EFFECT OF COVID-19 RESTRICTIONS ON TRANSPORTATION AND ENDORSEMENT OF ECONOMIC OPPORTUNITIES

SURFACE TRANSPORTATION TECHNICAL COMMITTEE

June 26, 2020

Michael Morris, P.E.

Director of Transportation

DO WHAT WE NEED, NOT WHAT WE WANT

Existing Funding Constraints

Financial Crisis Response from 2009

Lower Cost of Construction (25%)

Federal Infrastructure

State P3

0% Interest

Large Technology Jumps

Formula Allocation

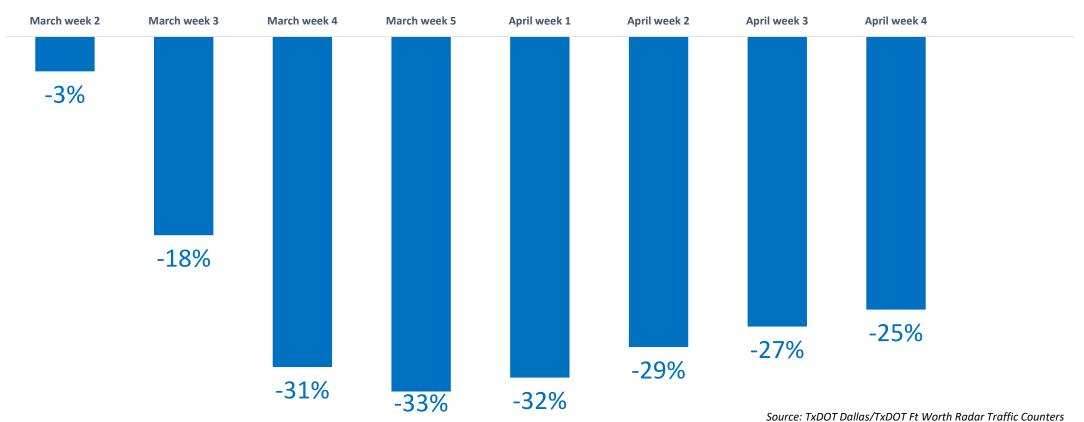
POLICY METRICS: RTC4U

- 1. Travel behavior response to COVID-19
- 2. Financial implications to traditional revenue sources
- 3. Benefits of travel behavior responses to areas of RTC responsibility (e.g., Congestion Management System, national performance measures, ozone standard)
- 4. Prioritization of infrastructure improvements that offset unemployment increases

Metric 1: Travel behavior response to COVID-19

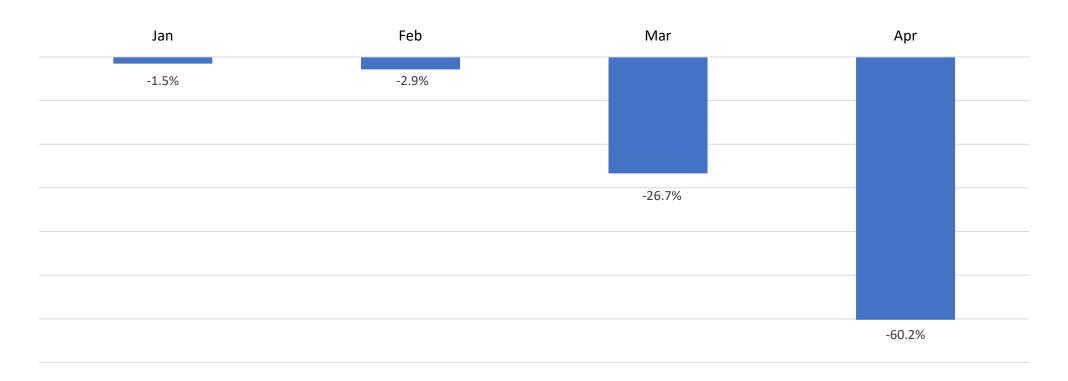
Weekly Freeway Volumes

Decrease in Traffic with respect to First Week of March 2020



Transit Ridership Trend

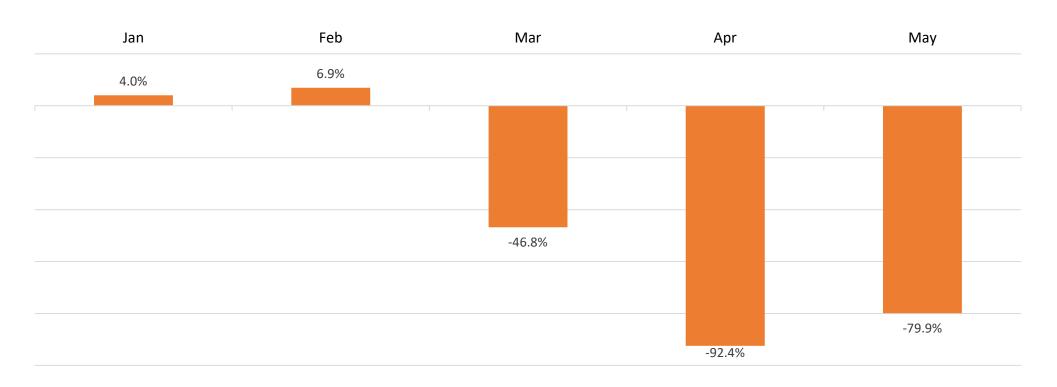
Percent Change of Transit Passengers: 2019 vs 2020



