



2011 Congestion Management System Summary Update

Prepared for the WILMAPCO CMS
Subcommittee

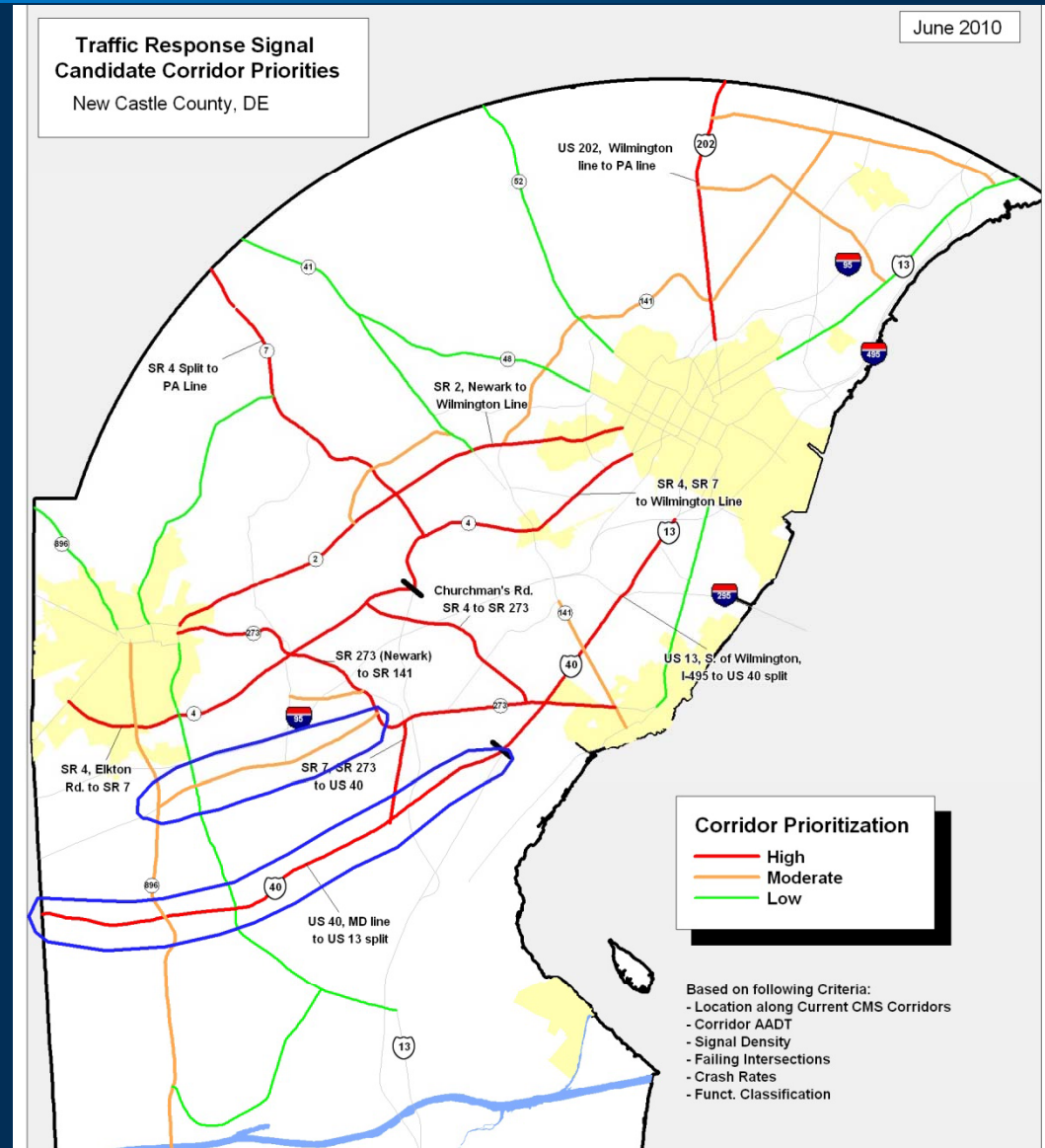
October 14st 2011

Agenda

- **TOMP Update**
- **Linking Planning & Operations in CMS activities**
- **Data/Performance measure update**
- **RTP Update**

Previous meeting follow up

- TMC looking for priority corridors for TRS
- Created list using criteria:
 - Road FC
 - CMS Corridor
 - AADT
 - Signal Density
 - # Failing Intersections
 - Crashes



What is TOMP?

