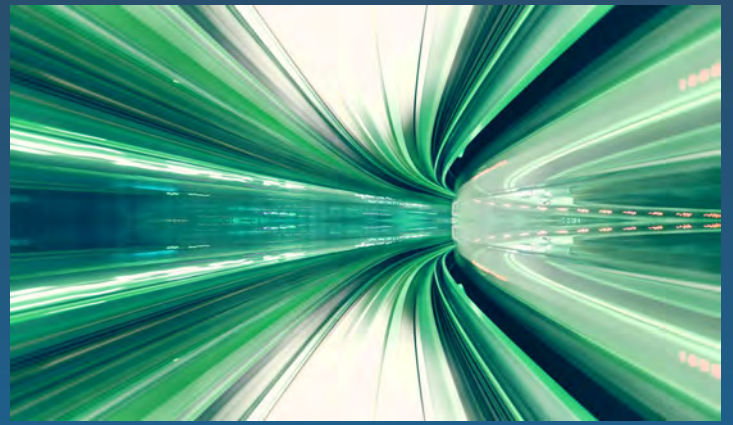
Higher-Speed

High-Speed

Maglev

Hyperloop

Emerging Technologies



Imagery provided by NCTCOG Staff, Schon Noris Photography, Texas Central Partners, Ren Long/China Features Photos, AECOM, Virgin Hyperloop

Level 2 Screening Results

Alignments

- IH 30 Alignments
  - 7 of 12 alignments recommend carrying forward into Level 3 screening
- SH 180 Alignments
  - 3 of 11 alignments carried forward into Level 3 screening

Modes

- Higher-speed rail and Emerging Technologies recommend eliminating from further consideration
- High-speed rail, maglev, and hyperloop recommend carrying forward into Level 3 evaluation

For more detailed information on Level 1 and Level 2 screenings go to:
www.nctcog.org/dfw-hstcs

>> Project Information

>> Level 1 & 2 Screening Results

Alignment/Corridor Recommendations Based on Level 2 Screening

January 2021

Mode Recommendations Based on Level 2 Screening

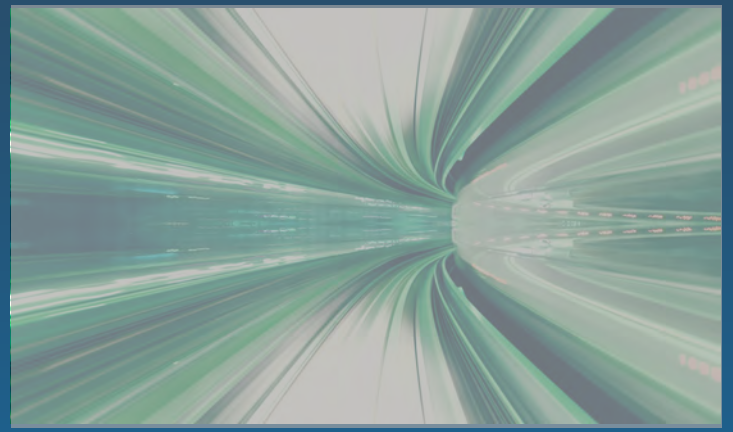
Conventional

Higher-Speed

High-Speed

Maglev

Hyperloop



Emerging Technologies

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Public and Agency Engagement

- Elected Officials Meetings
- Federal Transit Administration/Federal Railroad Administration Progress Meetings
- Technical Work Group Meetings
- Technology Forum
- Resource Agency Meeting
- Public Meetings
  - September 23 and 24, 2020
  - January 27 and 28, 2021
  - Spring 2021

Technology Update

- Technology Forum Workshop

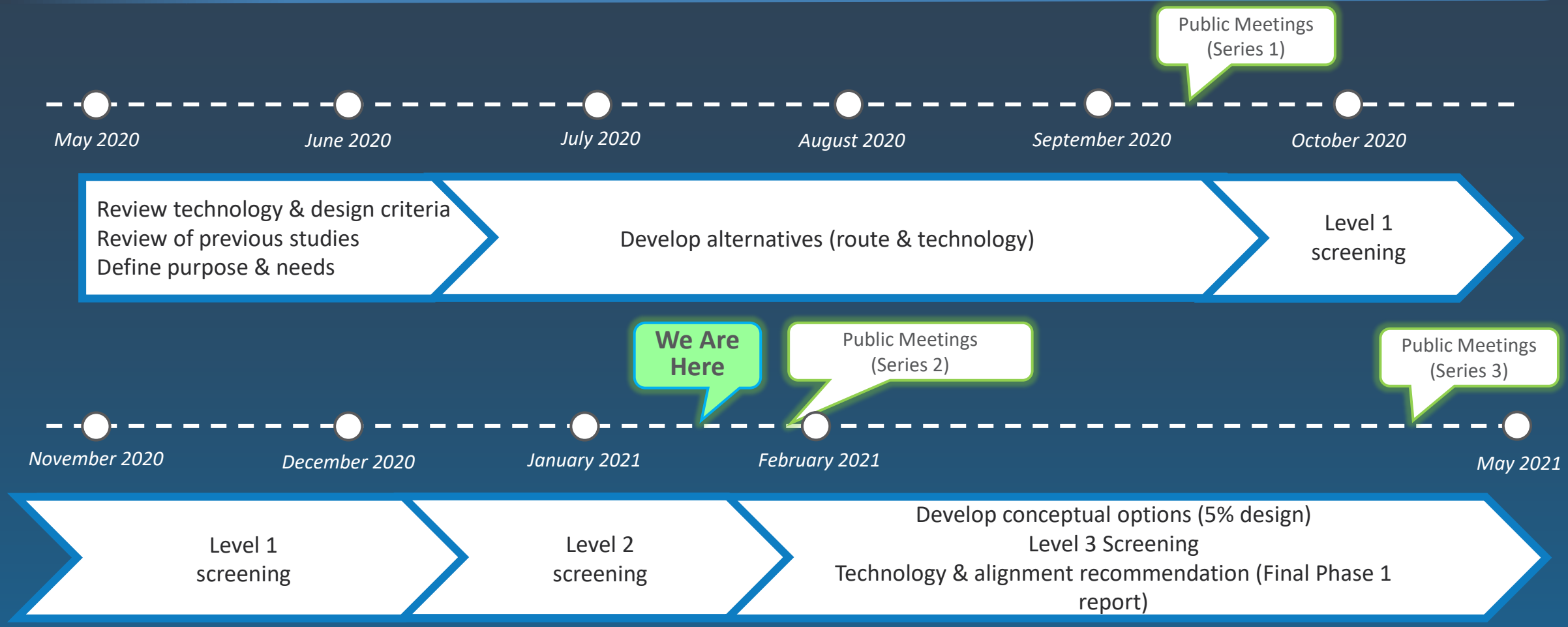
  December 9, 2020

- Held 10 One-on-One Meetings with Technology Providers

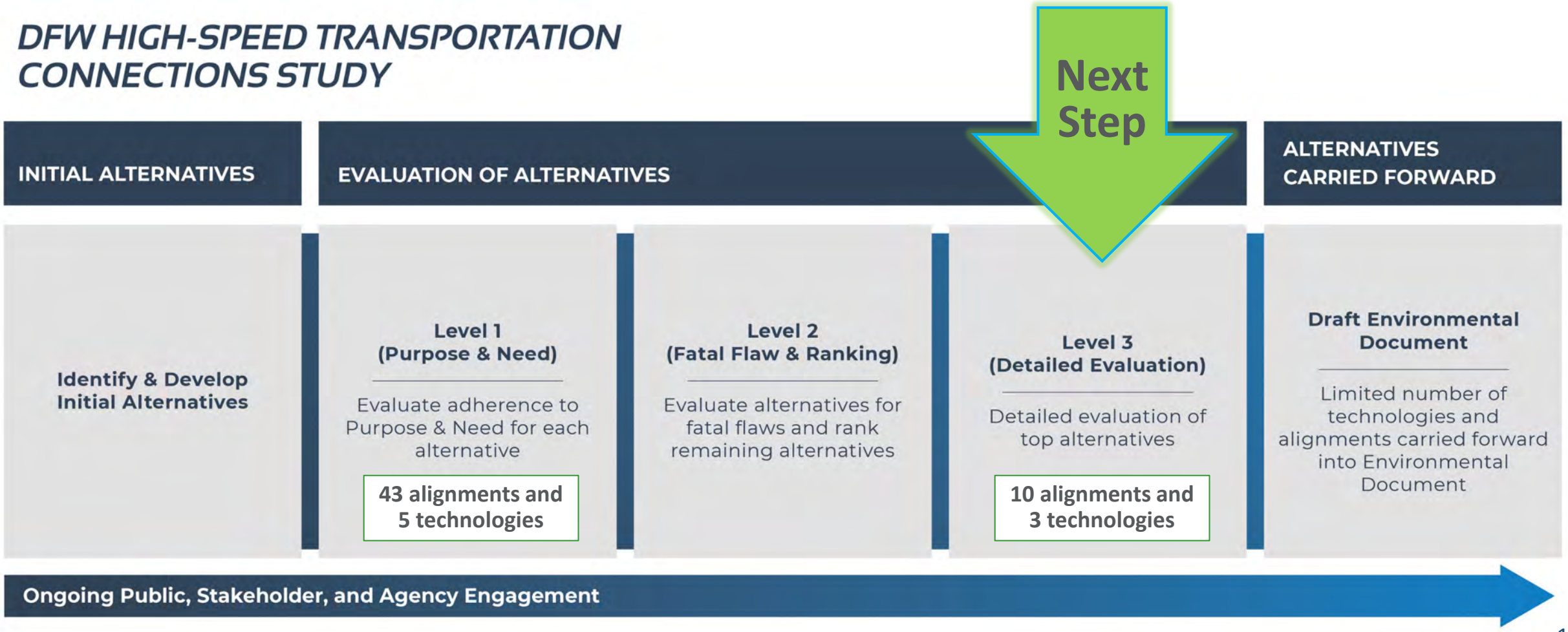
- Technology Peer Review

  Begins Next Week

Phase 1 Schedule – 12 Months



Evaluation Methodology



Screening Criteria by Levels

Level 1 (Ability to Meet Purpose and Need)

