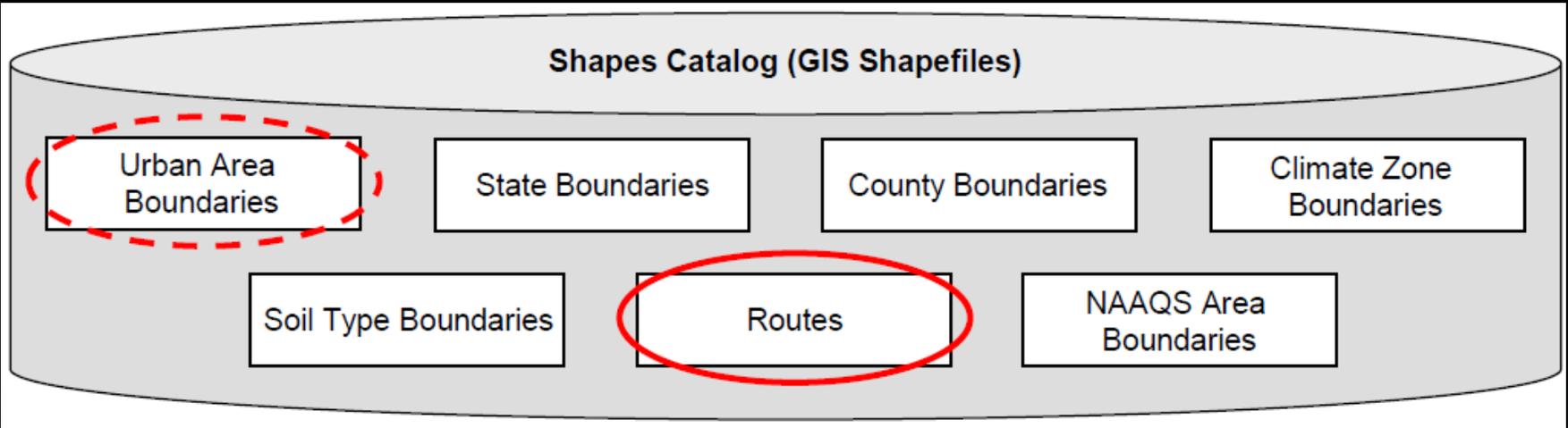
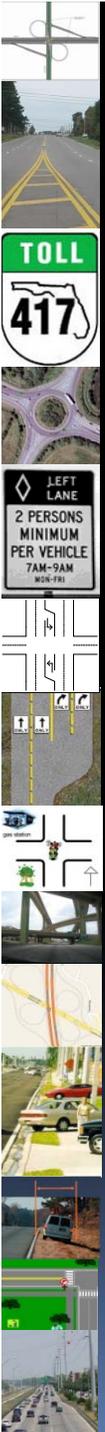
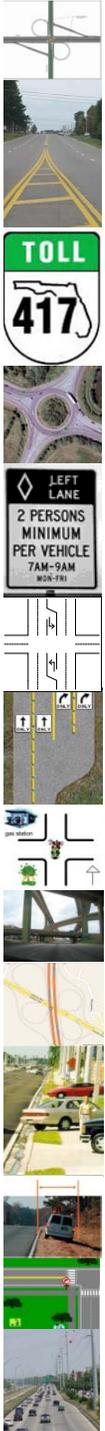


HPMS and Traffic Monitoring Joint Session - Ramp Data Requirements

(NHI Washington Rooms 1 and 2)

Shapes Catalog





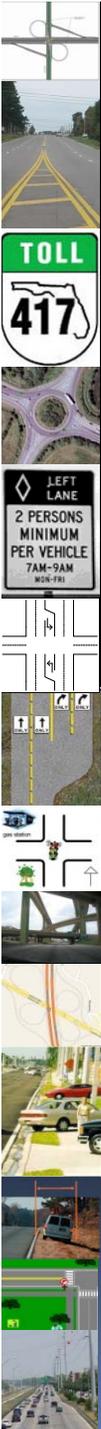
Routes Dataset

Field Name	Description
Year_Record	Year for which the data apply
State_Code	State FIPS code
Route_ID	Unique ID for the linear feature
Comments (optional)	Text descriptor for the route
Shape	<i>Line feature</i>

