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
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

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

- Recommend 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?

Christie J. Gotti  
Senior Program Manager  
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  
ccderrick@nctcog.org
Calls for Projects to Reduce Diesel Emissions

Surface Transportation Technical Committee
September 25, 2020

Jason Brown
Principal Air Quality Planner
## Air Quality Emphasis Areas

<table>
<thead>
<tr>
<th>High-Emitting Vehicles/Equipment</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Speeds</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Idling</strong></td>
<td>✓</td>
</tr>
<tr>
<td>Vehicle Miles of Travel</td>
<td>✓</td>
</tr>
<tr>
<td><strong>Energy and Fuel Use</strong></td>
<td>✓</td>
</tr>
<tr>
<td>Cold Starts</td>
<td>✓</td>
</tr>
<tr>
<td>Hard Accelerations</td>
<td></td>
</tr>
</tbody>
</table>
## Available Funding

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

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

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

<table>
<thead>
<tr>
<th></th>
<th>Clean Fleets North Texas</th>
<th>North Texas Emissions Reduction Project</th>
<th>North Texas Freight Terminal Electrification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
<td>2019 2020</td>
<td>2020</td>
<td>2019 2020</td>
</tr>
<tr>
<td><strong>Award Type</strong></td>
<td>Subaward</td>
<td>Rebate</td>
<td>Subaward Rebate</td>
</tr>
<tr>
<td><strong>Minimum Grant Award</strong></td>
<td>$50,000 No Minimum No Minimum</td>
<td>$100,000 No Minimum</td>
<td></td>
</tr>
</tbody>
</table>

**Subaward:**
- Federal Procurement Compliance Applies
- Federal Property Management Requirements Apply

**Rebate:**
- Less Administrative Burden
  - Federal Procurement Compliance Does Not Apply
  - Federal Property Management Requirements Do Not Apply
Applicant Eligibility

<table>
<thead>
<tr>
<th>Applicants</th>
<th>Clean Fleets North Texas 2020</th>
<th>North Texas Emissions Reduction Project 2020</th>
<th>North Texas Freight Terminal Electrification 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicants</td>
<td>Local Governments; Private Companies who Contract with Local Governments</td>
<td>Private Fleets and Companies</td>
<td>Freight Terminals and Distribution Centers</td>
</tr>
<tr>
<td>Clean Fleet Policy</td>
<td>Must Adopt RTC Clean Fleet Policy or Similar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geographic Area</td>
<td>10-County Nonattainment Area</td>
<td>12 Counties (10-County Nonattainment + Hood &amp; Navarro)</td>
<td>10-County Nonattainment Area</td>
</tr>
</tbody>
</table>
## Project Eligibility

<table>
<thead>
<tr>
<th>Eligible Activities</th>
<th>Clean Fleets North Texas 2020</th>
<th>North Texas Emissions Reduction Project 2020</th>
<th>North Texas Freight Terminal Electrification 2020**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace On-Road Diesel Trucks*</td>
<td>Replace Non-Road Diesel Equipment*</td>
<td>Rail and Switch Yards Idling Control Technology Installation</td>
<td>Transport Refrigerated Unit Electrified Parking Spaces (EPS), Power Monitoring Equipment, Electric Power Kit</td>
</tr>
<tr>
<td>16,001 GVWR and Up; Model Year 1996-2006; (Also Model Year 2007-2009 if Replacing with Electric)</td>
<td>Must Operate &gt;500 Hours/Year; Eligible Model Years Vary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Replace Non-Road Diesel Equipment*</td>
<td></td>
<td></td>
<td>**All equipment and installation must be completed by EPA SmartWay Verified Technology Vendor.</td>
</tr>
<tr>
<td>Must Operate &gt;500 Hours/Year; Eligible Model Years Vary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rail and Switch Yards Idling Control Technology Installation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Funding Threshold