Primary

- Serves Downtown Dallas and Fort Worth Central Station (fatal flaw)
- Travel Time (fatal flaw)

Secondary

- Safe
- Reliable
- Convenient
- Linkages to Other High-Performance Systems in Texas
- Connect to Existing Regional/Light Rail in Dallas-Fort Worth
- Improved Access to Major Activity Centers

Level 2 (Fatal Flaws and Ranking)

- Proximity to Sensitive Social, Biological, or Cultural Areas
- Potential Community Impacts
- Technology Maturity, Design Criteria, Regulatory Approval
- Capacity, Travel Time, Compatibility with Existing Infrastructure
- Operational Considerations

Level 3 (Detailed Evaluation)

- Costs
- Potential Impacts to Sensitive Social, Biological, or Cultural Areas
- Potential Community Impacts
- Constructability/Operability

Level 3 Screening – Draft Criteria

Criteria		Description
Costs	Construction (capital) cost per mile	Construction cost for the guideway, ancillary facilities, maintenance facilities, and vehicles
	Annual operations and maintenance cost per mile	Annual operations and maintenance cost per mile, based on industry information
	Modifications to existing infrastructure	Capital costs associated with modifications to existing infrastructure to accommodate the alternative
Potential Impacts to Sensitive Social, Biological, or Cultural Areas	Total length of water body and floodplain crossings	Total length (linear feet) of alignment that crosses a water body or floodplain
	Acres of wetland within proposed right-of-way	Total acres of wetland within the proposed right-of-way
	Number of potential structures displaced	Number of potential structures displaced (house, outbuildings, business, billboards, etc.)
	Acres of parks impacted	Total acres of parks within proposed right-of-way
	National and state historic sites potentially impacted	Number of national and state historic sites potentially impacted

Level 3 Screening – Draft Criteria

Criteria		Description
Potential Community Impacts	Noise & Vibration	Number of sensitive receivers within 500 feet (250 feet on each side of centerline)
	Visual/Aesthetics	Number of potential visual/aesthetic impacts within 500 feet (250 feet on each side of centerline)
	Community Facilities	Number of potential community facilities impacted (positive or negative)
	Environmental Justice	Potential impacts on minority or low-income populations (positive or negative)
Constructability/ Operability	Constructability	Potential impact to existing parallel transportation systems during construction
	Travel Time	Travel time between downtown Dallas (high-speed rail station) and downtown Fort Worth (Central Station) for each alignment/mode combination
	Required non-public right-of-way	Total acres of new or non-public right-of-way needed
	Technology maturity (safety systems)	Technology Readiness Levels for safety systems requirements, including emergency response, ventilation, fire life safety, etc.
	Technology maturity (operations systems)	Technology Readiness Levels for operational systems requirements, including signaling, autonomous vehicle operations, control systems, etc.

Initial Design Process

- Develop initial design for corridors advancing to Level 3 Screening
- Develop alignments within each corridor for Transportation Technology Modes advancing through Level 2 Screening
- Anticipated completion by the end of March 2021
- Used to support Level 3 Screening

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Automated Vehicles 2.0

Briefing on AV2.1 Planning Project Kick Off

Thomas Bamonte, Senior Program Manager
Automated Vehicles Program

Surface Transportation Technical Committee
January 22, 2021

North Central Texas
Council of Governments

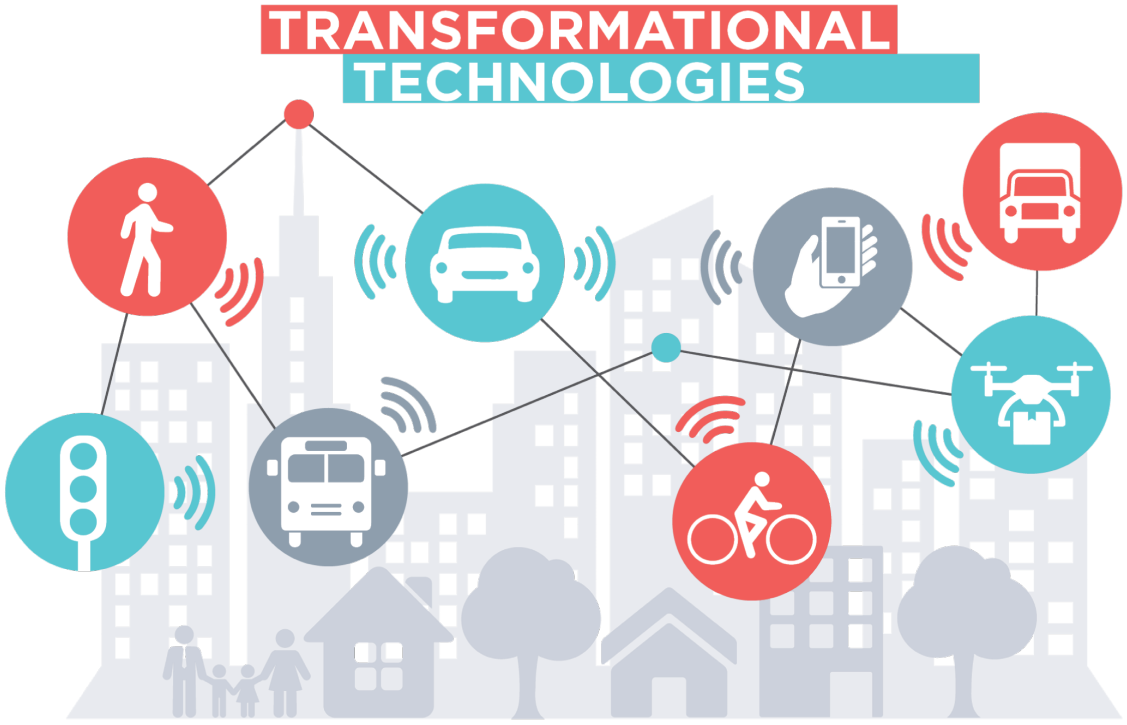
Automated Vehicles Program 2.0 Background

October 2018: Regional Transportation Council approves "AV 2.0"

- AV2.1: Regional planning exercise for future mobility technology ($1.5m)
- AV2.2: AV deployment support for local partners ($10m)
- AV2.3: Strategic investments in AV services ($20m)

Summer 2020: AV2.1 procurement

January 2021: Contract finalized with Kittelson & Associates



AV2.1 Project: Outside Planning Team

PROJECT MANAGEMENT

Abby Morgan, PhD, PE, ***Project Manager***
National expert on AV policy, regulation
Planning-level impacts of emerging tech

KITTELSON & ASSOCIATES

LOCAL & NATIONAL RESEARCH EXPERTS

Khaled Abdelghany, PhD, AV Scenario Development and Evaluation

SMU

Darcy Bullock, PhD
AV Hosting Best Practices

PURDUE UNIVERSITY

Janille Smith-Colin, PhD,
Future Mobility Needs & Impacts

SMU

Victor Fishman, PhD,
Texas Research Liaison

Texas Research ALLIANCE

LOCAL STAKEHOLDER & PUBLIC ENGAGEMENT

Judy Meyer
Stakeholder Engagement

PIA

Leigh Hornsby, PhD
Communications and messaging

PIA

Royalyn Reid
Focus groups

cmi

Denise Smith, PhD
Virtual community engagement

Hummingbird

LOCAL PLANNING EXPERTS

Jory Dille
NCTCOG Travel Demand Modeling

ATG ALLIANCE TRANSPORTATION GROUP

Behruz Paschai, PhD, PE
NCTCOG Travel Demand Modeling

C&M
C&M Associates, Inc.

Key Tasks

1. Project Management

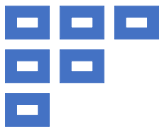
2. Public and Stakeholder Engagement

3. Future Mobility Needs Assessment

4. Scenario Development and Evaluation

5. Financial Report

6. AV Hosting Best Practices Guide



7. Final Report and Community Follow-Up

Objectives

How can technology address region's mobility-related challenges?

What should local agencies do to improve safety, mobility, and goods movement with AVs?

