

Request for Authorization to Open Public Comment Period



May 12, 2015



LRP, TIPs, and Conformity

Reasons for Requested Action:

LRP and TIP

- ❖ Amendment to *Connections 2040* LRP, and
- ❖ Draft FY 2016 TIP for New Jersey.

Conformity

- ❖ Addition of regionally significant and non-exempt projects to TIP for Pennsylvania,
- ❖ Meeting requirements for the 2012 PM_{2.5} standards, and
- ❖ MOVES 2014.

Requested Action

Staff requests authorization to open a minimum 30-day public comment period for the purpose of gathering public and agency comments for:

- The amendment to the *Connections 2040* Long-Range Plan,
- Draft FY 2016 TIP for New Jersey, and
- The Draft Conformity Determination of the *Connections 2040* Long-Range Plan, FY 2015 TIP for Pennsylvania, and FY 2016 TIP for New Jersey;

to issue proper public notifications; to publish the draft documents of the respective Plan amendment, TIP, and conformity findings on the internet; to make copies available at certain public libraries; and to hold public meetings.

State Street Transit Signal Priority Study

Presentation to the
Regional Technical Committee
May 12, 2015





Study Purpose

- * Explore the potential for Transit Signal Priority (TSP) along State Street in downtown Trenton
- * Implementation of *Transit Signal Priority Favorability Score: Development and Application in Philadelphia and Mercer County*
 - * Developed a set of high-level criteria to evaluate and compare TSP corridors
 - * Three segments of State Street scored in top ten for TSP favorability

