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 vs XD

- Chattanooga Downtown
TMC vs XD

- Nashville Downtown
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.
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