STTC Members: Participation/Support Opportunities

Opportunity	Role	Commitment
Project Advisory Committee (PAC)	Trusted advisors who influence direction of project Bring a mentee – inspire next generation; share commitments	Meet bi-monthly over 18-month schedule Includes 6 half-day virtual training workshops
Broader Stakeholder Engagement	Interested, involved parties stay informed of project Provide feedback in advance of key decision points	Attend public-portion of training workshops or public engagement
Public Engagement	Learn about new tech, project status Provide feedback on project decisions	Public meetings, stakeholder interviews, focus groups

Goals:

Mentorship opportunity
- Train and inspire the next generation
- Bring a junior staffer to learn from this effort

Ensure Representation from across the region
- Diversity that represents our communities
- Public/private, urban/rural

Questions | Contact Information

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2021 TOP 10 TRANSPORTATION TECHNOLOGY INITIATIVES: RECENT PRESENTATIONS

Surface Transportation Technical Committee

January 22, 2021

Michael Morris, P.E.
Director of Transportation

North Central Texas Council of Governments

TRANSPORTATION TECHNOLOGY PROJECTS FOR 2021

(Pick One to Adopt) (Are They at Risk?)

1) Internet For All (Education, Food Deserts)
2) Dynamically Priced Managed Lanes (Section 2E, 5G)
3) High-Speed Rail (Fort Worth, Arlington, Dallas, Houston)
4) Unmanned Aircraft System (Bell +)
5) Autonomous People Mover (Tarrant, Arlington to DFW Airport)

TRANSPORTATION TECHNOLOGY PROJECTS FOR 2021

(Pick One to Adopt) (Are They at Risk?)

6) IH 30 Next Generation Freeway Design

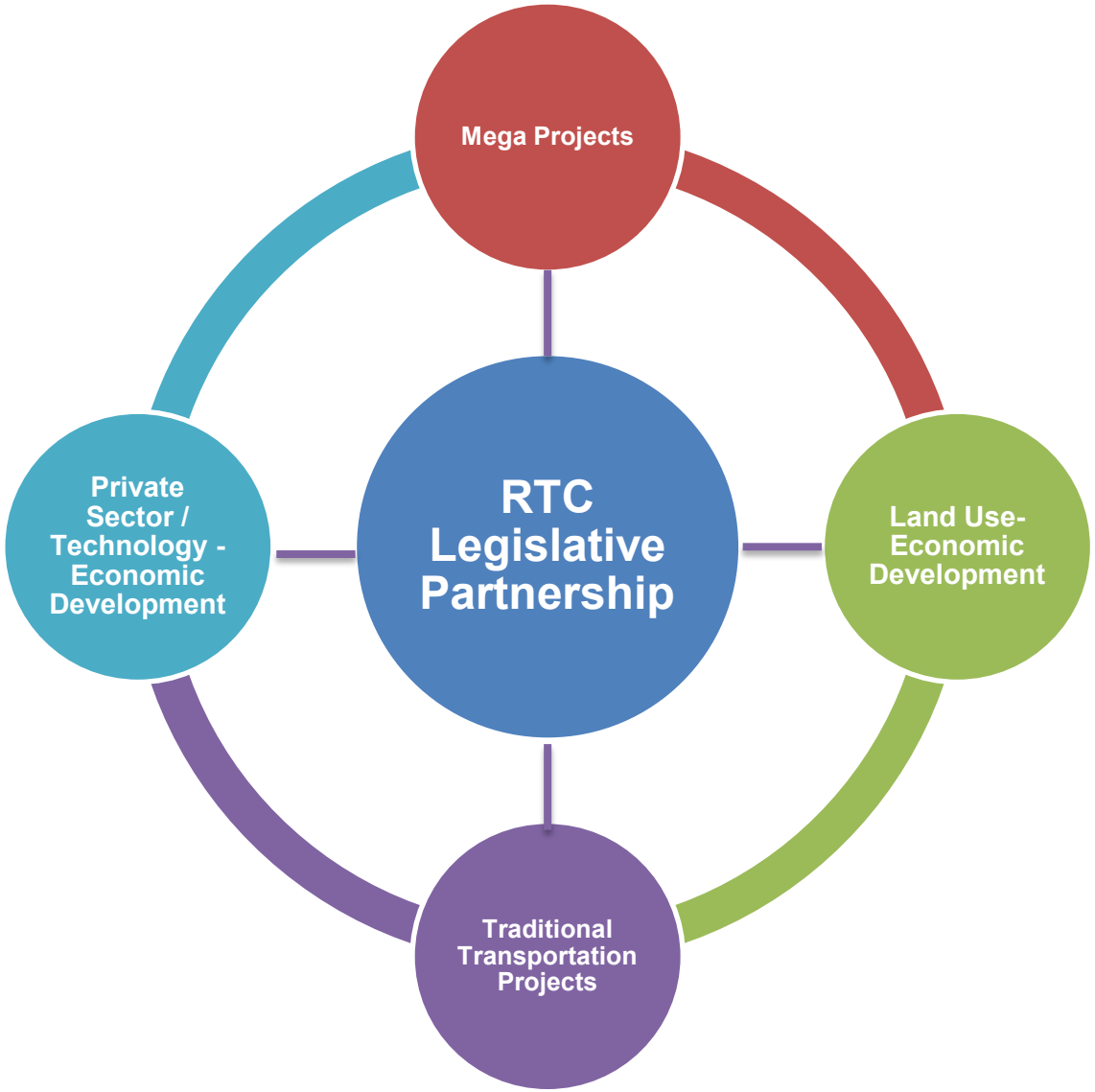
7) Toyota/GM (Hydrogen Fuel Cell/Electric)

8) Autonomous Heavy-Duty Vehicles

9) Alliance Mobility Innovation Zone (Hillwood)

10) Induction Loop in Pavement for Electric Vehicles

DALLAS-FORT WORTH MIRACLE: FOUR (RTC) PROGRAMS



REINFORCEMENT OF TRTC PRESENTATION

RTC Position and Senator Nichols Position

RTC: Formula Allocation and Reimbursement ($2B)

Can Be Done With One P3

Nichols: Supports Formula Allocation (July 22, 2016 Letter)

Does Not Support P3’s

CHANGING MOBILITY

DATA, INSIGHTS, AND DELIVERING INNOVATIVE PROJECTS DURING COVID RECOVERY

Surface Transportation Technical Committee
January 2021

Michael Morris, P.E.
Director of Transportation

TRAVEL BEHAVIOR BY MODE

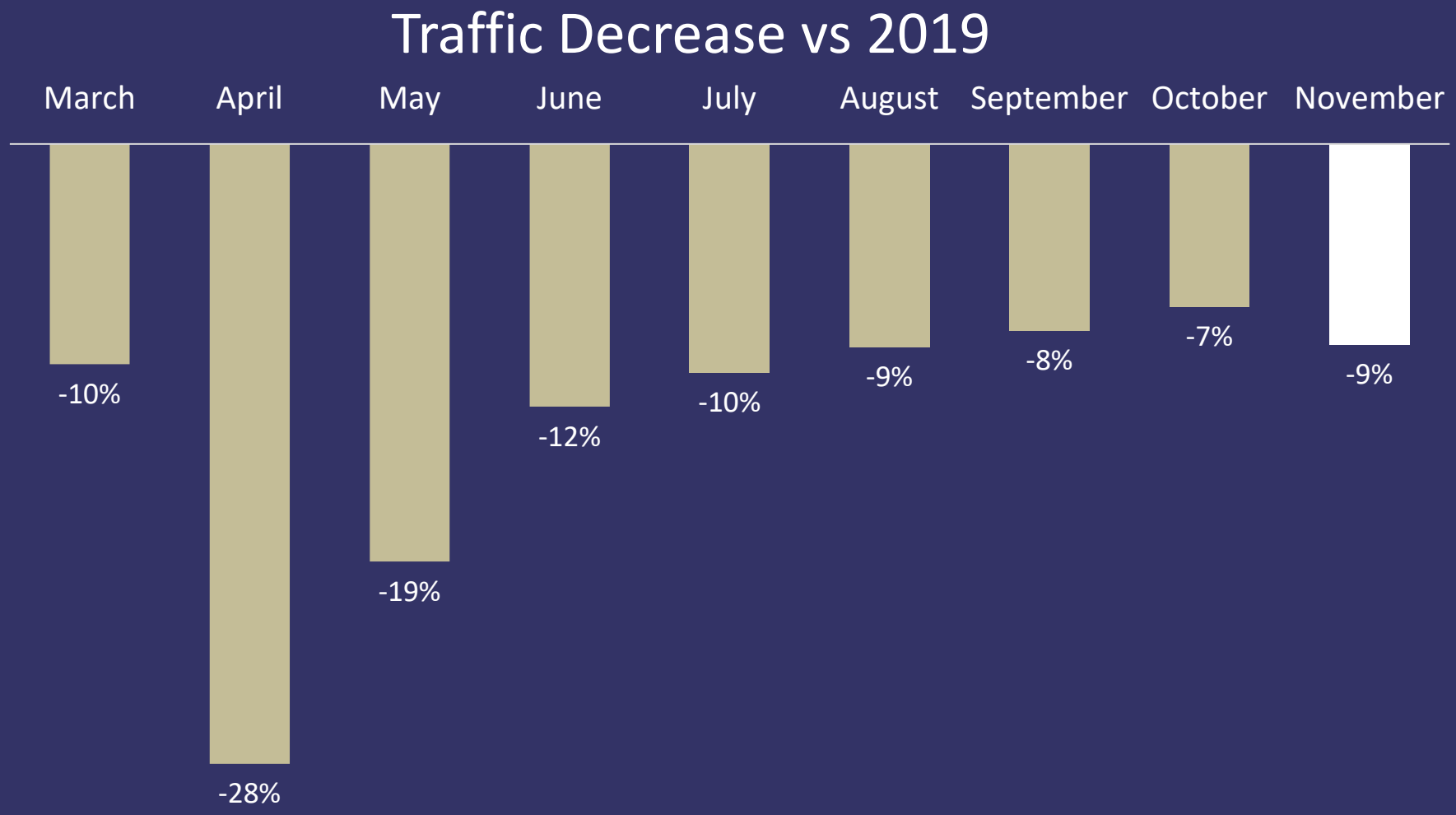
Bicycle/Pedestrian (+42%, November)

