



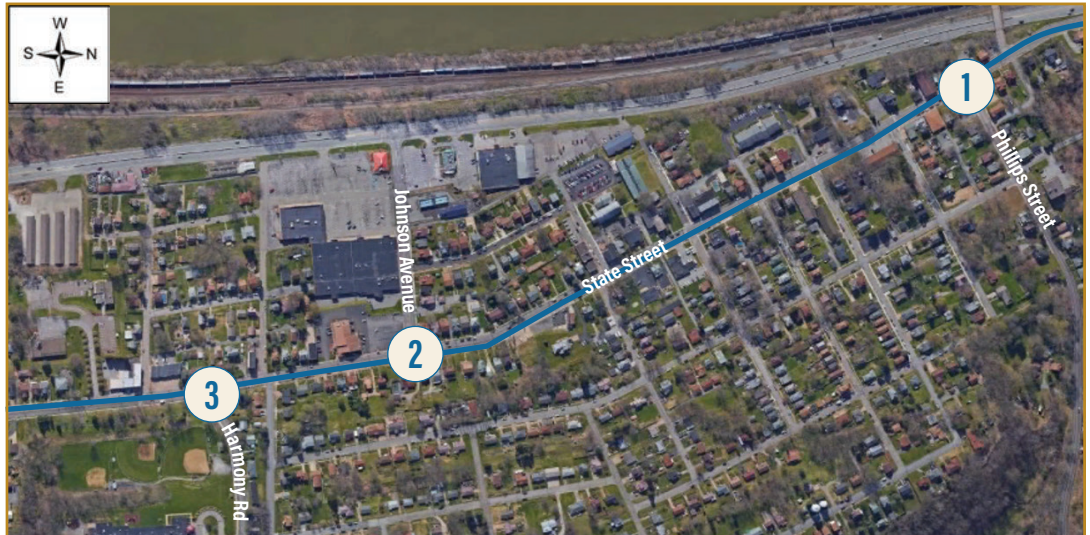
# State Street – Baden Borough (SINC-UP) Project Summary

## REGIONAL TRAFFIC SIGNAL PROGRAM CYCLE 4

The Southwestern Pennsylvania Commission’s (SPC) Regional Traffic Signal Program was established to assist local municipalities with improving traffic signal operations by optimizing signal timings and upgrading existing signal equipment. The **State Street (SR 2001) Signals In Coordination with Equipment Upgrades (SINC-UP) Project** is a traffic signal retiming project with a goal of optimizing signal operations at intersections along the State Street corridor. [See map below for project area].

### PROJECT LOCATION

Beaver County



- ① State Street (SR 2001) and Phillips Street
- ② State Street (SR 2001) and Johnson Avenue
- ③ State Street (SR 2001) and Harmony Road

Corridor Length: Approx. 0.7 miles

### SOUTHWESTERN PENNSYLVANIA COMMISSION

42 21st Street, Suite 101

Pittsburgh, PA 15222

P: (412) 391-5590

[www.spcregion.org](http://www.spcregion.org)

Evan Schoss

Manager, Transportation Operations & Safety

(412) 391-5590 Ext. 338

[eschoss@spcregion.org](mailto:eschoss@spcregion.org)

### PROJECT PARTNERS

Federal Highway Administration

Pennsylvania Department of Transportation, District 11-0

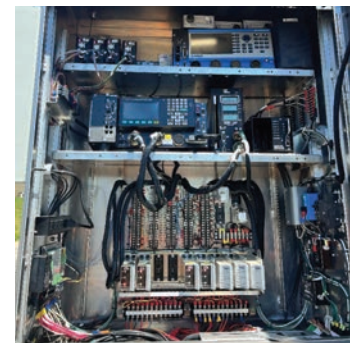
Beaver County

Baden Borough

Whitman, Requardt & Associates, LLP

### Traffic Signal Coordination:

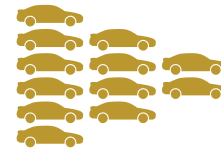
- Improves safety because vehicles stop less often, which reduces the probability for rear-end crashes
- Benefits the environment by reducing vehicle emissions
- Reduces travel costs by reducing the amount of time stopped at red lights
- Saves money at the gas station by reducing fuel consumption



This project added new controller assemblies, emergency vehicle preemption (EVP), replaced electrical services, and faded pavement markings. Additionally, this project added GPS units in conjunction with new coordinated timing plans to provide coordination and maintain traffic flow.