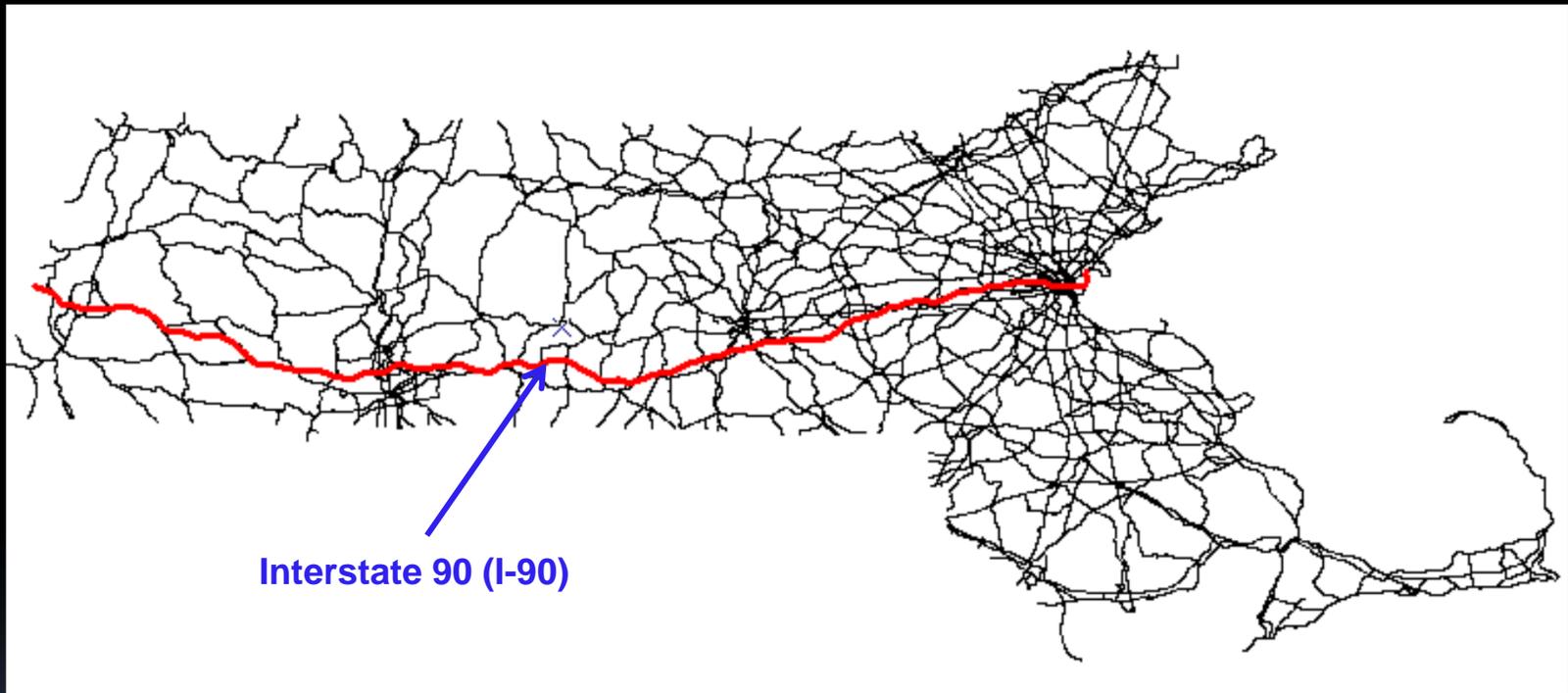
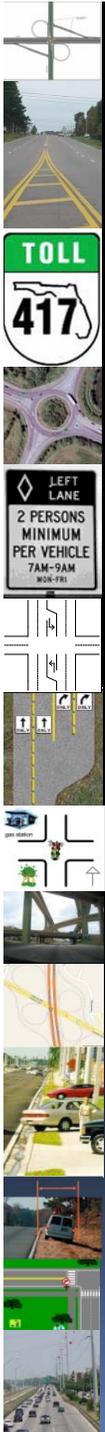
- Line feature dataset
- Depicts the States' National Highway System (NHS) all Federal-aid roads including grade separated ramps
- Developed and submitted by the States

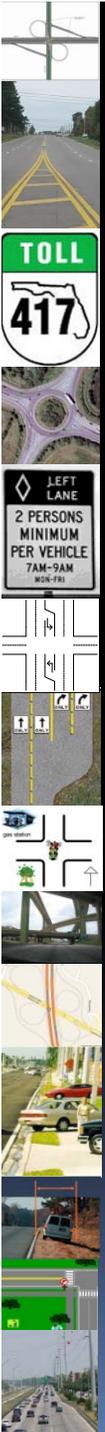
Routes Dataset Requirements

- Three acceptable Formats
 - ESRI Shape File
 - ESRI Personal Geodatabase
 - Geomedia MDB
- Data Format Requirements:
 - Centerline or Dual Carriageway geometry
 - Spatial Reference must be assigned
 - Projected or unprojected coordinates
 - Linear measures – miles, feet, etc.
 - Reference Scale - 1:100,000 or better



Routes Dataset Example

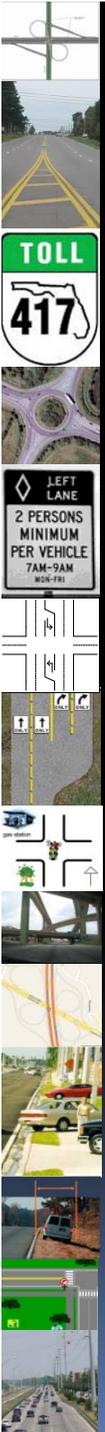




What data is required to be collected and reported for ramps?

