TDOT’s Traffic Count Program—An Update for MPOs

Long Range Planning | Office of Community Transportation
Traffic Data
Statewide traffic monitoring sites
TDOT’s Traffic Count Program

Traffic data collected broadly includes:

• Volume counts (also called Coverage Counts)
• Vehicle Classification Counts
• Speed data.
Coverage Count program

- 24 hour counts with 15 minute increments
  - Vs 48 hour counts recommended by Traffic Monitoring Guide (California conducts 7 day counts)
  - More counts, more staff efficiency

- There are in excess of 12,000 active count locations across the state
- In addition, there are approximately 2,000 ramp count locations
- Tubes, ATRs, Embedded Loops
Coverage Count program (continued)

- Interstates and State Routes are counted every year

- Functional Class Roads counted every 2 years (at this time)

- This year, TDOT is collecting traffic counts for all HPMS sample sections in order to eliminate the use of estimates in Federal reporting.

- Currently there are in excess of 3,000 HPMS Sample Sections.
Classification count program

• Approximately 600 **Classification Counts** are done *each year* and there are in excess of 2000 designated locations for those counts.

• Classification Count locations are rotated on an annual basis.

• Embedded Detection Loops and tube counts are used for classification counts
Who Does the Work?
Who does the Work?

- Right now, total of 8 data collection employees
- 2 in each TDOT Region
- Prior to Recession era, there were 15 data collection employees, including Turn Count Specialists
- We are currently in process of adding 4 additional data collectors who will be on contract through our contract with the University of Tennessee’s Center for Transportation Research.
- This change will enable us to start collecting data at all count locations across the state every year (over 14,000 locations total).
- Will also allow us to conduct more special counts for both internal and external customers.
Tools of the Trade: Mobile Equipment
Tools of the Trade: TDOT Count Infrastructure along roadway
Continuous Count program

- There are over 60 Automatic Traffic Recorders (ATR) Stations
- There are over 100 Embedded Detection Loop (EDL) locations
**What are we collecting?**

- **Traffic Volume**
- **Vehicle Classification (plus speed)**

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<thead>
<tr>
<th>Data Type</th>
<th>Definition</th>
<th>Use</th>
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<tr>
<td>Traffic Volume</td>
<td>The number and movements of roadway vehicles at a given location</td>
<td>- Determining LOS</td>
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<td>- Forecasting future traffic volumes</td>
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<td>- Analyzing highway capacity</td>
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<td>Vehicle Classification</td>
<td>Classifications of roadway vehicles at a given location</td>
<td>- Forecasts for travel by vehicle type</td>
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<td>- Pavement Design</td>
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<td>- Highway cost allocation</td>
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What does the future hold?

• New(er) Technologies, such as radar collection?
• New safety improvements (more ATR’s and embedded loops)
• New partnerships with internal partners at TDOT
  • Incorporating ATR installations into repaving projects
  • Incorporating ATR’s into New Start Technical Studies
What does the future hold?

- New partnerships with municipal/MPO partners across the state
  - What count locations are you already doing?
  - Are there locations we could add to our annual list?
  - Are there locations we/you can stop doing?
  - Standardization will be key
    - Applied factors
    - Computer programs utilized
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