



Texas Connected Freight Corridors Project Frequently Asked Questions

1. What is the Texas Connected Freight Corridors project?
 - The project vision is to create a sustainable connected vehicle deployment in Texas using I-35, I-10, and I-45 to showcase connected vehicle applications applicable to TxDOT and its partners throughout the “Texas Triangle.”
2. What are the goals of this project?
 - The project goals are to deploy vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) applications with commercial vehicles to address the greatest safety and mobility needs of the state. The Texas Connected Freight Corridors project will focus on the I-35 (with extension to Laredo, Texas), I-45, and I-10 corridors that make up the Texas Triangle.
 - The freight industry partners being assembled in Texas offer a unique opportunity to facilitate timely deployments by utilizing an existing fleet of technology-equipped vehicles, operated by experienced, professional drivers familiar with technology. Improving freight operations in these corridors also improves mobility, reliability, and safety, while reducing environmental impacts, not only for the freight operations, but for all travelers and vehicles operating in these corridors.
 - This project also creates a CV foundation that will expand to include light-duty vehicles as more passenger vehicles with CV technology penetrate the market. The Connected Freight Corridors project will also provide infrastructure and communications for developing connected-automated vehicle technology as automation benefits from connecting to the infrastructure.
3. What technologies will the project utilize?
 - The project will utilize a combination of technologies including cellular, Dedicated Short Range Communications (DSRC), and smart infrastructure to implement a suite of V2X applications. These technologies are expected to enable a sustainable deployment where TxDOT will be able to acquire a rich set of traffic conditions data and in turn provide better information to its freight partners and the traveling public.
4. What roadways and regions will the project impact?
 - The project is focused on the I-35, I-45, and I-10 corridors that make up the legs of what we refer to as the Texas Triangle. The project team expects that the project will benefit a much larger area due to the local freight traffic in the various cities around the triangle.

5. What is the expected near term and long term impact to Texas freight traffic?
 - In the near term, trucks operated by the freight partners will receive more timely and more accurate information about traffic and roadway conditions that greatly affect safety and mobility (e.g. traffic crashes, upcoming traffic queues, wrong-way drivers, pedestrians in the roadway), and unsafe weather conditions such as high crosswinds and low visibility. They will also experience benefits from smarter traffic intersections around their distribution centers which will enable the vehicles to interact with the traffic signals to reduce truck idling time. This helps the environment as well as saves money for the freight operators.
 - In the long term, as more and more trucks begin to utilize this technology, we expect to see system wide benefits in travel times and fuel efficiencies as well as improved safety from the exchange of better data.
6. When does the project start? How long does it last?
 - The project is expected to start before the end of the 2017 calendar year. The project is scheduled over 4 years. The first year will be to plan the project. The second and third years will be to design, build, and test the project. The fourth year will be to operate, maintain and evaluate the project.
7. How will the project progress?
 - The project will consist of three primary phases:
 - Planning and High-Level Design – Year 1
 - Detailed Design, Build, and Test – Years 2 & 3
 - Maintain and Operate – Year 4 and beyond
8. Who are the project partners
 - TxDOT is the lead agency on the award. TxDOT envisions building partnerships to deliver innovative solutions and tapping public- and private-industry innovators and advisors (e.g., the Texas A&M Transportation Institute, Southwest Research Institute, and the University of Texas at Austin Center for Transportation Research) to help guide the integration of connected and automated vehicle technologies into the Texas Triangle.
9. Who else will be involved?
 - The project will involve other state agencies, regional agencies, and local city and county agencies.
 - State Agencies: Texas DMV and Texas DPS
 - MPOs: North Central Texas Council of Governments (NCTCOG)
 - Cities: Arlington, Austin, Grand Prairie, and San Antonio
 - Counties: Harris County



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Frequently Asked Questions

10. What trucking/freight companies will be involved?

- The proposal was supported by the following freight companies. TxDOT will proceed to contact these private companies to define their exact level of involvement.
 - H-E-B Corporation
 - The Coca-Cola Company
 - The Home Depot
 - Crete Carrier Corporation
- The following freight manufacturers and equipment companies, and association also supported the proposal.
 - Peterbilt Motors
 - Peloton Technology, Inc.
 - North American Strategy for Competitiveness (NASCO)

11. What is the total cost of the Project?

- USDOT awarded Texas DOT \$6.09 million. Texas DOT and the project partners will match this with at least \$6.1 million. Making the total project cost over \$12 million.

12. How will this benefit drivers in Texas?

- Trucks are a significant portion of the traffic on Texas highways. By making Texas highways safer for truck drivers, and that will in turn make Texas highways safer for everyone. The goal of the project is to reduce truck related crashes and reduce the time trucks spend in congestion.

13. Will I see driverless cars on Texas Highways?

- Not as an outcome of this project. This project is focused on getting information and warnings to truck drivers to assist with the safety and mobility of freight movement on Texas highways.

14. What is the transferability of this project to other regions?

- TxDOT believes these applications can be transferred to other highway corridors where similar safety and mobility challenges exist. This project will deploy a suite of applications that will solve specific challenges in specific areas while also providing benefits to the entire triangle and surrounding communities. It is expected that these deployments will utilize standards based technology that can be deployed anywhere. TxDOT also actively engages other states to share lessons learned as well as documentation and software. TxDOT continues to leverage other investments when possible and openly share ours with other states to make optimal use of taxpayer money while maximizing the benefit to the traveling public.

15. What is the Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant program?

- The Fixing America's Surface Transportation Act or "FAST Act" established the Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Program to make competitive grants for projects that develop model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency system performance, and infrastructure return on investment.
- There is a total of \$60 million available each fiscal year for FY 2016 through FY 2020. The estimated period of performance is between 1 and 4 years. There will be 5 to 10 awards each fiscal year, with no one award exceeding \$12 million. There is a 50/50 match requirement.

16. Which Connected Vehicle Applications will be deployed?

- **Vehicle-to-Infrastructure (V2I)**
 - In-vehicle Traveler Information
 - Eco-Dynamic Routing
 - Work Zone Warning
 - SPaT Corridor for Improved Ped/Bicycle Safety
 - Truck Parking Reservations
 - Border Wait Times
 - Truck Signal Priority
 - Low Bridge Height Warning
 - Queue Warning
 - Road Weather Warning
 - Wrong Way Driving (WWD)
- **Vehicle-to-Vehicle (V2V)**
 - Truck Platooning
 - Emergency Electronic Brake Lights (EEBL - V2Vapplication)

For more information about the Texas Connected Freight Corridors Project, please do not hesitate to contact Brian Fariello (Brian.Fariello@txdot.gov) and Jianming Ma (Jianming.Ma@txdot.gov).