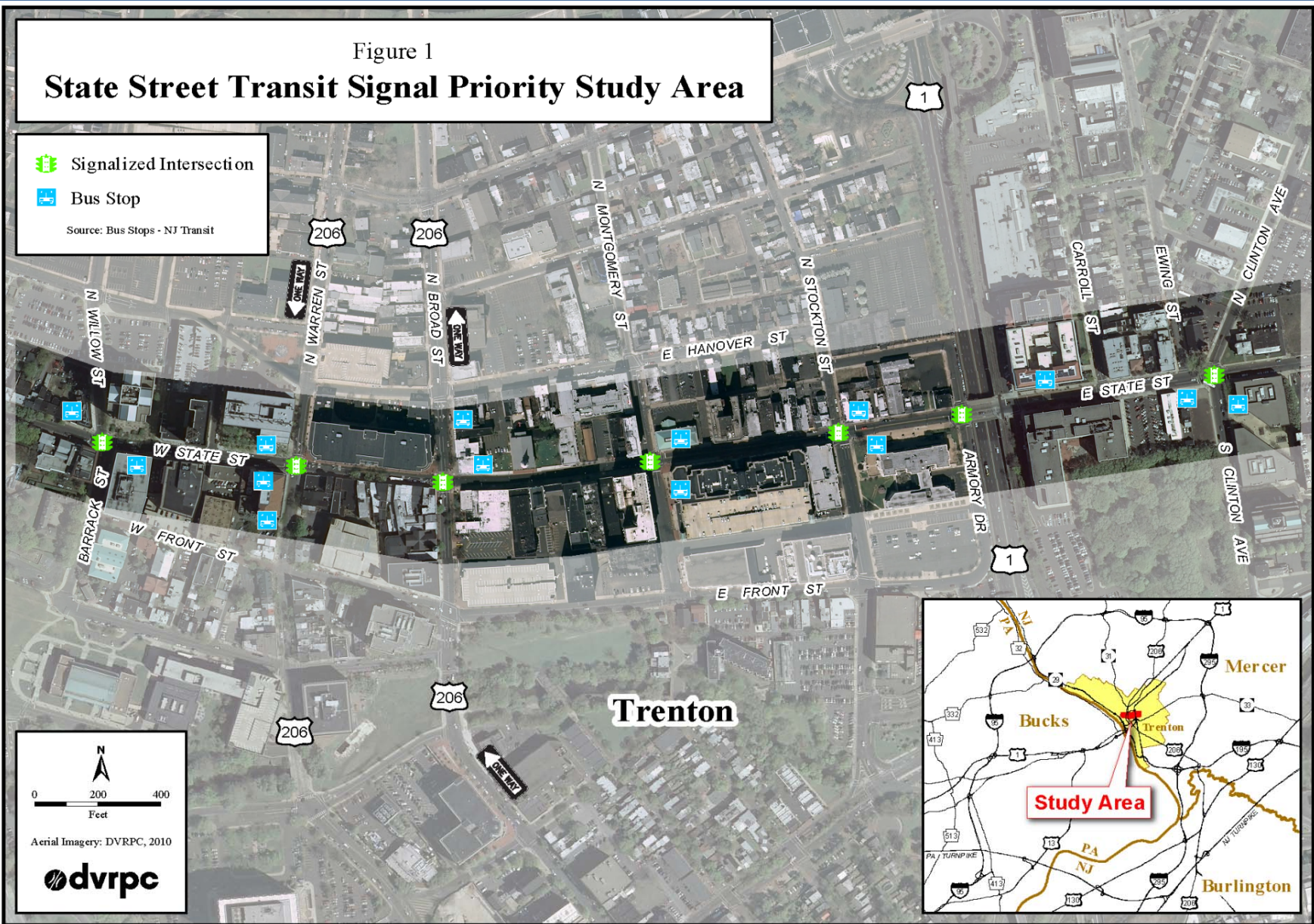
Study Area



- * State Street from Willow Street to Clinton Avenue
- * Corridor characterized by:
 - * High urban density with closely spaced signalized intersections
 - * Wide sidewalks
 - * High daytime pedestrian activity
 - * One travel lane in each direction with intermittent turn lanes
 - * Low traffic congestion, moderate vehicular volumes, low travel speeds
 - * High bus frequency

Figure 1
State Street Transit Signal Priority Study Area

-  Signalized Intersection
-  Bus Stop

Source: Bus Stops - NJ Transit




 0 200 400
 Feet
 Aerial Imagery: DVRPC, 2010


Data Collection

- * Non-Transit

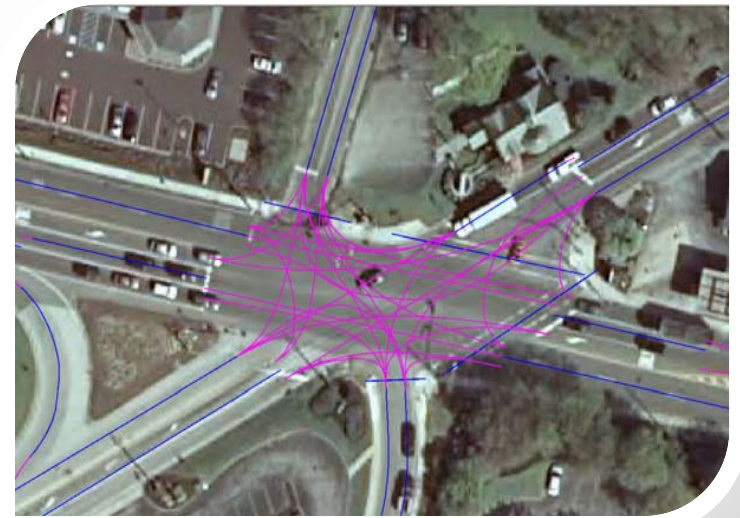
- * Manual turning movement counts
- * Signal timings
- * Pedestrian activity

- * Transit

- * Inventory of bus timetables, schedules, and routes
- * Stop-level activity for study area stops
- * Supplemented with field visits

VISSIM Model

- * VISSIM software
 - * Multi-modal, micro-simulation tool
 - * Built on scaled aerial photos
 - * Traffic signal timing and phasing
 - * Stop signs, yield points, volumes, routing entered
 - * Replicate real-world conditions



VISSIM Model Development

- * Traffic Operations

- * Balance turning movement counts
- * Develop AM and PM peak hour networks

- * Transit Operations

- * Routes, headways, and stops
- * Boardings and alightings converted to a dwell time

Networks

- * Base Year
 - * Developed from 2014 existing conditions
- * Optimized
 - * Signals optimized for cycle length, cycle splits, and offsets
- * TSP
 - * Detection of an approaching transit vehicle
- * TSP + Enhancements
 - * TSP and other refinements

Performance Measures

- * VISSIM performance measures
 - * Intersection delay (seconds)
 - * Approach delay (seconds)
 - * Network-wide travel speeds and overall delay
 - * Bus travel-time segments

- * Based on ten averaged random seeds

Results

* Peak-Hour Vehicle Network Delay

		Base Year		Optimized		TSP		TSP + Enhancements	
		AM	PM	AM	PM	AM	PM	AM	PM
Delay (Seconds)	All Vehicles	31.0	34.3	28.9	31.5	29.3	31.6	28.2	31.4
	Car	23.9	26.6	22.6	24.5	22.7	24.6	22.1	24.4
	Bus	91.2	93.1	83.4	76.2	71.8	73.3	67.4	69.0