Transportation Operations Management Plan (TOMP)

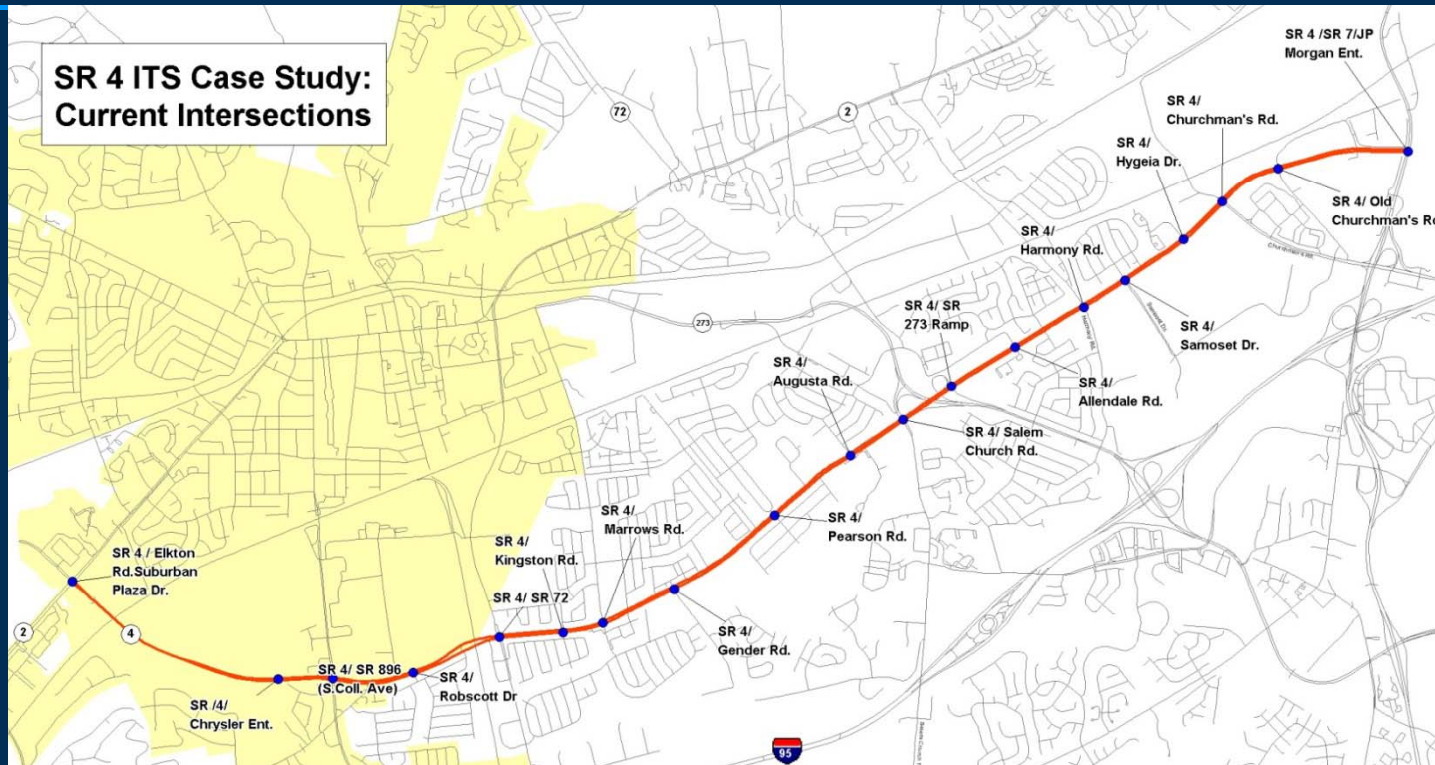
- DeIDOT first conducted county-specific (TOMP) in 2000 & 2001
- The data and findings of these plans proved to be very useful for DelTrac,
- DeIDOT seeks to update the county-specific TOMPs to reflect current conditions through this study effort.
- 2010 effort to focus on NCC

