

Signal Timing Briefs

May 2015 - T15-10a

Mobility



State Highway 128: McCaslin Boulevard to Wadsworth Boulevard

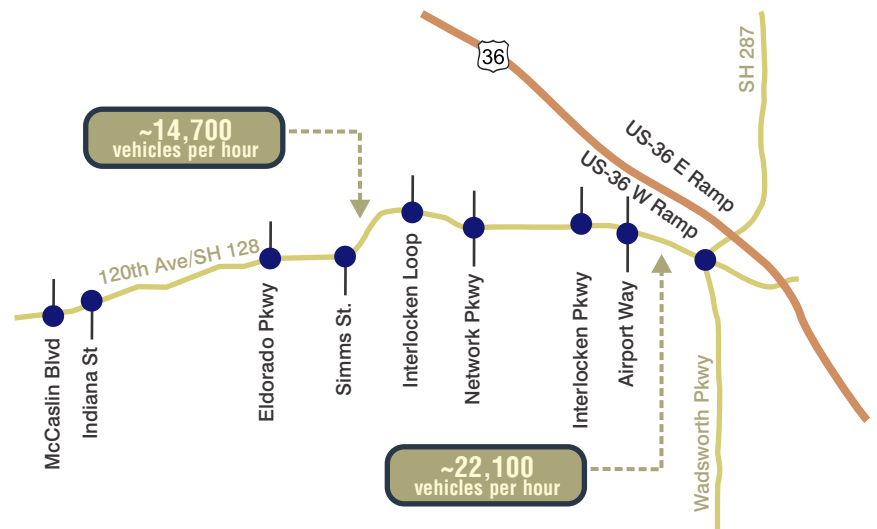
The Denver Regional Council of Governments leads multijurisdictional partnerships to achieve optimal signal timing and coordination on area roadways. Adjustments to signal timing are key to ensuring the smoothest possible flow for drivers, saving time and money. Signal timing also minimizes greenhouse gas emissions and other pollutant emissions, preserving and enhancing air quality.

Project Description

This project implemented timing and coordination plans for nine signals on SH 128. SH 128 is a Principal Arterial roadway in the Metro Vision Regional Transportation Plan in the City and County of Broomfield providing access to U.S. 36. Land use along the roadway in the project area is mostly commercial.



SH 128



Project Partner's Signals
● CDOT

Project Achievements

Performance Measures

Daily Benefits

| | |
|------------------------------------|------------------------|
| Vehicle hours of travel | 122 hours reduction |
| Fuel consumption | 58 gallons decreased |
| Time and fuel costs | \$2,850 savings |
| Total greenhouse gas emissions | 1,224 pounds reduction |
| Total criteria pollutant emissions | 13 pounds reduction |

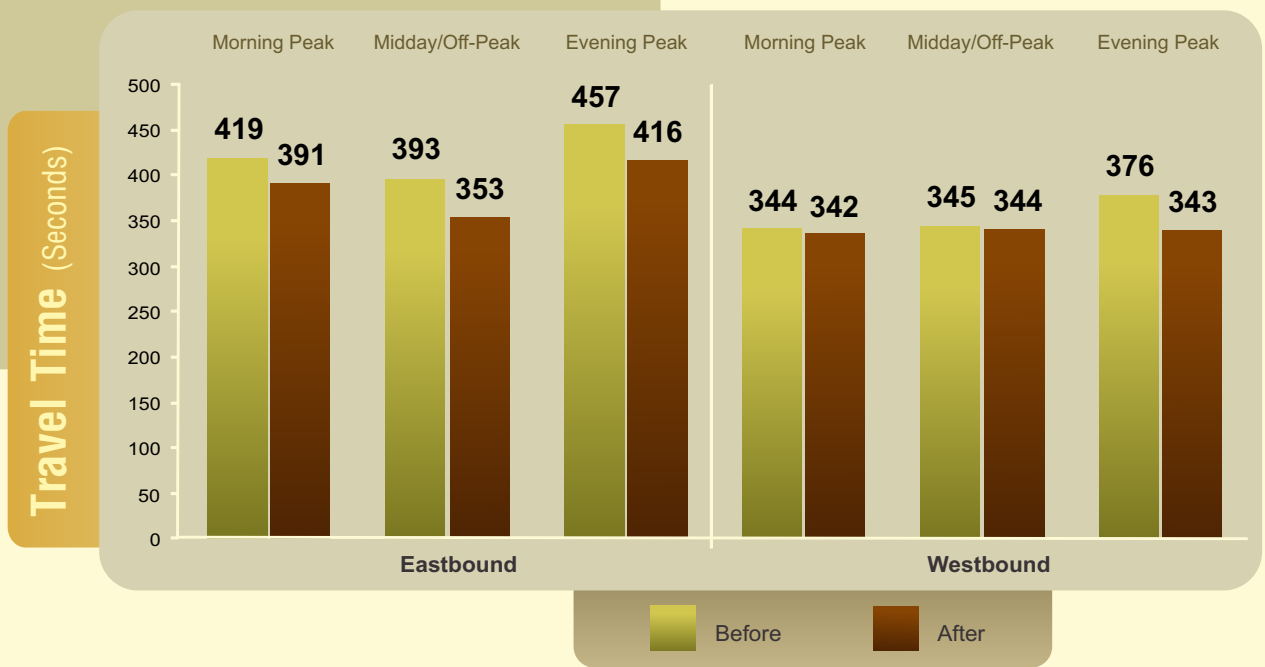
State Highway 128: McCaslin Boulevard to Wadsworth Boulevard

Timing Revision:

| | Morning Peak | | Midday/Off-Peak | | Evening Peak | |
|--------------------------------|---------------------------|---------|-------------------------------|---------|---------------------------|---------|
| | Before | After | Before | After | Before | After |
| Time Period | 6 - 9 a.m. (No change) | | 9 a.m - 3 p.m. (No change) | | 3 - 7 p.m. (No change) | |
| Cycle Length (seconds) | 75 (No change) | | 75 (No change) | | 75 (No change) | |
| Other Timing Parameters | -- | Revised | -- | Revised | -- | Revised |

Travel Time Improvements (4.1 miles end-to-end)

Improvements were obtained during all periods in both directions.



Overall Improvements

The value to motorists, in terms of weekday time and fuel savings, is calculated to be approximately \$2,850 daily, or about \$710,000 annually.