Results

* PM Network Travel Speeds

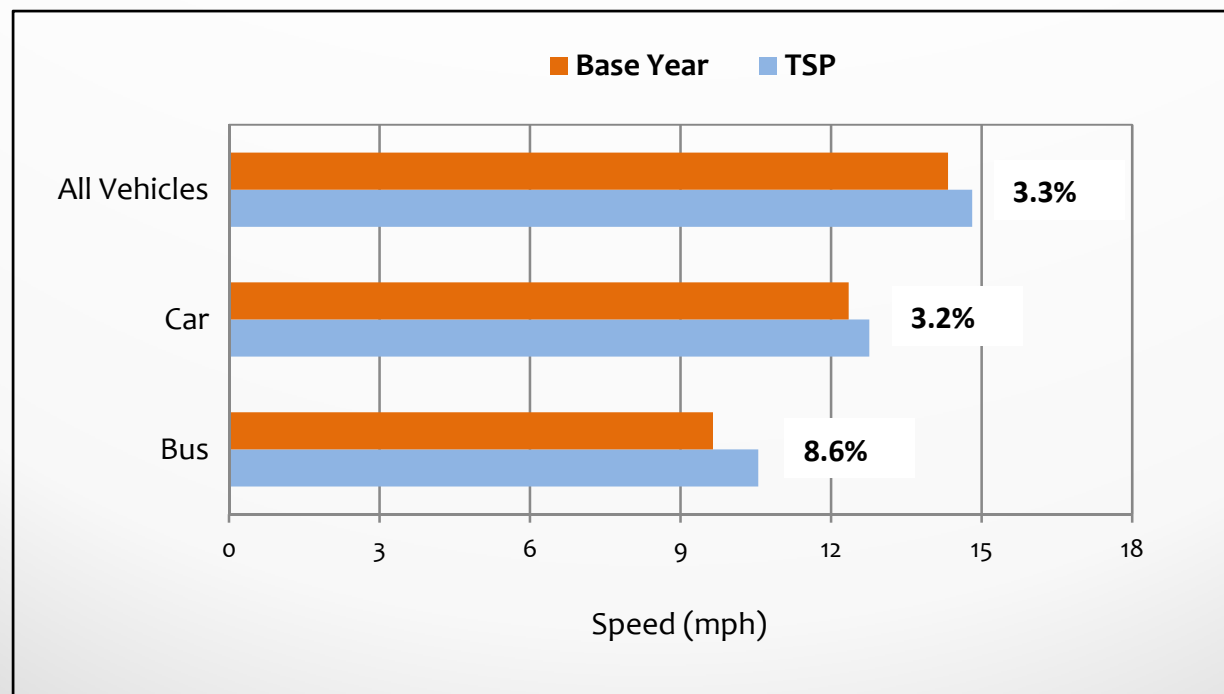
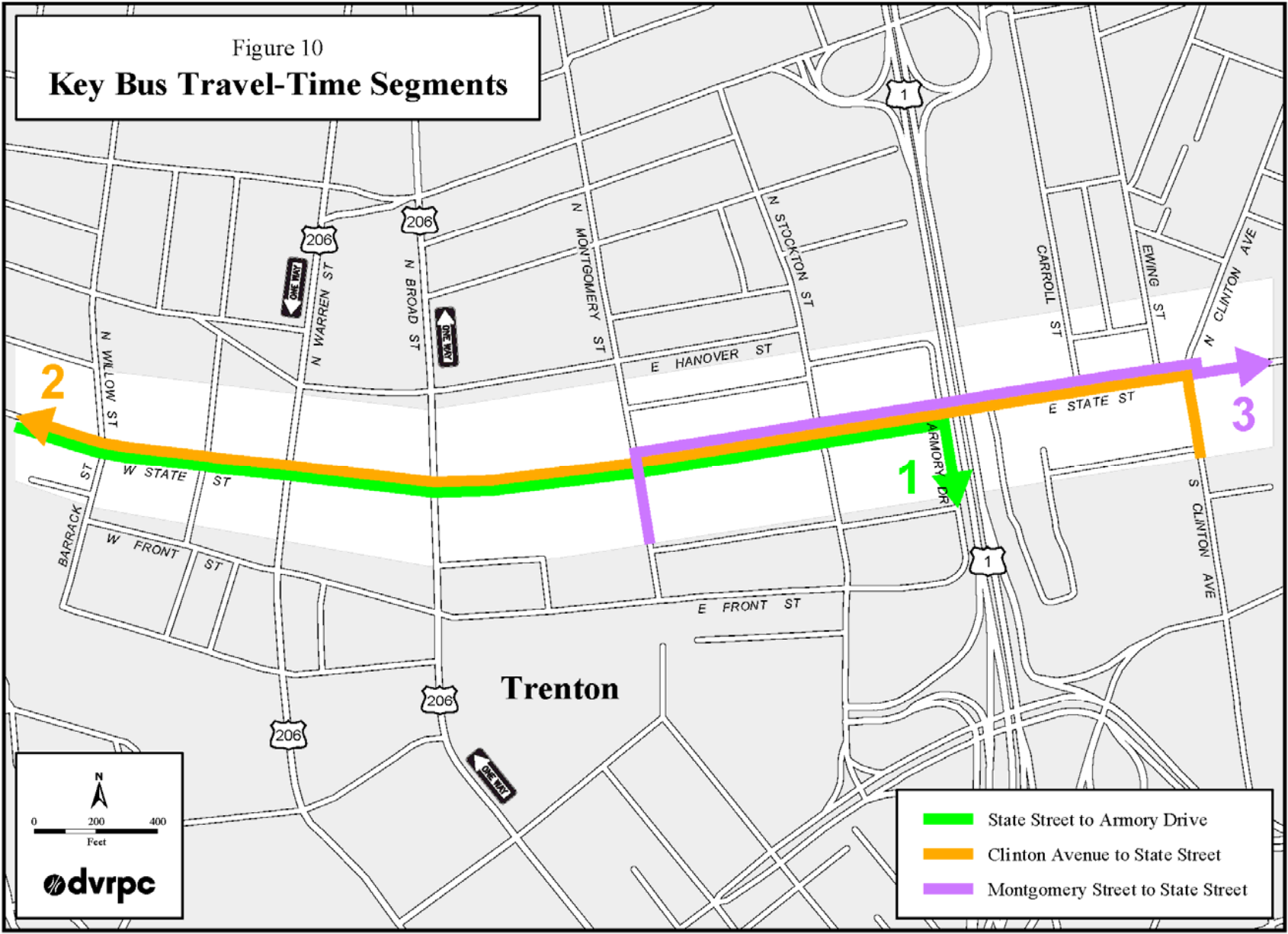