<table>
<thead>
<tr>
<th>45% Cost if New is Electric; 35% Cost if New is Powered by Engine Certified to CARB Optional Low-NO\textsubscript{X} Standards (Both Natural Gas and Propane Engines Currently Available); 25% Cost for All Others</th>
<th>30% of unit cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>40% Cost Coverage</td>
<td>**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)</td>
</tr>
</tbody>
</table>
### Eligibility and Selection

<table>
<thead>
<tr>
<th>Eligibility</th>
<th>Clean Fleets North Texas 2020</th>
<th>North Texas Emissions Reduction Project 2020</th>
<th>North Texas Freight Terminal Electrification 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operate in Required Geographic Area</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 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 $\text{NO}_x$ 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 |
<table>
<thead>
<tr>
<th>Milestone</th>
<th>Estimated Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td>STTC Action to Recommend Opening CFPs</td>
<td>September 25, 2020</td>
</tr>
<tr>
<td>RTC Approval of Recommended Opening of CFPs</td>
<td>October 8, 2020</td>
</tr>
<tr>
<td>CFPs Open</td>
<td>October 9, 2020</td>
</tr>
<tr>
<td>Application Deadline (Rolling 90-Day Application Deadline Until Fully Awarded)</td>
<td>January 8, 2021</td>
</tr>
<tr>
<td>Staff Funding Recommendations Finalized</td>
<td>January-February 2021</td>
</tr>
<tr>
<td>STTC Action</td>
<td>March 2021</td>
</tr>
<tr>
<td>RTC Action</td>
<td>April 2021</td>
</tr>
<tr>
<td>Executive Board Authorization</td>
<td>April 2021</td>
</tr>
<tr>
<td>Project Implementation Deadline</td>
<td>March 31, 2022</td>
</tr>
</tbody>
</table>
Recommend 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

Amy Hodges  
Senior Air Quality Planner  
817-704-2508  
AHodges@nctcog.org

Lori Clark  
Program Manager  
DFW Clean Cities Coordinator  
817-695-9232  
LClark@nctcog.org

Jason Brown  
Principal Air Quality Planner  
817-704-2514  
JBrown@nctcog.org

Chris Klaus  
Senior Program Manager  
817-695-9286  
CKlaus@nctcog.org

Website  
www.nctcog.org/aqfunding
COMPUTER EQUIPMENT AND HARDWARE

Action: Request Regional Transportation Council Local Funds due to Federal Buy America Requirements

Computer Turnover, Software, & New Employees* $390,000  (Budgeted as TPF)

COVID-19 Hybrid Office** $260,000  (New + $390,000)

Total: $650,000  RTC Local Funds

*Funds will be reprogrammed to other activities.

**Equipment and Hardware will be cycled into regular use as COVID-19 restrictions are relieved, reducing future purchases. This is an approximate number that is currently being refined.
NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS’ STRATEGIC TRAFFIC SIGNAL PROGRAM

Surface Transportation Technical Committee
Marian Thompson, P.E.
September 25, 2020
Current Traffic Signal Retiming Program

• Call for Projects
• Selection based on volume, environmental justice, communication, multi-modal, multi-jurisdictional, data cloud, number of locations, etc.
• Data collection – before and after conditions
• Utilize contractors to develop traffic signal timing plans
• Offered separate program for equipment upgrades
• Track traffic signal layers in GIS
Proposed Approach

- Establish Regional Minimum Standards, Policies, and/or Goals
- Traffic Signal Assessment by Signal
- Traffic Signal Performance Evaluation
- Identify Traffic Signals that Need Improvements
- Continue Monitoring and Maintenance
- Fund Improvements
Regional Standards, Policies, and/or Goals

Phase 1
- Traffic Signal Equipment Minimum Standards
- Minimum Maintenance Standards

Future Phase:
- Communications
- Data Sharing
- Cycle Lengths
- Clearance Times
- Joint Operations
- Eliminate Left Turns / Michigan Left
- Flashing Yellow Arrow
- Others
Traffic Signal Assessment by Signal

