

NCTCOG PRESENTATION

# Endorsement of Community Noise Mitigation Program Grant Submission

AMANDA WILSON | SURFACE  
TRANSPORTATION TECHNICAL COMMITTEE |  
OCTOBER 25, 2024



# Community Noise Mitigation Program

- ❑ Authorized by U.S. Congress in FY22 Appropriations Bill
- ❑ Purpose: reduce impact of fixed wing military aviation noise on covered facilities
  - Schools, daycares, facilities serving senior citizens, hospitals, private residences within noise contours of military installation
- ❑ \$75M available; \$18.75M available to reserve installation (\$5M reserved for bases with new model of aircraft)
- ❑ Multiple applications allowed per agency but must be prioritized based on noise levels
- ❑ NCTCOG staff would like to pursue applications for six school district facilities in Lake Worth and White Settlement ISDs



# Community Noise Mitigation Program

## Funding Availability

**\$75 Million**  
National

**\$18.75 Million**  
Guard/Reserve  
Installations

**\$5 Million**  
Guard/Reserve Bases with  
New Aircraft

## Cost Sharing

90% Federal | 10% non-Federal

## Covered Facilities Eligibility

1. School, Daycare, Facilities Serving Senior Citizens, Hospitals, Private Residences
2. Within a military base noise contours
3. Experiencing average indoor noise level 45+ dB



# NCTCOG Community Noise Mitigation Applications

## Lake Worth and White Settlement ISDs

Initially met with three school districts, two chose to participate

Acoustical testing performed to determine indoor noise level/eligibility

- Effie Morris Early Learning Academy (LWISD)
- Howry STEAM Academy (LWISD)
- LWISD Operations Building
- Brewer Middle School (WSISD)
- Liberty Elementary School (WSISD)
- WSISD Transition Center

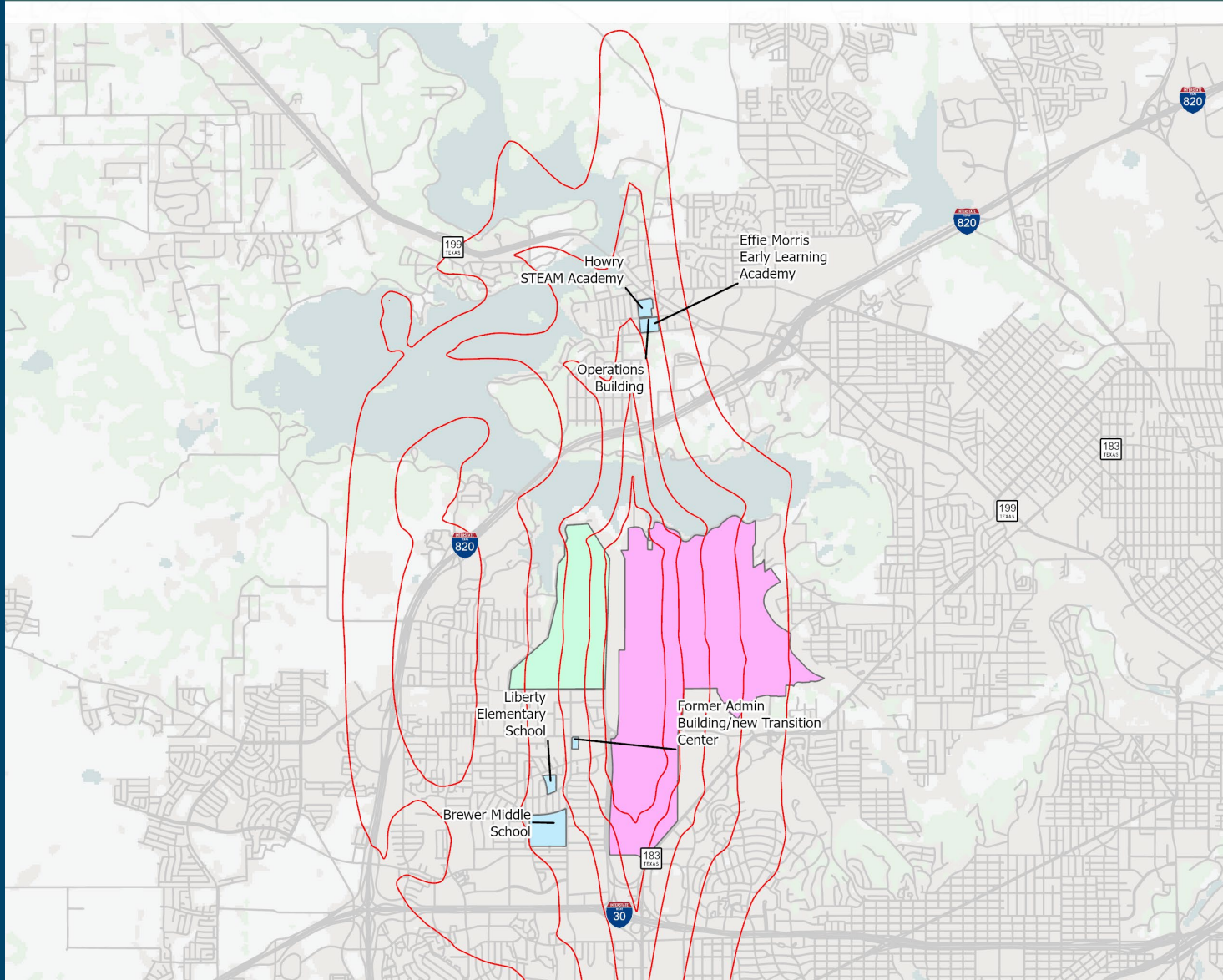
Recommendations to reduce indoor noise include primarily replacing window and doors with higher Sound Transmission Classification (STC) rated materials