Figure 10
Key Bus Travel-Time Segments



Results

* Bus Travel-Time Segments

Travel-Time Segment	Base Year		Optimized		TSP		TSP + Enhancements	
	AM	PM	AM	PM	AM	PM	AM	PM
State St to Armory Dr	4:59	4:52	4:41	4:30	4:19	4:18	4:13	4:22
Clinton Ave to State St	6:49	6:20	6:25	5:44	5:50	5:35	5:31	5:23
Montgomery St to State St	2:22	2:28	2:32	2:38	2:36	2:30	2:19	2:20

Findings / Conclusions

- * Traffic signal optimization has a positive impact on traffic flow through the corridor
- * Implementing TSP does not negatively impede overall intersection performance or State Street traffic flow
- * TSP reduces through-movement delay by 31.6 percent in the AM and 26.0 percent in the PM

Thank You

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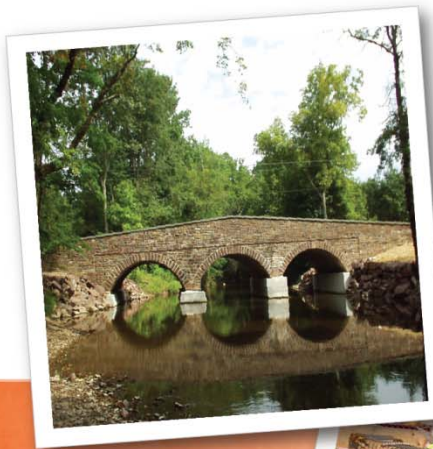


May 2015

★ TIP A-C-T-I-O-N-S

Transportation Improvement Program

New Jersey (FY2014-2017)
Pennsylvania (FY2015-2018)



DELAWARE VALLEY
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REGIONAL 1965-2015
PLANNING COMMISSION



Add Proposed New Project - PA

a. Paper Mill Road over Darby Creek (Worrall Bridge/CB #221) (Act 13), Delaware County

- ❖ Amend the PA TIP by adding a new **\$1,415,000 Act 13** funded local bridge project to the TIP. These are additional funds to the region.