0

Freeway Volumes (-9%, November)
Toll Road (-18.5%, October)
Airport Passengers (-43%, October)
Transit Ridership (-50%, November)

ROADWAY TRENDS

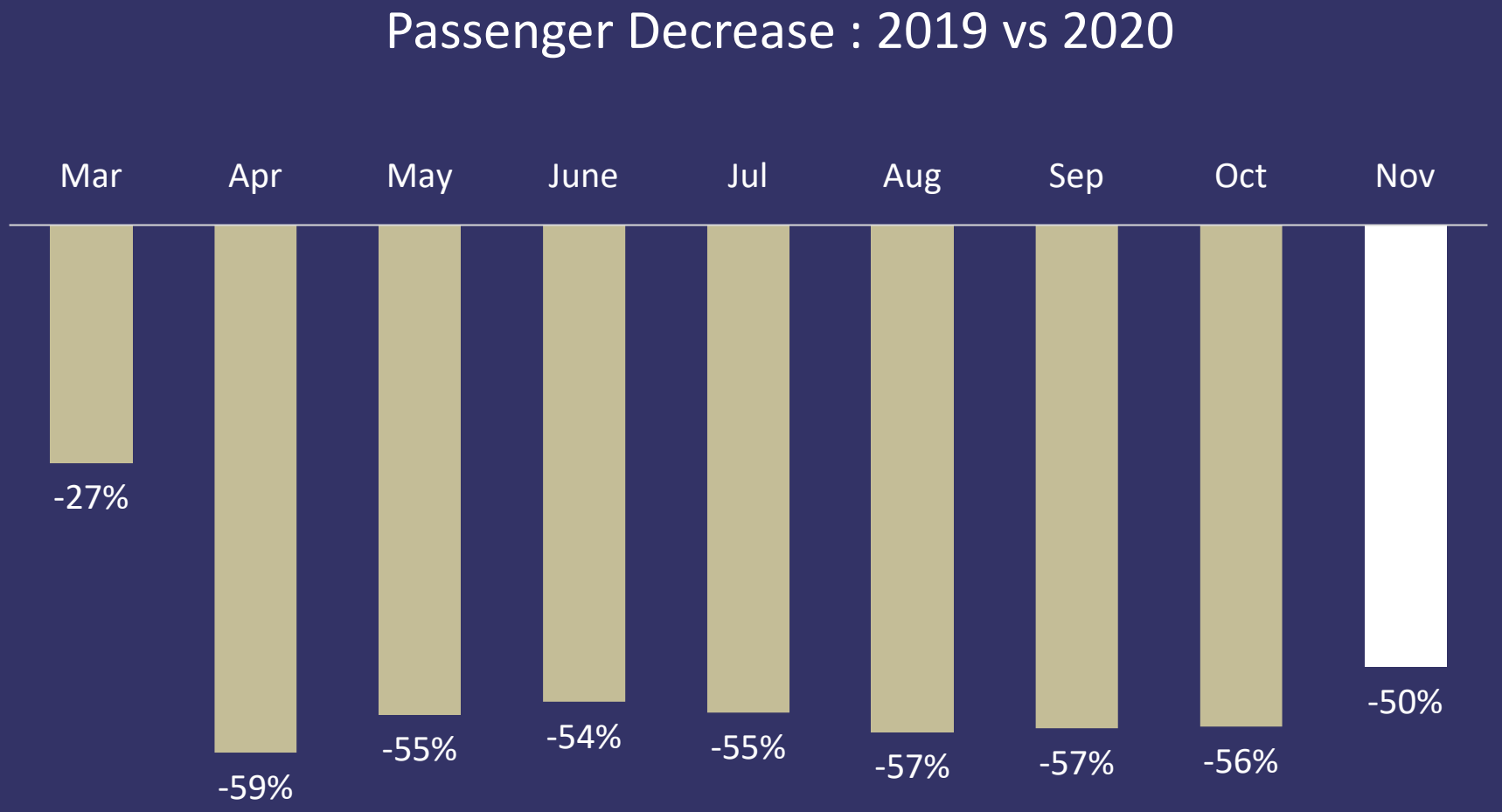
Average Weekday Freeway Volumes



Source: TxDOT Dallas/TxDOT Fort Worth Radar Traffic Counters. As of October 2020 growth calculations are based on Fort Worth locations.