1. Assets at Each Signal Intersection
2. Based on Minimum Equipment Standards
3. Develop Survey
4. Develop Live Web Interface with Log-In
5. City Staff or Consultant Assistance
6. Allows for Continuous Updates
Traffic Signal Performance Measures

Region-Wide Data - Pilot to Test Platforms and Evaluate

1) Safety
   • Crashes

2) Performance
   • Intersection Delay
   • Ratio of Arrival on Red/Green
   • Travel Times
   • Origin/Destination
   • Multiple Jurisdictional Pass Thru Traffic
   • Others
Fund Improvements

Traffic Signal Equipment + Traffic Signal Performance = Identify Need

1. Signal Retiming
2. Signal Equipment
3. Signal Software
4. Capacity Improvement
5. Others

Funds to Continue to Operate and Maintain
Traffic Signal Data and Monitoring

• Integrate System to Share Data
• Monitor Assets
• Monitor Performance
• Set Triggers
  - Maintenance
  - Operations
  - Capacity
  - Jurisdictional Incompatibility
Existing Funding – Staff / Existing Consultant

Develop Traffic Signal Minimum Equipment Standards
Develop Survey Questions
Develop Online Interface

Timeframe: Fall 2020 – Spring 2021
Future Funding (FY 2021 and 2023)

Evaluate Performance Monitoring Platforms – Pilot
Set Thresholds
Apply to Survey and Performance Monitoring
Select and Fund Improvements
Continue to Monitor and Maintain

Timeframe: Summer 2021 and Beyond
Complementary Pilot Projects

Emergency Vehicle Pre-emption
  Impact of Emergency Vehicle Pre-emption on Traffic Signal Operations
  Submitted TxDOT Research Statement
  If Not Accepted, Identify Other Funding

Optimized Freight Movement Project
  Freight Hubs Linked to Expressway Through Improved Traffic Signal Operations
  $5 Million to Review and Implement
  Findings Feed Into Regional Traffic Signal Program
Questions, Feedback, Other Ideas

Natalie Bettger
Senior Program Manager
nbettger@nctcog.org
817-695-9280

Gregory Masota
Transportation Planner
gmasota@nctcog.org
817-695-9264

Marian Thompson. P.E.
Transportation System Operations Supervisor
mthompson@nctcog.org
817-608-2336
Enhancing Freight and Passenger Rail Coordination: Clear Path™ Technology

Surface Transportation Technical Committee
September 25, 2020

Jeff Hathcock, Program Manager
NCTCOG Transportation Department
A HISTORY OF COLLABORATION

Regional Rail Partner Coordination

Grade Crossing Separations/Grade Crossing Closings

Major Track Projects (Tower 55)

Project Coordination

Rail Studies

Technology Solutions (PTC)

Grant Submittals

BUILD Grant Award $25 Million, includes $2.5 Million for Clear Path™
COORDINATION VISION

Major Transit Corridor Recommendations

Recommended Rail
Existing Rail
Recommended High-Intensity Bus

Dallas CBD
Fort Worth CBD

Facility recommendations indicate transportation need. Corridor-specific alignment, design, and operational characteristics will be determined through ongoing project development.
Implementation of Clear Path™ Technology

In use in the Greater Chicago Area

Innovative response to maximizing operational efficiency

Will enable all rail agencies to exchange timely, accurate, and actionable information

Courtesy of Railinc
CURRENT AND FUTURE CONSIDERATIONS

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

Courtesy of Railinc
Current Tasks

Coordinate with senior leadership to establish guidelines and parameters for implementing Clear Path™ Technology

Request Action from RTC in October

### Rail Agencies

- DART
- Trinity Metro
- DCTA
- TRE
- BNSF Railway
- Union Pacific Railroad
- FWWR
- DGNO
- KCS
CONTACT INFORMATION