FY15

PE \$200,000

CON \$250,000

FY16

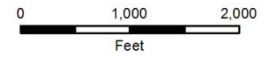
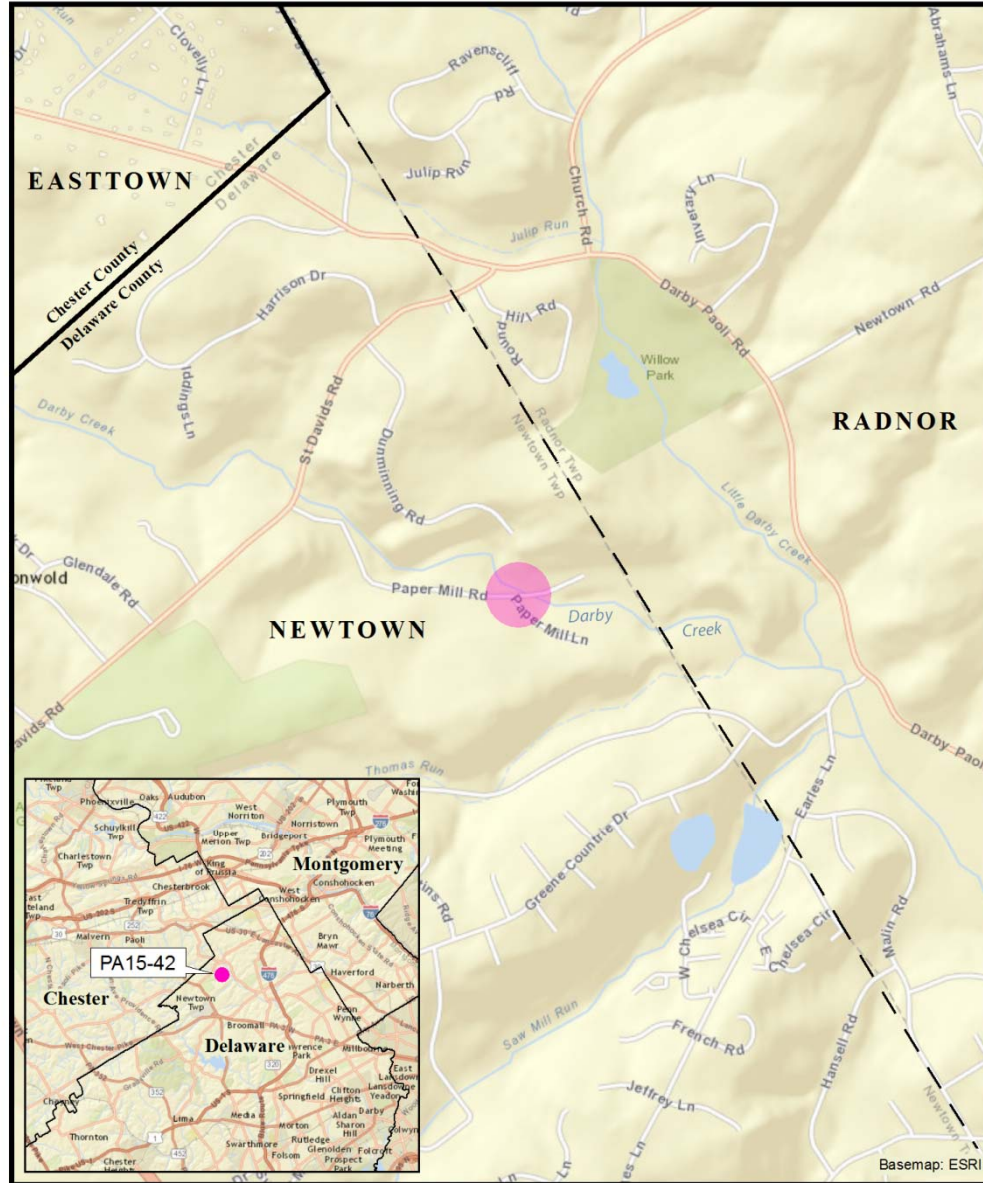
FD \$100,000

ROW \$15,000

CON \$850,000

- ❖ Bridge from 1927 is posted with weight restrictions, has a “fair” superstructure, efflorescence, surface map cracking, and heavily deteriorated deck inlets with exposed and corroded reinforcing steel.
- ❖ Bridge structure will be analyzed. A rehabilitated or new structure will be designed.

