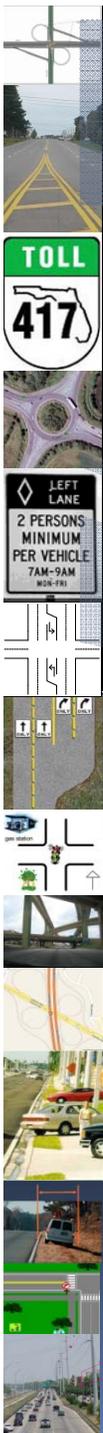


Learning Outcomes for Module I

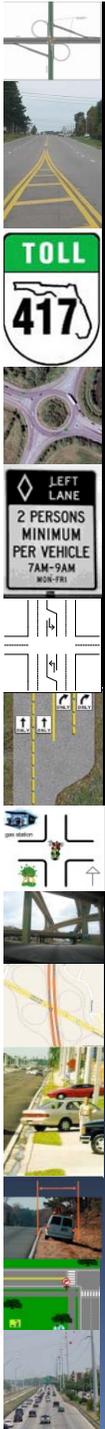
You will be able to:

- Describe the Background of HPMS
- Describe the Scope of HPMS
- Identify the Roles/Responsibilities pertaining to HPMS
- Identify the Core Data Components of HPMS



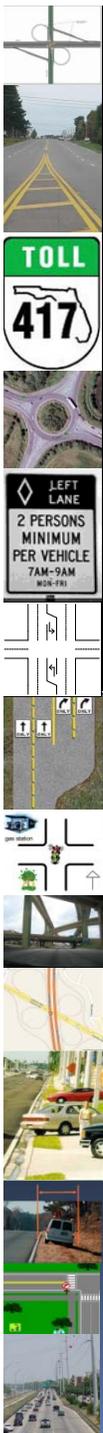
Lesson 1

HPMS BACKGROUND



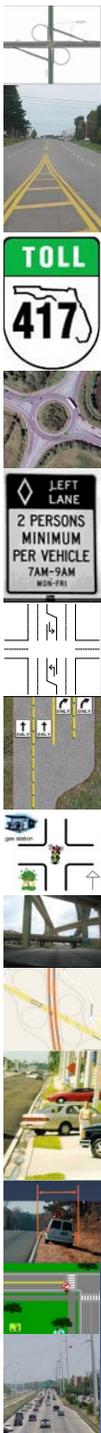
HPMS Background

- Developed in 1978
- Roadway condition and performance (C&P) data
- Used to determine apportionment of Federal-aid funds
- Key source of data for C&P Report
- Comprised of State-provided transportation system data
- Program objectives/business needs must be reassessed periodically



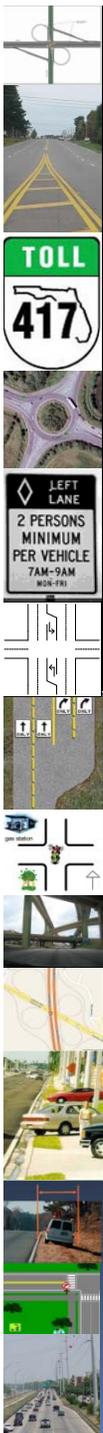
Uses of HPMS Data

- Federal Uses
 - Federal Apportionment Formula
 - Highway Economic Requirements System (HERS)
 - Pavement Deterioration Models
- Non-Federal Uses
 - Statewide Planning Programs
 - Real Estate/Business Sector
 - Transportation Research