Advanced pre-application consultant work with RTC Local funding previously approved for Regional Joint Land Use Study activities



# Participating Facilities

## Schools Within NAS JRB Fort Worth Noise Contours



# NCTCOG Community Noise Mitigation Application

## Anticipated Budget

Facility	Total Construction Budget	Federal (CNMP)	ISD Non-Federal Match	NCTCOG Non-Federal Match*
Effie Morris Early Learning Academy	\$597,756	\$537,980	\$29,888	\$29,888
Howry STEAM Academy	\$350,032	\$315,029	\$17,501	\$17,502
LWISD Operations Building	\$244,378	\$219,940	\$12,219	\$12,219
Brewer Middle School	\$1,110,440	\$999,396	\$55,522	\$55,522
Liberty Elementary School	\$1,320,053	<del>\$1,888,048</del> \$1,188,048	\$66,003	\$66,002
WSISD Transition Center	\$425,340	\$382,806	\$21,267	\$21,267



# Schedule

Date	Milestone
July 25, 2024	NOFO Released
October 22, 2024	Applications Due
October 24, 2024	Executive Board
<b>October 25, 2024</b>	<b>STTC Action (Endorsement)</b>
<del>November 14, 2024</del> December 12, 2024	RTC Action



# Requested Action

- Endorse NCTCOG grant applications for the Community Noise Mitigation program.
- Recommend RTC approval of the use of approximately \$210,000 in Regional Transportation Council Local funds used to advance pre-application consultant activities to backfill Regional Joint Land Use Study activities.
- Approve staff to administratively amend the TIP/STIP and other planning/administrative documents to incorporate these changes should the project be selected for funding.





# CONTACT US

Amanda Wilson, AICP

Senior Program Manager

[awilson@nctcog.org](mailto:awilson@nctcog.org) | 817-695-2984



Dan Kessler

Assistant Director of Transportation

[dkessler@nctcog.org](mailto:dkessler@nctcog.org) | 817-695-9248





# STRATEGIC SELECTION OF TRAFFIC SIGNAL EQUIPMENT

SURFACE TRANSPORTATION TECHNICAL COMMITTEE  
OCTOBER 25, 2024

14 FT 5 IN

# REGIONAL TRAFFIC SIGNAL EQUIPMENT INVENTORY

## Overview

NCTCOG conducted a regional inventory to establish a Regional Traffic Signal Minimum Standard and identify traffic signals that don't have equipment to meet the standard.

