

Signal Timing Briefs

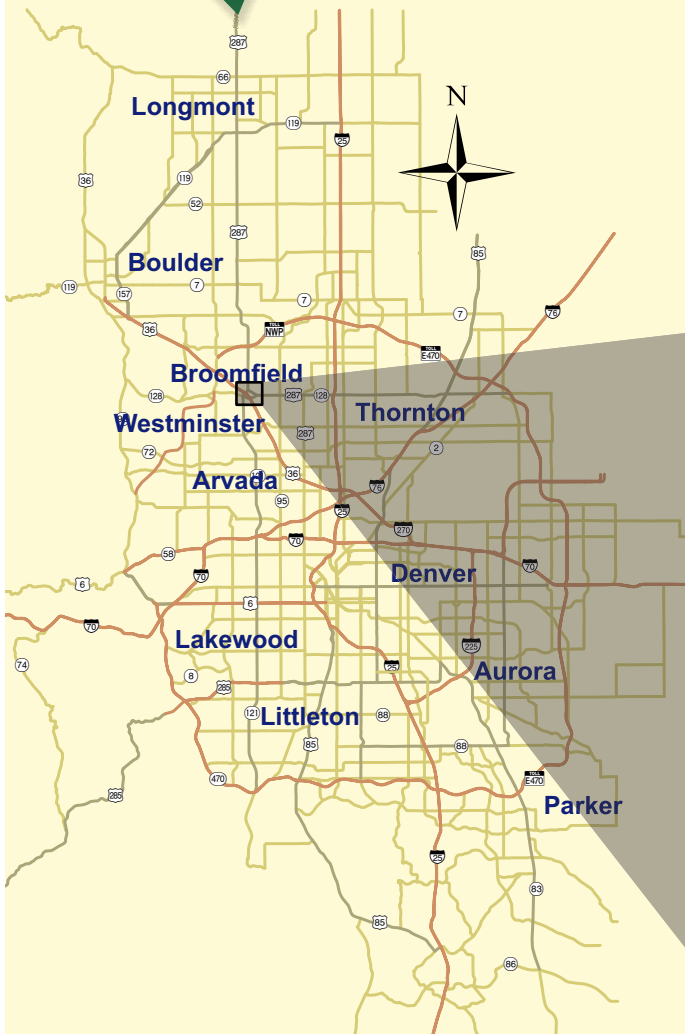
May 2015 - T15-10b

Mobility



SH 287/Wadsworth Parkway: from 108th Avenue to Miramonte Boulevard

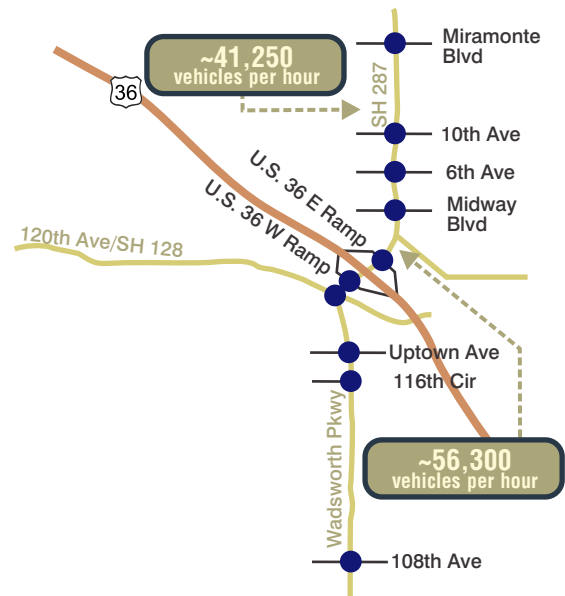
The Denver Regional Council of Governments leads multijurisdictional partnerships to achieve optimal signal timing and coordination on area roadways. Adjustments to signal timing are key to ensuring the smoothest possible flow for drivers, saving time and money. Signal timing also minimizes greenhouse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



Project Description

This project implemented revised timing and coordination plans for ten signals on SH 287. SH 287 is a major regional arterial roadway in the Metro Vision Regional Transportation Plan in the City and County of Broomfield providing access between U.S. 36, the Northwest Parkway, Broomfield and Lafayette. Land use along the roadway in the project area is mostly commercial.