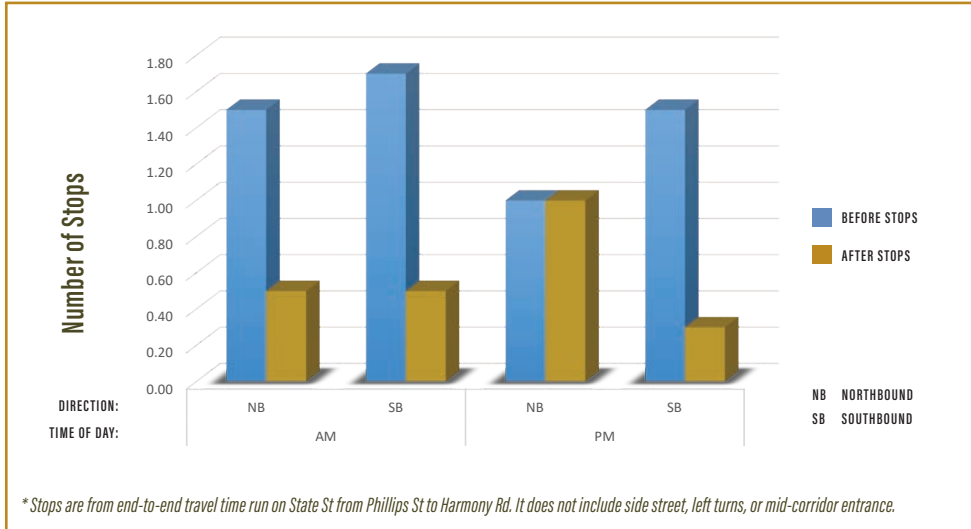
## Travel Improvements:

The results showed that the AM peak travel times reduced by an average of 15% for both directions. The PM peak travel times were reduced by 15% for southbound. There was a 54% reduction of throughput stops during the peaks.

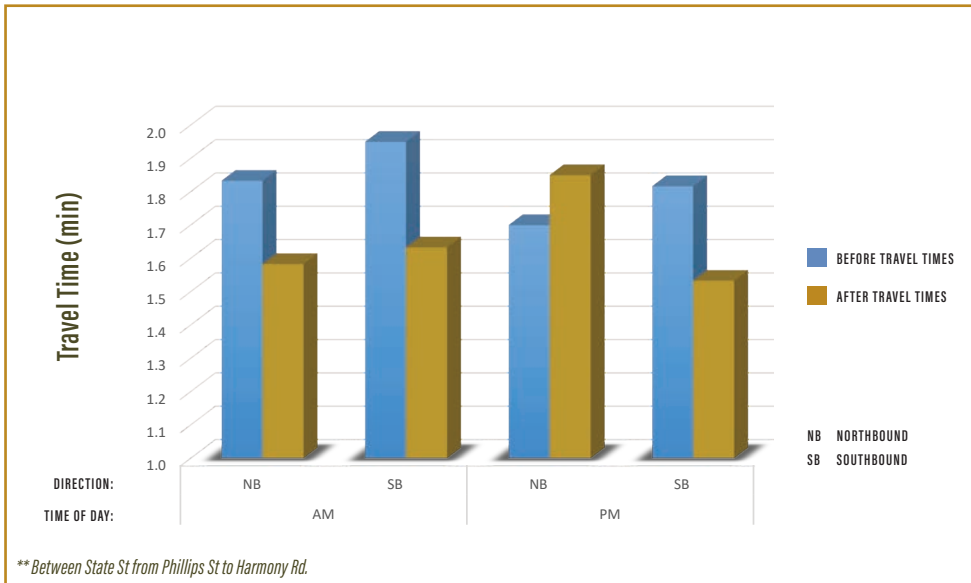


**6,000**  
vehicles travel this corridor  
on an average day

### Number of Stops\*: Before and After Comparison



### Travel Time\*\*: Before and After Comparison



Prior to this SINC-UP Project, motorists typically experienced the frustration of consecutive stopping at the traffic signals. This project reduced stopping on the State Street corridor as well as performed necessary maintenance to extend the lifespan of the corridor's signals and improved emergency vehicle response with the EVP systems.

### Summary of First Year Benefits

**116**



Reduced Throughput Vehicle Hours of Travel

**1,685**  
Gallons



Reduced Fuel Consumption

**23 kg**



Reduced Total Pollutant Emissions

**84,891**



Reduced Number of Stops

**Total Benefit**  
**\$10,605**

**Benefit Cost Ratio**

**0.3:1**