City of El Paso –Transportation LRC

Intelligent Transportation Systems Applications at the El Paso-Ciudad Juarez Border Crossings RFID and Secure Border Trade Project

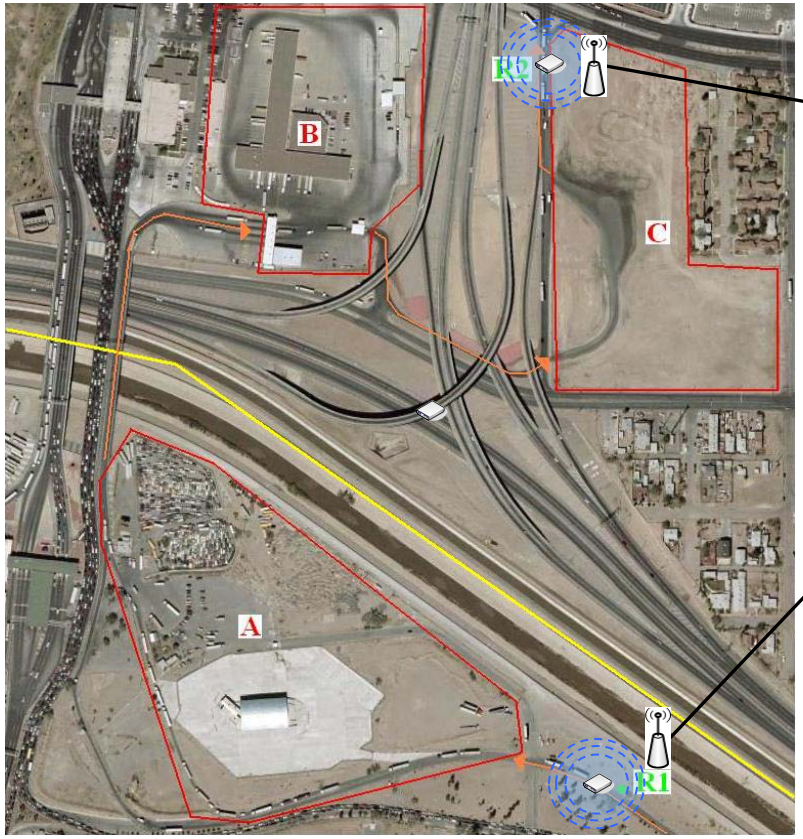
The Center for International Intelligent Transportation Research