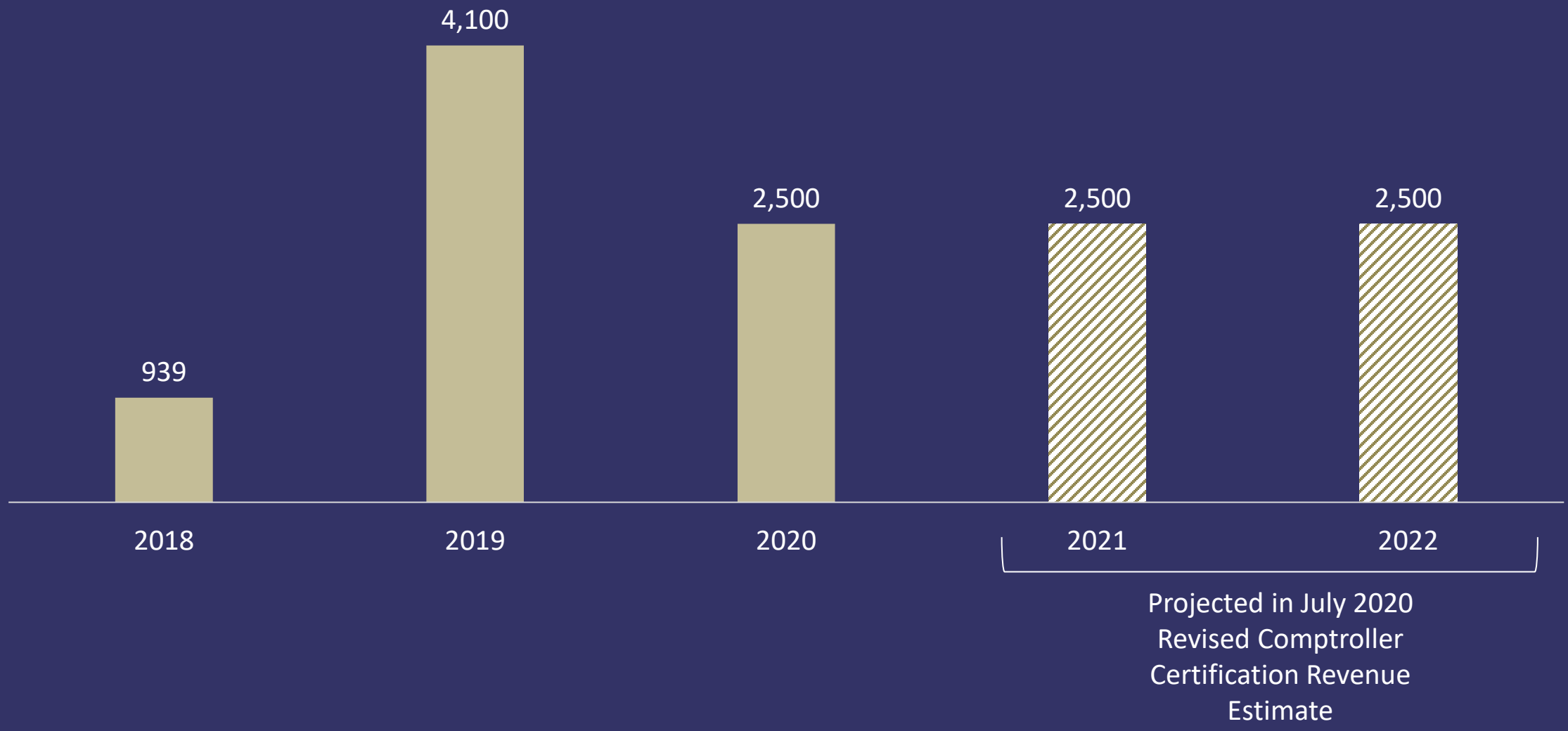
TRANSIT IMPACTS

Weekday Ridership



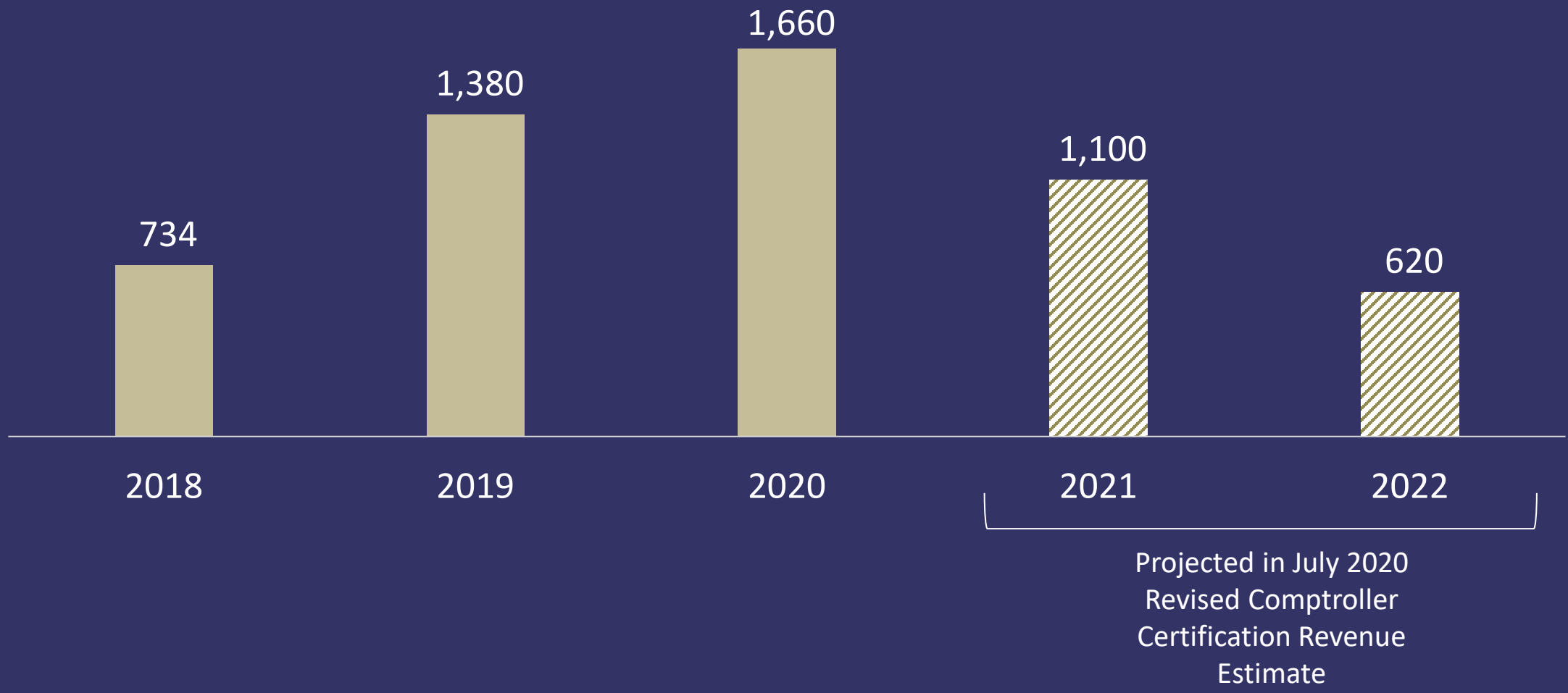
Source: DART, DCTA, and Trinity Metro

Proposition 7 (Sale & Use/MV Sales & Rental Taxes)
Transfers to the State Highway Fund, Millions



Source: Texas Comptroller of Public Accounts

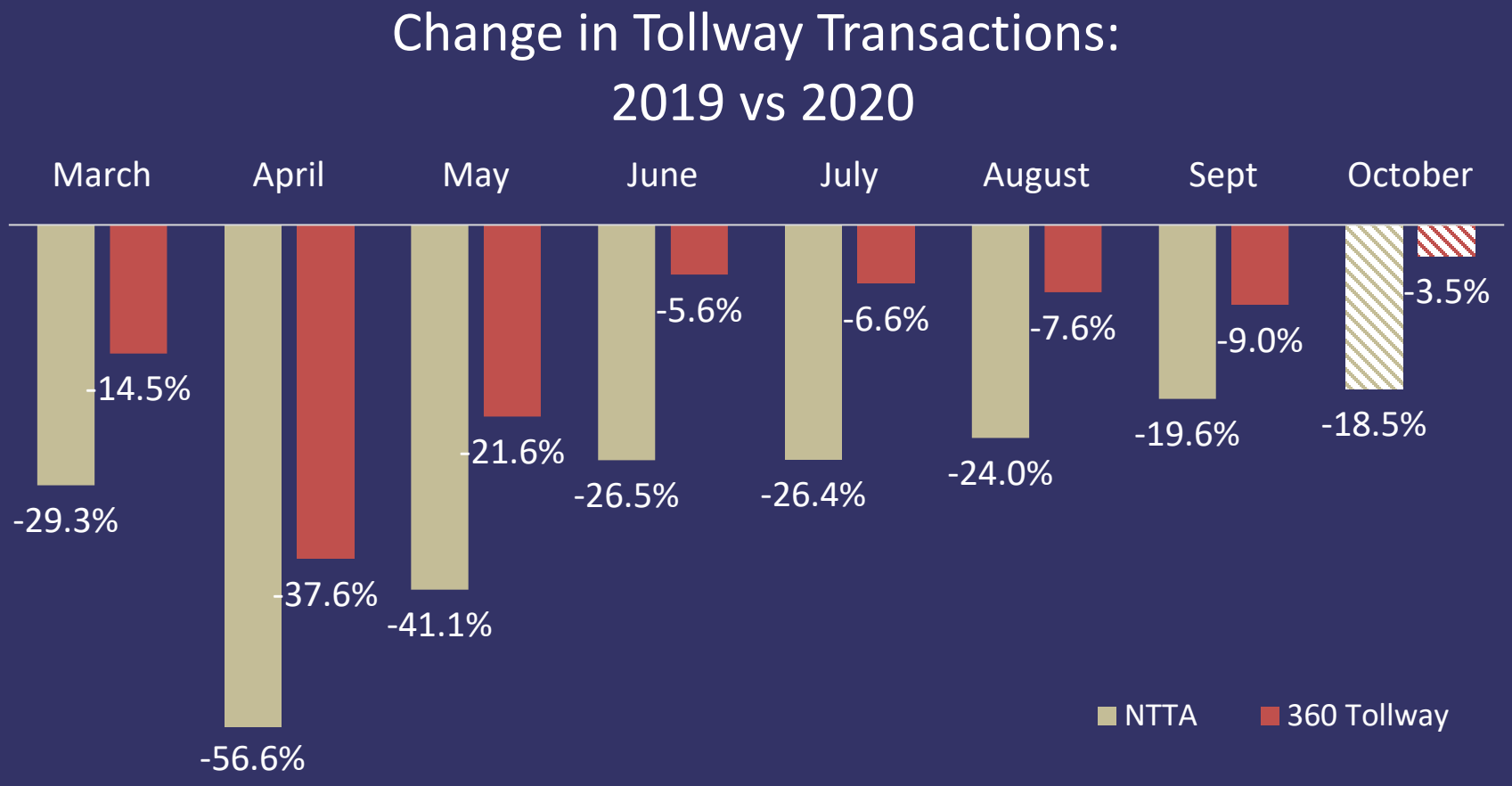
Proposition 1 (Oil & Gas Severance Tax)
Transfers to the State Highway Fund, Millions