PA15-42: Paper Mill Road over Darby Creek





*a. Paper Mill Road over Darby Creek
(Worrall Bridge/CB #221) (Act 13),
Delaware County*

Amend the PA TIP by adding a new **\$1,415,000 Act 13** funded local bridge project to the TIP.

FY15

PE \$200,000

CON \$250,000

FY16

FD \$100,000

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CON \$850,000

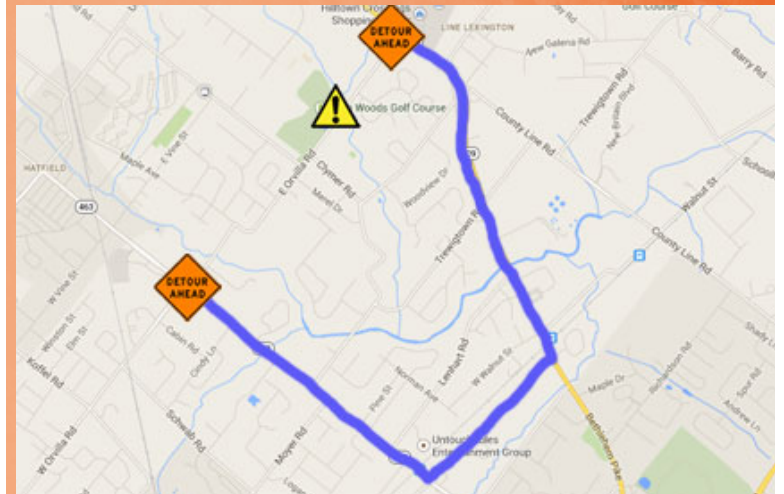
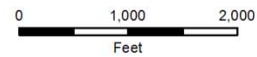
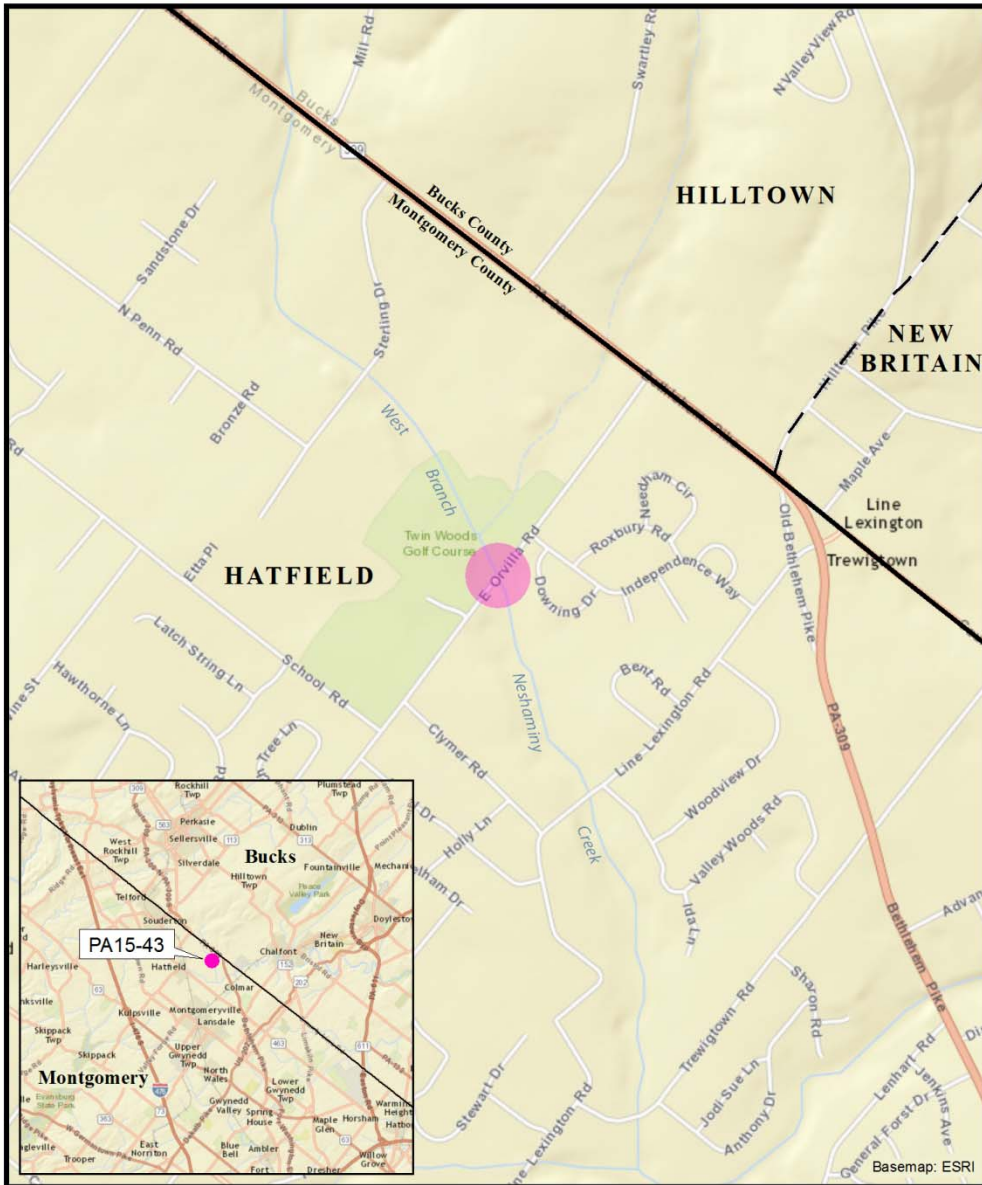