El Paso, Texas

Faster, Smarter, Safer

February 18, 2010

Radio Frequency Identification Based System to Measure Truck Crossing Times



A central server processes raw data and archive border crossing data

Mobile Devices

Average Truck Crossing Time

Internet

RFID Tag readings are transmitted using a cellular modem over the internet

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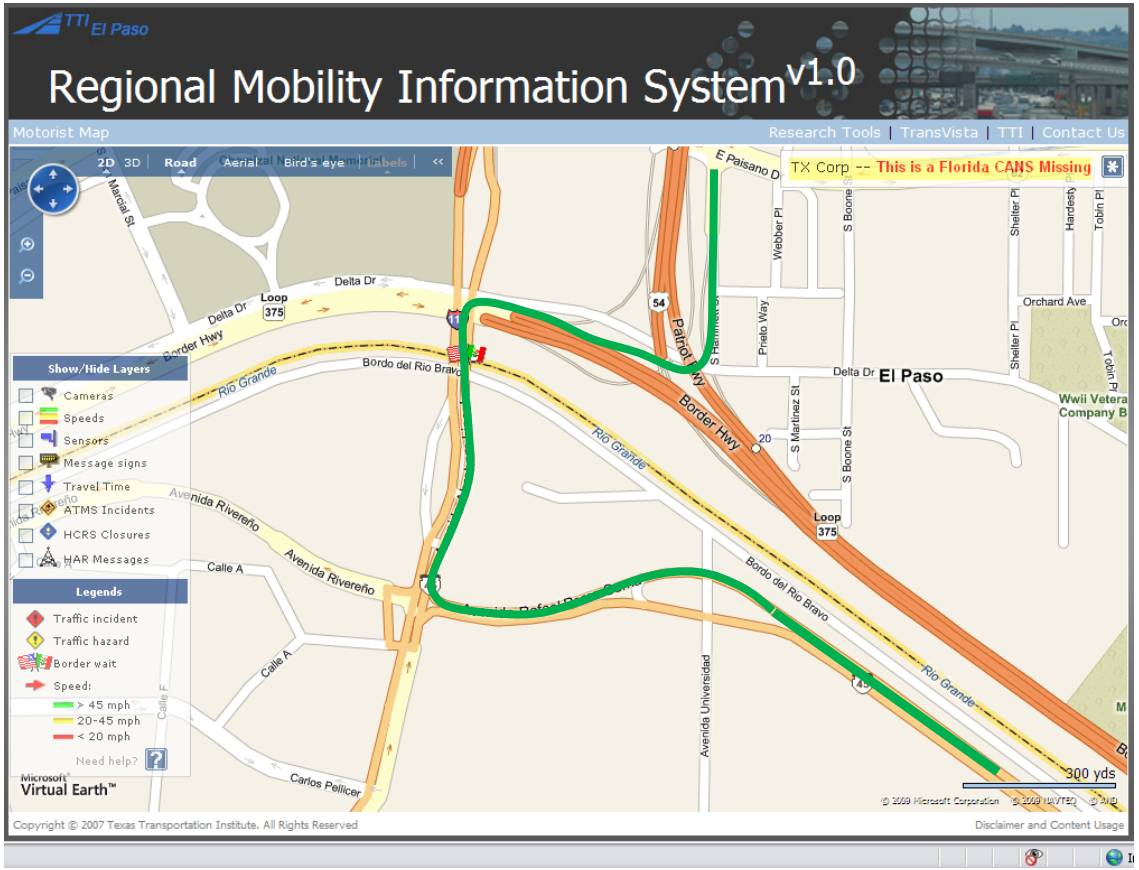
Radio Frequency Identification Based System to Measure Truck Crossing Times



Current Truck Crossing Time at BOTA

- > 60 min
- 30 min – 60 min
- < 30 min

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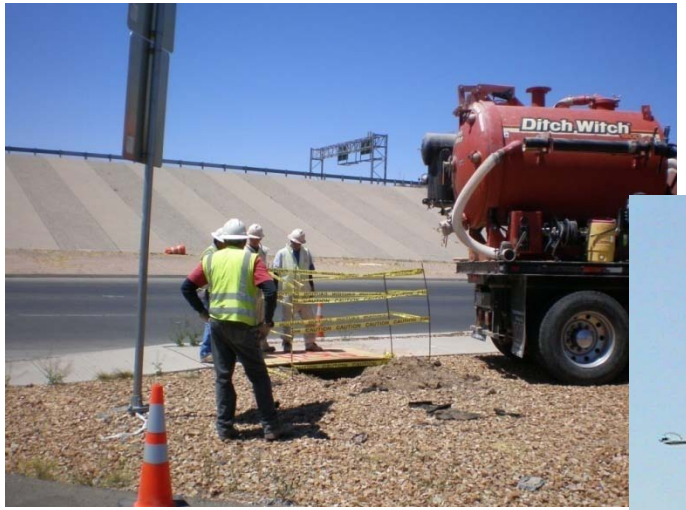
Radio Frequency Identification Based System to Measure Truck Crossing Times