- Grade separated interchanges only!
- 1 F_System FE + R
- 2 Urban_Code FE + R
- 3 Facility_Type FE + R
- 7 Through_Lanes FE + R
- 21 AADT FE + R
- 67 County_Code FE + R

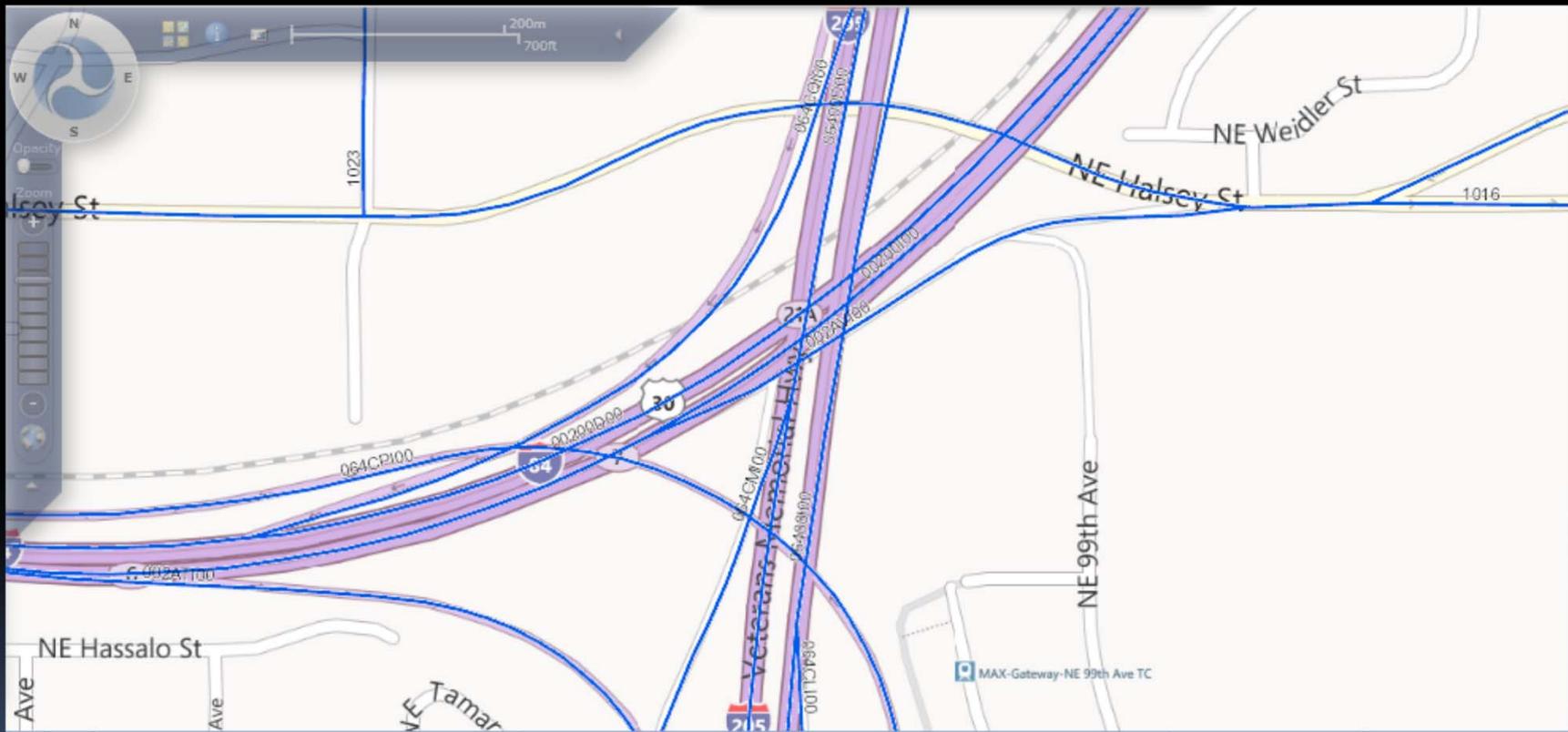
Centerline System with Ramps (notice the tails)



