



Update on Travel Time Data Acquisition and Technical Support

Current Status of Data Acquisition

- **INRIX Real-Time Probe Data**
 - TDOT is Negotiating with INRIX and CATT LAB (University of Maryland) for the following
 - Real-Time Probe Data
 - Probe Data Analytical Tools (Online, Web-based Tools)
 - Historical Travel Time Data (15 min-Average Travel Time)
 - Traffic Operations Division is the main communication channel
 - Authorized users: TDOT, every MPO, all consultants working for TDOT, Emergency Management Agencies, all Universities in Tennessee
 - Total Cost Estimation: approximately \$920,000 per year

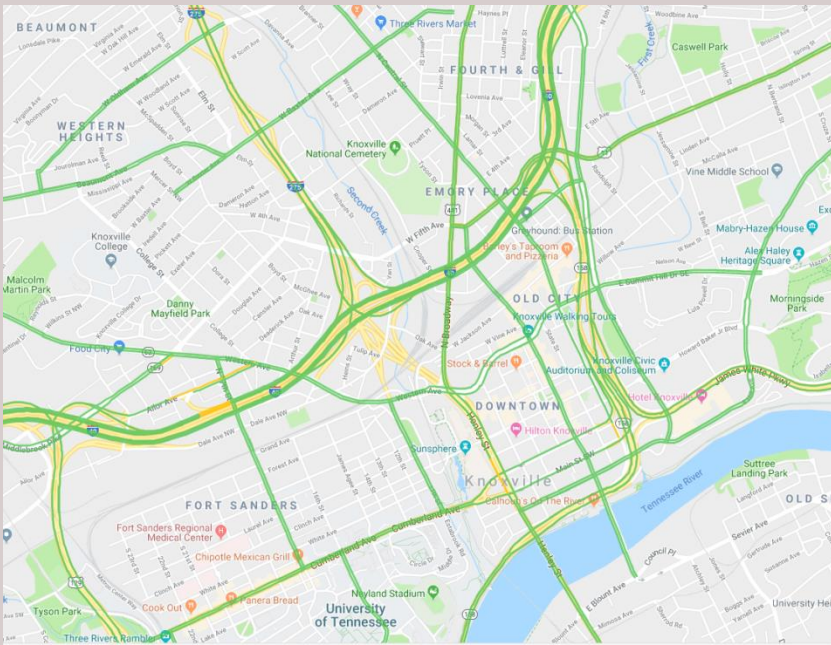
Network Options

- **INRIX Network Resolution Options**
 - **All TMC Network**
 - Segment Count: 15,999
 - Freeway Miles: 2,903.71 miles
 - Arterial Miles: 17,656.98 miles
 - **INRIX XD Network**
 - Segment Count: 53,423
 - Freeway Miles: 2,902.75 miles
 - Arterial Miles: 21,921.19 miles
 - **XD Network has shorter lengths of segments and more granularity**