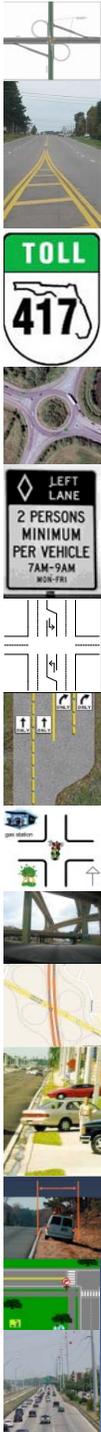
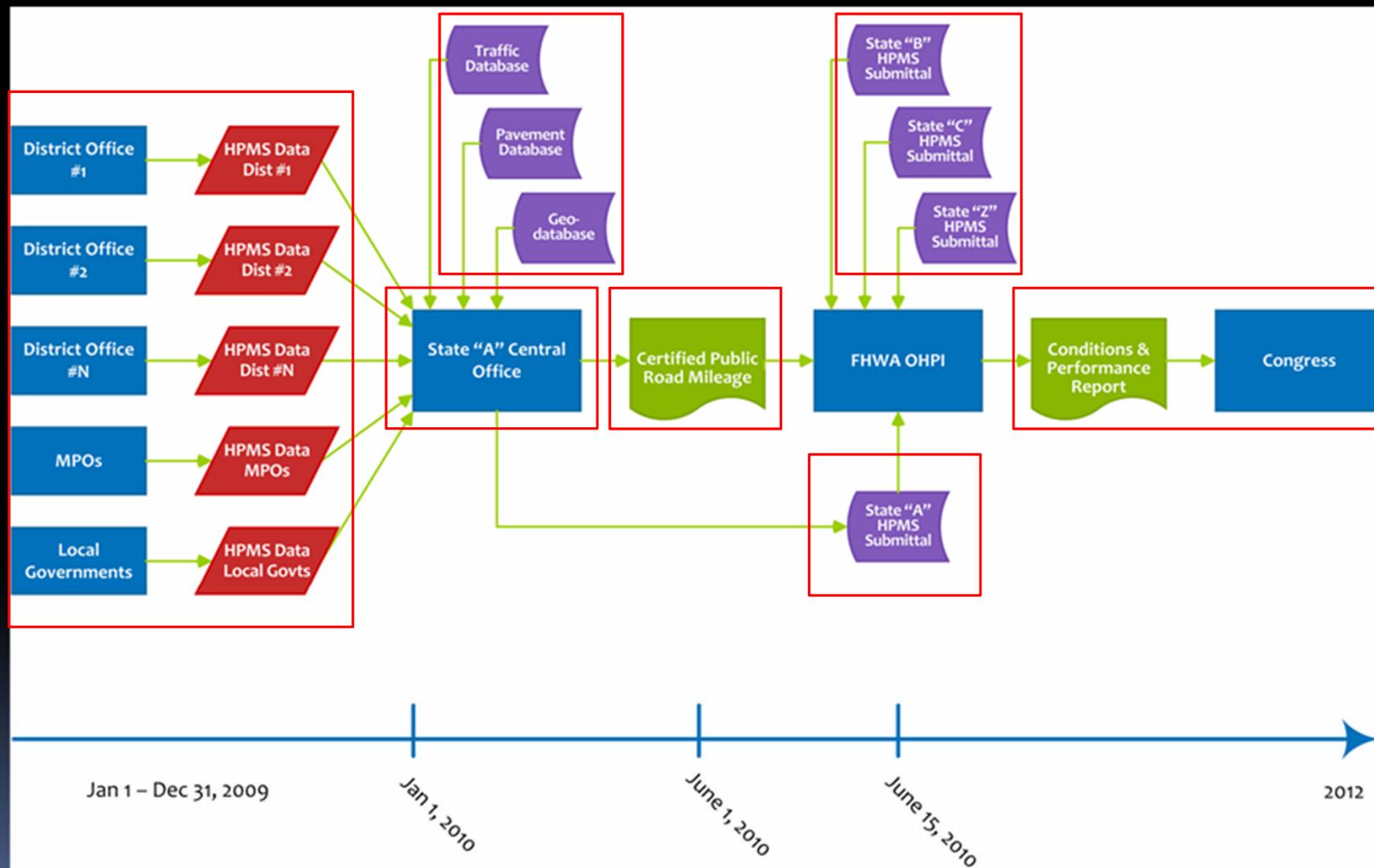


HPMS Reporting Requirements

- HPMS annual submittal due by June 15th
- Mileage must be consistent with Certified Public Road Mileage
- Linear referencing system (LRS) data
- Roadway inventory/attribute data
- HPMS submittal must be transmitted to FHWA via web-based application

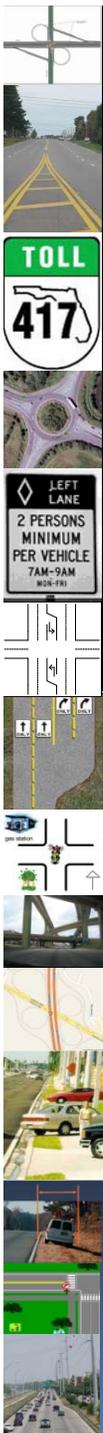


HPMS Roles/Responsibilities



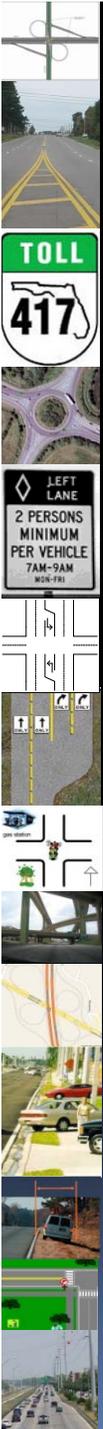
Lesson 1 Summary

- HPMS serves as a major input to the C&P report
- HPMS consists of data for all publically-traveled roads
- The due date for HPMS submittals is June 15th
- HPMS involves a coordinated effort between FHWA and the States



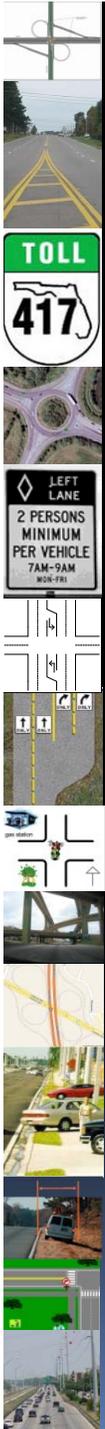
Lesson 1

Questions???