Route ID Comments Last Modified By Last Modified On

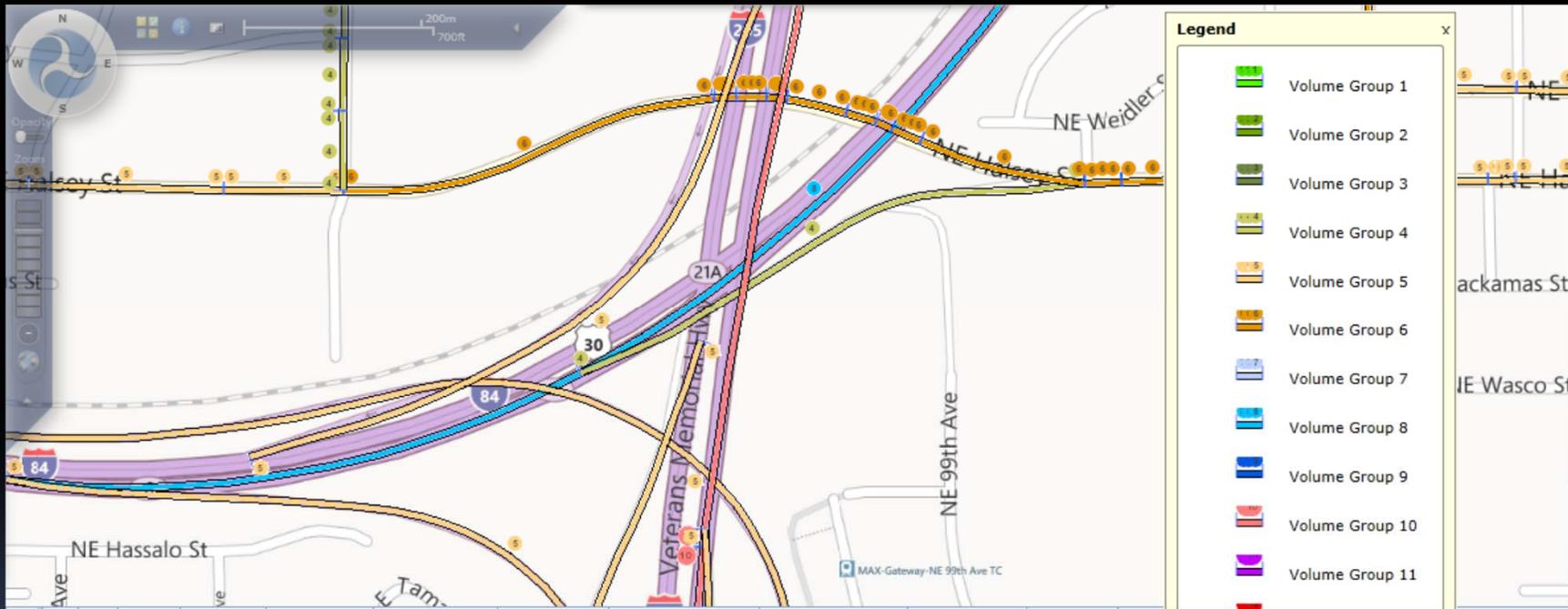
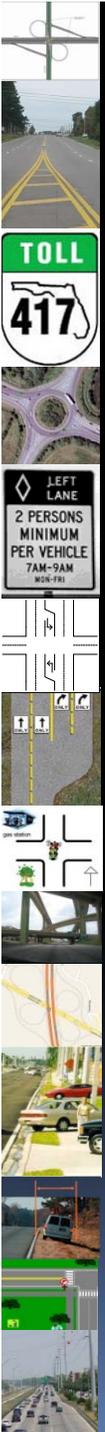
Thanks Colorado!

Dual Carriageway System with Ramps



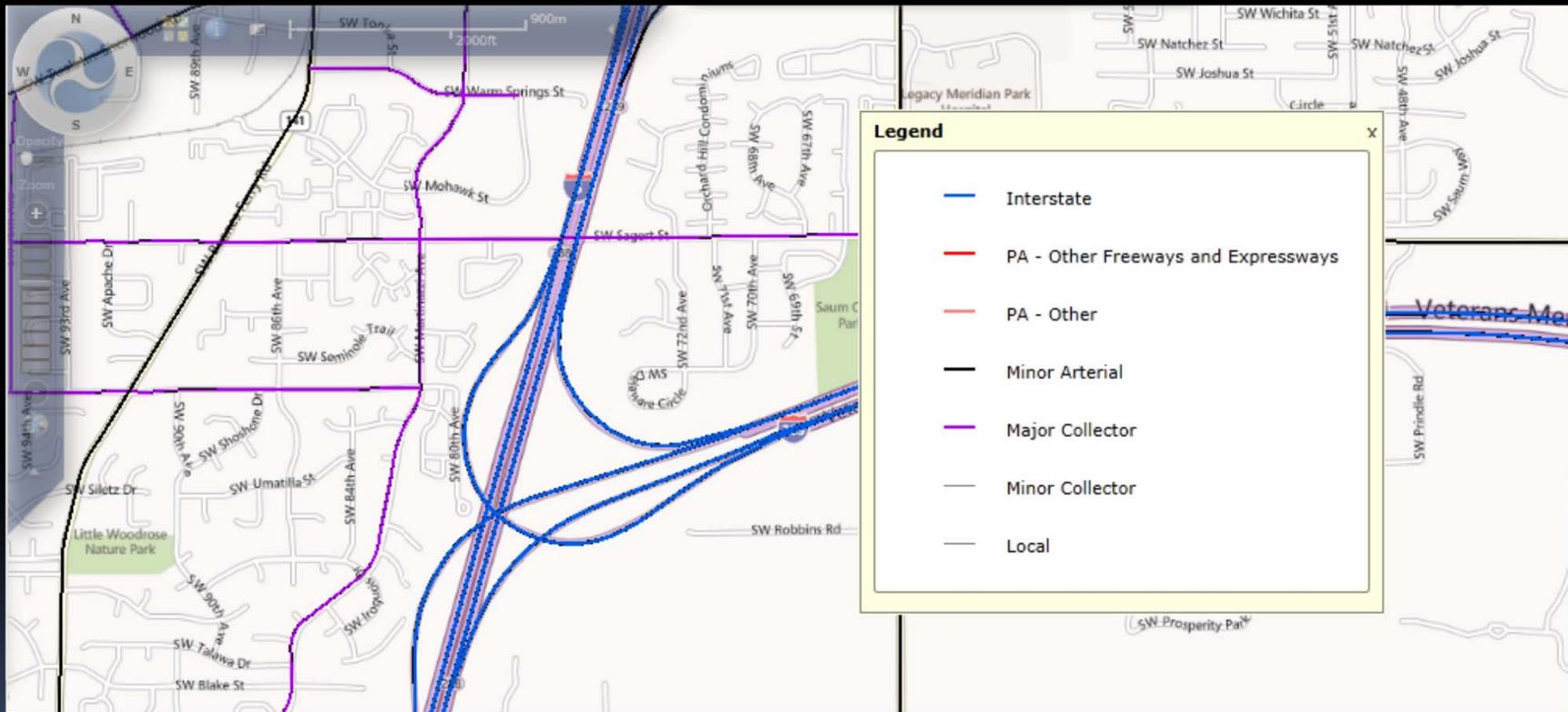
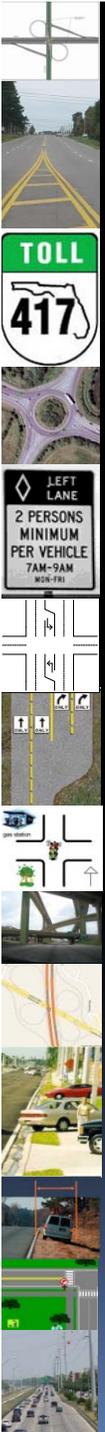
Thanks Oregon!