TOMP Goals

Project Goals and Objectives

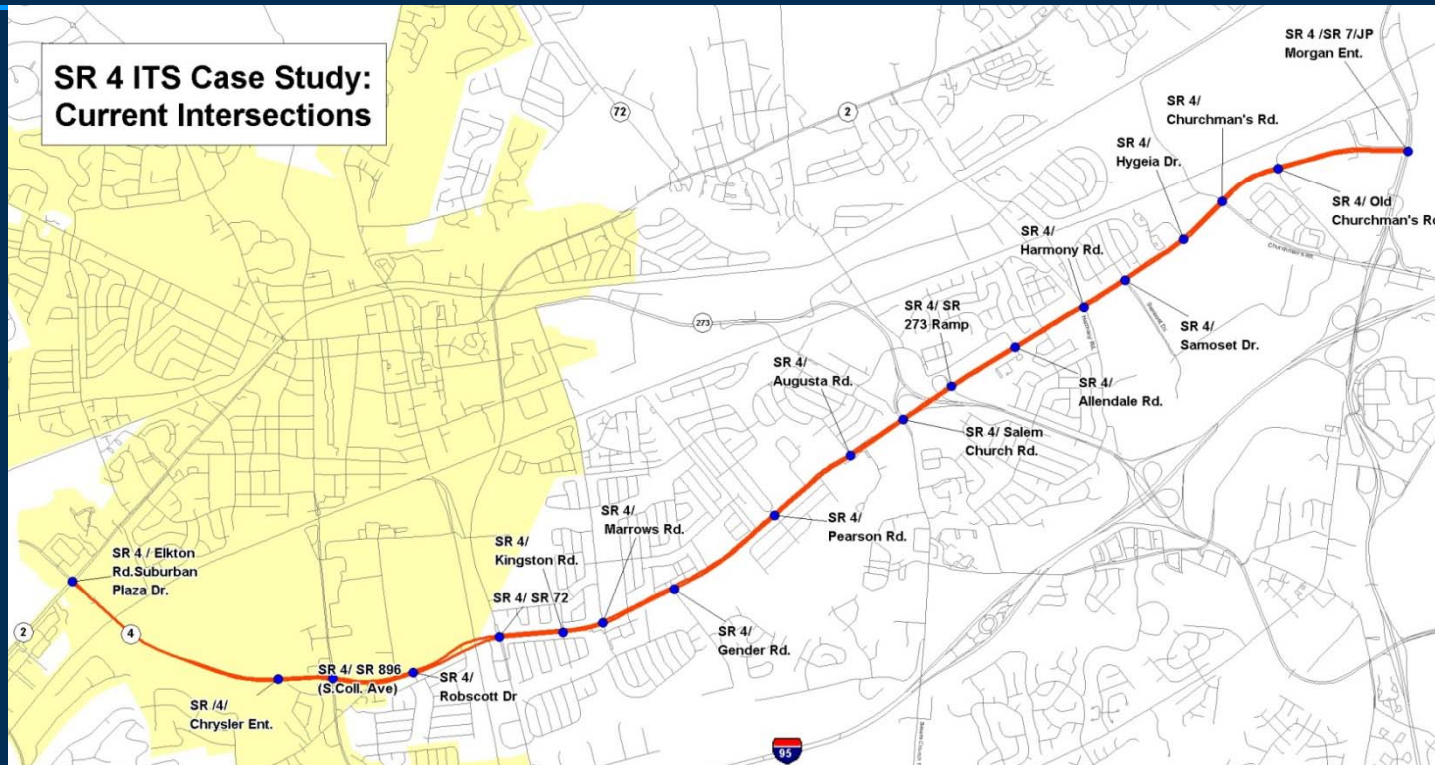
- **Stakeholder outreach to confirm study locations and determine measures of effectiveness (MOEs)**
- **Extensive data collection**
- **Traffic analysis**
- **Temporal and geographic displays of transportation system performance using various MOEs**
- **Electronic storage of data**
- **Technical analysis findings and recommendations for improvements**
- **DelTrac investment cost-benefit analysis**
- **Special “Case Study” to be conducted**