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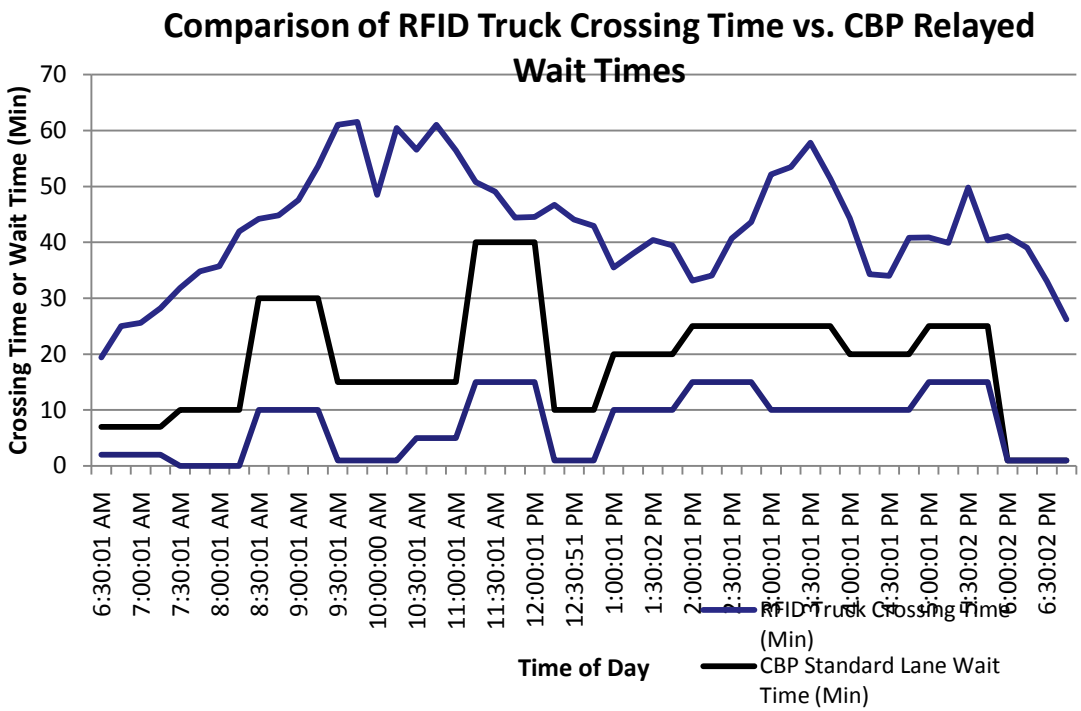
Implementation of RFID Based Technology to Measure Crossing Times of Commercial Vehicles

Crossing Times of Commercial Vehicles at BOTA



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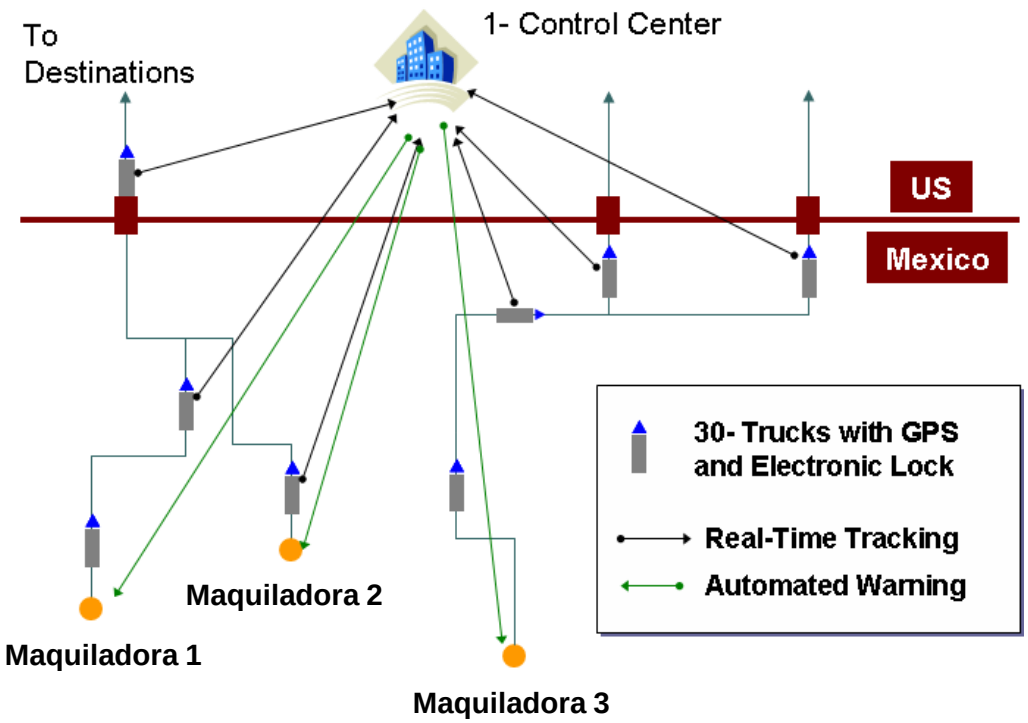
El Paso County Secure Border Trade (SBT) Demonstration Project