Dual Carriageway LRS with Ramps and AADT



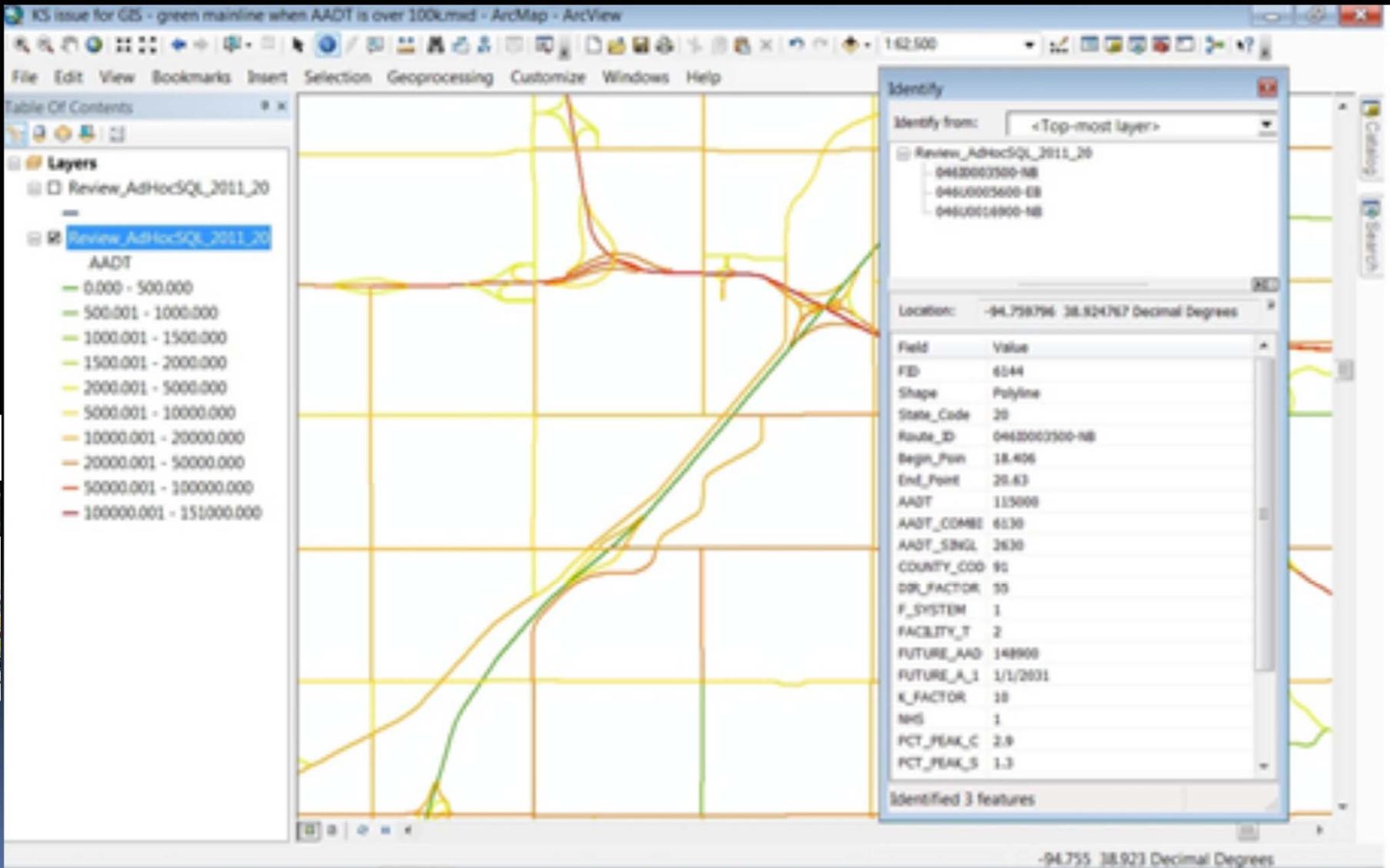
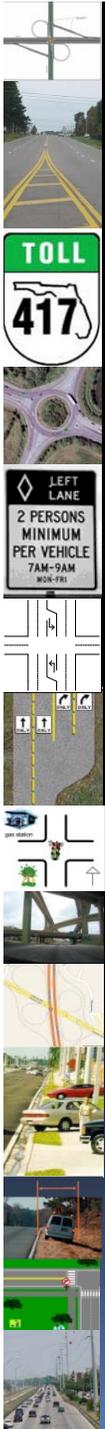
Thanks Oregon!