Jeff Hathcock
Program Manager
817-608-2354
JHathcock@nctcog.org

Collin Moffett
Transportation Planner
817-695-9252
CMoffett@nctcog.org

Dan Lamers
Senior Program Manager
817-695-9263
DLamers@nctcog.org

Mike Johnson
Senior Transportation Planner
817-695-9160
MJJohnson@nctcog.org
CHANGING MOBILITY
DATA, INSIGHTS, AND DELIVERING INNOVATIVE PROJECTS DURING COVID RECOVERY

Surface Transportation Technical Committee
September 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 (22%, July)

Freeway Volumes (-10%, July)
Toll Road (-27%, June)
Transit Ridership (-55%, July)
Airport Passengers (-60%, July)
ROADWAY TRENDS

Average Weekday Freeway Volumes

Traffic Decrease vs 2019

- Match: -9.9%
- April: -27.8%
- May: -18.7%
- June: -11.8%
- July: -10.2%

Source: TxDOT Dallas/TxDOT Fort Worth Radar Traffic Counters
ROADWAY TRENDS
Regional Average Freeway Speeds

Average Weekday Speeds, Weighted by Traffic Volume

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

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.

Increase in Full Week Trail Usage: 2019 vs 2020

January: 17%
February: 19%
March: 50%
April: 71%
May: 78%
June: 54%
July: 22%
AIRPORT TRENDS

Change in Airport Passengers - 2019 vs 2020

Source: Dallas Love Field Website and DFWIA data
Metric 2: FINANCIAL IMPLICATIONS TO TRADITIONAL TRANSPORTATION REVENUE
FUNDING IMPACT

Transit - Sales Tax Allocations

Sales Taxes Allocated For Transit:
2019 vs 2020

Feb: -2% 4%
Mar: -2% -8%
Apr: -8% -12%
May: -9% -14%
Jun: -1% -12%
Jul: -1.4% -4.0%

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 7\textsuperscript{1})

Change in Fuel Tax: 2019 vs 2020

Source: Texas Comptroller of Public Accounts

\textsuperscript{1} Proposition 7 includes General State Sales Tax and Motor Vehicle Sales Tax

Month reflects reporting date, not collection date
Motor Vehicle Sales and Rental Tax (Component of Proposition 7\(^1\))

<table>
<thead>
<tr>
<th>Month</th>
<th>Change: 2020 vs 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>February</td>
<td>2.1%</td>
</tr>
<tr>
<td>March</td>
<td>-2.6%</td>
</tr>
<tr>
<td>April</td>
<td>-44.7%</td>
</tr>
<tr>
<td>May</td>
<td>-38.2%</td>
</tr>
<tr>
<td>June</td>
<td>-7.6%</td>
</tr>
<tr>
<td>July</td>
<td>-3.7%</td>
</tr>
<tr>
<td>August</td>
<td>-4.1%</td>
</tr>
</tbody>
</table>

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

Projected in July 2020 Revised Comptroller Certification Revenue Estimate

Source: Texas Comptroller of Public Accounts
FUNDING IMPACT

NTTA Transactions, Including SH 360

Change in Tollway Transactions: 2019 vs 2020

January  February  March  April  May  June
1.4%  14.20%  18.70%  -29.3%  -14.5%  -56.6%
4.6%  -29.3%  -56.6%  -37.6%  -21.6%  -26.5%

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

- February 14.8%
- March -31.4%
- April -73.6%
- May -60.2%
- June -40.6%

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
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

Sources: Federal Highway Administration, McKinsey & Company
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

Surface Transportation Technical Committee
September 25, 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
NTCMT Functions

R&D network for mobility-related companies and public agencies
Attract industry and academic talent to North Texas
Develop mobility-related university research capabilities in DFW
Facilitate communication and collaboration among universities
University-public sector partnerships on mobility-related projects
Workforce development
Model for similar North Texas university networks in other industries
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. Transportation Director makes final decision on research project funding request