## List of Equipment Included in the Regional Traffic Signal Equipment Standard:

- Cabinets
- Controllers
- Coordination (GPS Clocks)
- Communication
- Vehicle Detection
- Flashing Yellow Arrow (FYA)
- LED Signal Bulbs



# PARTNER AGENCY ELIGIBILITY

- Public Sector Partner Agencies within the 10-County Non-Attainment Area (Cities, TxDOT, Etc.)
- Actively using INRIX traffic signal performance platform.
- Confirm agency agrees to share traffic signal and detector data in standard format that is consistent with Traffic Management Data Dictionary (TMDD) 3.03(d).



# PRIORITIZATION AND FUNDING TABLE

Goal: Utilize existing funding RTC has allocated for traffic signal equipment upgrades.

Prioritization Order	Cost	Revenue
	Total Funding Allocated	\$30,720,000
1. Coordination (GPS Clocks)*	\$507,000	\$29,633,000
2. Communication	\$4,430,000	\$25,203,000
3. Vehicle Detection	\$102,960,000	(\$77,757,000)
4. Flashing Yellow Arrow (FYA)	TBD	TBD
5. Controllers*	\$580,000	
6. Cabinet	TBD	TBD
7. LED Signal Bulbs	TBD	TBD



\*RTC funded coordination and controller as part of 2022 M&O Allocation in the amount of \$720,000. Due to inflation, these cost have increased to \$1,087,000. TxDOT Dallas has already implemented communication districtwide, the above number reflects this.

# Proposed Filter and Criteria for Remaining Funds



**Filter 1:** Regional Traffic Signal Priority Arterials (Y/N) (FHWA functional classification: principal, minor, collector roads with 8 or more signals)

**Filter 2:** Vehicle Detection Working Properly (Y/N)

**Criteria 1:** Signals with worst average control delay per vehicle from INRIX signal analytics (Ranking)



## METHOD

**Step 1:** Overlay vehicle detection improvements on traffic signal priority arterials GIS layer.

**Step 2:** Analyze remaining Average Control Delay per vehicle

**Step 3:** Select locations for improvement based on criteria



# INRIX SIGNAL ANALYTICS SNAPSHOT

**Average Control Delay/Vehicle (24 hour):** The average control delay per vehicle is the average time that a vehicle is delayed at a signalized intersection due to traffic control devices, primarily caused by stopping, deceleration, acceleration, and queueing at traffic signals.

- A ≤ 10 seconds
- B > 10 - 20 seconds
- C > 20 - 35 seconds
- D > 35 - 55 seconds
- E > 55 - 80 seconds
- F > 80 seconds



# PARTNER AGENCY COORDINATION

## Equipment upgrades

- Draft Listing of Equipment Upgrades
- Coordinate with operating agencies to account for any completed upgrades.
- Refine locations for equipment upgrades
- Continue to next prioritized location on the list





# PROGRAMMING FUNDING IN THE TIP

## Projects Over \$150,000:

- Enter agency as implementing agency in the Transportation Improvement Program (TIP).

## Projects Under \$150,000:

- NCTCOG will consolidate these projects into a larger project in the Transportation Improvement Program (TIP).
- Procurement through Buy Board or similar mechanism.



# SCHEDULE

Action	Meeting	Date
Action - Funding Approval	RTC	February 2024
Public Meeting		October 15, 2024
Action - Approval of Project Selection Process	STTC	October 25, 2024
Action - Approval of Project Selection Process	RTC	December 12, 2024
Scoring by NCTCOG		Nov. – Dec. 2024
TIP Modification Requests Due		December 6, 2024
TIP Modification Approval	STTC	February 28, 2025
TIP Modification Approval	RTC	March 13, 2025
FHWA Approval Expected		June/July 2025



# ACTION REQUESTED

A recommendation for Regional Transportation Council (RTC) approval of the process, criteria, and schedule for the strategic selection of traffic signal equipment.