Special TOMP Case Study SR 4



- Examine all current conditions
 - AADT & V/C
 - Travel Speed
 - Transit Usage
 - Intersection LOS
 - Ped. Usage?

Special TOMP Case Study SR 4



- Implement several ITS infrastructure
 - TRS
 - Transit wait-time countdown
 - Measure changes after implementation

Linking Planning & Operations

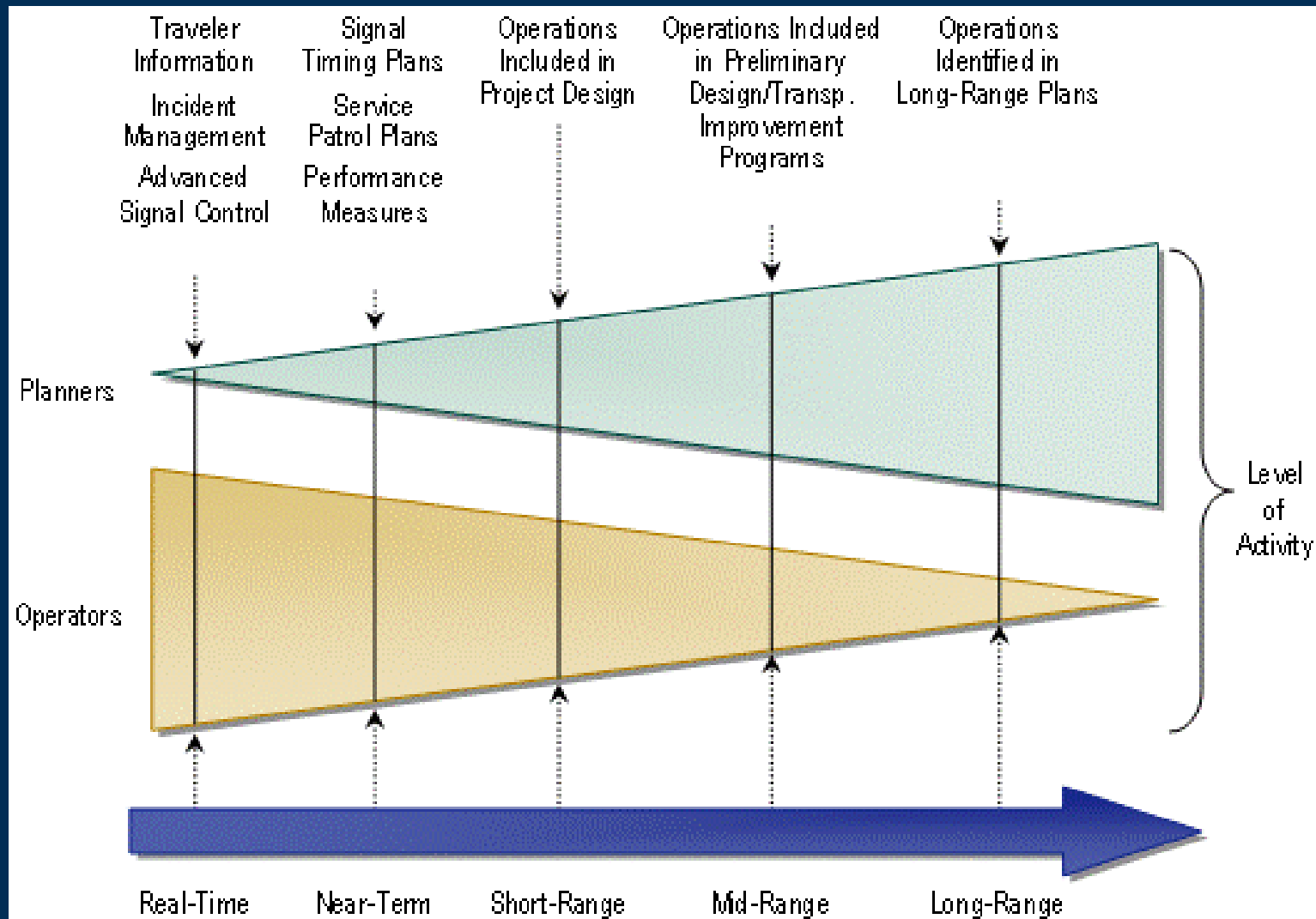
From the FHWA Guidebook on CMP:

For MPOs of areas with populations greater than 200,000, SAFETEA-LU contains this requirement:

- **Congestion Management Process:** Section 6001(a) of SAFETEA-LU includes an amendment to Title 23, Section 134(k), of the United States Code that states:

“Within a metropolitan planning area serving a transportation management area, the transportation planning process under this section shall address congestion management through a process that provides for effective management and operation, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under this title and chapter 53 of title 49 through the use of travel demand reduction and operational management strategies.”

Roles of Planning in Operations

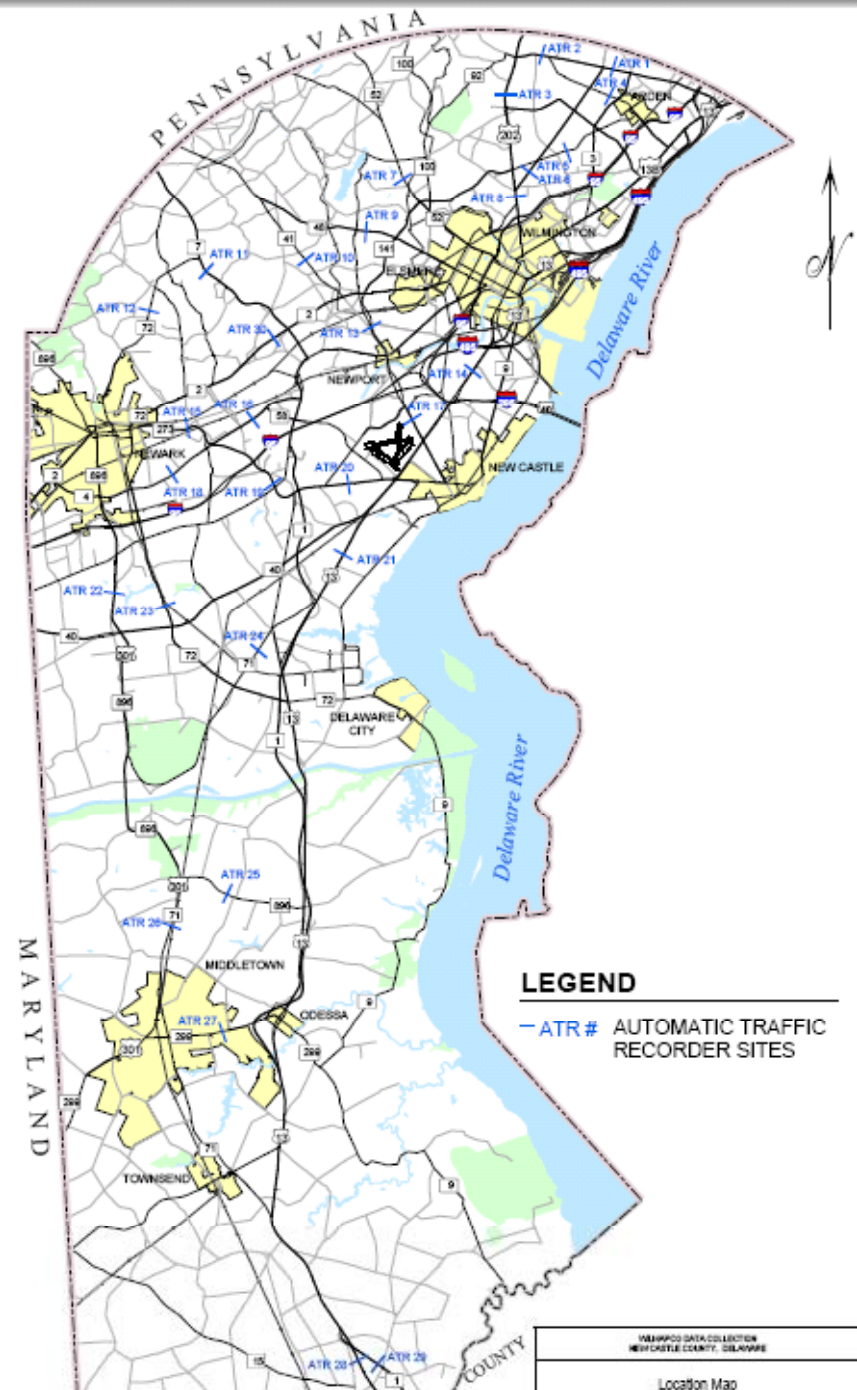


From FHWA report on congestion

WILMAPCO Role in Operations

- **Collector/organizer/analyst of data**
 - Intersection data
 - Congestion location analysis (corridors)
- **Feed ongoing TOMP work (to become annual)**
- **Expand CMS to highlight increased ITS effort in region**
- **Look at more detailed data**
 - Wavetronics data
 - Hourly traffic data
 - ICAT, INRIX, other private sources

AADT/ Class Data



