MEETING SUMMARY

Regional Freight Advisory Committee
North Central Texas Council of Governments
May 19, 2020
1 pm-2 pm

The Regional Freight Advisory Committee convened at 1 pm on Tuesday, May 19, 2020, in a Microsoft Teams Virtual Meeting.

Meeting Outline
1. Welcome/Previous Meeting Recap
2. Autonomous Vehicle Update/Texas Connected Freight Corridors
3. Regional Rail Study Phase II
4. General Discussion/Announcements

1. Welcome/Previous Meeting Recap, Jeff Hathcock, NCTCOG
Jeff Hathcock welcomed everyone to the meeting and suggested questions be held until after each presentation. Although not on the agenda, Jeff announced that Amy Hodges from the Transportation Department's Air Quality Program area, would brief the Committee on Electric Vehicle and Natural Gas Vehicle (NGV) data collection projects.

Initiatives include the EVWatts and NGV Updated Performance Tracking Integrating Maintenance Expenses (UP-Time) projects. Both are nationwide initiatives and include support from Dallas-Fort Worth Clean Cities. The purpose of the EVwatts project is to "collect real-world use data from electric vehicles and charging stations, anonymize that data (remove all personally identifiable information), and share the aggregated data with the Department of Energy (DOE) and national laboratories." As a regional project partner, DFW Clean Cities helps promote the data collection effort, in collaboration with NCTCOG's Air Quality program area.

The goal of the NGV UP-TIME project is to "quantify differences in maintenance costs between diesel and NGVs, determine maintenance cost changes/improvements of newer generation NGVs compared to older generation NGVs, and capture impacts of different technology solutions and best practices that impact/reduce maintenance costs." DFW Clean Cities is one of only five participating Clean Cities nationwide. Their role is to "recruit fleet data partners, facilitate execution of data sharing agreements, disseminate study results and [develop] individual fleet analysis reports." Fleet types sought as partners include freight and goods movement, medium- and heavy-duty natural gas and diesel. Data being sought is the cost, frequency, and types of repairs. Participants will receive individual analysis of their operation. Funding for both projects has been provided by the DOE.

2. Autonomous Vehicle Update/Texas Connected Freight Corridors, Tom Bamonte, NCTCOG – Clint Hail and Tom Bamonte presented an update on automation in freight and delivery. Recent developments in automation technology are transforming supply chain logistics. Automated freight transport and autonomous urban air transport, along with last-mile delivery, are just a few of the developments in the supply chain. Regional examples of automation in transportation include the City of Arlington's automated shuttle in the entertainment district and Drive AI's partnership with the City of Frisco for on-demand self-driving vehicles. Fort Worth Alliance Airport is developing the Alliance Mobility Innovation Zone (MIZ). The MIZ will allow testing for multimodal autonomous vehicles integrated with multi-

modal air and ground infrastructure. And as Virgin Hyperloop One continues development of high speed transport to move people and goods at speeds up to 600 MPH, Hyperloop One is considering North Central Texas as a test location for Hyperloop operations. In addition to public-private support, academia support for regional automation is elevated by the North Texas Center for Mobility Technology – University of Texas at Arlington, University of North Texas at Denton, Southern Methodist University, and the University of Texas at Dallas.

Connected Freight Vehicle Developments
The Texas Department of Transportation (TxDOT), in collaboration with the Federal Highway Administration and other public and private stakeholders, is working to implement Texas Connected Freight Corridors on roadways within the Texas Triangle. "The Texas Triangle is formed by the state's four main urban centers, Houston, Dallas-Fort Worth, San Antonio, and Austin, connected by Interstate 45, Interstate 10, and Interstate 35."

This project will "deploy connected vehicle technologies to more than 1,000 commercial vehicles to improve traveler information, asset condition management and system performance." Connected vehicle technologies allow vehicles and infrastructure to communicate through short-range radio signals. Drivers will receive notifications about roadway hazards, congestion, and work zones, among others "to enable safe and efficient goods movement through key freight corridors in the Texas triangle."

This project will achieve proof of concept before making large connected vehicle (CV) investments and will contribute to a model for future CV deployments. High level planning and design was completed in March with detailed design and testing scheduled for April 2020-March 2022. Operation and self-evaluation begin in April 2022 and are scheduled for completion in March 2023.