Administratively amend NCTCOG and State Transportation Improvement Programs (TIP / STIP), as well as other planning and administrative documents.



# CONTACT US



Natalie Bettger

Senior Program Manager

[nbettger@nctcog.org](mailto:nbettger@nctcog.org) | 817-695-9280



Gregory Masota

Principal Transportation Planner

[gmasota@nctcog.org](mailto:gmasota@nctcog.org) | 817-695-9264





NCTCOG PRESENTATION

# Call for Projects to Reduce Diesel Emissions

SURFACE TRANSPORTATION  
TECHNICAL COMMITTEE

October 25, 2024

Jason Brown, Program Manager

# RELEVANCE TO REGIONAL PLANNING

## **Purpose:**

### Performance Measure:

Air Quality

### Mobility 2045:

#### **Air Quality Program AQ2-001:**

Reducing emissions from public sector and private sector fleets is important to efforts to improving air quality in the region as mobile sources emit roughly two-thirds of ozone-forming nitrogen oxides emitted each day and are a major source of other air pollutants.

[Mobility 2045 Chapter 4 – Environmental Considerations](#)

[Appendix C – Environmental Considerations](#)

## **Air Quality Emphasis Areas:**



High-Emitting Vehicles/Equipment



Idling

Hard Accelerations

Low Speeds

Cold Starts

Vehicle Miles of Travel



Energy and Fuel Use



# New Funding and Applicant Eligibility

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

<b>Call for Project</b>	North Texas Diesel Emissions Reduction Project 2024
<b>Project Types</b>	Replace Onroad and Nonroad Diesel Engines/Vehicles/Equipment; Install Locomotive Shore Power and Other Idle Reduction Technologies
<b>Available Funding for CFP*</b>	\$1,635,949
<b>Applicants</b>	Private Fleets and Companies; Public Entities such as Municipalities and Airports
<b>Geographic Area</b>	10-County Nonattainment Area**, Area of Air Toxics Concern***
<b>Clean Fleet Policy</b>	Must Adopt RTC Clean Fleet Policy or Similar

\*A committed project from a call for partners of \$1,188,065 was included in the overall EPA \$2.999 million award.

\*\*This includes Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise counties.

\*\*\*This includes Dallas, Denton and Tarrant counties. Source: [2022-2023 DERA Priority County List](#)



# Project Eligibility

## North Texas Diesel Emissions Reduction Project 2024 Call for Projects

Eligible Activities	Funding Threshold		
<u>Replace Onroad Diesel Vehicles and Engines*</u> <ul style="list-style-type: none"> <li>GVWR: 16,001 and Up;</li> <li>EMY: Older - 2009 (Also EMY 2010 - Newer if Replacing with Zero Emission);</li> <li>Must Operate &gt; 7,000 Miles/Year during 24 Months Prior to Application</li> </ul>	<u>Replacement Type</u>	<u>Vehicles/Equipment</u>	<u>Engines</u>
	New is Zero Emission Powered:	45%	60%
	New is CARB Certified Low-NO <sub>x</sub> Powered:	35%	50%
<u>Replace Nonroad Diesel Equipment*</u> <ul style="list-style-type: none"> <li>Must Operate &gt; 500 Hours/Year during 24 Months Prior to Application;</li> <li>Eligible Tiers Vary</li> </ul>	New is Zero Emission Powered:	45%	60%
	New is CARB Certified Low-NO <sub>x</sub> Powered:	35%	50%
	New is EPA Certified Diesel Powered:	25%	40%
<u>Locomotive Engine Replacement and Shore Power Installation**</u>	40% Cost Coverage		

