



SR 50 - Collier Township, Scott Township & Heidelberg 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 **SR 50 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 SR 50 corridor. [See map below for project area].

PROJECT LOCATION

Allegheny County



- 1 SR 50 and Steen Road
- 2 SR 50 and Thoms Run Road
- 3 SR 50 and Collier Town Square
- 4 SR 50 and Raceway Plaza Drive
- 5 SR 50 and Greentree Road
- 6 SR 50 and Collier Avenue
- 7 SR 50 and First Street
- 8 Greentree Road and Old Washington Pike

Corridor Length: Approx. 1.4 mile

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PROJECT PARTNERS

Federal Highway Administration

Pennsylvania Department of Transportation, District 11-0

Allegheny County

Collier Township

Scott Township

Heidelberg 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 provided needed maintenance to the controller assembly and added new controller timers and push buttons. Additionally, this project added GPS units in conjunction with new coordinated timing plans to provide coordination and improve traffic flow.

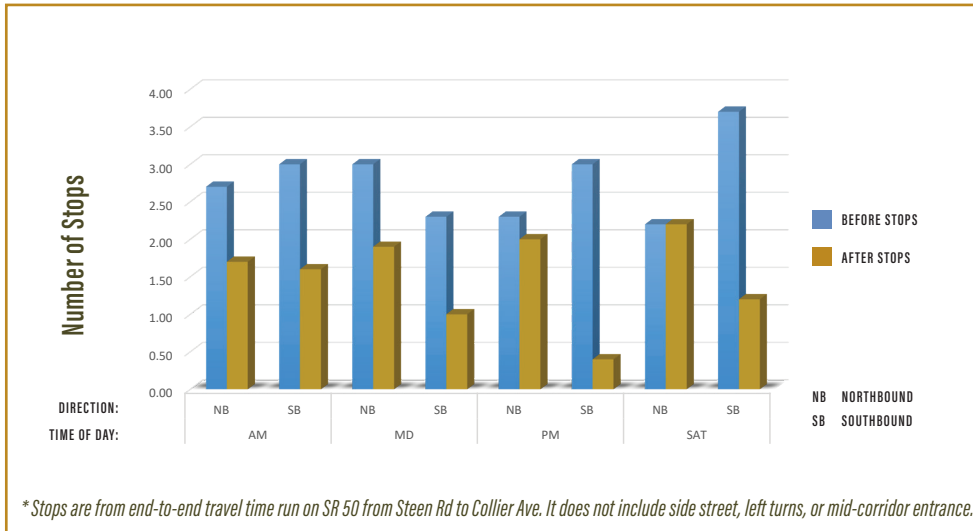


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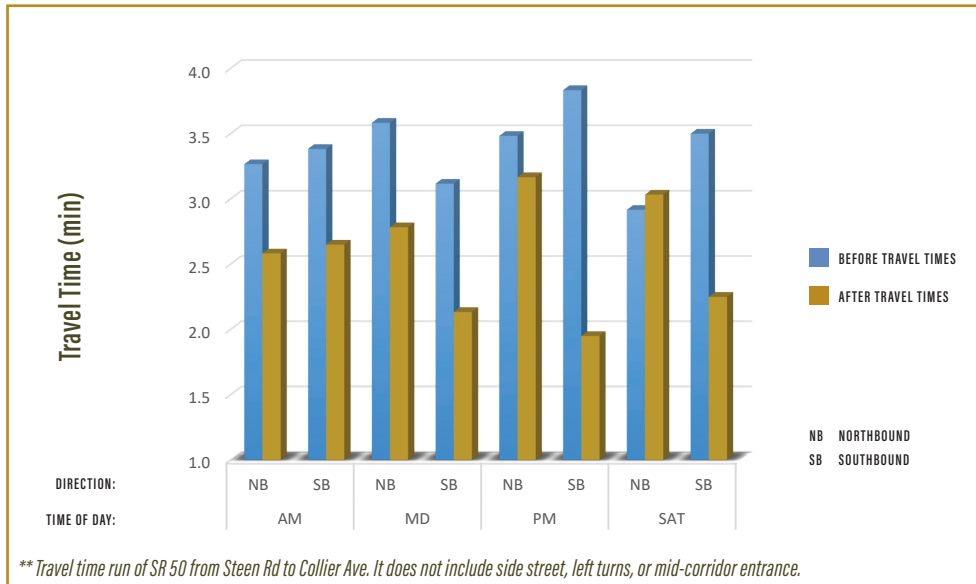
Travel Improvements:

The results showed that the AM peak travel times reduced by nearly 21% for both directions. The PM peak travel times were reduced by nearly 9% and 49% for northbound and southbound respectively. There was a 43% reduction of stops and over 23% reduction in travel time throughput traffic during the peaks.

Number of Stops*: Before and After Comparison



Travel Time**: Before and After Comparison



Prior to this SINC-UP Project, motorists typically experienced moderate delays and the frustration of consecutive stopping at the traffic signals. This retiming project updated the traffic patterns among these eight intersections which alleviated consecutive stopping and reduced the total number of stops.



15,700 - 18,300 vehicles travel this corridor on an average day

Summary of First Year Benefits

49,873



Reduced Vehicle Hours of Travel

87,000 Gallons



Reduced Fuel Consumption

8,721 kg

Reduced Total Pollutant Emissions

5,122,717



Reduced Number of Stops

Total Benefit
\$1,521,225

Benefit Cost Ratio

29:1