In another collaborative effort, NCTCOG is working to create the first Automated Vehicle-ready corridor in Texas with the Interstate Highway (IH) 30 technology corridor project. Project 1 of this initiative will install the connectivity platform/infrastructure to allow vehicle to vehicle and vehicle to infrastructure communications through both cellular vehicle-to-everything and dedicated short-range communication technology. Project 2 will integrate data from Waze into the 911 center located along the IH 30 corridor and improve information flows from traffic management centers. NCTCOG will conduct outreach to the cities along the corridor including Dallas, Grand Prairie, Arlington, and Fort Worth. Project 3 will assess the infrastructure based on AV problem conditions and AV data; put processes, procedures, and standards in place, and make any necessary improvements to the infrastructure. Multiple applications have been identified and prioritized for this initiative, with truck signal priority as one of the higher priorities. Numerous benefits to safety and air quality are anticipated.

The City of Arlington is implementing smart technology on Cooper Street from Lamar Blvd. to just south of IH 20. Shared connected vehicle information is expected to reduce travel time, improve safety, and decrease emergency vehicle response time.

3. Regional Rail Study Phase II, Sara Clark, TranSystems/TxDOT
TranSystems is a consulting firm providing engineering, design, and construction recommendations to TxDOT for integrated transportation solutions. TxDOT's Rail Division manages state-owned rail facilities and is responsible for state safety inspections and rail-highway crossing improvements.

The purpose of the Regional Rail Study is "to conduct a comprehensive analysis of the freight and passenger rail transportation network to identify mutually-beneficial mobility improvements." The intended outcome is "a program of projects to address mobility needs in the North Central Texas region."

As the population in North Central Texas continues to grow, so does demand for passenger and freight rail. With the potential for expanding regional passenger rail, TranSystems is collaborating with TxDOT to review infrastructure recommendations and identify/confirm needed improvements and potential impacts to freight and passenger rail service. Fundamental to rail infrastructure, rail crossings have a unique impact on regional mobility. Of the 2,250 regional rail crossings, 500 are grade separated. The remaining public rail crossings are at-grade crossings where traffic must stop to allow trains to pass. As a result, the roadways become more congested and harmful emissions increase as vehicles idle waiting to cross. In addition to other infrastructure recommendations, grade separation recommendations and other mobility solutions are anticipated outcomes of the Regional Rail Study. Please visit www.nctcog.org/rfac for more information and access to meeting materials.

4. General Discussion/Announcements

Jeff thanked participants for their attendance and contributions. As there was no further discussion, the meeting was adjourned.

Meeting Attendees

Bamonte, Thomas, NCTCOG
Brown, Jason, NCTCOG
Clark, Sara, TranSystems
Coburn, Chad, Texas Department of Transportation
Duong, Huong, NCTCOG
Gamez, Kassandra, NCTCOG
Hail, Clint, NCTCOG
Hathcock, Jeff, NCTCOG
Hodges, Amy, NCTCOG
Jasenovic, Georgi, Federal Highway Administration
Johnson, Michael, NCTCOG
Kermanshachi, Sharareh, University of Texas Arlington
Key, Lisa, NCTCOG
Khankarli, Gus, City of Dallas
Klaus, Chris, NCTCOG
Lamers, Dan, NCTCOG
Mainwaring, Brenda, Union Pacific Railroad
Mays, Caroline, Texas Department of Transportation
McLaughlin, Kelly, Schneider Trucking
Melvin, Tiffany, North American Strategy For Competitiveness (NASCO)
Morgan, Curtis, Texas Transportation Institute
Muller, Bailey, NCTCOG
Pohlen, Terrance, University of North Texas, Denton
Prozzi, Jolanda, Texas Transportation Institute
Rader, Mike, Prime Rail Interests
Rutter, Allan, Texas Transportation Institute
Shahandashti, Seyed Mohsen, University of Texas Arlington
Shea, Megan, BNSF Railway
Wells, Casey, Texas Department of Transportation
Young, Andrew, The Chartered Institute of Logistics & Transport