Source: DART, DCTA, and Trinity Metro

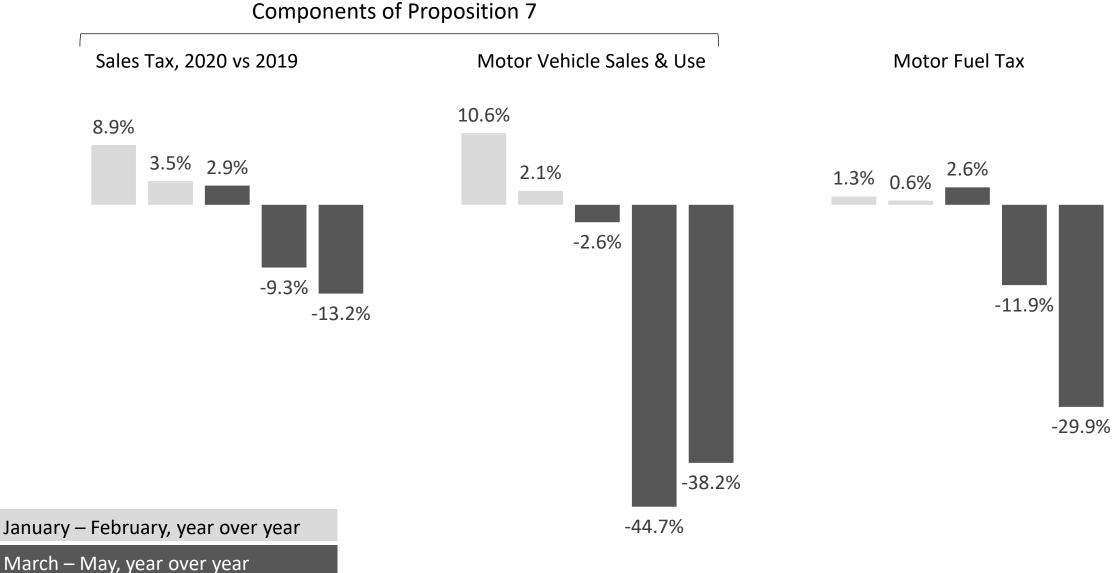
Airport Passenger Trends

Percent Change of Airport Passengers: 2019 vs 2020



Metric 2: Financial Implications to traditional transportation revenue

State Transportation Revenue Trends



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

REGIONAL AIR QUALITY IMPACTS DURING COVID-19

Reduced Vehicle Emissions

Lowest Frequency of High-Level, Unhealthy Ozone Exposure Days (prior to exceedances on May 17, 2020)

Cleaner Air = Blue(r) Skies

Positive Health Impacts? (Under Review)

How Can We Sustain Impacts? (To be Determined)
Electric and Fuel Cell Vehicles
Travel Demand Management (Telecommuting)

Exceedances influenced by high background levels

Real world analysis on local contributions suggest multi-state SIP's to reduce background

CANDIDATE PROJECTS

High Speed Rail: Dallas to Houston (FEIS Released May/June)

High Speed Rail: Dallas to Fort Worth

Hyperloop Certification Center (Governor's Letter Anticipated)

Autonomous Transit (GM, Midtown)

Freeway Induction Loops

State Highway 183 (Section 2E+)

Y Connector (FEIS June 4 − 22, 2020)

COVID-19 #00X Program

INCOMING PRIVATE SECTOR REVENUE FOR NORTH TARRANT EXPRESS (NTE)/SH 183

Per prior RTC direction, staff continues to work with TxDOT and private sector partners to complete additional phases of the NTE and other public/private partnership projects.

Recent projections indicate that general purpose and managed lane capacity improvements are anticipated to be triggered in mid-2022 with an open to traffic date of June 2024.

The private sector is currently coordinating with TxDOT to advance the first item.

The private sector partner will be paying for these improvements in these amounts:

Capacity Improvements	\$ in Millions	Notes
SH 183/NTE Segment 1 (from IH 35W/IH 820 Interchange to West of IH 820/SH 121 interchange) & 2W (from E. of	\$162	Add 1 general purpose lane in NTE Segment 1 and 1
Bedford/Euless Rd to E. of Westpark Way) Widening		managed lane in NTE Segment 2W
Build 2+2 managed lanes from Reliance Parkway to SH	\$860	This 5.3 mile section would be built and operated by
161 (former Segment 2E)		private sector as an extension of the current facility
Build 2+2 managed lane from SH 161 to Story Rd	\$270	Funding Cintra would pay to TxDOT to lane balance east of SH 161 (2 miles)
		0431 01 311 101 (2 1111103)

ENGINEERING FOR THE NORTH TARRANT EXPRESS (NTE)/SH 183 PROJECT

Cintra is coordinating with TxDOT to implement this project, engineering is anticipated to begin in approximately six months.

In order to continue advancing this project, staff proposes to provided a \$3,000,000 financial backstop in order to expedite engineering now. It is anticipated the financial backstop will use RTC Local funds.

Cintra will perform the design work under current TxDOT agreement. Once the project is initiated by TxDOT, RTC will be released of its financial commitment.

