

South Boulder Road: Centaur Village Drive to Public Road

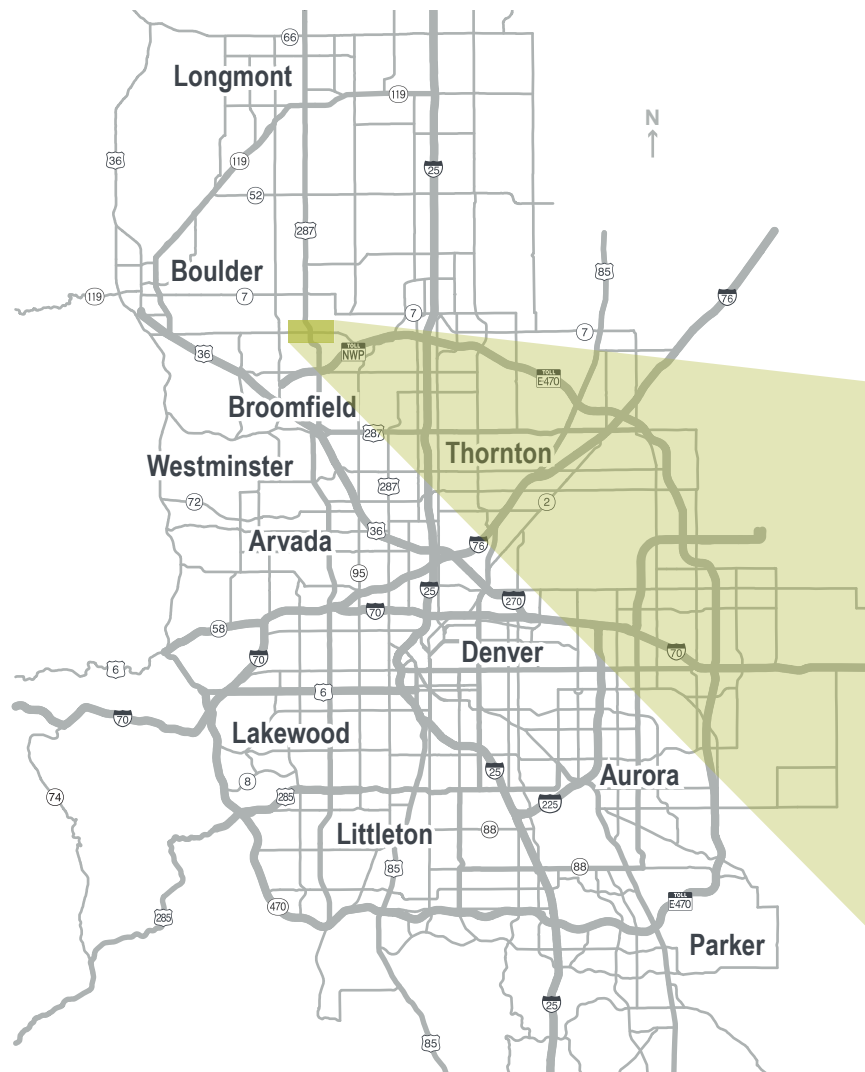


Federal Funds for Lafayette

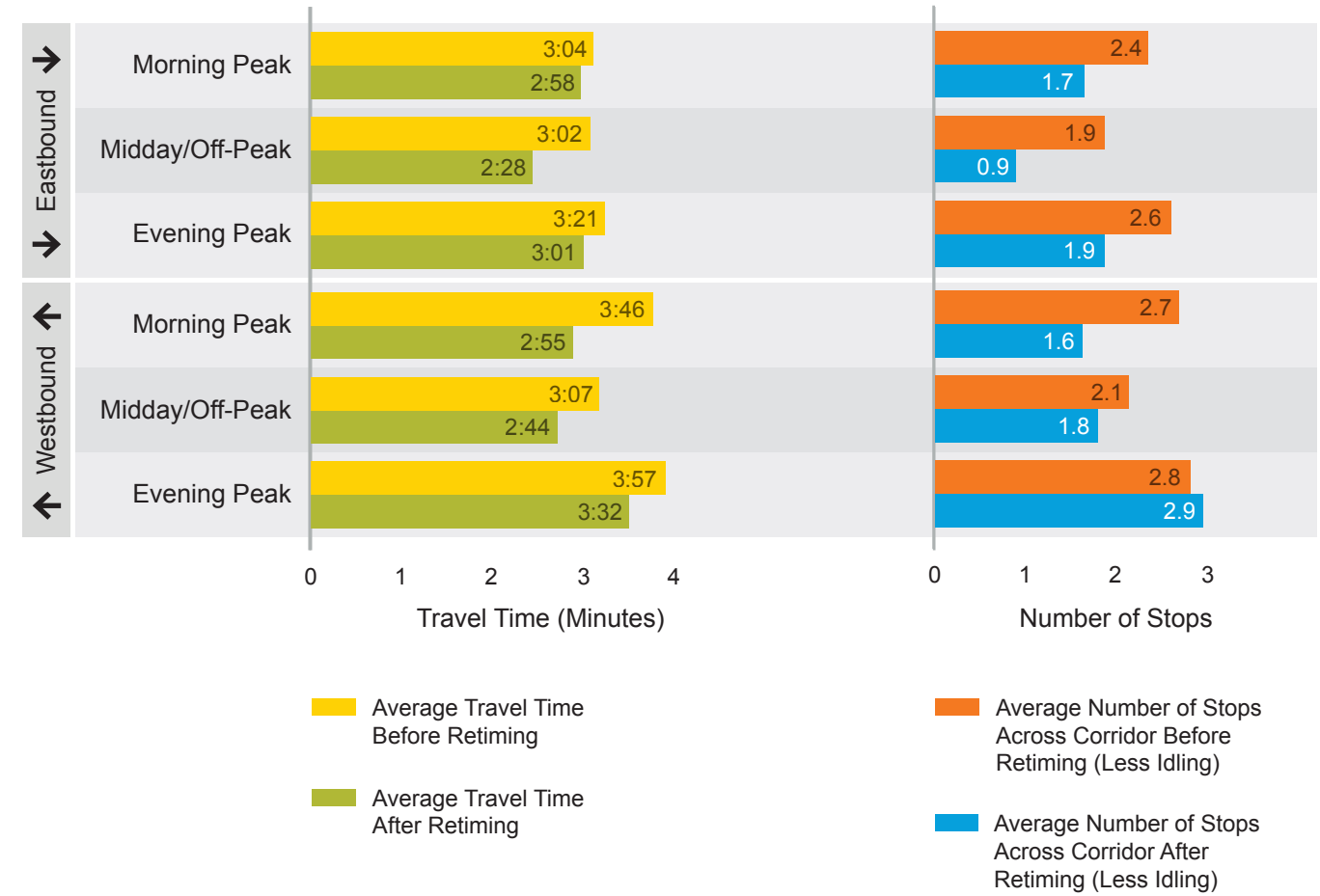
DRCOG engineering staff developed the signal timing and coordination plans in partnership with the project stakeholders.

Project Achievements

Performance Measures	Daily Reduction
Vehicle travel time	142 hours
Fuel consumption	74 gallons
Time and fuel costs	\$3,300 savings daily (\$830,000 annual annually)
Greenhouse gas emissions	1,541 pounds
Emissions of six EPA-regulated pollutants	17 pounds

