

# Transportation Systems Management Operations Deployment in PennDOT District 8-0 *Thanksgiving Initiative*

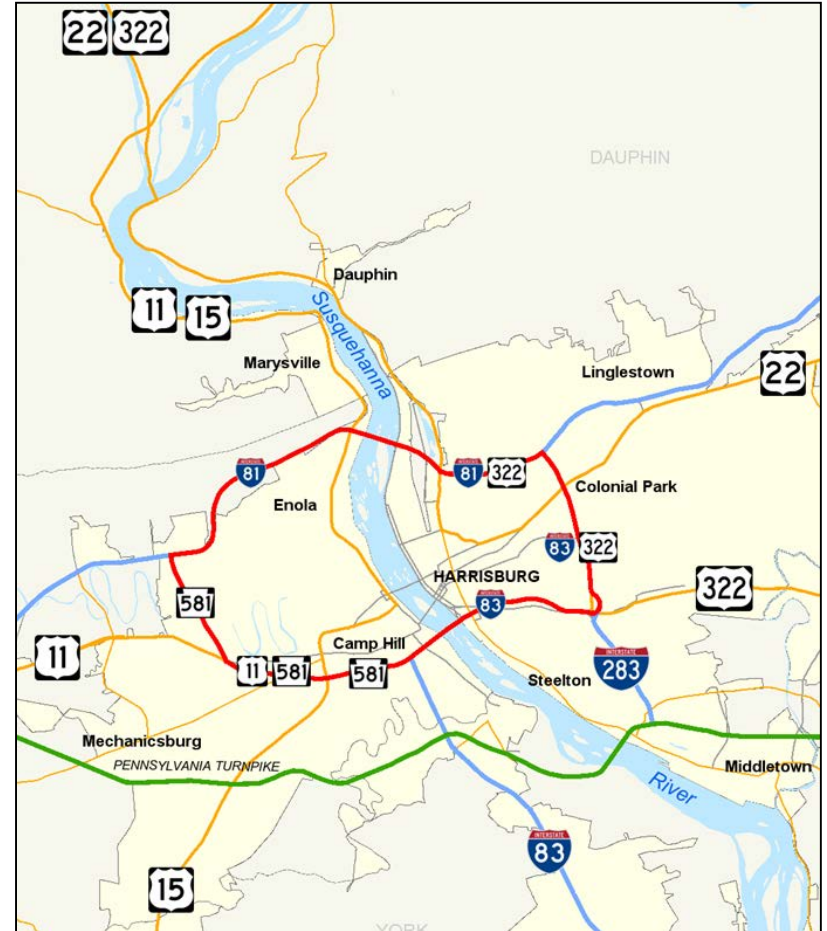
December 6, 2017

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PennDOT District 8-0

# BACKGROUND

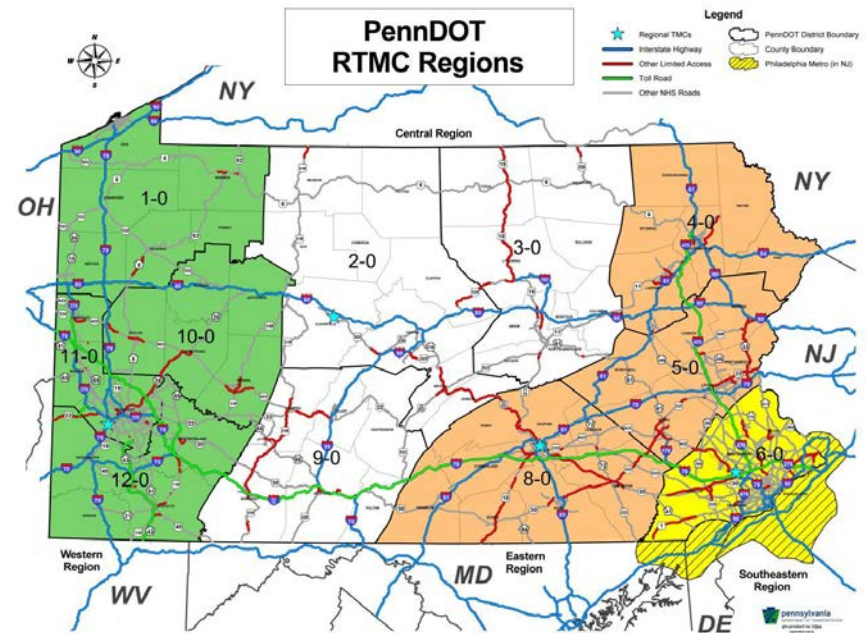
- PennDOT District 8-0 is located in the PA Capitol - Harrisburg. Counties served include:

- Adams
- Cumberland
- Dauphin
- Franklin
- Lancaster
- Lebanon
- Perry
- York



# BACKGROUND

- District 8-0 operates one of 4 Regional Transportation Management Centers (RTMC) in the state
  - 24/7/365 operation
  - Focal point for information collection and dissemination of traffic management operations within the regions



# District 8 Goals

- With this initiative – we were looking to:
  - maximize our usage of our ITS tools, and
  - increase the highway efficiency for our travelling customers in a known high peak traveling condition
    - (I.E. Thanksgiving Holiday Traffic)
- Increase travel speeds by 20%
- Decrease travel time delays by 20%
- Basically, provide alternatives to travelers and balance demand on two separate roadways rather than one.