Functional System Codes Applied to a Dual Carriageway Network



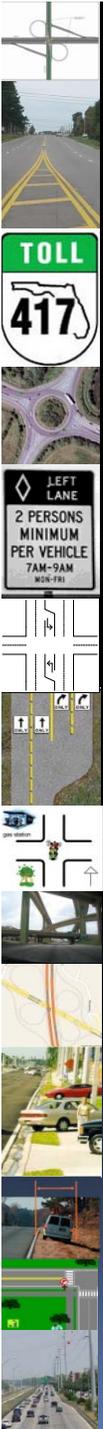
Thanks Oregon!

Travel/Traffic Analysis - Missing Ramp AADT Data



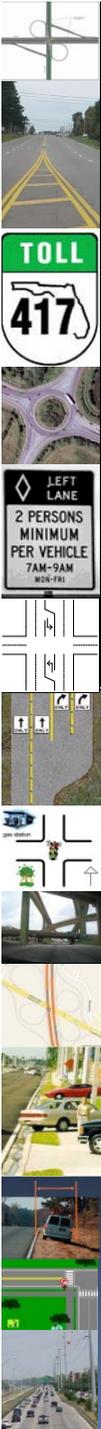
HPMS Ramp Requirements

Data Item Type	Item Number	Data Item	Extent
Inventory	1	Functional (F) System	FE + R
	2	Urban Code	FE + R
	3	Facility Type	FE + R
	7	Through Lanes	FE + R
Traffic	21	AADT	FE + R

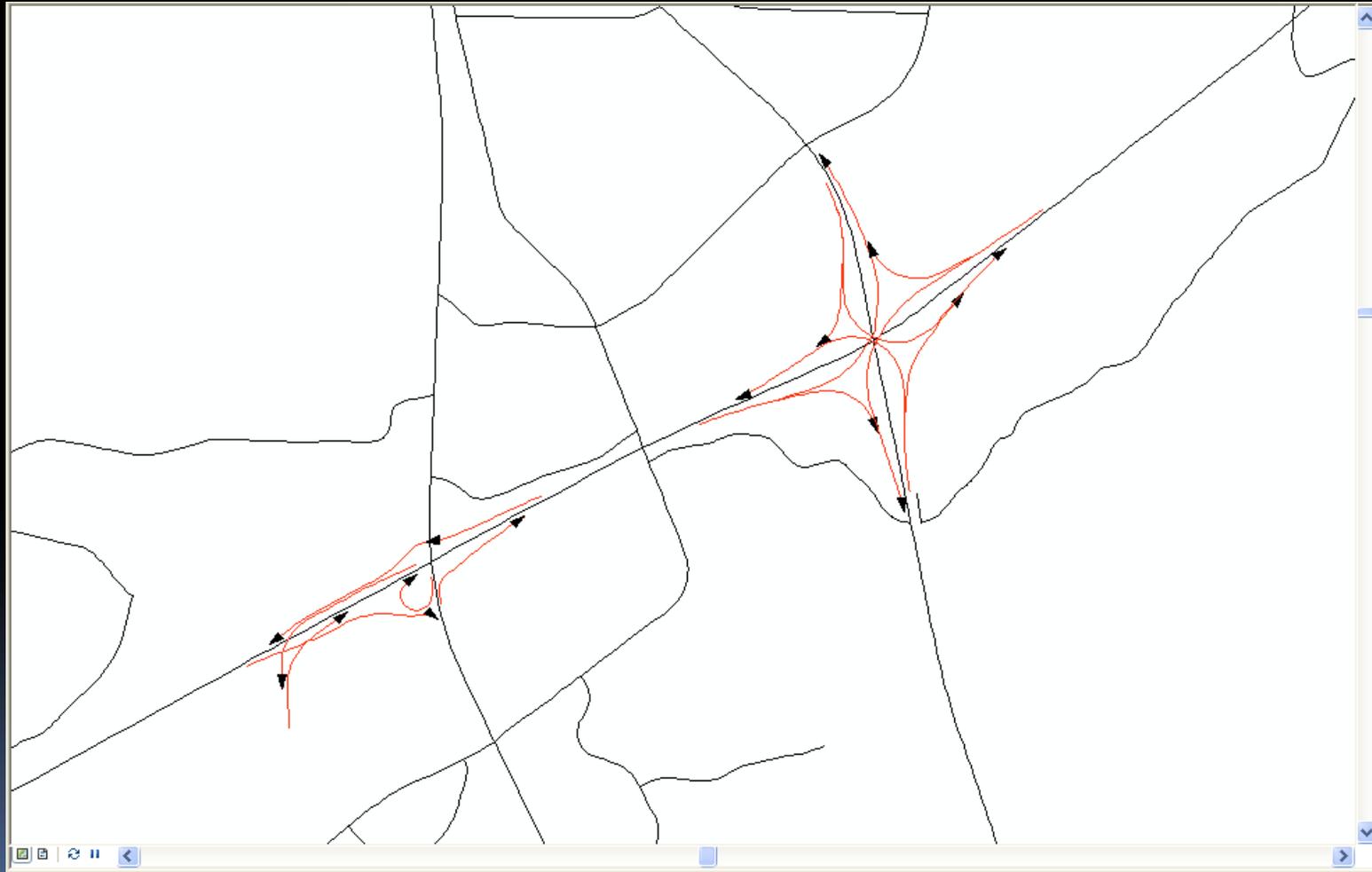
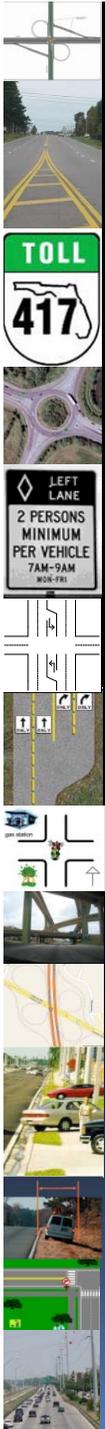