Add Proposed New Project - PA

b. Troxel/Orvilla Road (SR 1004) Bridge Repair, Montgomery County

- ❖ Amend the PA TIP by adding a **\$1,320,000** (\$1,056,000 STU/\$264,000 State 581) project to the TIP for **FY15 CON**.
- ❖ Due to structural damages, the Troxel/Orvilla Road over the West Branch of Neshaminy Creek bridge in Hatfield Twp. was recently closed to traffic.
- ❖ This 1874 stone arch bridge serves as a connection between PA 309 and PA 463 for roughly 7,000 drivers a day.
- ❖ PennDOT expects to re-open the bridge to traffic around the end of November 2015 (a 6-mile detour currently exists).
- ❖ Improvements will strengthen and restore the structure to a non-structurally deficient status.

PA15-43: Troxel/Orvilla Road (SR 1004) Bridge Repair



Detour Map Source: <http://www.hatfieldtownship.org/60-homepage-rotator/483-orvilla-road-bridge-detour-spring-2015>



Bridge Photo Source: <http://www.thereporteronline.com/general-news/20150410/orvilla-road-bridge-repair-slated-for-late-2015-walton-street-bridge-pushed-back-to-2016>

***b. Troxel/Orvilla Road (SR 1004) Bridge Repair,
Montgomery County***

Amend the TIP for PA by adding a **\$1,320,000** (\$1,056,000 STU/\$264,000 State 581) project to the TIP for **FY15 CON.**

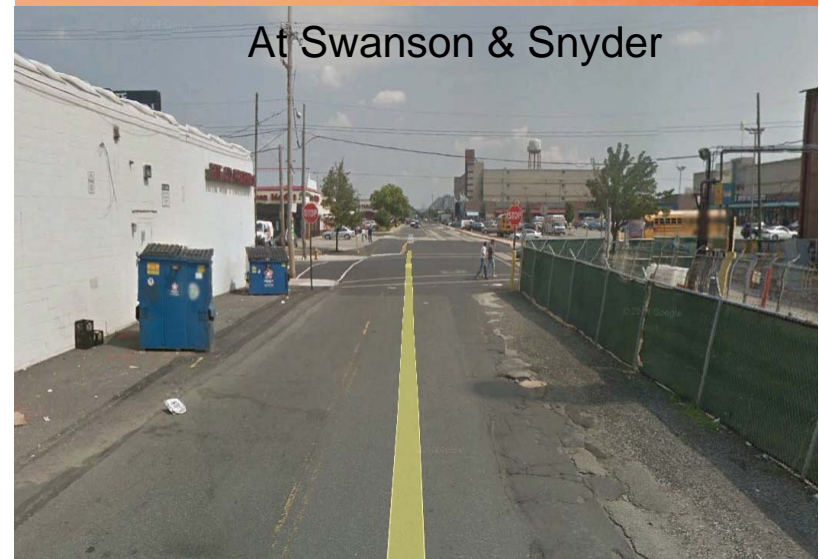
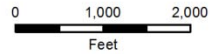