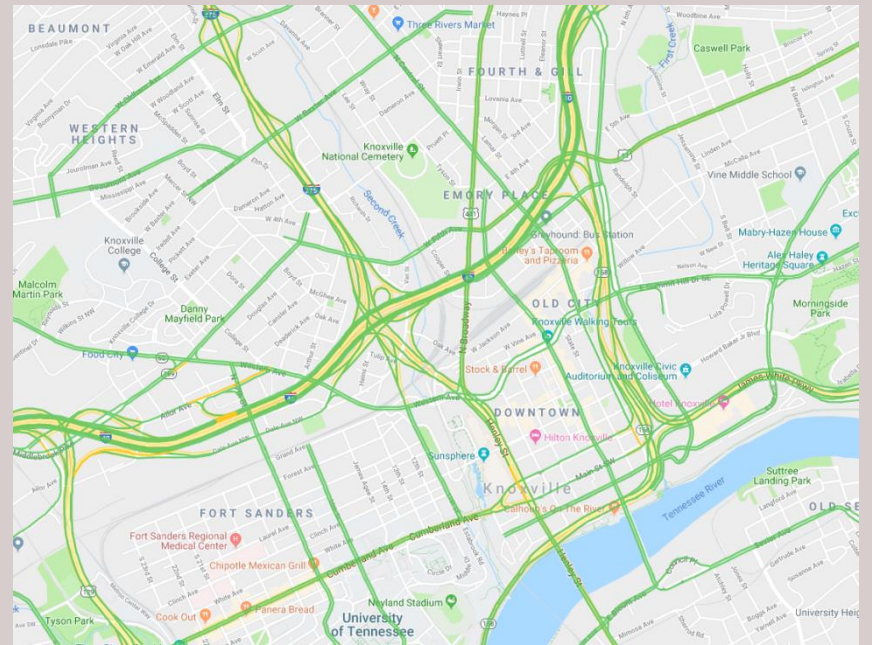
TMC vs XD

- Knoxville Downtown

TMC



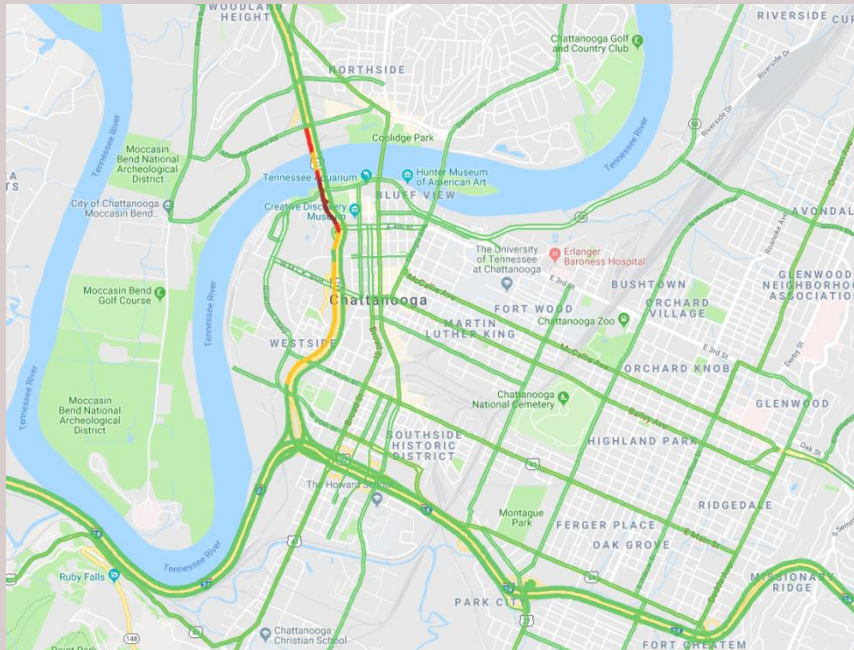
XD



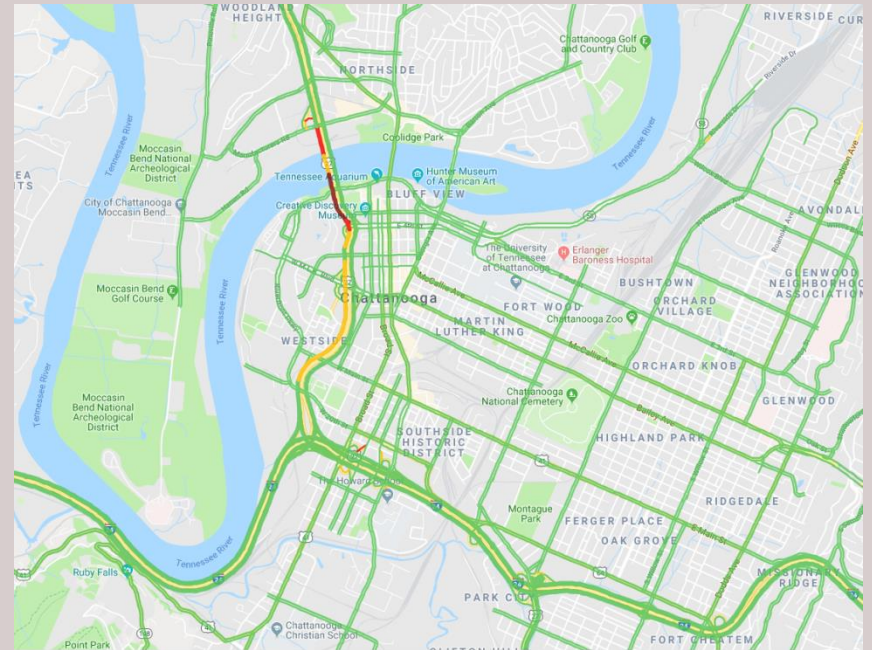
TMC vs XD

- Chattanooga Downtown

TMC



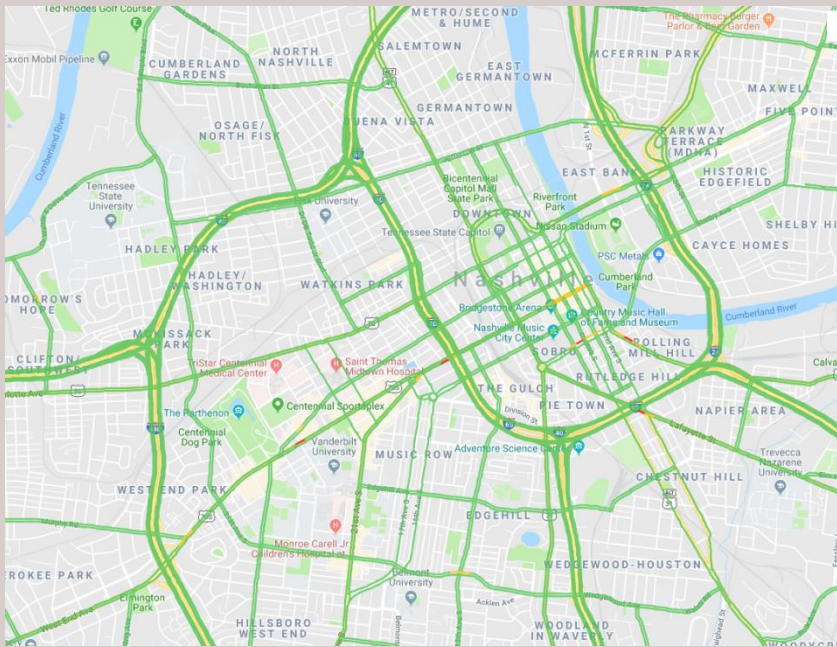
XD



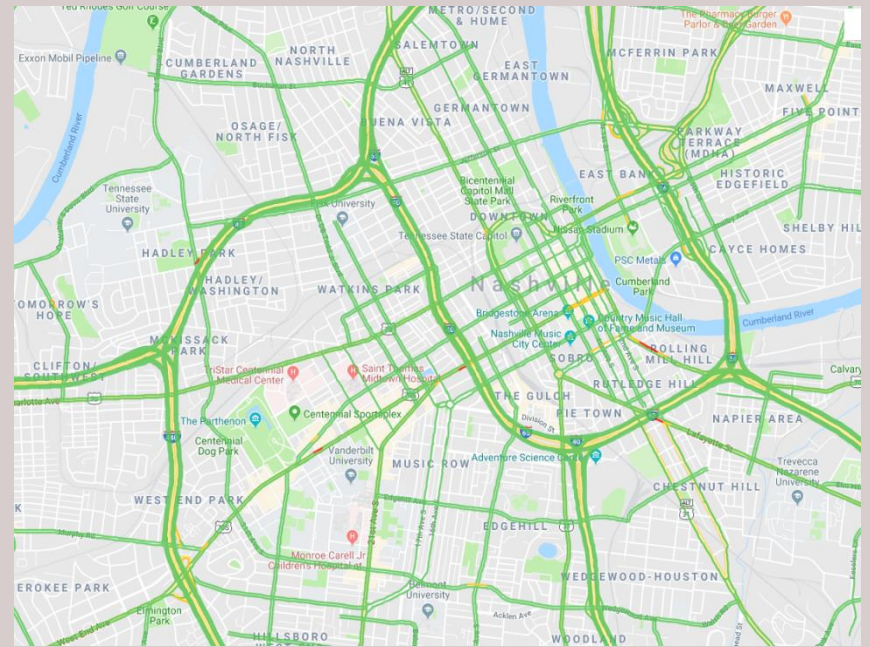
TMC vs XD

- Nashville Downtown

TMC



XD



Timeline

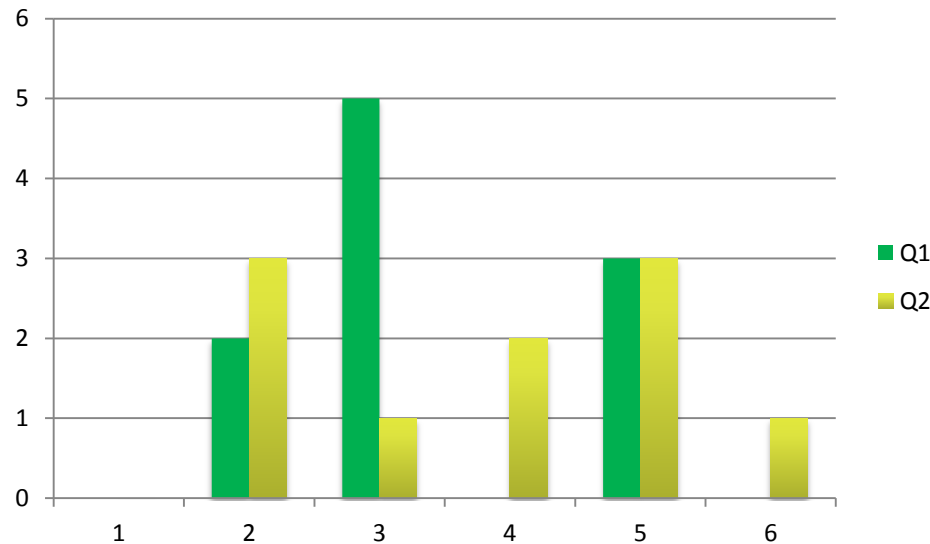
- **Mar. 4, 2019 – INRIX Visit**
- **Mar. 2019**
 - Confirm the option TDOT will purchase
 - Make a decision about the subscription period
- **Apr. 2019 – Find Additional Funding Source**
 - TDOT may contact to all MPOs for discussion on the cost sharing
- **Jul. 2019 – Make a contract with RITIS & Data Vendor**

Model Application Challenges

- **Survey in 2018**