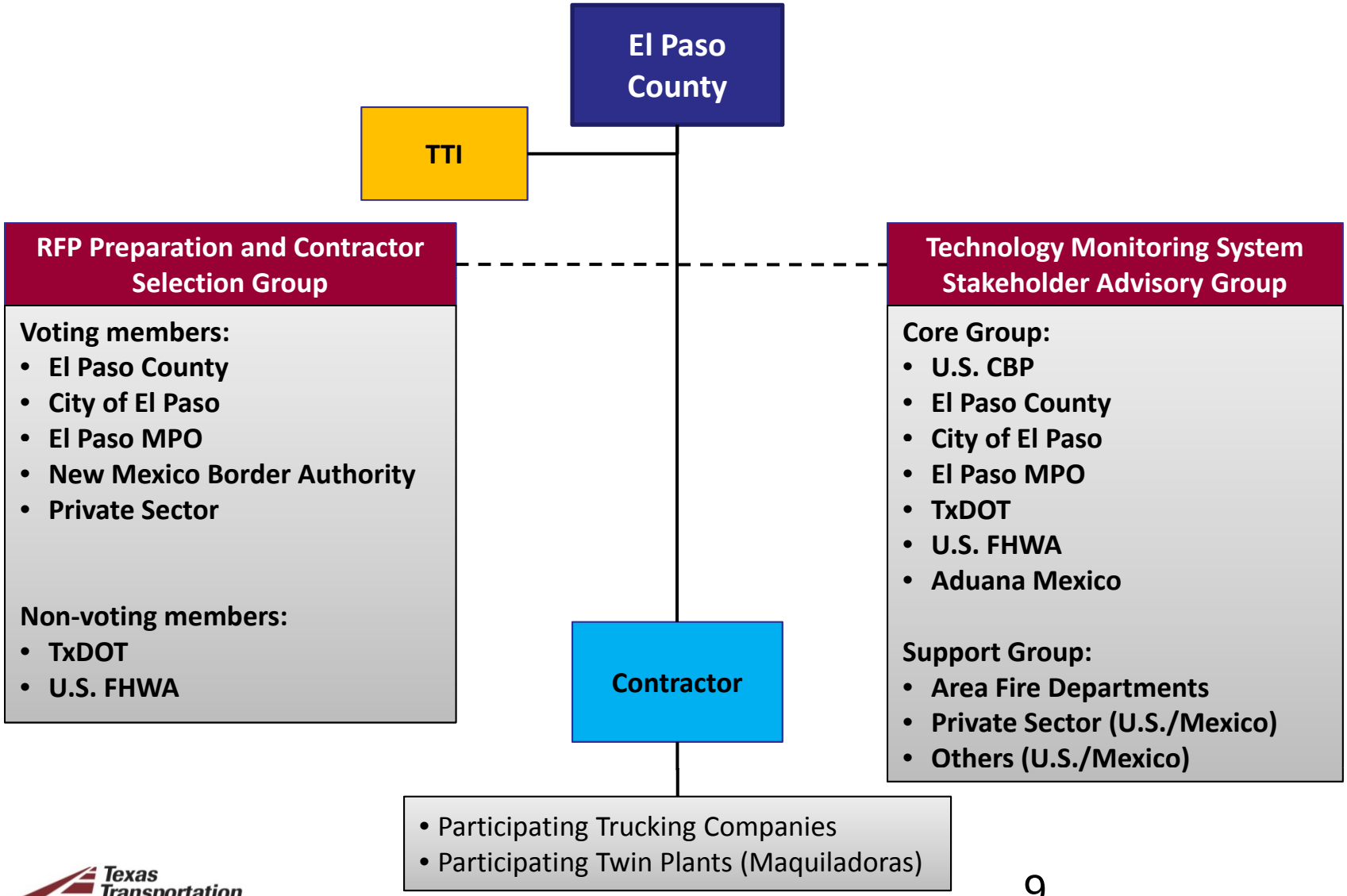
- Goal
  - Heighten security, promote economic development, and border trade efficiency through enhanced stakeholder collaboration
- Objectives
  - Introduce state-of-the-art technology to track and monitor commercial freight carriers
  - Expand the visibility of cross-border supply chain by extending monitoring of vehicles and cargo away from the border
- Project promoted and championed by the County of El Paso, funded by FHWA through Coordinated Border Infrastructure funds
- TTI is providing technology monitoring assistance and project management support to the El Paso County

El Paso County SBT Demonstration Project - Scope



- One central control facility equipped with software and hardware technology to track and monitor trucks in real-time
- Three designated “secure” maquiladora sites with surveillance devices and establish procedures for loading of goods
- 30 designated FAST-registered tractors and trailers with GPS-based electronic locking system

El Paso County SBT Project Management Plan



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