4. Funded research projects described in Director’s Report (STTC and RTC)

5. 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

Thomas Bamonte, NCTCOG
Senior Program Manager, Automated Vehicles
tbamonte@nctcog.org
@TomBamonte
NATIONAL DRIVE ELECTRIC WEEK PAST SUCCESS

- Raising Awareness & Education of Electric Vehicles
- Providing Opportunities for Direct Conversation with EV Owners
- Creating Opportunities for Ride and Drives
- 2nd Largest Event Nationwide

Source: NCTCOG

<table>
<thead>
<tr>
<th>Year</th>
<th>Participant Count</th>
<th>EV Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>350</td>
<td>128</td>
</tr>
<tr>
<td>2017</td>
<td>400</td>
<td>155</td>
</tr>
<tr>
<td>2018</td>
<td>627</td>
<td>169</td>
</tr>
<tr>
<td>2019</td>
<td>647</td>
<td>186</td>
</tr>
</tbody>
</table>

Source: Ken Oltmann/Coserv
September 26, 2020 at 1 pm
2-Hour “Live” Virtual Event will Include:
• EV 101 Pioneers Panel
• Video Message From Dallas Mayor Eric Johnson
• EV Driver-Produced Testimonials
• Video Highlighting Trinity Metro’s DASH Bus
• Video From Race Car Driver and EV Advocate Leilani Munter
Second Annual Oncor EV Road Rally – Various Dates/Times

• Courses/Timing Determined by Participating Local Governments
  • Confirmed Participants: Allen, Dallas, Irving, Jacksonville, and Southlake
• EV Drivers Travel a Series of Waypoints, Snap Photos, Log Time
• Oncor Awards Cash Prize to the Winning Team (Most “Correct” Time)

Local Government Fleet EV Roundtable – Thursday, October 1, 10:30am - 12pm

Questions and Discussion On:
• EV Implementation Experiences
• EV Potential Savings
• Potential EV Applications Right for your Fleet

Using Clean Cities Tools to Implement EV and EV Infrastructure Goals – Thursday, October 1, 2-4 pm

• Find Number of EVs Registered to City/County/Zip
• Use Online Tools to Locate Existing Charging Stations
• Determine Additional Charging Stations Needed to Support EV Growth
• Discuss Key Considerations for Siting EV Stations

Source: Oncor

www.driveelectricdfw.org
NORTH TEXAS ELECTRIC VEHICLE REGISTRATION TRENDS

NCTCOG EV Registration Tools:
North Texas
Statewide
Historic Trendline

Tools: www.dfwcleancities.org/evnt

12,821 EVs
In North Texas as of September 2020

35%
2019 North Texas EV Growth Rate

North Texas EV Fleet Composition
72% BEV / 28% PHEV
## Municipalities with EVs

<table>
<thead>
<tr>
<th>Arlington</th>
<th>Benbrook</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrollton</td>
<td>Cedar Hill</td>
</tr>
<tr>
<td>Coppell</td>
<td>Dallas</td>
</tr>
<tr>
<td>Denton</td>
<td>Euless</td>
</tr>
<tr>
<td>Farmers Branch</td>
<td>Frisco</td>
</tr>
<tr>
<td>Garland</td>
<td>Grapevine</td>
</tr>
<tr>
<td>Irving</td>
<td>Lewisville</td>
</tr>
<tr>
<td>McKinney</td>
<td>Mesquite</td>
</tr>
<tr>
<td>North Richland Hills</td>
<td>Plano</td>
</tr>
<tr>
<td>Richardson</td>
<td>Southlake</td>
</tr>
<tr>
<td>Addison</td>
<td>Flower Mound</td>
</tr>
</tbody>
</table>

### Lewisville Case Study
- 10 BEVs
- 14 HEVs
- Saves $1,000 annually on Maintenance
- 2 Cents per mile in Charging Costs
- 150-260 miles of Range per charge.