 - **Survey Questions Part 3**
 - Q1: “We have to spend too much money on hiring consultants for the model application”
 - Q2: “We highly rely on consultants to conduct projects that need to use the model”
 - **Answers**
 - 1 - Strongly Disagree
 - 2 - Disagree
 - 3 - Neutral
 - 4 - Agree
 - 5 - Strongly Agree
 - 6 - Not Applicable

Model Application Challenges

- **Survey Results**



- **Average Score is greater than 3.0.**
- **Some of MPOs seem to be burdened with the cost of the model applications**

Model Application Challenges

- **What TDOT can help?**
 - Provide technical support to MPOs in model application
 - Example: Modeling Request from Kingsport MPO
 - A new project analysis using the travel demand model
 - Updated on the model network
 - Executed the model
 - Provided a table of results including future traffic flow and V/C ratio
 - TDOT Forecasting Office can help MPOs who need modeling assistance with simple tasks because of the lack of personnel.
- **Future Discussion**
 - Standardized Travel Demand Model Platform
 - It helps TDOT Forecasting Office save time to review and provide technical support.

Contact Information

David Lee, PhD

Assistant Director

Long Range Planning Division

David.Lee@tn.gov

Office: (615) 253-4519

Cell: (615) 906-4555

Chris McPhilamy

Planning Manager

Long Range Planning Division

Chris.McPhilamy@tn.gov

Office: (615) 253-2562

Cell: (615) 483-1086

Jaehoon Kim, PhD

Forecasting Office Supervisor

Long Range Planning Division

Jaehoon.Kim@tn.gov

Office: (615) 837-5464

Cell: (615) 587-1866