

## US 30 - North Huntingdon Township & Irwin Borough Township (SINC-UP) Project Summary

# REGIONAL TRAFFIC SIGNAL PROGRAM CYCLE 4

#### PROJECT LOCATION

**Westmoreland County** 



#### SOUTHWESTERN PENNSYLVANIA COMMISSION

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#### PROJECT PARTNERS

Federal Highway Administration
Pennsylvania Department of
Transportation, District 12-0
Westmoreland County
North Huntingdon Township
Irwin Borough
Whitman, Requardt & Associates, LLP

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 **US 30 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 US 30 corridor. [See map below for project area].

- 1 US 30 and Colonial Manor Road
- 2 US 30 and Malts Lane
- 3 US 30 and Lincoln Way
- 4 US 30 and Robbins Station Road/Center Highway
- 5 US 30 and Fairwood Drive/10th Street
- 6 US 30 and Colony Drive/Ash Street
- 7 US 30 and Norwin Ave/N. Huntingdon Square Drive
- 8 US 30 and Barnes Lake Road
- 9 US 30 and Ronda Court/Rocky Road
- 10 US 30 and Arona Road
- 11 US 30 and Thompson Lane
- 12 Lincoln Way and Bethel Road / Maus Drive
- 13 Center Highway and Brownstown Road
- 14 Pennsylvania Avenue and Rocky Road

Corridor Length: Approx. 4.9 miles

### 30 1 2 12 3 4 13 7 6 7 8 8 9 14 10

#### 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
- Afona R6 83
- 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, vehicular and pedestrian signals, push buttons, and emergency preemption. Additionally, this project added GPS units in conjunction with new coordinated timing plans to provide coordination and improve traffic flow.

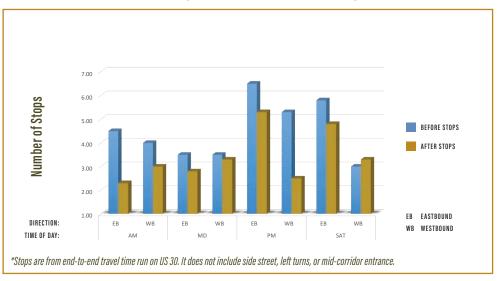


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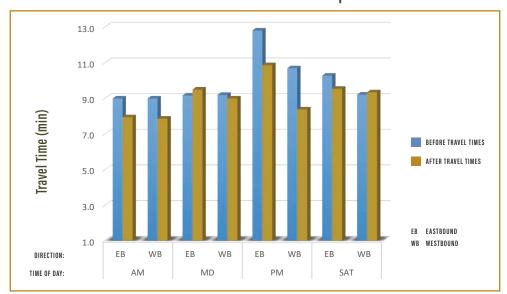
#### **Travel Improvements:**

The results showed that the AM peak travel times reduced by nearly 12% for both directions. The PM peak travel times were reduced by nearly 15% and 22% for eastbound and westbound respectively. There was a 22% reduction of stops and over 8% 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 coordinated the traffic patterns among these thirteen of the fourteen intersections which alleviated consecutive stopping and reduced the total number of stops.



**30,900 - 34,750** vehicles travel this corridor on an average day

#### **Summary of First Year Benefits**

118,689



Reduced Vehicle Hours of Travel

**69,433** Gallons



**Reduced Fuel Consumption** 



**Reduced Total Pollutant Emissions** 

4,814,486



**Reduced Number of Stops** 

**Total Benefit** 

\$2,932,588

**Benefit Cost Ratio** 

25:1