[https://www.dfwcleancities.org/successstories](https://www.dfwcleancities.org/successstories)
LOCAL ELECTRIC VEHICLE SUCCESSES

Transit Electric Vehicle Successes:

**DART:**
- 7 Heavy-Duty Electric Transit Buses
- Reduced 255 pounds Nitrogen Oxides and 116 Tons GHGs in 2019

**Trinity Metro:**
- 4 Heavy-Duty Electric Transit Buses
- Reduced 95 pounds Nitrogen Oxides and 43 Tons GHGs in 2019

**Everman ISD:**
- 3 Electric School Buses - First in Texas
- Expected to Reduce 51 pounds of Nitrogen Oxides and 18 Tons GHGs per Year
- Received Texas Volkswagen Environmental Mitigation Program Grant of $969,295

LOCAL ELECTRIC VEHICLE DATA COLLECTION PROGRAM

Electric Vehicle Widescale Analysis for Tomorrow’s Transportation Solutions (EV-WATTS)
• Collect Real-World Use Data from EVs and EV Charging Stations
• Share Aggregated & Anonymized Data with Department of Energy, National Laboratories, and the Public
• Leverage Local Clean Cities Coalitions for Local Fleet and Driver Connections

Requirements To Participate:
• Own/Operate EVs (Both Battery-Electric and Plug-In Hybrid Desired)
• Share Existing Telematics Data OR Allow Installation of Free Data Loggers
• Share Data from Networked EV Charging Stations (Must Have Data Rights)

Contact bmuller@nctcog.org for More Information
ELECTRIC VEHICLE FUNDING

- Up to $7,500: Plug-In Electric Drive Vehicle Tax Credit
- Up to $2,500: Texas Light-Duty Motor Vehicle Purchase or Lease Incentive Program
- Up to $2,500, Not to Exceed 70% Per Activity: Texas Volkswagen Environmental Mitigation Program Now Accepting Applications for Level 2 Charging Stations

AQ Funding Website: [https://www.nctcog.org/aqfunding](https://www.nctcog.org/aqfunding)
FOR MORE INFORMATION:

Bethany Hyatt
Air Quality Planner
(817) 704 5663
Bhyatt@nctcog.org

Lori Clark
Program Manager and
DFW Clean Cities Coordinator
(817) 695-9232
Lclark@nctcog.org

www.dfwcleancities.org
cleancities@nctcog.org
CURB MANAGEMENT
REGIONAL PLANNING GUIDE

Surface Transportation Technical Committee

Shawn Conrad

September 25, 2020
What is Curb Management?

Any intentional practice to bring order to the curb and determine specific priorities for space.

Ranges from signage/striping distinguishing the public ROW to permanent curb changes, geofencing, or designated pickup/drop-off areas.
Why is Curb Management Important?

- Can make access more equitable
- Improves level of service for multiple competing modes
- Facilitates data collection for planning
- Enables planning for new technologies using the curb
- Can facilitate monetizing the curb
Balancing Competing Curb Uses

In most cities, streets constitute the largest percentage of public space, and this space must be equitably distributed between the needs of the many different users of urban streets. Design must accommodate people walking, cycling, taking transit, enjoying public spaces, providing city services, doing business, or driving. This chapter identifies design elements and strategies to support safe and inviting spaces for the variety of people using urban streets.

**Pedestrians**
- Include people of all abilities, and aging, sitting, waiting, and resting within urban areas. Designing for pedestrians means making streets accessible to the most vulnerable users.

**Cyclists**
- Include people on bicycles, electric scooters, and skateboarders. Facilities should be safe, direct, intuitive, clearly delineated, and part of a coherent network.

**Transit Riders**
- Transit riders are people using collective transport such as bus, rail, or intercity vehicles. This sustainable mode of transportation dramatically increases the overall capacity and efficiency of the street. Dedicated space for transit supports convenience, reliability, and affordable service for riders.