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

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





# Project Eligibility Continued

## North Texas Diesel Emissions Reduction Project 2024 Call for Projects

### Eligible Activities

### Funding Threshold

<u>Replacement of Diesel Transport Refrigeration Unit (TRU) Trailer</u>	<u>Replacement Type</u>	<u>Maximum Funding Level</u>
<ul style="list-style-type: none"> <li>• TRU trailer Replacement ONLY</li> </ul>	New Zero Tailpipe Emission eTRU* Trailer includes Charging Unit	45%
<u>Replacement of Drayage**</u> <ul style="list-style-type: none"> <li>• GVWR: 33,001 and Up;</li> <li>• EMY: Older - 2009 (Also EMY 2010 - Newer if Replacing with Electric);</li> <li>• Operates on or transgresses through port or intermodal rail yard property for the purposes of loading, unloading, or transporting cargo</li> </ul>	2017 or Newer: Diesel, Alternative Fuel, Gasoline Powered  2021 or Newer: Zero-Emission or CARB Certified Low-NOx	50%
<u>EPA Verified Highway Idle Reduction Technologies</u>	When combined with new or previous installed exhaust aftertreatment retrofit	100%

\*New unit will operate solely on grid, battery, or other zero emission power sources

\*\*Drayage truck operator must hold a valid and current vehicle registration and driver's license issued in the United States. Operator must have proof that your existing truck has been covered for primary liability insurance over the last year.



# Eligibility and Scoring Criteria

## North Texas Diesel Emissions Reduction Project 2024 Call for Projects

Characteristics	<b>Rebate Program</b> Purpose: Reduces administrative burden as compared to a subgrant program.	
	<b>Competitive application process</b> Purpose: Choose the best activities for our region.	
Eligibility	<b>Operate in Required Geographic Area</b>	
	<b>Clean Fleet Policy Adoption</b> Purpose: Reserve Funding for Fleets that are Engaged Beyond Grant Opportunities; Consistent with RTC Adoption of Clean Fleet Policy	
Scoring Criteria	<b>Criteria</b>	<b>% of Total Score</b>
	<b>Cost Per Ton NO<sub>x</sub> Emissions Reduced</b> Purpose: Maximize Emissions Reductions	65%
	<b>Rebate Recipient Oversight Criteria</b> Purpose: Balance Project Benefits with Administrative Burden	25%
	<b>Priority Project Location Criteria</b> Purpose: Preference to Projects Operating in Environmental Justice areas and Disadvantaged Communities	5%
	<b>Project Resilience and Workforce Development Criteria</b> Purpose: Preference to Projects with Ability to Protect Funded Investments; Prepare the Workforce for the Project	5%

# Schedule

Milestone	Date
STTC Recommendation of RTC Approval	October 25, 2024
RTC Approval	December 12, 2024
Open Call for Projects	December 16, 2024
Call for Projects Applications Deadline (Rolling 90-Day Application Deadline to Fully Award Funds)	March 14, 2025
Executive Board Approval	April/May 2025
Enter into Rebate Agreements	May/June 2025



# ACTION REQUESTED

## Recommend RTC Approval Of:

### North Texas Diesel Emissions Reduction Project 2024

1. Open Call for Projects
2. Details
  - Eligibility Screens
  - Scoring Criteria
3. Schedule
  - Call for Projects Estimated Open: December 16, 2024
  - Rolling 90-Day Application Deadline to Fully Award Funds