INVENTORY OF COVID-19 PROJECTS TO DATE¹

COVID-19 #001: Loop 9 Cost Overrun: \$17.3M, STBG

(June 2020 RTC Agenda Item 5)

COVID-19 #002: IH 35E at Frankford Rd: \$5M, STBG

(June 2020 RTC Agenda Item 5)

COVID-19 #003: IH 45 at Dowdy Ferry Rd: \$3.7M, CMAQ

(June 2020 RTC Agenda Item 6)

COVID-19 #004: Tripp Rd: \$800K, RTR

(June 2020 RTC Agenda Item 6)

Notes:

¹ Anticipate adding projects to inventory in 2020 and 2021

NHL STANLEY CUP (COMPETING AGAINST 10 CITIES)

TWO SELECTIONS

12 Teams at Dallas Omni (Lamar Street)

Games at American Airlines Center

Practice Throughout Region

Transportation Need (RTC Local Funds)

Events August and September

Announcement: Week of June 22, 2020

History: Stanley Cup and Winter Classic in Same Season

Proposed Staff Action: By June 15, 2020

STTC Endorsement: June 26, 2020

RTC Ratification: July 9, 2020

Executive Board Endorsement









2020 NCTCOG Incident Management Equipment Purchase Call for Projects Updated Recommendations

Surface Transportation Technical Committee

Camille Fountain June 26, 2020













Updates to 2020 NCTCOG Incident Management Equipment Purchase Call for Projects Recommendations Since May 2020 Meeting

Shifted Town of Flower Mound from Western Subregion Recommendations to Eastern Subregion Recommendations

Removed Opticom and Drone Project Recommendations from Final Recommendations List Due to Eligibility Requirements

Reranked Project Recommendations Based on Changes Above

All Other Previously Recommended Projects Will Be Funded

Requesting Allocation of Regional Toll Revenue (RTR) Funds to Implement the Incident Management Blocking Equipment Pilot Project







2020 NCTCOG Incident Management Equipment Purchase Call for Projects

Purpose: To Assist Partner Agencies in Purchasing Equipment and Technology that Aid in Quick Incident Clearance and Mitigation

Supports: Current Incident Management Training Recommendation to Use Best Practice Equipment and Technology

Emphasizes: Importance of Implementing Incident Management Strategies and Training









Eligible Recipients and Activities

Eligible Recipients

- Public Sector Partner Agencies within the NCTCOG 10-County Nonattainment Area Actively Involved in Incident Management
 - Police, Fire/EMS, Courtesy Patrol, etc.

Eligible Activities

- Purchase of Equipment and Technology Used in Mitigating Crashes
 - Examples include: traffic barriers, cones, flares, protective clothing, signs, barrels, lighting, radio equipment, crash reconstruction technology, etc.

Ineligible Activities

- Personnel and Staffing Charges
- Vehicle Purchases (Due to Lack of FHWA Buy America Exemptions for Vehicles)









Funding Availability and Submitted Projects

\$1.5 Million Available

Funding Split:

66% Eastern Sub-Region = \$ 990,000

34% Western Sub-Region = \$ 510,000

Local Match – Regional Transportation Council TDCs

Total Applications & Funding Requests Received: 21 applicants (44 projects) – \$2,670,614

Applications & Funding Received (East): 15 – (31 projects) – \$1,584,312

Applications & Funding Received (West): 6 - (13 projects) - \$1,086,302

Ineligible Projects

Ineligible Projects Received (East): 5 applications (6 projects) – \$513,809 Ineligible Projects Received (West): 1 application (3 projects) – \$782,500

Blocking equipment requests will be funded using a local funding source as part of an Incident Management Equipment Blocking Pilot Project.

Blocking Projects Received (East): 3 applications (4 projects) - \$132,000









Eastern Sub-Region Applications

- 1. City of Balch Springs 3 Projects
- 2. Cedar Hill Police Department 1 Project
- 3. City of Dallas 2 Projects
- 4. Dallas County Sheriff's Office 1 Project
- 5. Farmersville Police Department 1 Project
- 6. City of Frisco 2 Projects (Including 1 Ineligible Project)
- 7. City of Grand Prairie 2 Projects (Crash Attenuator/Blocking Projects)
- 8. Irving Police Department 2 Projects
- 9. Kaufman Police and Fire Departments (Joint Application) 4 Projects
- 10. City of Lucas 1 Project (Ineligible Vehicle Project)
- 11. City of Mesquite Fire Department 1 Project (Crash Attenuator/ Blocking Project)
- 12. City of Richardson 3 Projects (Including 1 Ineligible Project)
- 13. City of Terrell 2 Projects
- 14. Town of Flower Mound 3 Projects (Including 1 Ineligible Project and 1 Crash Attenuator/Blocking Project)
- 15. Town of Prosper 3 Projects (Including 1 Ineligible Project)









Western Sub-Region Applications

- 1. City of Colleyville 1 Project
- 2. City of Fort Worth 4 Projects (Including 3 Ineligible Projects)
- 3. Fort Worth Police Department 4 Projects
- 4. City of Keller 2 Projects
- 5. North Richland Hills Fire Department 1 Project
- 6. North Richland Hills Police Department 1 Project









Scoring Criteria

Scoring Component	Available Points
TIM Training Attendance - NCTCOG or In-house (Since August 2013)	15
Crash Data in Jurisdiction (2014 - 2018)	10
Adoption of Incident Management Resolution	10
Incident Management Goals/Targets in Place	5
Completion of Incident Management Commitment Level Survey	5
Adoption/Implementation of Regional Performance Measure Standard Definitions	5
Explanation of How Equipment will be Used to Mitigate Crashes	50
Total Score	100









Scoring Methodology

Recent TIM Training Attendance (NCTCOG or In-House) – as of August 2013

0 Points – No TIM Training

7.5 Points – Police or Fire Participation

15 Points – Police AND Fire Participations

Incident Management Survey Completion

0 Points – Not Completed

5 Points – Completed

Crash Data in Jurisdiction

5 Points - Crash Rate Below County Rate

10 Points – Crash Rate Above County Rate

Adoption of Incident Management Resolution

0 Points - Not Adopted

10 Points – Adopted









Scoring Methodology (Cont.)