Lesson 2

HPMS CORE DATA COMPONENTS

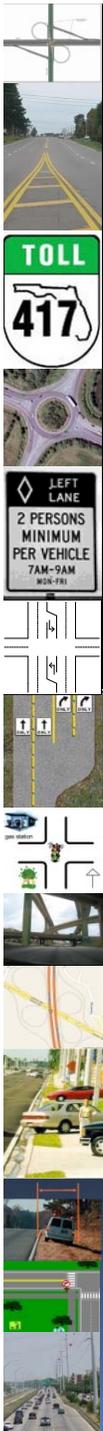


HPMS Core Data Components

- Types of Attribute Data:
 - Full Extent
 - Sample Panel
 - Partial Extent
 - Summary
 - Estimates
 - Metadata
- Linear Referencing System (LRS) Data

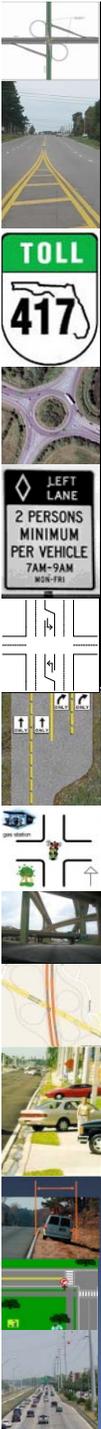
HPMS Core Data Components (cont'd)

- Full Extent Data
 - Reported for an entire roadway system (e.g., the NHS)
 - Includes ramps at grade-separated interchanges*
- Sample Panel Data
 - Reported for randomly selected roadway sections
- Partial Extent Data
 - Reported on a Full Extent basis for certain functional systems and a Sample Panel basis for others



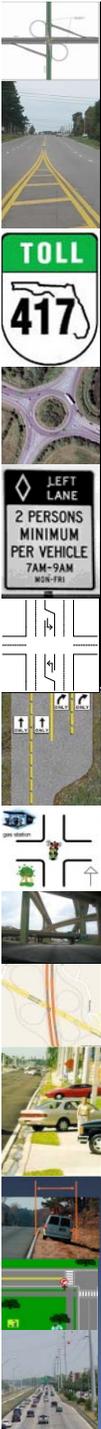
HPMS Core Data Components (cont'd)

- Summary Data
 - Reported for the lower functional system roads
 - Summarized from State, local sources
- Estimates Data
 - Reported for various pavement-related data elements
- Metadata
 - Reported for various traffic and pavement-related data elements