Current Process and Equipment for Data Collection

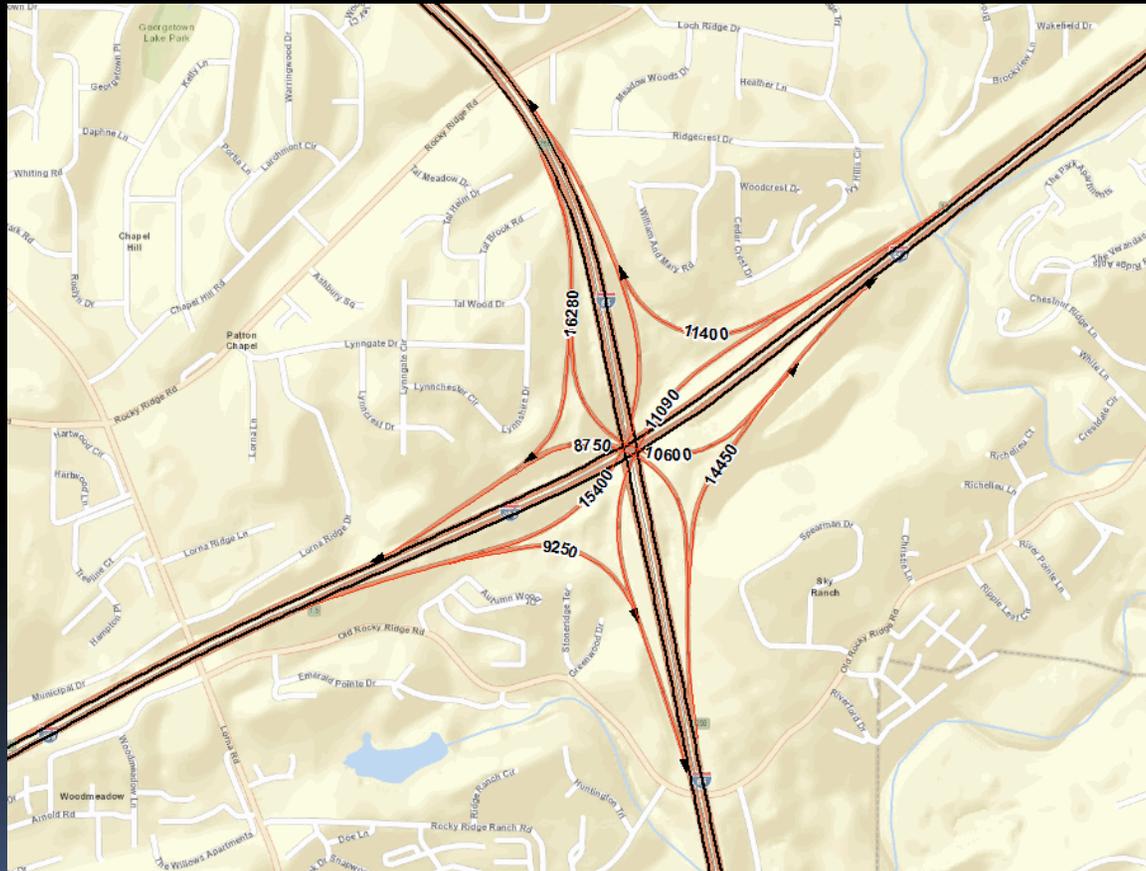
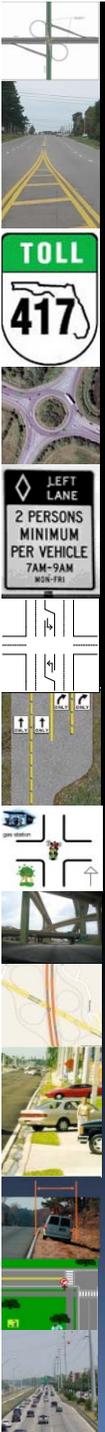
- Ramps are inventoried on a three year cycle by HPMS Field Personnel.
- Field equipment used
 - Trimble AgGPS 132
 - Field Laptops with ESRI software for data entry