# Project Area



## Trend Map - Using INRIX data

Data Type

Speed

Color Thresholds

0 mph

50 mph

10

20

30

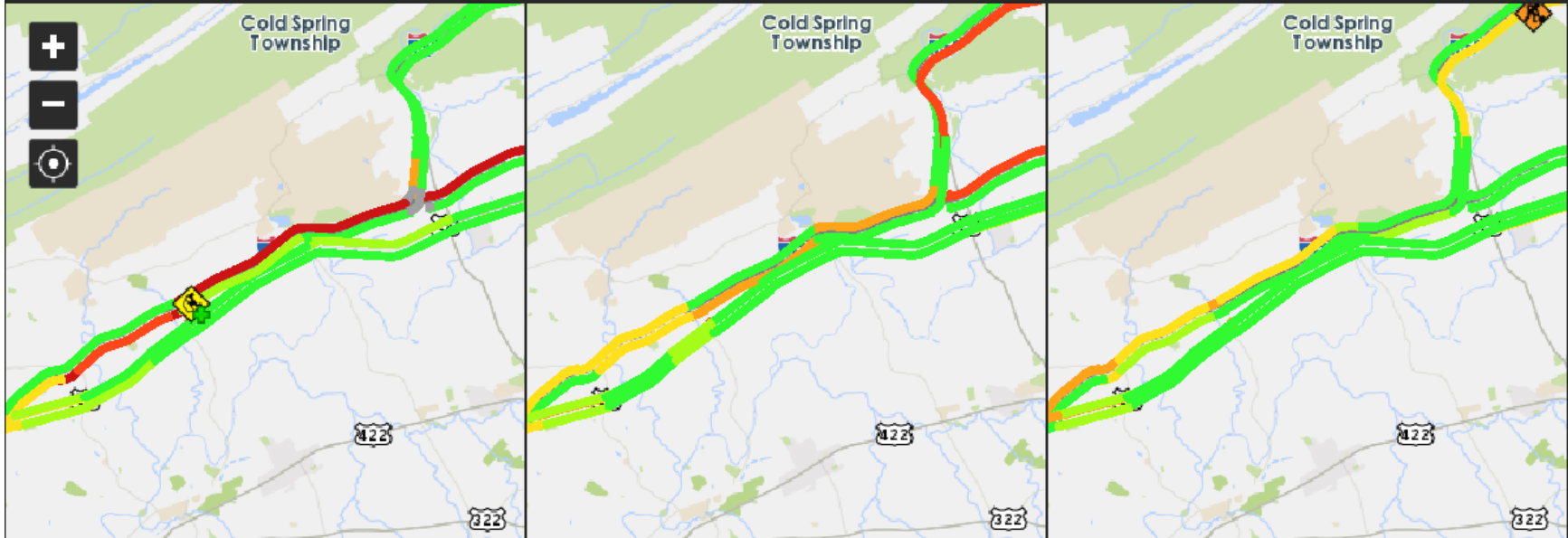
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1:40 PM - November 30, 2014 (Sunday)

1:40 PM - November 29, 2015 (Sunday)

1:40 PM - November 27, 2016 (Sunday)



1:40 PM



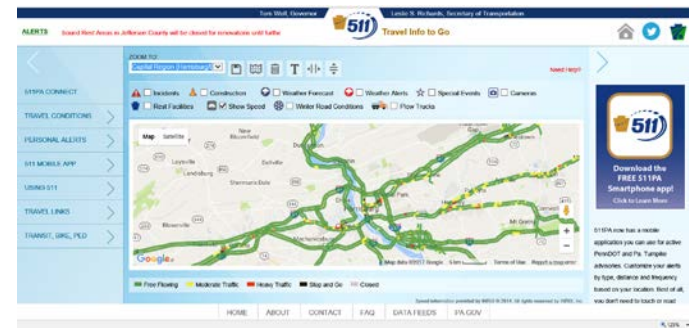
pennsylvania

DEPARTMENT OF TRANSPORTATION

[www.dot.state.pa.us](http://www.dot.state.pa.us)

# District 8-0 ITS Elements/Tools

- 98 CCTV Cameras
- 49 Permanent DMS
- 20 Portable DMS (with 3 set up special for this initiative)
- 20 HAR Transmitters
- 35 HAR Beacon signs
- 3 Freeway Service Patrol tow trucks with 2 used on this Sunday
- 511PA



# So what did the initiative entail?

- Extra message boards to tell travelers to use alternate route US 22 WB
  - Panel 1



A rectangular variable message board with a black background and yellow text. The text is arranged in three lines: "TIME TO I-83" on the top line, "VIA I-81 SOUTH 37 MIN" on the middle line, and "VIA US 22 WEST 29 MIN" on the bottom line.