SH 287/Wadsworth Parkway



Project Achievements

Performance Measures

Daily Benefits

Vehicle hours of travel
 Fuel consumption
 Time and fuel costs
 Total greenhouse gas emissions
 Total criteria pollutant emissions

219 hours reduction
 103 gallons decreased
 \$5,200 savings
 2,139 pounds reduction
 25 pounds reduction

Project Partner's Signals

● CDOT

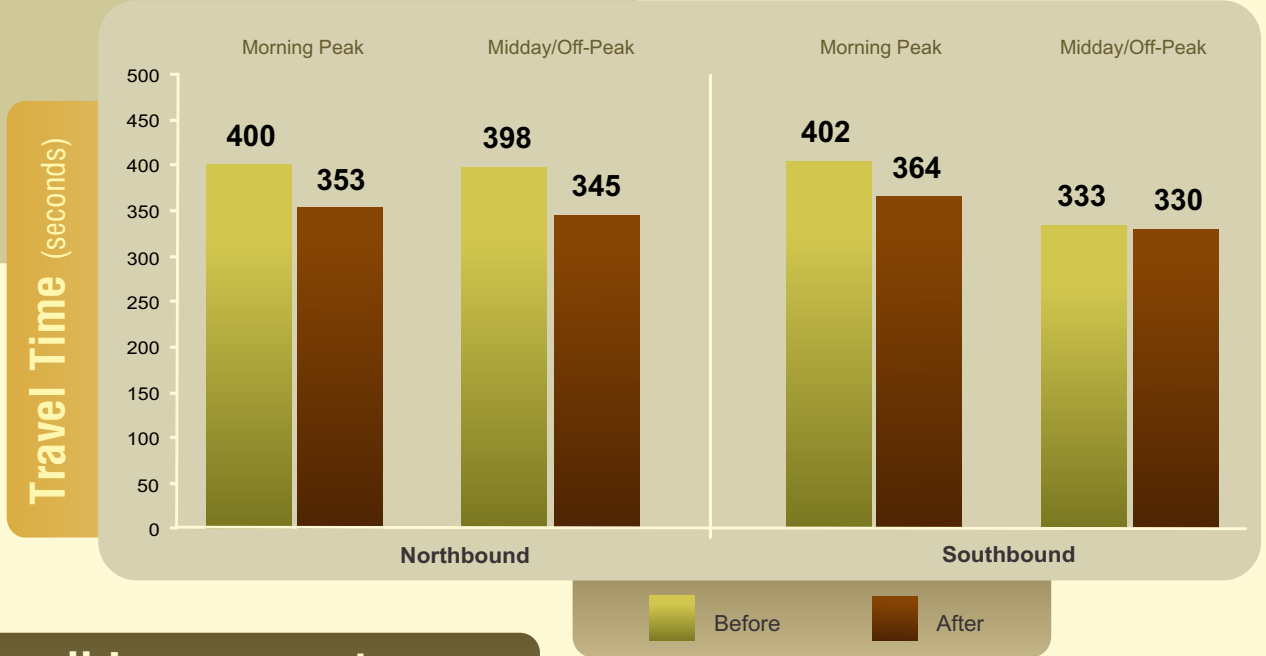
SH 287/Wadsworth Parkway: from 108th Avenue to Miramonte Boulevard

Timing Revision Weekday:

Time Period	Miramonte to 108th Ave	Morning Peak		Midday/Off-Peak	
		Before	After	Before	After
Cycle Length (seconds)	Miramonte to Midway	6 - 9 a.m. (No change)		9 a.m. - 3 p.m. (No change)	
	U.S. 36 East Ramp to SH 128	110	150	110 (No change)	
	Airport Way to Arista Pl	165			
	108th Ave	110			
Other Timing Parameters		120	120	--	Revised

Travel Time Improvements (3 miles end-to-end)

Improvements were obtained during morning and off-peak periods in both directions. The afternoon period is very congested. CDOT determined that the current afternoon period plans are as optimized as possible. Since the plans were not changed, no before-and-after evaluation was conducted for the afternoon period.



Overall Improvements

The value to motorists, in terms of weekday time and fuel savings, is calculated to be approximately \$5,200 daily, or about \$1.3 million annually.