Adoption/Implementation of Regional Performance Measure Standard Definitions

0 Points – Have Not Adopted/Implemented Regional Performance Measure Standard Definitions

5 Points – Have Adopted/Implemented Regional Performance Measure Standard Definitions

Incident Management Goals/Target in Place

0 Points - No Goals/Targets

2.5 Points – Goals/Targets without Measurements

5 Points – Goals/Targets with Measurements

Equipment Description and Explanation

15 Points – Detailed/Clear Project Description with Pictures and Specifications

20 Points - FIM Best Practice

15 Points – Innovativeness









Project Rankings – Eastern Sub-Region (*Projects Recommended for Funding*)

	City/Agency Name	Cost	Project Name
1	City of Balch Springs	\$31,190	Portable Solar Message Boards
2	City of Balch Springs	\$7,760	Traffic Control & Scene Management Equipment
3	City of Frisco	\$245,000	Closest To Dispatching Enhancement
4	Dallas County Sheriff's Office	\$66,540	Highway Incident Reporting Software & Equipment
5	City of Balch Springs	\$8,160	Radio & Communication Equipment
6	Town of Prosper	\$68,505	Thermal Imaging Cameras
7	Town of Prosper	\$3,200	Traffic Safety Vests
8	City of Dallas	\$38,500	LED Active Lighting Reflective Safety Vests
9	City of Dallas	\$70,000	Portable Hand-held Radios
10	City of Terrell	\$70,522	FARO Laser Scanner System
11	Kaufman Police & Fire Department	\$16,595	Portable Message Board
12	Kaufman Police & Fire Department	\$9,300	Arrowboard Trailers
13	Kaufman Police & Fire Department	\$2,400	Reflective Class 2 Vests
14	Kaufman Police & Fire Department	\$950	Traffic Cones
15	City of Terrell	\$9,307	Traffic Control & Scene Management Equipment
16	Town of Flower Mound	\$54,250	Response Trailer & Equipment
17	Irving Police Department	\$5,585	Crash Data Recovery Kit
18	Farmersville Police Department	\$9,042	Speed Trailer & Equipment
19	City of Richardson	\$57,590	FARO 3D Scanner
20	City of Richardson	\$39,790	Video Management System
21	Cedar Hill Police Department	\$26,570	Dynamic Message Signs
22	Irving Police Department	\$98,384	Traffic Control, Safety & Personal Protective Equipment
	Total	\$939,140	









Project Rankings – Western Sub-Region (*Projects Recommended for Funding*)

	City/Agency Name	Cost	Project Name
1	North Richland Hills Police Department	\$27,338	Crash Data Retrieval Premium Kit
2	North Richland Hills Fire Department	\$27,285	HAAS Alert Safety Cloud Service
3	City of Keller	\$32,000	Crash Data Retrieval Kit (CDR)
4	City of Colleyville	\$40,000	Portable Radios and Batteries
5	City of Keller	\$24,700	Traffic Control & Scene Management Equipment
6	Fort Worth Police Department	\$6,150	Traffic Cones
7	Fort Worth Police Department	\$3,480	Roadside Assistance Equipment
8	Fort Worth Police Department	\$2,669	Tow/Recovery Equipment
9	Fort Worth Police Department	\$32,680	PPE Equipment
10	City of Fort Worth	\$107,500	Pan-Till-Zoom Camera
	Total	<u>\$303,802</u>	









Updated 2020 IM CFP Recommendations

Total Recommended Funding:\$1,242,942Funding Recommended (East):\$ 939,140Funding Recommended (West):\$ 303,802

Where appropriate, small equipment and materials purchases may be carried out by NCTCOG through a consolidated purchase or through cooperative purchase organizations that comply with federal requirements.

Ineligible Projects Submitted in Eastern Sub-Region

- City of Frisco Drones \$5,000
- City of Lucas Emergency Traffic Incident Management Vehicle \$70,000
- City of Richardson Opticom System Upgrade \$79,253
- Town of Flower Mound GPS Opticom System Upgrade (Year 1) \$185,210
- Town of Flower Mound GPS Opticom System Upgrade (Year 2) \$153,715
- Town of Prosper Drones (Accident Mapping UAS) \$20,631

Ineligible Projects Submitted in Western Sub-Region

- City of Fort Worth Portable Traffic Signal \$90,000
- City of Fort Worth Advanced Traffic Signal Detector \$400,000
- City of Fort Worth Battery Back-up Unit \$275,000
- City of Fort Worth Pan-Tilt-Zoom Cameras \$17,500 (Funding reduced due to system redundancy.)









Schedule *

Date	Action
December 18, 2019	Opened Call for Projects (60 days)
February 21, 2020	Closed Call for Projects
Feb. 2020 - March 2020	Evaluate Submitted Proposals (30 days)
April 7 – April 17, 2020	Regional Safety Advisory Committee (RSAC) Evaluation & Comment Period
April 13 - May 12, 2020	Public Input Comment Submittal Period
May 22, 2020	STTC (Action) - Approval of Selected Projects
June 26, 2020	STTC (Action) – Approval of Selected Projects - Updated
July 9, 2020	RTC (Action) - Approval of Selected Projects
July 23, 2020	Executive Board Meeting
July 27, 2020	Interlocal Cooperation Agreement Coordination Activities Begin

^{*} Schedule may be impacted by current COVID-19 restrictions.