Time of Day Data

Delaware Department of Transportation

- HOME
- About DeIDOT
- DOT Secretary
- Press Releases
- Divisions
- Jobs
- Employment
- Public Workshops
- Related Links
- DMV
- DMART
- ETC/Pass
- Contact Information
- Service Locations
- Emergency Site Map
- SERVICES
- Online Services
- INFORMATION
- Interactive Traffic
- Interactive Traffic Maps
- Traveling in Delaware
- Community Programs
- and Services
- Doing Business
- DOT Regulations
- Projects
- Applications
- Archaeology
- and Light Enforcement
- Media Gallery

Interactive Traffic Map

Traffic | Advisories | Restrictions | Cameras | Projects | Weather | Facilities | Airports

Northbound | Southbound

Map | Satellite | Terrain

DE 7 & Arundle Dr

Direction	Northbound
Timestamp	10/13/2010 at 02:00:00 PM
Status	Delay
Number of Lanes	2
Avg. Speed	N/A
Volume (5 min)	89 vehicles (30%)
Max Volume (5 min)	300 vehicles
Projected Volume (1 hr)	1,068 vehicles
Vehicles Per Hour	1,800 vehicles
Max Volume (1 hr)	3,600 over 2 lanes
Occupancy (5 min)	38%
Occupied (5 min)	228 seconds
Volume + Occupancy	68% (30% Vol + 38% Occ)
Sample Size	10 of 10 (100%)

[Traffic Data Definitions](#)