Source: Texas Comptroller of Public Accounts

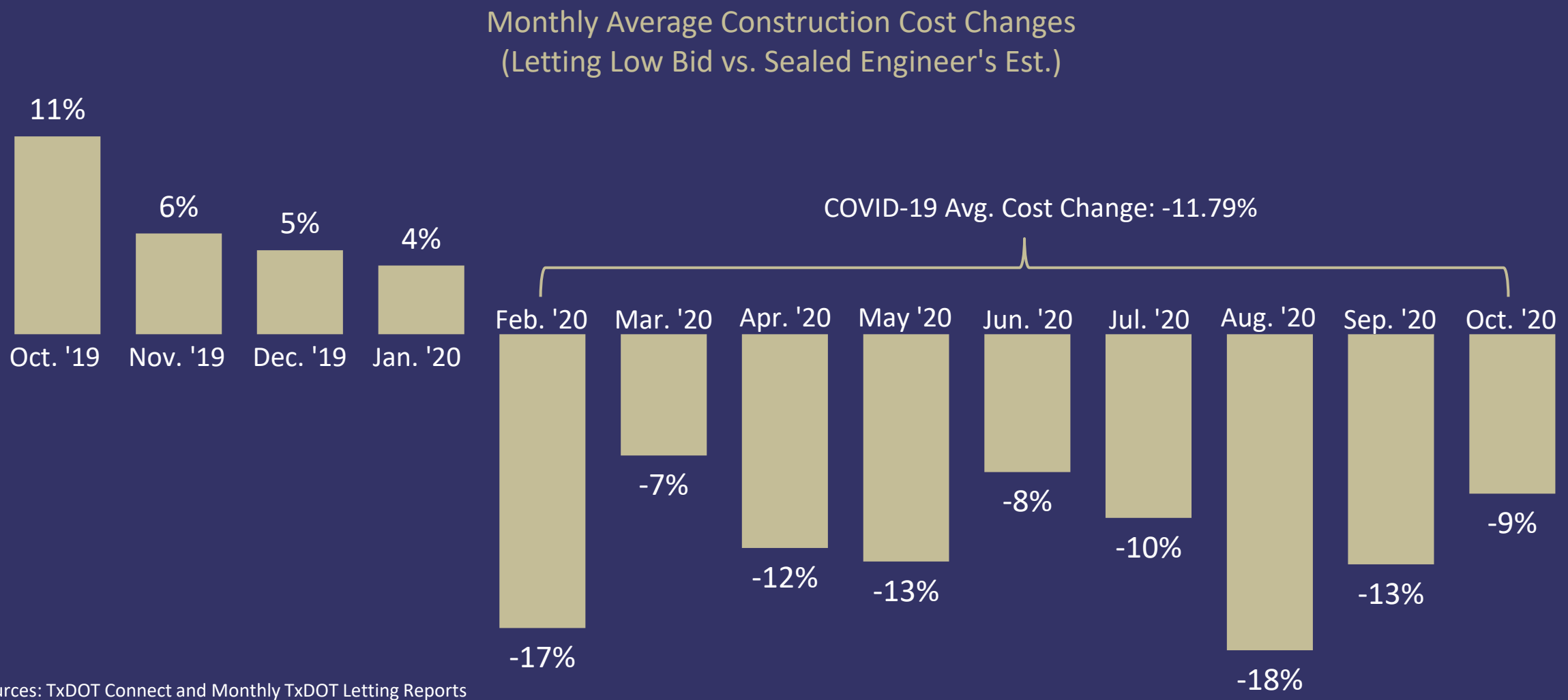
FUNDING IMPACT

NTTA Transactions, Including SH 360



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.

October 2019 to October 2020 Construction Cost Changes



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

LEGISLATIVE UPDATE

Surface Transportation Technical Committee

Nicholas Allen, Communications Coordinator

January 22, 2021

North Central Texas Council of Governments

FEDERAL UPDATE

FY2021 Appropriations and new COVID-19 Stimulus Relief bill signed into law

- Provides $3.7 trillion in funding – all twelve annual appropriations bills and COVID relief
- $25.3 billion for USDOT, funding levels are as prescribed by the FAST Act extension
- BUILD grants funded at $1 billion
- $10 billion for State DOTs to be administered as STBG funds (15% for MPOs)
- $14 billion for public transit providers

FEDERAL UPDATE

117th Congressional Session began January 3

- FAST Act one-year extension expires September 30, new infrastructure bill is an early priority
- New USDOT Secretary of Transportation Buttigieg, requires Senate confirmation
- New committee chairmen and ranking minority members

TEXAS LEGISLATURE

87th Texas Legislature convened January 12

- Representative Dade Phelan elected Speaker of the House
- Budget: Comptroller's Biennial Revenue Estimate
- Bill filing continues through March 12
- Senate Transportation Committee assignments have been released

TEXAS LEGISLATURE

Texas Comptroller Biennial Revenue Estimate FY22-23

- Estimated $112.5 billion in revenue available for general-purpose spending during the 2022-23 biennium, 0.4 percent decrease from FY20-21
- Rainy Day Fund balance is expected to be $11.6 billion at the end of FY22-23
- Transportation Revenue – State Highway Fund:
  - **Prop 1**: Estimated $2.3 billion transfer expected from Oil & Gas Severance Taxes for the biennium
  - **Prop 7**: Projected $61 million transfer from Motor Vehicle Sales Tax for the biennium, full $5 billion transfer expected from State Sales Tax

TEXAS LEGISLATURE

Bill Topics of Interest

- Transportation Funding – Gas Tax, Alternative Fuel Vehicle Fee, & Tolling
- Safety – Cell Phones, Speed Limits, Bicycle/Pedestrian
- High-Speed Rail
- Air Quality – Alternative Fuels, Energy
- Fewer transportation related bills filed compared to previous sessions

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www.nctcog.org/legislative

Surface Transportation Technical Committee

January 22, 2021

Ernest Huffman
Aviation Planning and Education Program Manager

North Central Texas Council of Governments

UAS Unmanned Aircraft Systems Safety+ Integration

Proposed Regional Transportation Council Resolution

A Resolution Supporting the Safe and Efficient Integration of Unmanned Aircraft Systems into the Dallas-Fort Worth Metropolitan Area's Existing Transportation Ecosystem

UAS
Unmanned Aircraft Systems
Safety + Integration

North Central Texas
Council of Governments

Draft Resolution

Section 1. The RTC supports a continuous, comprehensive, and cooperative transportation planning process to integrate land-based and aerial-based transportation systems in a safe and cost-effective fashion to maximize economies of scale and improve mobility.

Section 2. The RTC supports safe and responsible Unmanned Aircraft Systems (UAS) activity within the region including, but not limited to, medical supplies and package delivery, air taxi, public safety use, accident reconstruction, surveying, and other activities as identified in the future.

Section 3. The RTC encourages agencies to support their public safety services use of UAS.

Section 4. The RTC encourages agencies to work with the UAS industry to adopt "pilot" programs to demonstrate the technologies properly operated in and around a metropolitan area.

Section 5. The RTC encourages educational institutions in North Texas to provide UAS-oriented educational offerings to help prepare the transportation workforce of the future.

UAS
Unmanned Aircraft Systems
Safety + Integration

North Central Texas
Council of Governments

Draft Resolution(*cont'd*)

Section 6. The RTC supports the development of UAS aircraft pilot certification standards and efforts to position North Texas as a center for UAS aircraft pilot training.

Section 7. The RTC encourages agencies to participate in the North Texas UAS Safety and Integration Task Force. This working group provides a forum that will allow cities to share their current use cases and policies, and also learn about other UAS use cases that can be employed by cities.

Section 8. This Resolution shall be transmitted to the Federal Highway Administration, Federal Transit Administration, Federal Aviation Administration, National Aeronautics and Space Administration, Texas Department of Transportation, and counties and cities within the Metropolitan Planning Organization planning boundary.

Section 9. This resolution shall be in effect immediately upon its adoption.

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Safety + Integration

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Community Best UAS Practices Forum

- Characterize community concerns
- Inventory available applications for city use
- Inventory funding mechanism for city use
- Inventory training available to cities
- Identify how small UAS and UAS operations can supplement existing transportation methods
- Identify how UAS can replace existing transportation methods in emergency situations

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Safety + Integration

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Schedule

1. Input from North Texas UAS Safety and Integration Task Force (numerous meeting discussions)

2. Requesting STTC endorsement of RTC approval – January 22

3. Requesting RTC approval – February 11

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Council of Governments

Conclusion

This resolution will demonstrate community acceptance and regional engagement in planning and implementation of UAS integration.

UAS
Unmanned Aircraft Systems
Safety + Integration

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Council of Governments

Contact Information

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ehuffman@nctcog.org, (817) 704-5612

UAS
Unmanned Aircraft Systems
Safety+ Integration

North Central Texas
Council of Governments

FEDERAL HIGHWAY ADMINISTRATION SAFETY PERFORMANCE TARGETS UPDATE

Surface Transportation Technical Committee

January 22, 2021

Kevin Kroll

Senior Transportation Planner

North Central Texas
Council of Governments

2020-2021 Federal Measures Schedule

Rulemaking	Upcoming RTC Action	Next Anticipated RTC Action	Target-Setting Schedule
PM3 – System Performance, Freight, and CMAQ	October 2020 ✓	Late 2022	Biennial
PM2 – Pavement and Bridge	November 2020 ✓	Late 2022	Biennial
PM1 – Roadway Safety	February 2021 (Information)	Early 2022	Annual (Targets established as reductions over 5-year period)
Transit Asset Management (TAM)	March 2021	Early 2022	Annual
Transit Safety (PTASP)	March 2021	Early 2022	Annually/With MTP Updates

Background

Federal legislation specifies quantitative performance measures that must be tracked and reported annually.

- 2018 Performance Targets approved by Regional Transportation Council (RTC) in December 2017

  Established Regional Safety Position:

  Even one death on the transportation system is unacceptable. Staff will work with our partners to develop projects, programs, and policies that assist in eliminating serious injuries and fatalities across all modes of travel.

- Targets affirmed annually.
- In May of 2019, the Texas Transportation Commission (TTC) adopted Minute Order 115481, directing TxDOT to work toward the goal of reducing the number of deaths on Texas roadways by half by the year 2035 and to zero by the year 2050.