# CONTACT US



Juan Barron Luna  
Air Quality Planner

[Jbarron-luna@nctcog.org](mailto:Jbarron-luna@nctcog.org) | 817-704-5611



Trey Pope  
Air Quality Planner

[Tpope@nctcog.org](mailto:Tpope@nctcog.org) | 817-695-9297



Jason Brown  
Program Manager

[Jbrown@nctcog.org](mailto:Jbrown@nctcog.org) | 817-704-2514

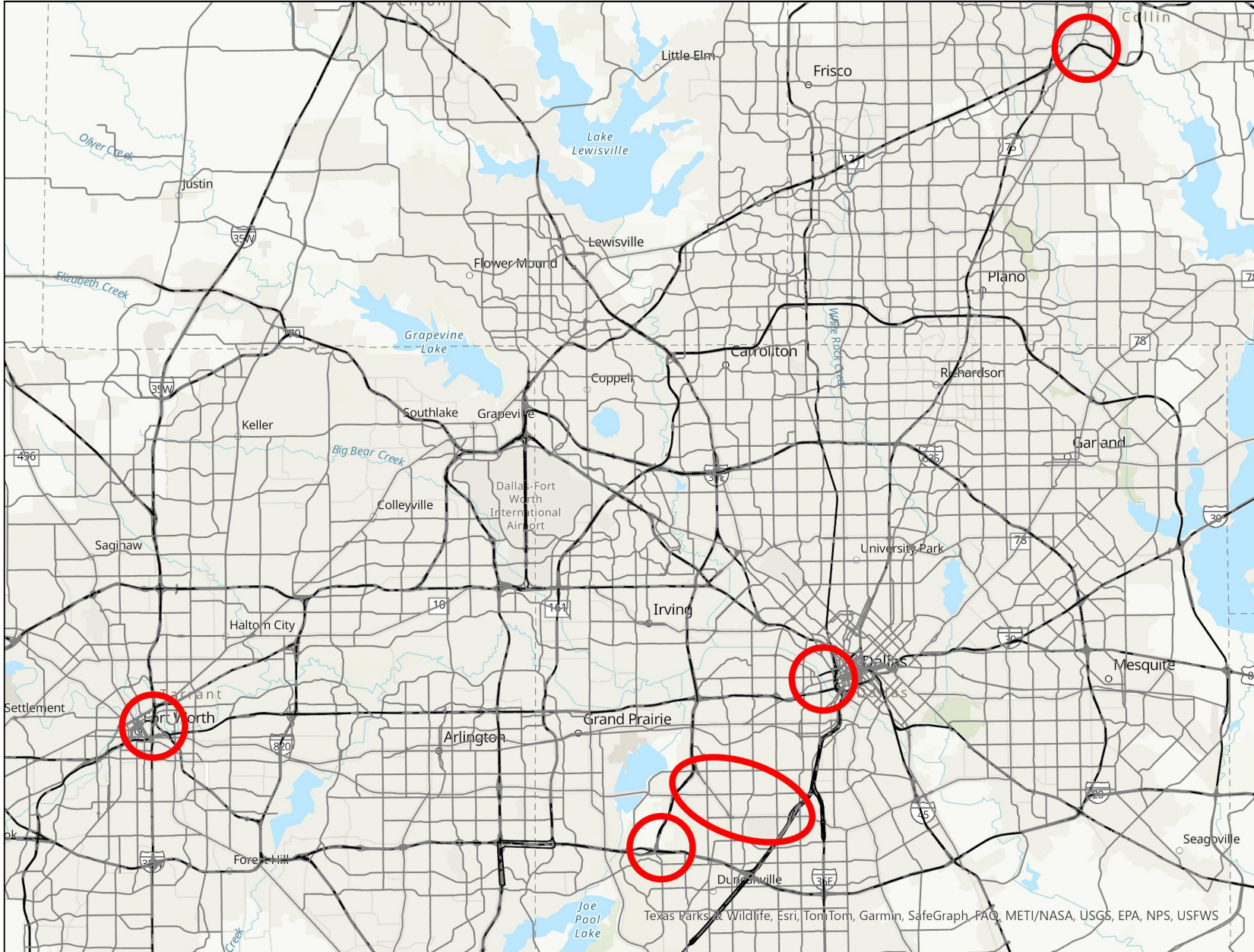


Chris Klaus  
Senior Program Manager

[Cklaus@nctcog.org](mailto:Cklaus@nctcog.org) | 817-695-9286



# Junior Freeways to Thoroughfares in the Region





Certification of Emerging and Reliable  
Transportation Technology

# Swyft Cities Update

Mike Johnson | Surface Transportation Technical Committee  
October 25, 2024



# CERTT PROGRAM

Certification of **Emerging** and **Reliable** Transportation Technology

Provide **transparent process** for RTC coordination with providers of new technology