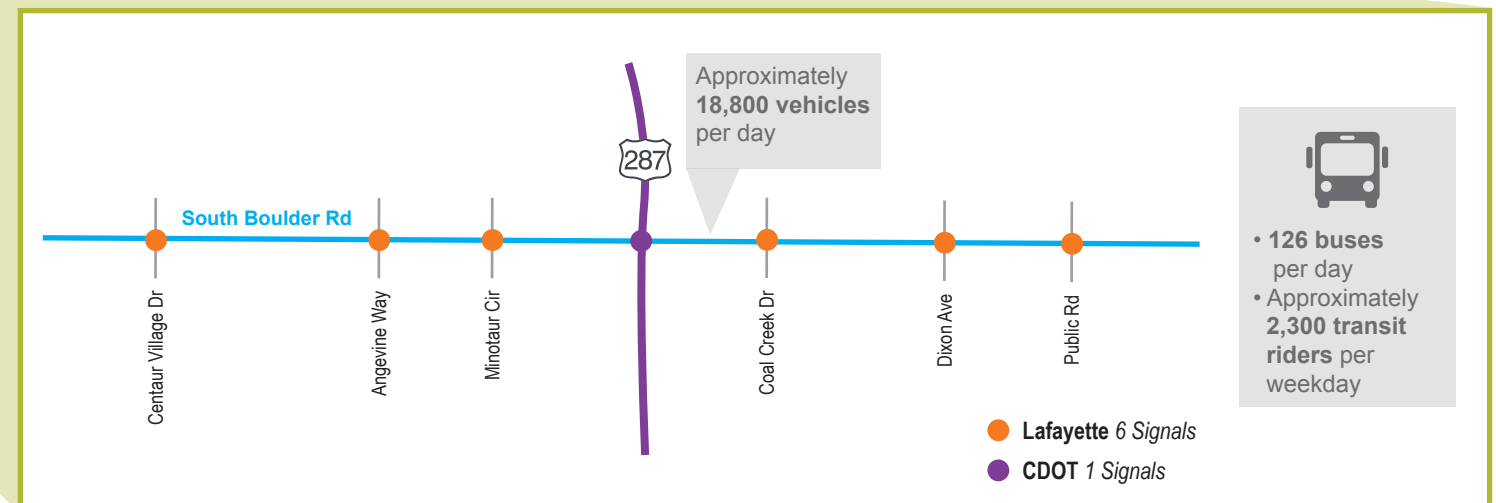


Overall Improvements



Project Scope

South Boulder Road (1.6 miles)



Traffic Signal Coordination

Traffic signal coordination allows traffic to travel along a street without stopping at every light. A major component of any coordinated signal-timing plan is properly sized cycle length shared by each intersection along the corridor. The cycle length is the time required for one sequence of signal displays (green, yellow and red) around an intersection to be lit for each approach. DRCOG's engineers evaluate cycle lengths to strike a balance between intersection capacity and delay for all users. The cycle lengths vary by time of day to account for fluctuating numbers of vehicles, bicyclists and pedestrians.

Time of day	05:30	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00
1 South Boulder Rd & Centaur Village Dr	100-second cycle				105-second cycle					100-second cycle				
2 South Boulder Rd & Angevine Way	100-second cycle				105-second cycle					100-second cycle				
3 South Boulder Rd & Minotaur Cir	100-second cycle				105-second cycle					100-second cycle				
4 U.S. 287 & South Boulder Rd	150-second cycle				105-second cycle					150-second cycle				
5 South Boulder Rd & Coal Creek Dr	100-second cycle				105-second cycle					100-second cycle				
6 South Boulder Rd & Dixon Ave	100-second cycle				105-second cycle					100-second cycle				
7 South Boulder Rd & Public Rd	100-second cycle				105-second cycle					100-second cycle				

■ City of Lafayette ■ CDOT

For more information about signal timing, see: bit.ly/SignalRed
 For more information about DRCOG's traffic operations program, see: bit.ly/TrafficOps



1290 Broadway, Suite 100
 Denver, Colorado 80203
 Main 303.455.1000
 Fax 303.480.6790
drcog.org



SIGNAL TIMING PROJECT BRIEF

South Boulder Road: Centaur Village Drive to Public Road

The Denver Regional Council of Governments (DRCOG) leads multijurisdictional partnerships to achieve optimal signal timing and coordination on area roadways. Traffic signal timing adjustments provide the smoothest possible flow for cars, trucks and buses. At the same time, safety is enhanced for all users, including pedestrians and bicyclists. Signal timing optimization saves drivers time and money, minimizes greenhouse gas and pollutant emissions, and enhances air quality.

September 2016 - T16-14b