TIME TO I-83  
VIA I-81 SOUTH 37 MIN  
VIA US 22 WEST 29 MIN

- Panel 2



A rectangular variable message board with a black background and yellow text. The text is arranged in three lines: "I-81 SOUTH" on the top line, "EXPECT DELAYS" on the middle line, and "USE US 22 WEST AT EX 8" on the bottom line.

I-81 SOUTH  
EXPECT DELAYS  
USE US 22 WEST AT EX 8

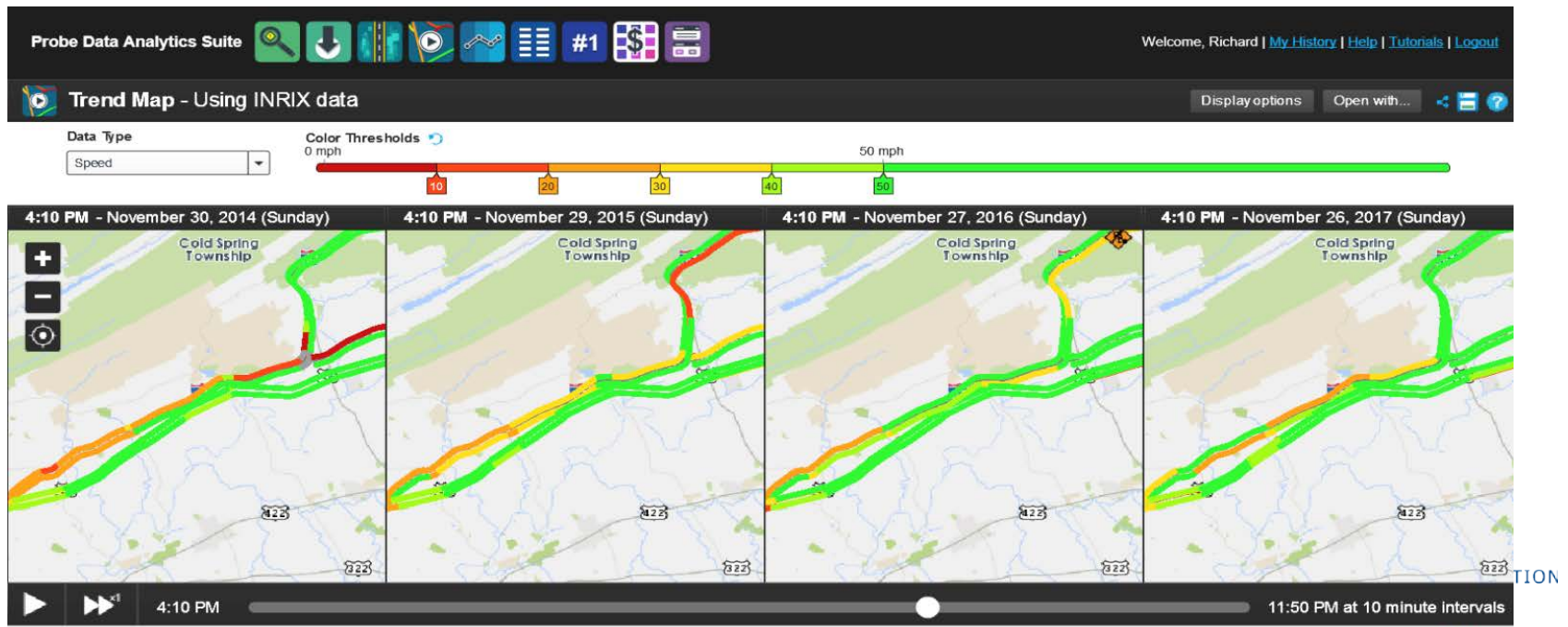
# Summary for 2016

- Did We Meet our Goals?
  - Avg travel speed on I-81 SB increased from 38.7 (2011-2015) to 50.9 in 2016 (931.5% increase)
  - Avg travel speed on I-78 W between US 22 & I-81 increased from 20.8 to 66.3 mph (218% increase) during the worst hour comparison.
  - In 2016 vehicle counters confirmed an increase in 32.5% of vehicles exiting I-78 WB at Exit 8 to use US 22



# Summary for 2017

- So what happened in 2017?
- Looking at the preliminary numbers:
  - It looks like traffic volumes were up by about 20-30%
  - More traffic used the US 22 option, but the I-81 SB segment was more congested than 2016.



# QUESTIONS

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