Periodic solicitation/opportunity for new technology applications

Ensure **level playing field** for providers and local governments

**Convert** certification facility into commercial application, meeting long-range transportation needs





# RTC Policy P22-02

## Process:

- 1) NCTCOG staff to ensure technology solution conforms to policy guidance and long-range transportation need (MTP).
- 2) NCTCOG staff to brief RTC; RTC to take action on initiating process.
- 3) Solicit local government interest in submitting potential locations.
- 4) Technology provider to determine preferred location to pursue.
- 5) RTC to initiate development activities; NCTCOG staff to provide support.



# CERTT Applicant Status

Applicant/ Technology Provider	Technology/Mode	Market Solution	Purpose/Benefit	Status
TransPod (Round 1)	Hyperloop (ultra-high-speed pod in near vacuum environment)	Statewide/ Intercity/ Regional	People and Goods/ Air Quality, and Congestion Reduction	Periodic staff coordination; TransPod is pursuing statewide corridor effort
JPods (Round 1)	Personal Rapid Transit (elevated pod/modern gondola)	Local/Sub- Regional	People/Air Quality and Congestion Reduction	Completed staff coordination; JPods is pursuing local interest outside of CERTT Program
Swyft Cities/ Whoosh (Round 2)	Personal Rapid Transit (elevated pod/modern gondola)	Local/Sub- Regional	People/Air Quality and Congestion Reduction	Regular staff coordination; Swyft Cities is actively pursuing projects and certification structure



# Swyft Cities/Whoosh

Personal rapid transit (PRT) system using overhead fixed-cable gondola-like pods (6 passengers/pod)

Low-speed network that runs along/within existing public right-of-way

Proofs of concept in Christchurch, NZ

Use of private financing and can support planning of special districts, P3s, etc.

Local applications could include service extensions from transit hubs, barrier crossings, dense/mixed use center circulator