Proposed Incident Management Blocking Equipment Pilot Project

I. Blocking equipment requests received through this CFP will be funded using RTR Funds if Approved by the Regional Transportation Council

Agency	Project Cost	Project Name
Mesquite Fire Department	\$39,200	Scorpion Attenuator
City of Crond Prairie	\$34,500	Scorpion Blocker
City of Grand Prairie	\$31,400	Scorpion Blocker
Town of Flower Mound	\$26,900	Scorpion Trailer Attenuator and Arrowboard
Grand Total	\$132,000	



Requested Action



Recommend RTC Approval to:





Approve Staff to Administratively Switch Out CMAQ Funds with STBGP Funds for Projects that are not Eligible for CMAQ Funding.



Approve Allocation of \$132,000 in RTR Funding to Implement the Incident Management Blocking Equipment Pilot Project.









Contact Information

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TEMPORARY INTERIM FUNDING (CASH FLOW) FOR AIR QUALITY INITIATIVES

\$4M Funds Anticipated September 2, 2020 (STBG)

Interim Funds \$300,000

Staff Action

STTC Endorsement: June 26, 2020

RTC Ratification: July 9, 2020

Interstate Highway 45 Zero-Emission Vehicle Corridor Plan Update

Surface Transportation Technical Committee June 26, 2020

Bethany Hyatt
Air Quality Planner





Air Quality Emphasis Areas

High-Emitting Vehicles/Equipment Low Speeds Idling

Vehicle Miles of Travel

Energy and Fuel Use Cold Starts Hard Accelerations

Response To FHWA Alternative Fuel **Corridors Deployment Plan Goals**

FHWA Goals:

- Develop an Infrastructure Deployment Plan
- **Transition Designated** Corridors from "Pending" to "Ready"
- Identify Public-Private **Partnerships**

NCTCOG Proposal:

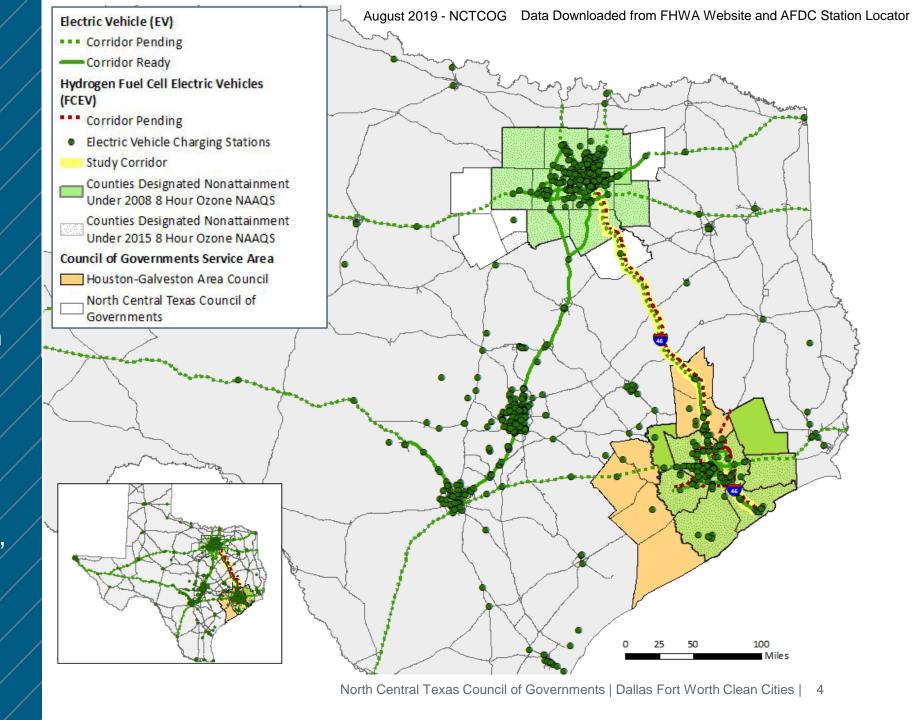
- Develop Electric and Hydrogen corridor along IH-45
- Expand Infrastructure Needs Suitable for Medium and Heavy-duty Electric Trucks and Buses
- Support Future Strategic Initiatives in the Corridor, such as AV Technology Deployment and Truck Platooning

Corridor Profile

290-Mile Corridor

Nearly half of truck freight in Texas is moved through this corridor.

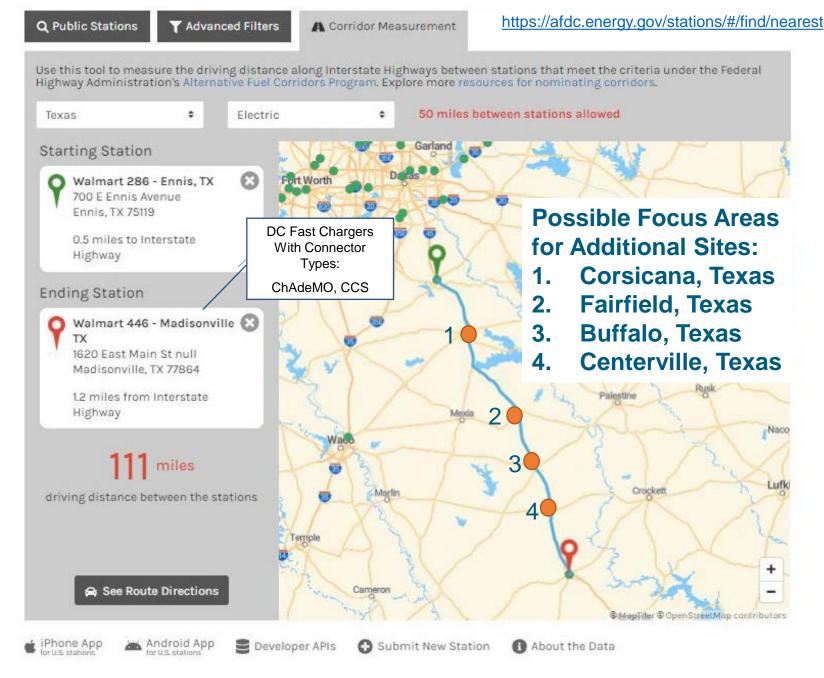
Over 10,000 ton-miles of cargo traveled between Dallas and Houston in 2017, totally over \$62.6 billion.