**Motorists**
- Motorists are people driving personal motor vehicles for on-demand, point-to-point transportation. This includes drivers of private cars, for-hire vehicles, and motorized two- and three-wheelers.

**Freight Operators and Service Providers**
- Freight operators and service providers are people driving vehicles that move goods or conduct critical city services. These users benefit from dedicated access and utilization of space for easy loading and unloading, as well as dedicated routes and hours of operation.

**People Doing Business**
- People doing business include vendors, street stall operators, and users of commercial spaces. These users provide important services that support vibrant, active, and engaging street environments. Allocation of space should be allocated to these users.

Design elements include
- Level signage
- Bike lanes
- Sidewalks
- Street furniture
- Public art
- Street lighting
NCTCOG Curb Management Workshop

Held February 5, 2020 with attendees from across the region

Topics:
• Importance of curb management
• Planning for a dynamic curb
• Planning for curb in a variety of settings

Workshop materials online at: www.nctcog.org/parking → Parking Events and Symposia
Completed March 2020

Includes:
- Curb management best practices
- Tools for planning in a variety of contexts, assigning priorities, and evaluating tradeoffs
- Data collection and evaluation guidance
 Communities in this stage are just beginning their curb management journey. They may have curb, gutter, and sidewalks in some or most areas, and have clearly delineated where the public right-of-way is located.

 Communities in this stage are starting to enforce rules and regulations at the curb, such as parking time limits, loading zones, vehicle storage and abandonment ordinances, and others.

 Communities in this stage have started to add public elements to the curb, such as sidewalk improvements, standard bike lanes, and other streetscaping.

 Communities in this stage have allocated portions of the right-of-way to active modes of travel, like separated bike lanes and enhanced bus stops.

 Communities in this stage are using the right-of-way to create travel areas for their transit systems, such as dedicated bus lanes and protected bike lanes.

 Communities in this stage have started to monetize the curb through paid on-street parking.

 Communities in this stage are accommodating other demands at the curb, such as parklets, Uber and Lyft pick up and drop off, and enhanced commercial delivery loading zones. Uses for these zones may change throughout the day to accommodate demand.
Curb Management Regional Planning Guide

Land Uses Best Suited for Curb Management
- Central Business Districts
- Downtowns
- Entertainment Districts (theaters, stadiums, arenas)
- Mixed-Use Developments
- Shopping Destinations
- Airports
- Hospitals
- College Campuses

Land Uses that Typically Don’t Need Curb Management
- Single Family Residential Neighborhoods
- Big Box Stores

Who are the primary user groups?
- Pedestrians
- Cyclists
- Transit (bus or rail)
- Vehicles
- Delivery

What types of land uses are present?
- Commercial, retail, offices
- Restaurants, bars, cafes
- Mixed-use developments

What are the primary activities occurring at the curb?
- Transportation and mobility
- Social gathering: street furniture, public art, parklets, street festivals, food trucks
- Retail & Shopping: restaurants, outdoor dining, cafes, shops
- Pickup/drop-off: TNCs, deliveries
- Parking

What are the communities’ goals for the curb? Consider citywide mobility & planning goals.
- Reduce single occupancy vehicle mode share
- Improve pedestrian walkability
- Increase transit service
- Reduce vehicle congestion
- Accommodate pickup/drop-off activities
- Improve safety for bike and pedestrian activity
- Reduce conflicts between various modes and activities
- Provide on-street parking for surrounding land uses
- Reduce on-street parking
- Increase turnover of on-street parking
- Encourage economic development
- Provide space for social gathering
- Bringing order and safety
Curb Management Regional Planning Guide

Available online at
www.nctcog.org/parking
Contacts

Karla Weaver, AICP
Senior Program Manager
kweaver@nctcog.org

Shawn Conrad
Principal Transportation Planner
sconrad@nctcog.org