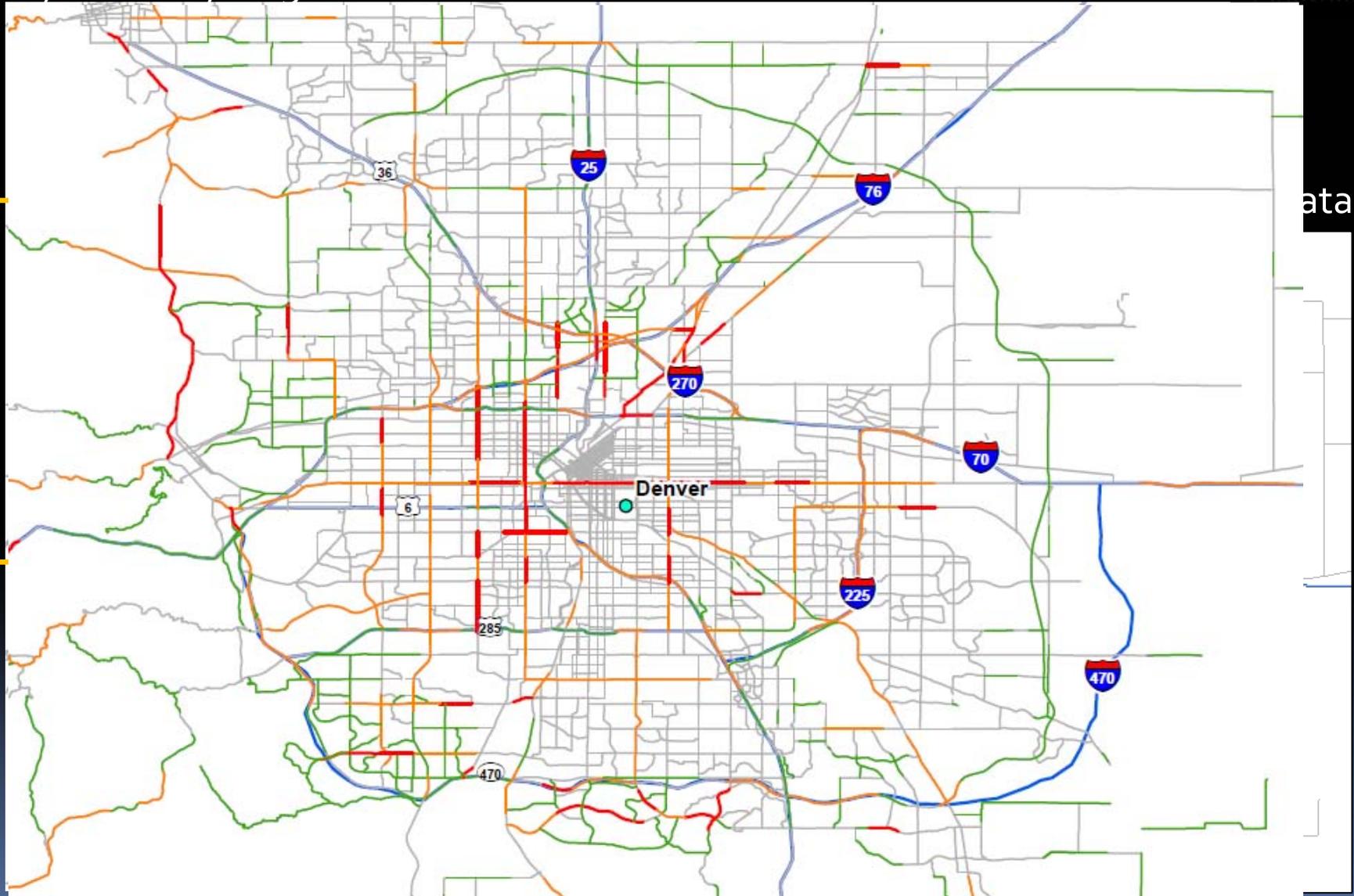
HPMS Core Data Components (cont'd)

- Linear Referencing System (LRS)
 - Provides a geospatial representation of a road network
 - Retains record of points along highways
 - Measured using milepoint, milepost, reference point, or link-node
 - Provides the framework for analysis and reporting

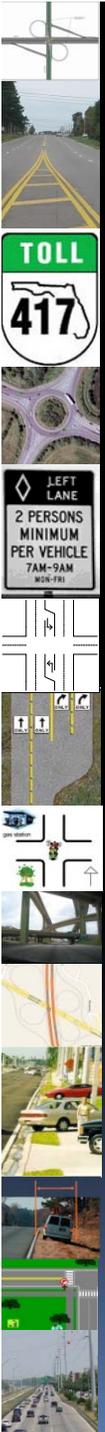


Dynamic Segmentation Process

Dynamic Network Segmented LRS Network

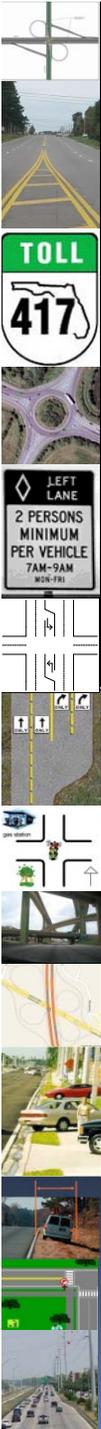


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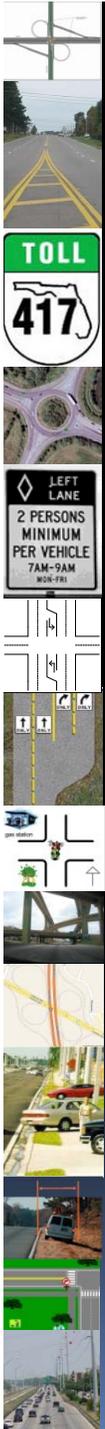
Lesson 2 Summary

- Full Extent, Sample Panel, and Partial Extent Data are reported for roadway sections
- Summary Data is reported as area-wide totals
- Estimates and Metadata provide supplemental descriptive information
- LRS networks provide the framework for geospatial analysis/reporting in HPMS



Lesson 2

Questions???



Review: Learning Outcomes

You should now be able to:

- Describe the Background of HPMS
- Describe the Scope of HPMS
- Identify the roles/responsibilities pertaining to HPMS
- Identify the core data components of HPMS