Current State of Electric Vehicle Supply Equipment (EVSE

One Gap Remaining to Meet "Corridor-Ready" Status per FHWA Criteria: 111 Mile Gap from Ennis to Madisonville

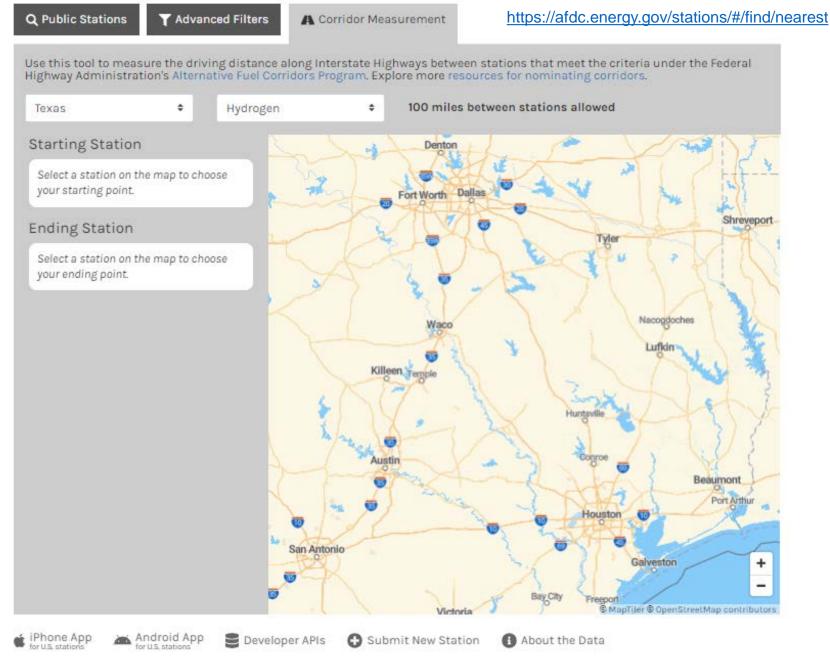
For the corridor to be classified as ready, a station must be placed every 50 miles within 5 miles of IH-45.



Current State of Hydrogen Fueling Stations

There are currently no publicly available hydrogen stations currently in Texas.

For the corridor to be classified as ready, a station must be placed every 100 miles within 5 miles of IH-45.



Through the Plan, NCTCOG Will...



Identify best technologies suitable for vocational needs



Identify best market development opportunities



Develop and convene stakeholder groups including stakeholder perspectives from:

TxDOT

Utilities

Fleets

Fueling Providers

Consumer Interest Groups



Solicit infrastructure needs from industry

Deliverables



Stakeholder Lists



Stakeholder **Meetings**



Corridor Workshops



Case Studies

May 2021



Infrastructure **Deployment Plan**

May 2021

Stakeholder's Role





Infrastructure Development

- Solicit Infrastructure Needs and Criteria
- Identify and Contact Property Owners



Vehicle Availability

- Identify Best Technologies Suitable for **Vocational Needs**
- Evaluate Commercialization Status of Suitable Vehicles



Customer Identification

- Identify and Engage End-User Fleets
- Match User Needs to Vehicle Availability



Policy/Incentives

- Identify and Prioritize Non-Monetary Policies/Incentives
- Assess Existing and Needed Monetary Incentives

For More Information:

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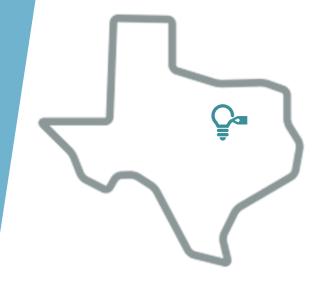
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Local Government Energy Reporting Update