Roadway Safety Performance Targets

- Target: Number of Fatalities
- Target: Rate of Fatalities
- Target: Number of Serious Injuries
- Target: Rate of Serious Injuries
- Target: Number of Non-motorized Fatalities plus Serious Injuries

(Targets based on a five-year rolling average)

Safety Performance Targets (PM1) Trends and Target Performance

Performance Measure	Desired Improvement Trend	Current Trend*	2018 Target Met	2019 Target Met**
	State of Texas			
1. No. of Fatalities	↘	↗	Yes	-
2. Fatality Rate	↘	↘	Yes	-
3. No. of Serious Injuries	↘	↘	Yes	-
4. Serious Injury Rate	↘	↘	Yes	-
5. No. of Non-motorized Fatalities and Serious Injuries	↘	↗	Yes	-
	North Central Texas (NCTCOG) Region			
1. No. of Fatalities	↘	↗	Yes	Yes
2. Fatality Rate	↘	↘	Yes	Yes
3. No. of Serious Injuries	↘	↘	Made Significant Progress	Yes
4. Serious Injury Rate	↘	↘	Made Significant Progress	Yes
5. No. of Non-motorized Fatalities and Serious Injuries	↘	↗	Yes	Yes

*Current trend using data from the previous five years of available data (2015-2019)
**Preliminary results for NCTCOG. FHWA expected to release state results in March 2021.
Observed safety performance is compared to targets on a two-year delay

NCTCOG Actual Safety Performance 2019

Safety Performance Measures	Original 2019 Target	PY2019 Actual Performance	PY2012-2016 Baseline Performance	Met Target?	Better than the Baseline?	Met or Made Significant Progress?
Number of Fatalities	599.2	557.2	496	Yes	No	Yes
Rate of Fatalities	0.838	0.781	0.768	Yes	No	
Number of Serious Injuries	3,999.6	3,692	3,754	Yes	Yes	
Rate of Serious Injuries	5.568	5.200	5.807	Yes	Yes	
Number of Non-Motorized Fatalities and Serious Injuries	582.4	559	497	Yes	No	

TxDOT Safety Performance Targets and Projections

Safety Performance Targets	2020 TxDOT Targets	2020 NCTCOG Targets	2021 TxDOT Targets	2021 NCTCOG Targets	2022 TxDOT Targets	2022 NCTCOG Targets
	1.2% Reduction		1.6% Reduction		2.0% Reduction	
No. of Fatalities	4,068	589.3	3,687*	572.4	-	-
Fatality Rate	1.48	0.803	1.33*	0.762	-	-
No. of Serious Injuries	18,602	3,514.7	17,151	3,375.3	-	-
Serious Injury Rate	6.56	4.768	6.06	4.485	-	-
No. of Non-motorized Fatalities and Serious Injuries	2,477	595.0	2,316.4	592.3	-	-

Targets are based on a five-year rolling average (ex. 2017 – 2021) for 2021.
Proposed reduction from original trend line projections.

*2021 Targets for TxDOT include new 50% reduction by 2035 targets for fatalities and fatality rate only.

NCTCOG Safety-Related Programs and Projects

Safety Program Area	Bike and Pedestrian	Freight
* Regional Roadway Safety Plan	Education and Outreach - Look Out Texans	Fort Worth Rail Crossing Evaluation
* Driver Behavior Social Marketing Campaign	Regional Pedestrian Safety Plan	Truck Lane Restrictions Planning
Intersection Safety Implementation Plan	Bike/Ped Technical Training/Workshops	Freight Safety Initiative
WWD Mitigation Pilot Project	Safety Spot Improvement Program	Canyon Falls/US 377 and UPRR
Traffic Incident Management Training Program	Transportation Alternative Funding CFPs	Linfield Closing/Ped Crossing over UPRR
Crash Reconstruction Software/Equipment Training Program	"Routes to Rail Stations" Study	Prairie Creek Road Grade Separation
Incident Management Call for Projects	Safe Routes to School	
Commercial Vehicle Enforcement Training for Judges & Prosecutors	Bicycle and Pedestrian Advisory Committee	**Streamlined Project Delivery**
Commercial Vehicle Enforcement RFP		Denton County East-West Corridor
Mobility Assistance Patrol Program	**Congestion Management**	
Regional Safety Information System - Crash Database	Emerging Technology Investment Programs	**Automated Vehicles**
Abandoned Vehicle Working Group / Regional Policy Development	Freeway Management & HOV Enforcement	AV 2.0
Annual Safety Performance Report Publication	Congestion Management Process	Texas Connected Freight Corridor: IH 30
FHWA Safety Performance Target	Peak Hour Lane Implementation	AV Truck Data Sharing
Regional Safety Advisory Committee		Traffic Signal Data Sharing
* Vision Zero Program Development Workshop	**TSM / ITS**	Waze/511DFW Data Sharing
* Vision Zero Regional Policy Resolution Development	Regional Traffic Signal Retiming Program	DSTOP
* NCTCOG Systemic Safety Improvements Program	Traffic Signal/Intersection Improvement Program	
	Traffic Signal Cloud Data	**Aviation**
Air Quality		Know Before You Fly (Your Drone) Workshops
DFW Clean Cities	**Transit**	UAS Safety and Integration Initiative/Task Force
Emissions Enforcement	Public Transportation Agency Safety Plan (PTASP)	

Date	NCTCOG Safety Performance Targets Actions to Date
December 2017	STTC/RTC (Action) - Presented 2018 Safety Performance Targets. * Affirmed support of 2018 TxDOT Targets
January/February 2019	STTC/RTC (Action) - Presented 2019 Safety Performance Targets. *Reaffirmed support of 2018 TxDOT Targets and affirmed support of 2019 – 2022 TxDOT Targets
January 24, 2020	RSAC/STTC (Information) - Presented 2020 Safety Performance Targets Update and 2018 preliminary safety targets vs. actual performance update to STTC. Item pulled from RTC due to special agenda
July 24, 2020	RSAC – Presented final safety targets vs. actual performance.
January/February 2021	RSAC/STTC/RTC (Information) - Present 2021 Safety Performance Targets Update and 2019 preliminary safety targets vs. actual performance update to STTC and RTC
January/February 2022	STTC/RTC (Action) - Present proposed 2022 Safety Performance Targets and 2020 preliminary safety targets vs. actual performance update to STTC and RTC

Questions, Comments, Contacts

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Dallas-Fort Worth Clean Cities Fleet Recognition and Annual Survey Results

Amy Hodges, Senior Air Quality Planner

Surface Transportation Technical Committee

Dallas-Fort Worth CLEAN CITIES

North Central Texas Council of Governments

January 22, 2021

Relevance to Regional Planning

Air Quality Emphasis Areas:

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

Performance Measure:

Air Quality

Mobility 2045:

Air Quality Policy AQ3-004:
Support and implement strategies that promote energy conservation, reduce demand for energy needs, reduce petroleum consumption, and/or decrease greenhouse gas emissions