ALERTS

- Special Travel Alert**
- WTMC 1380 AM**

LEGEND

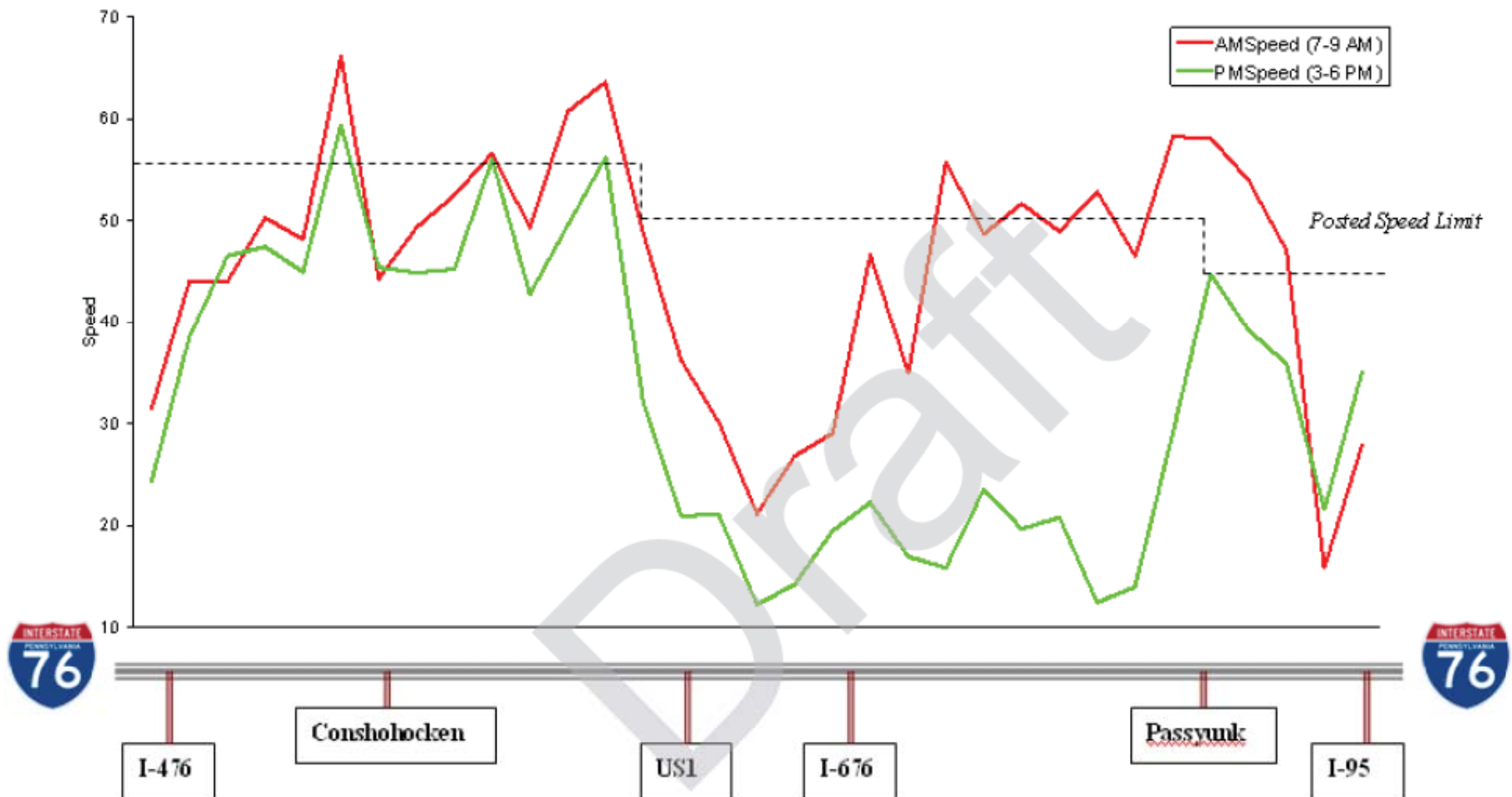
Occupancy	Delay
	0-8% No Delay
	8-15
	15-25
	25-35 Minor Delay
	35-45
	45-95 Major Delay
	95-100% Stop and Go
	No Data Available
Traffic Data Definitions	