Bailey Muller Surface Transportation Technical Committee June 26, 2020



Air Quality Emphasis Areas

High-Emitting Vehicles/Equipment

Idling

Hard Accelerations

Low Speeds

Cold Starts

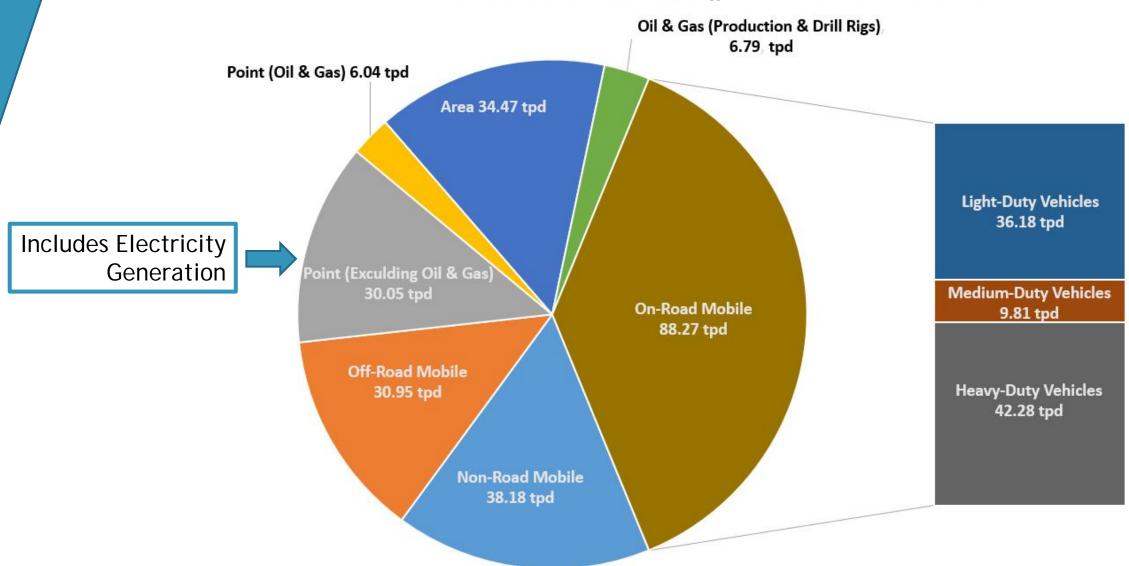
Vehicle Miles of Travel



Energy and Fuel Use

Nitrogen Oxide (NOx) Emission Sources

Total Nitrogen Oxides $(NO_x) = 234.75$ tons per day (tpd)



Regional Energy Management Project

Partnership Within NCTCOG, Between <u>Transportation</u> and <u>Environment & Development</u> Staff

Purpose



- Expand Local Government Staff Capabilities In Energy Management Topics
- Increase Compliance With The State Mandated Energy Reporting Requirements
- Improve Accuracy Of Emissions Reduction Data Associated With Reduced Energy Use

Outcome



- Demonstrate The Value And Benefits Of Increasing Regional Energy Management/Efficiency Education
- Assess The Impact Of Focused Regional Outreach To Serve As An Example For Replication By Regional Organizations Statewide

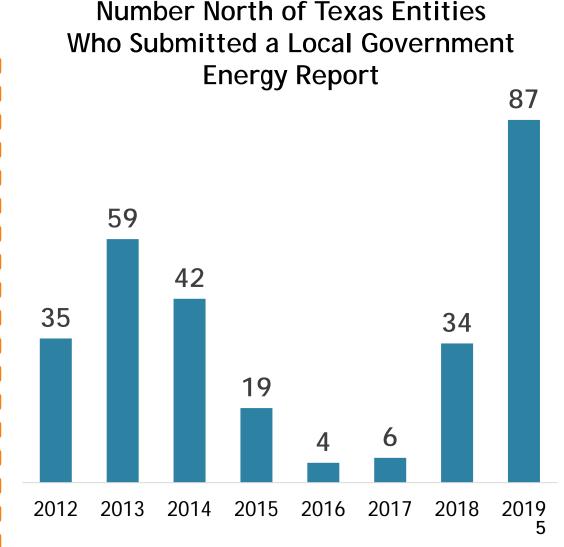
Local Government Energy Reporting Statistics

Section 388.005 (c) Texas Health and Safety Code

Purpose: Aid efforts to attain federal air quality standards by reducing demand for electricity generation

Requirements: All political subdivisions, institutes of higher education, and state agencies in 42 Ozone Nonattainment and Near Nonattainment Counties must establish a goal of reducing electric consumption by at least 5% each state fiscal year for 7 years beginning September 1, 2019* and to submit an annual report to the State Energy Conservation Office (SECO)

Issues: Lack of Awareness, Inconsistency in Reporting Year-to-Year



Source: State Energy Conservation Office (SECO), March 2020

*In 2001, SB 5(77R) required political subdivisions to reduce their electrical consumption by 5 percent over five years beginning Jan. 1, 2002. Subsequent statutes have continued to revise this initial requirement. SB241 (86R) passed most recently to extend the requirement to 2026.

Local Government Energy Reporting Requirement



What's Due?
Annual Report to SECO

Reports used by Texas A&M Energy
Systems Laboratory (ESL) to estimate
nitrogen oxide reductions (NOx)
associated with energy
conservation/energy efficiency
measures

ESL submits annual report to the Texas Commission on Environmental Quality (TCEQ)



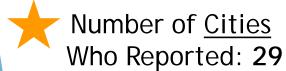
Cities and Counties Who Submitted a FY18 Local Government Energy Report to SECO