Mobility 2045 Chapter 4 – Environmental Considerations

Appendix C – Environmental Considerations

DFW Clean Cities Impacts – Results from 2019 Survey

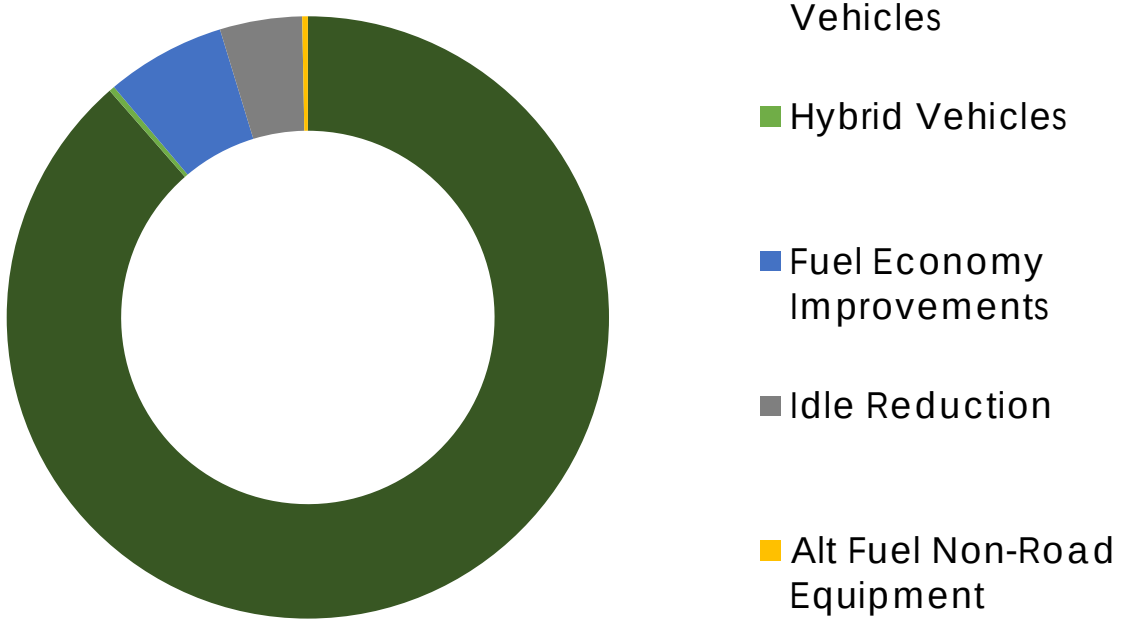
42 Fleets Reporting

9,871 Alternative Fuel Vehicles and Equipment

*Impacts Over Calendar Year 2019

dfwcleancities.org/annualreport

~26.03 Million Gasoline Gallon Equivalent (GGE) Reduced*



~420.104 Tons Ozone-Forming Nitrogen Oxides (NO_X) Reduced*

~1.6 Tons/Day

For Comparison: RTC Initiatives Credited in Conformity = ~2.12 Tons/Day

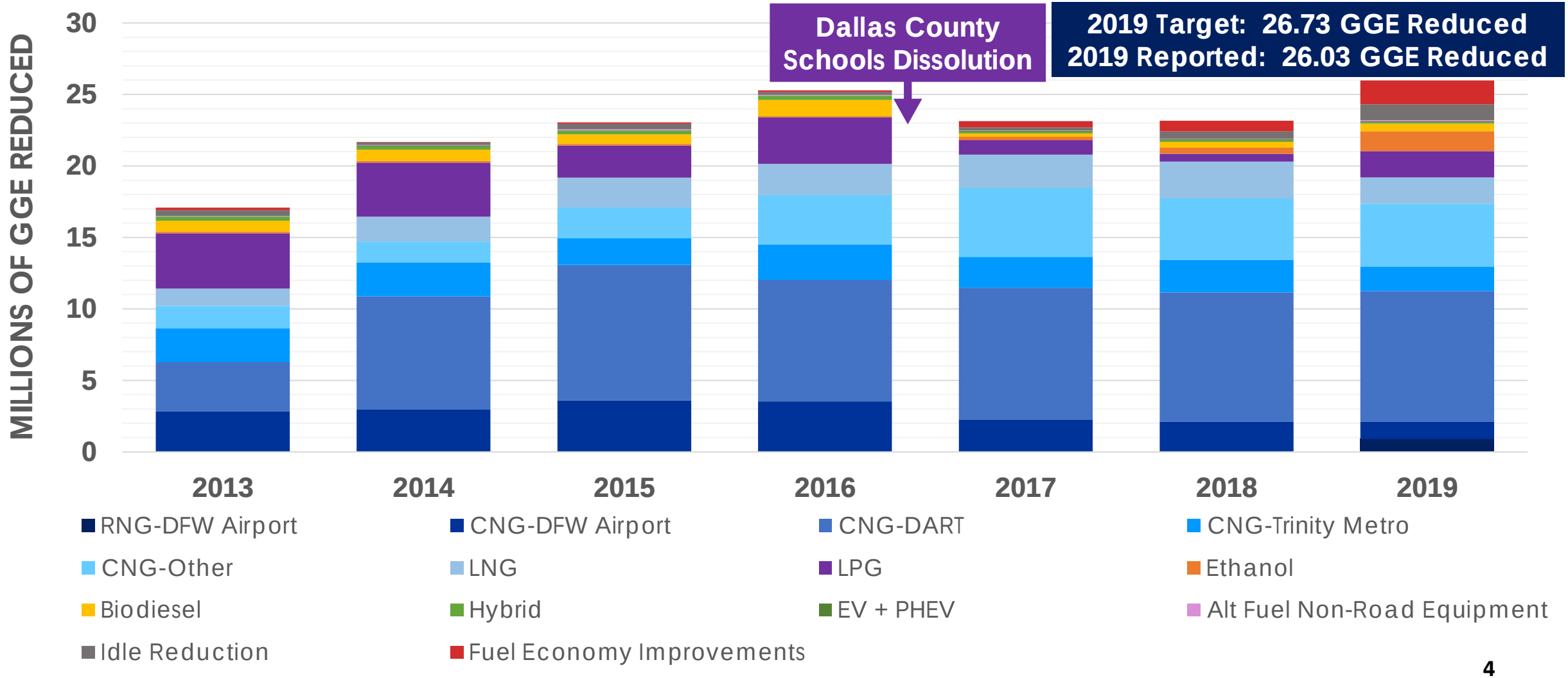
72,094 Tons Greenhouse Gas (GHG) Emissions Reduced*

Equivalent to Eliminating

Tanker Trucks of Gasoline

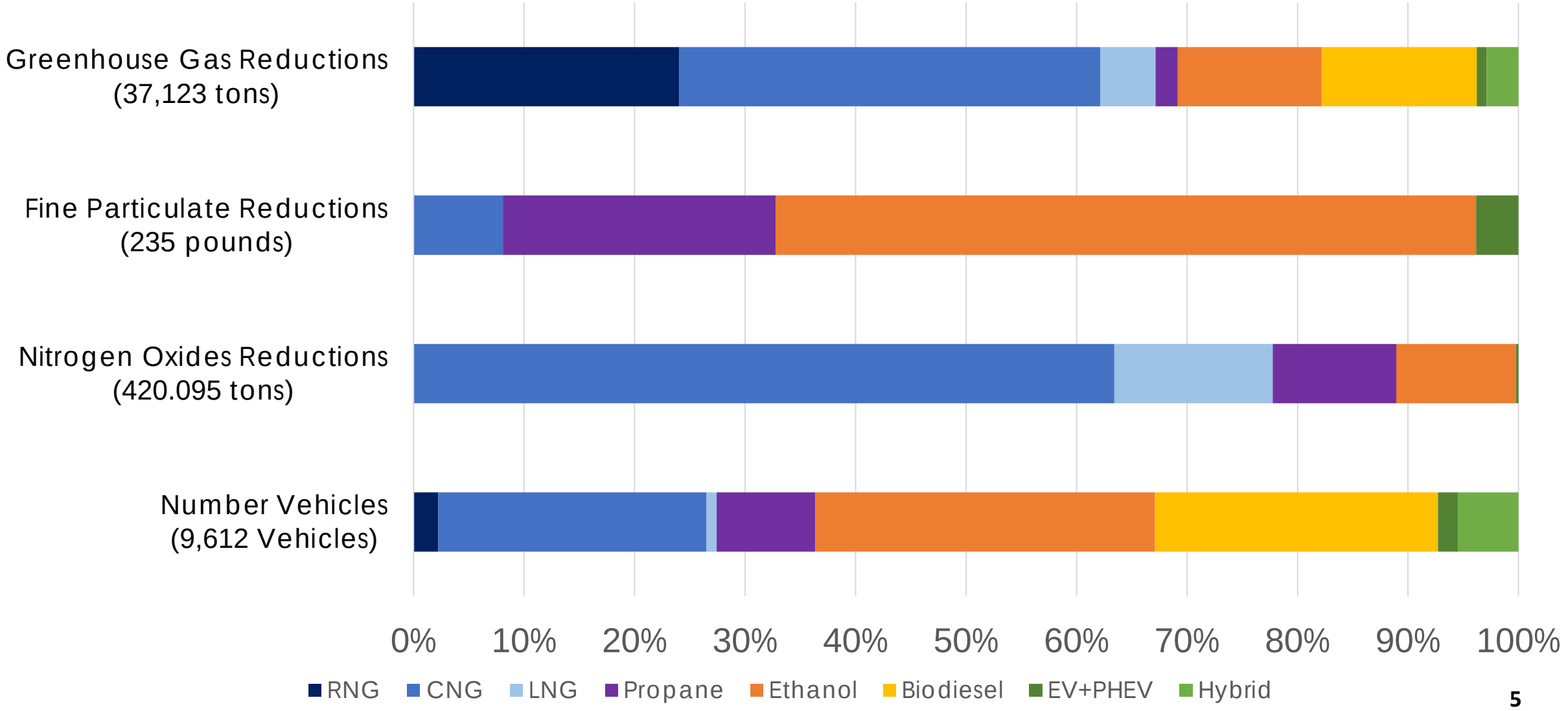
Trends in Annual Energy Impact

Goal per Department of Energy: Increase Reductions 15% Year Over Year



RNG-Renewable Natural Gas; CNG- Compressed Natural Gas; LNG- Liquified Natural Gas; LPG- Liquified Propane Gas; EV- Electric Vehicle; PHEV-Plug-In Hybrid Electric Vehicle

Impact of Various Fuel Types



RNG-Renewable Natural Gas; CNG- Compressed Natural Gas; LNG- Liquified Natural Gas; LPG- Liquified Propane Gas; EV- Electric Vehicle; PHEV-Plug-In Hybrid Electric Vehicle

Fleet Recognition Awards

Based on 2019 Report

Recognition Criteria – Up to 100 Points
Up to 45 Points – Emissions Reduction
Up to 25 Points – Reducing Fuel Consumption
Up to 20 Points – Partnering with DFW Clean Cities
Up to 10 Points – Ensuring Familiarity with Fleet Goals

Bronze Fleet Winners

City of Arlington
City of Frisco
City of North Richland Hills
City of Watauga
Tarrant County
Town of Addison
Town of Flower Mound
Trinity Metro

Silver Fleet Winners

City of Bedford
City of Coppell
City of Irving
City of Mesquite
Denton ISD
Prosper ISD

Gold Fleet Winners

City of Carrollton
City of Dallas
City of Denton
City of Euless
City of Lewisville
City of Southlake
Dallas Area Rapid Transit (DART)
DFW Airport

Shining Stars

Greatest Progress in NO_X Reduction

DFW Airport
27.5 tons of NO_X Reduced

North Richland Hills
93% Increase in Reductions

Greatest Progress in GGE Reduction

City of Denton
698,000 GGE Reduced

SPAN Transit
97% Increase in Reductions

Greatest Progress in Transitioning to Alternative Fuels

Trinity Metro
79% Alternative Fuel Vehicles

Denton ISD
+36 LPG Vehicles

2020 Annual Survey

Goal:

29,933,670 GGE Reduced

(15% Increase Relative to 2019)

Priority Outreach:

Clean Fleet Policy Adoptees

Private Sector Fleets

Former Dallas County Schools Customer Fleets

Submit to DFWCC by February 26, 2021

dfwcleancities.org/annualreport

25th Anniversary in 2020

dfwcleancities.org

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CLEAN CITIES