VIEWS

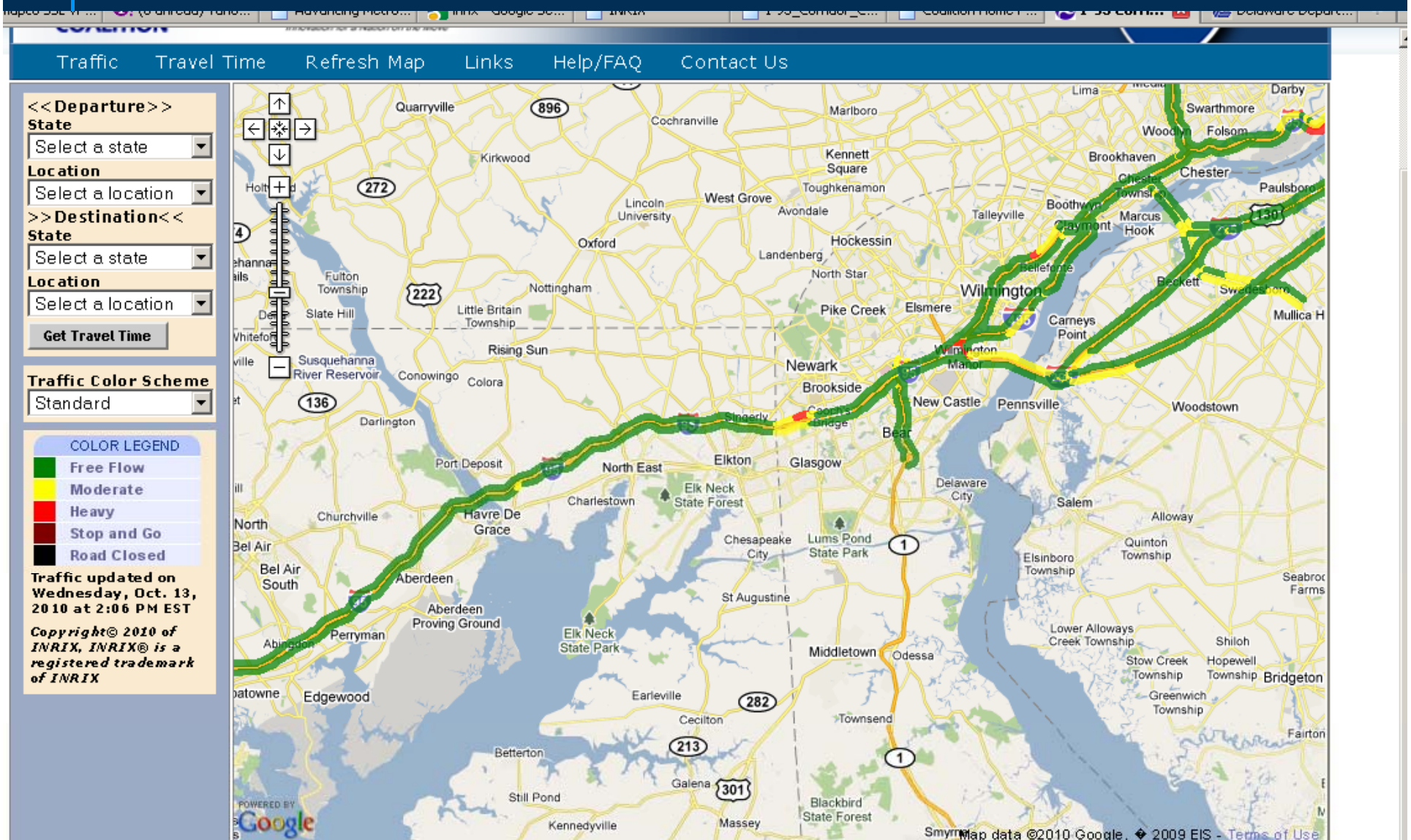
- Statewide
- New Castle County
- Middletown
- Newark
- Wilmington

Time of Day Data

Figure 4: I-76 Eastbound Peak Period Speeds, 6/24/2010



I-95 Corridor / INRIX Data



Future Steps for CMS Subcommittee

Continue Annual Identification of Network Performance using current PMs

- Peak Period LOS (AM&PM combined)
- Peak Period Travel Speed (AM & PM Peak)
- Peak Hour intersection LOS (AM & PM)
- Crash Rates by functional class

Produce small document annually in March

- Maps of performance Measures
- Identified Corridors for use in TIP project prioritization
- Projects within TIP

Produce over summer: CMP Operations Summary

- Transit Usage
- Implemented ITS (i.e. OBP, US 40 with supporting data)
- Analysis of “pilot” site from annual TOMP efforts (SR 4)