Legend

Counties Subject to Report

Cities

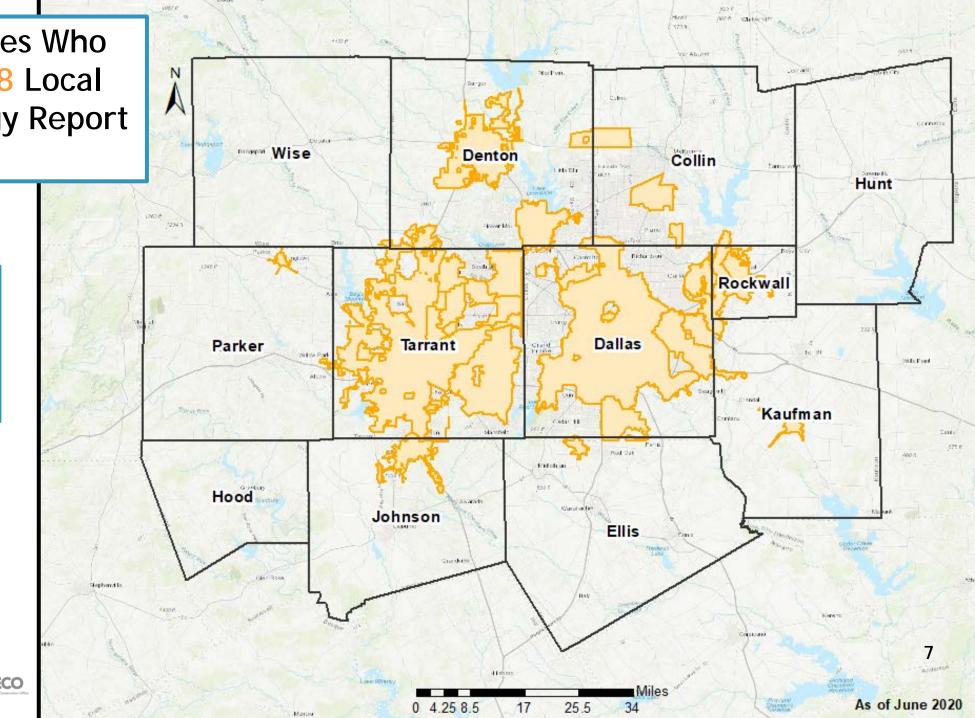
Submitted FY18 Report



Number of <u>Counties</u> Who Reported: **0**







Cities and Counties Who Submitted a FY19 Local Government Energy Report to SECO

Legend

Counties Subject to Report

Cities

Submitted FY19 Report

Counties

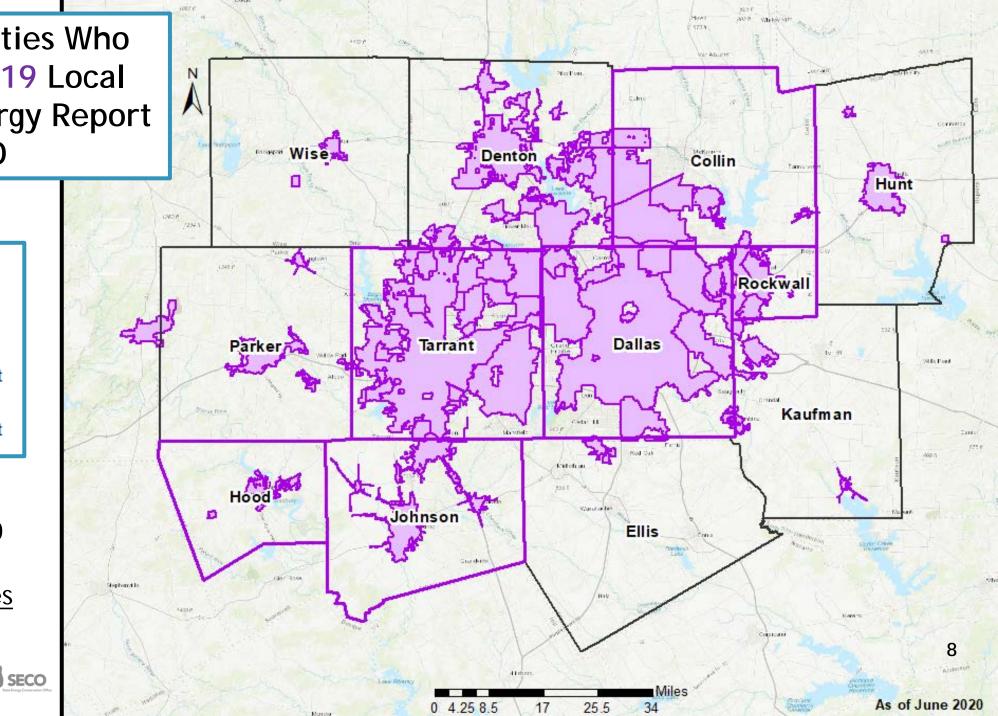
Submitted FY19 Report

Number of <u>Cities</u> Who Reported: **70**

Number of <u>Counties</u> Who Reported: **6**







Local Government Energy Toolkit



- ✓ ENERGYSTAR Building Portfolio Manager "How-To" Document
- ✓ SECO's Preliminary Energy Assessment (PEA) Program Handout
- ✓ Blank FY19 Energy Report Form Template
- ✓ Whitepaper: Effectiveness and Transparency of Energy Reporting Requirements for Local Governments in Texas
- ✓ Energy Efficiency Reporting Matrix
- ✓ Example correspondences for peer regional agency outreach





Free individualized assistance to entities interested in learning more about the local government energy reporting requirements, how to fill out the annual reporting form, and answer any questions.



Working group of local governments to identify barriers preventing compliance to the state mandated local government energy reporting requirements and potential opportunities to improve the effectiveness of the requirement.

2020 Workshops + Trainings

Recorded and Available Online!

January

Webinar 1

Leveraging COG Programs and Funding to Support Energy Management for Your Members

February

Webinar 2

Understanding
Municipal Utility
Bills & Tracking
Energy
Consumption

May

Webinar 3

Financing Energy
Efficiency
Projects for
Facilities and
Services

July

Webinar 4

Procurement
Strategies
for Energy
Efficiency and
Renewable
Energy- JULY 16



- SolSmart Working Group
- LGER Working Group



Sign-up to stay in the loop on Energy Efficiency and Management Trainings/Webinars/Workshops

FOR MORE INFORMATION

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