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 **North Huntingdon Twp and Irwin Borough US 30 Signals In Coordination with Equipment Upgrades (SINC-UP) Project** is a signal equipment upgrade and traffic signal project with the goal of optimizing signal operations at intersections along the US 30 corridor and North Huntingdon Twp while considering all users of the intersections [See map below for project area].

**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

The installation of emergency vehicle preemption systems at 10 intersections on this project will facilitate improved response time by emergency vehicles. The signal at the intersection of Robbins Station Road and Clay Pike was also rebuilt. The implementation of lagging left turn phasing as well as the installation of Global Positioning Satellite Antenna and Receivers at the intersections improved the time-based coordination along US 30. Coordination of traffic signals is one of the most cost effective ways of improving traffic flow along a corridor.
Travel Improvements:
The results for the coordinated signals along US 30 (Thompson Lane to Malts Lane) show an average of 37% reduction in signal delay, 13% reduction in travel time, and 32% reduction of stops for all peaks and directions. On average the peak travel time is reduce by over 1.3 minutes. US 30 on average has 50% reduction in signal delay during Saturday afternoons. Eastbound US 30 travel time improves by 15% or greater for the AM, Midday, and Saturday peaks.

This corridor was re-timed eight years ago under the SPC Signal Program. As traffic grew and signal equipment aged, motorists experienced moderate delays and queuing along US 30. This retiming project coordinated the traffic patterns along US 30 while deploying strategic locations of lagging left turns to improve progression and to alleviate the delay along US 30.

Summary of First Year Benefits

- **Reduced Vehicle Hours of Travel**: 142,510
- **Reduced Fuel Consumption**: 97,532 gallons
- **Reduced Total Pollutant Emissions**: 9,736 kg
- **Reduced Number of Stops**: 5,062,260
- **Total Benefit**: $2,883,189
- **Benefit Cost Ratio**: 20:1

Number of Stops*: Before and After Comparison

Travel Time*: Before and After Comparison

*Stops are from end to end travel time run from Thompson Lane to Malts Lane. It does not include side street, left turns, or mid-corridor entrance.

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https://www.spcregion.org/trans_ops Traff_vids3.asp