Advance PE Phase - PA

c. Swanson Street Reconstruction, City of Philadelphia

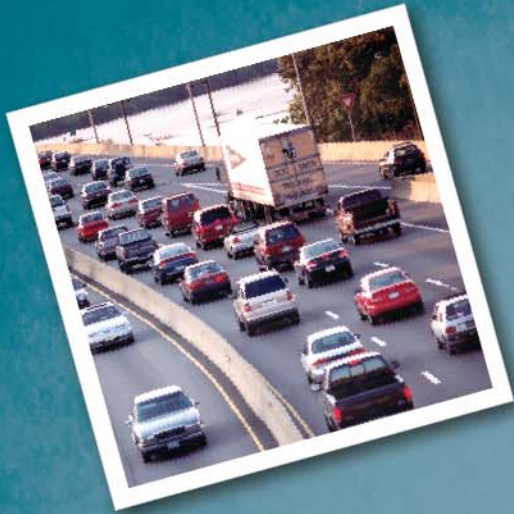
- ❖ Amend the PA TIP by advancing the Preliminary Engineering (PE) phase from FY20 to FY15 and reprogramming the PE phase in the amount of \$600,000 STP with toll credit match.
- ❖ Roadway has deteriorated to the point that full reconstruction and other roadway upgrades are necessary to safely accommodate increased traffic from surrounding significant retail development in the area.
- ❖ As a complex, busy corridor, PE while ready to advance is anticipated to take several years. Thus, other phases would be considered during the FY2017 PA TIP Update process.
- ❖ The existing roadway will be reconstructed to provide a new roadway surface, including footway, medians and curbs, new drainage and storm water management improvements, street lighting pavement markings, landscaping, and a new signal at the Snyder Avenue intersection.

PA15-44: Swanson Street Reconstruction

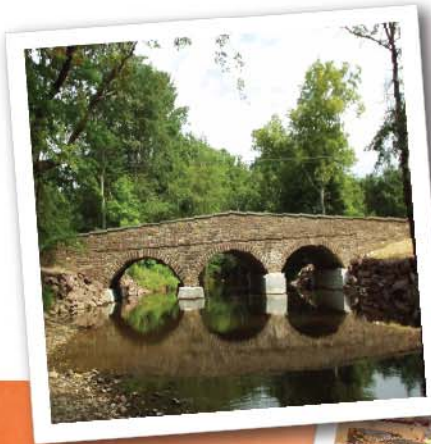


***b. Swanson Street Reconstruction,
City of Philadelphia***

Amend the TIP for PA by advancing the **Preliminary Engineering (PE)** phase from **FY20 to FY15** and reprogramming the PE phase in the amount of **\$600,000 STP with toll credit match**.



THANK YOU



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PLANNING COMMISSION



Proposed Work Program Amendment:
Facilitating Dialogue on Municipal Actions to Protect and Improve Water Quality in the Delaware River Watershed



DELAWARE VALLEY REGIONAL
PLANNING COMMISSION
May 12, 2015

Facilitating Dialogue on Municipal Actions to Protect and Improve Water Quality in the Delaware River Watershed

- **Builds on DVRPC's previous open space and water quality planning work**
- **Proposal prepared at request of William Penn Foundation**
- **Total Project Cost \$442,728**
 - **Grant Award - \$385,385**
 - **Match - \$57,343 (Comprehensive Planning funds)**
 - **Completion by 12/31/16**



Facilitating Dialogue on Municipal Actions to Protect and Improve Water Quality in the Delaware River Watershed

✿ Major Tasks:

- ✿ Establish Municipal Technical Assistance Advisory Panel
- ✿ Inventory municipal TA programs in the DRWI clusters
- ✿ Hold series of meetings with MTAAP
- ✿ Engage municipal responses through interviews and focus groups
- ✿ Recommend TA actions, capacity building and delivery mechanisms to facilitate nonprofit conservation organizations' (and others') provision of Municipal TA to help municipalities implement tools to improve or maintain water quality



Facilitating Dialogue on Municipal Actions to Protect and Improve Water Quality in the Delaware River Watershed

✿ **Action Proposed:**

- ✿ **Recommend DVRPC Board approval for amending the FY15 Work Program to include the project *Facilitating Dialogue on Municipal Actions to Protect and Improve Water Quality in the Delaware River Watershed***