2011 Centerline Routes



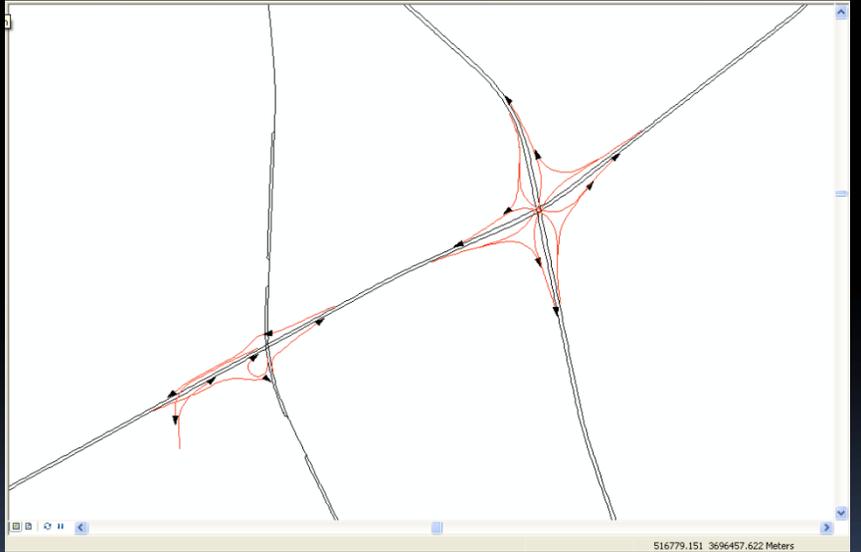
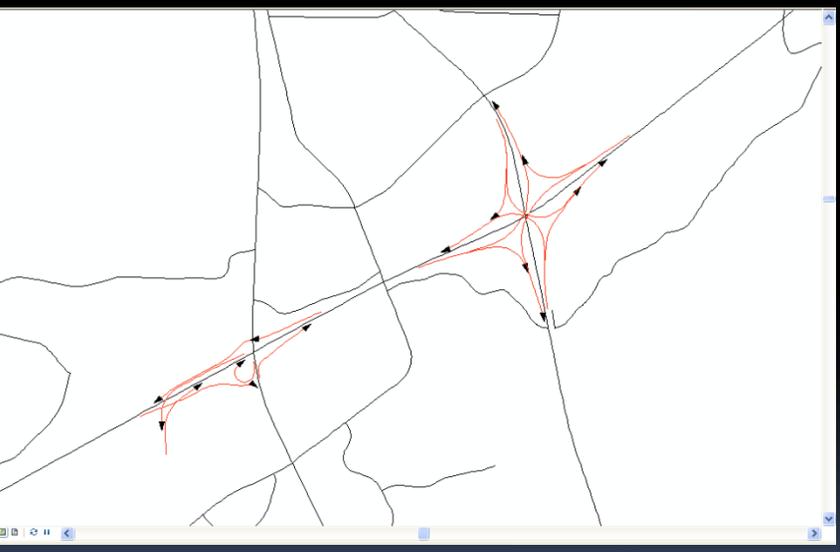
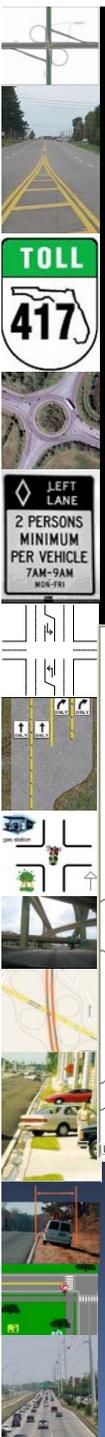
2012 Dual-Carriage Routes



Comparison

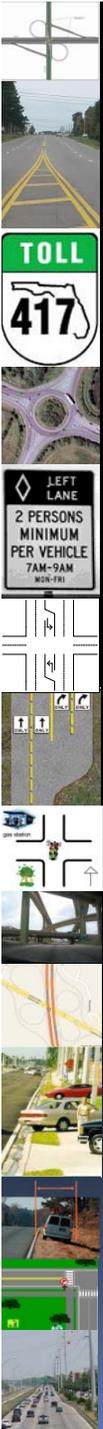
2011

2012

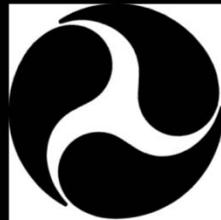
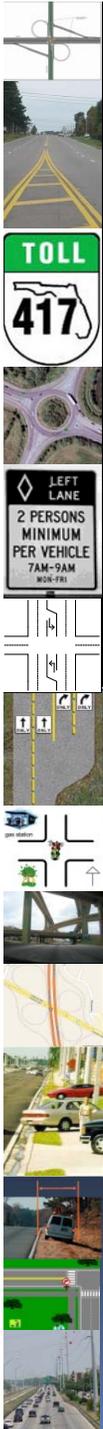


Future Plans for Data Collection

- A dedicated group of staff collecting data in a single pass for the entire ALDOT.
- Utilizing better equipment in the field (IMU, Imaging, LiDAR, etc.)



Open Discussion



U.S. Department
of Transportation

**Federal Highway
Administration**