# CERTT Proposals Received: Interest in Swyft Cities/Whoosh Technology

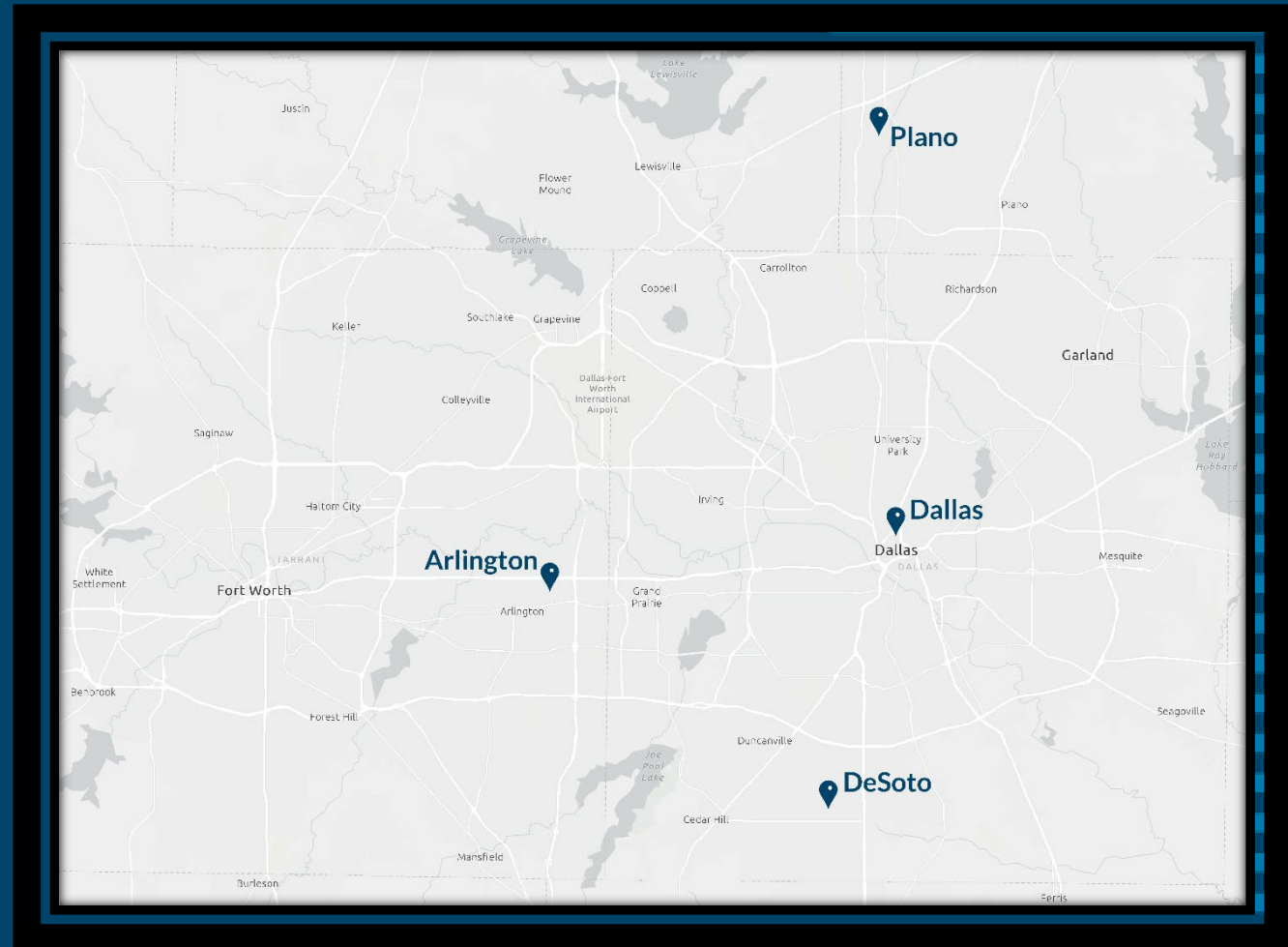
Arlington

Dallas

Desoto

Plano

Others have reached out to Swyft Cities directly



# Recent Progress

- Interest at national ASCE Conference
- Investigation of process/requirements for new technology certification
- Staff coordination with Swyft Cities and local governments in project development discussions and identification of roles/risks
- NCTCOG provided Letter of Commitment for City of Arlington's SMART Grant application (feasibility study)
- Included consideration for Swyft Cities and other technologies in scoping for Legacy Area ATN Planning Study in Plano



# Next Steps

Swyft Cities: steps 4 and 5 continue in tandem

- Swyft Cities pursuing initial project and certification
  - Planning, funding, certification, and organization model that meets the needs of all parties
  - Initial project not intended to be only location
- NCTCOG staff continue providing support to Swyft Cities and local governments in project development discussions

TransPod: working to identify statewide program/interest

CERTT: continued monitoring for new technology proposals



# CONTACT US



Jeff Hathcock

Program Manager

[jhathcock@nctcog.org](mailto:jhathcock@nctcog.org) | 817-608-2354



Mike Johnson

Principal Transportation Planner

[mjohnson@nctcog.org](mailto:mjohnson@nctcog.org) | 817-695-9160



Savannah Briscoe

Transportation Planner

[SBriscoe@nctcog.org](mailto:SBriscoe@nctcog.org) | 817-608-2347



Valerie Alvarado

Transportation Planner

[VAlvarado@nctcog.org](mailto:VAlvarado@nctcog.org) | 817-640-4428

Additional imagery provided by Swyft Cities, JPods, and TransPod



Certification of Emerging and Reliable  
Transportation Technology (CERTT) Program

