

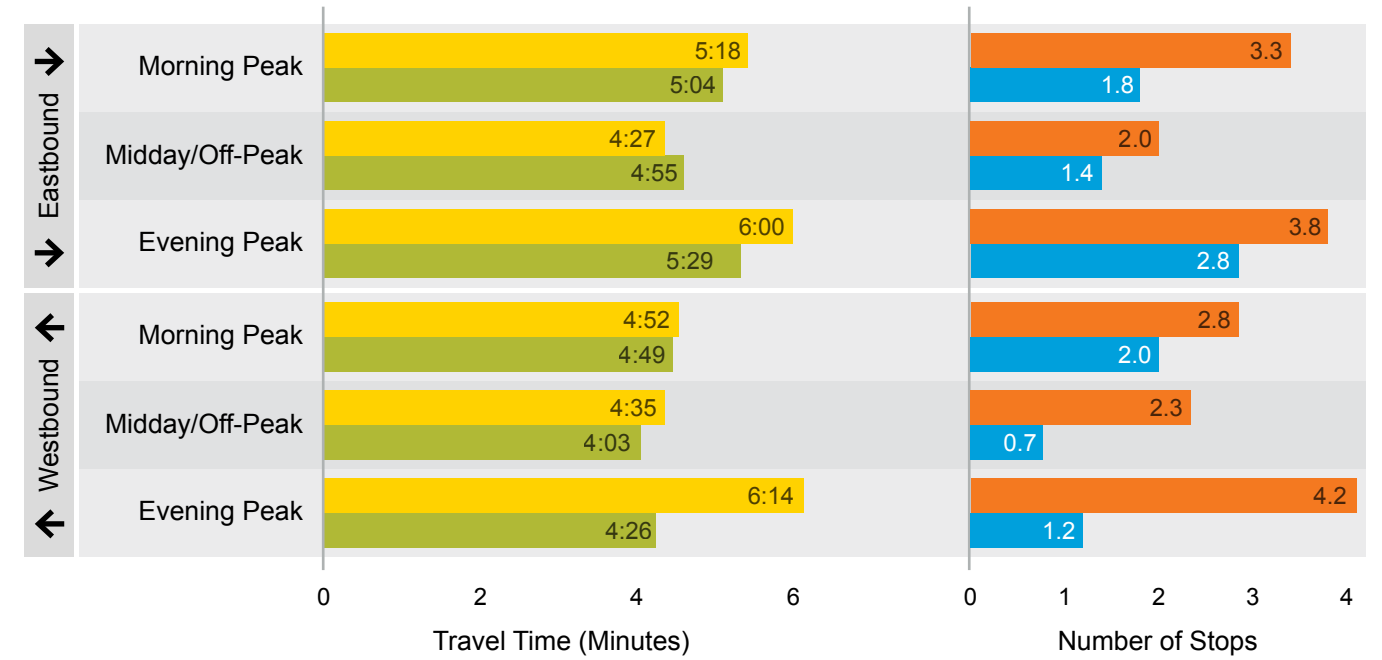
64th Avenue: Quaker Street to Ward Road



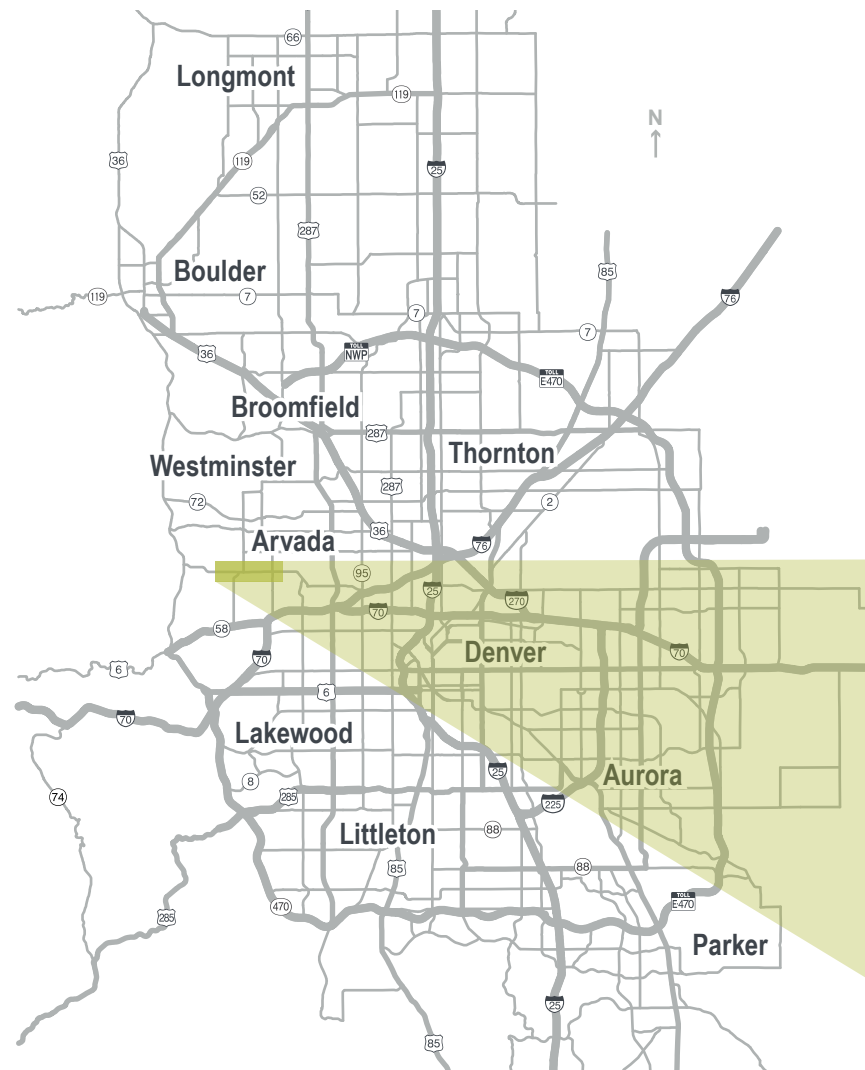
Project Achievements

Performance Measures	Daily Reduction
Vehicle travel time	140 hours
Fuel consumption	113 gallons
Time and fuel costs	\$3,350 savings daily (\$840,000 annual savings)
Greenhouse gas emissions	2,151 pounds
Emissions of six EPA-regulated pollutants	21 pounds

Overall Improvements



- Average Travel Time Before Retiming
- Average Travel Time After Retiming
- Average Number of Stops Across Corridor Before Retiming (Less Idling)
- Average Number of Stops Across Corridor After Retiming (Less Idling)



Project Scope

Quaker Street to Ward Road (2.4 miles)



Federal Funds for Arvada

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

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	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 64th Ave and Quaker St	100-second cycle			90-second cycle						100-second cycle			
2 64th Ave and Pike St													
3 64th Ave and McIntyre St													
4 64th Ave and McIntyre Pkwy													
5 64th Ave and Joyce Dr													
6 64th Ave and Indiana St													
7 64th Ave and Gardenia St													
8 64th Ave and Eldridge St													
9 64th Ave and Deframe St													
10 64th Ave and Yank Way	120-second cycle									120-second cycle			
11 64th Ave and Ward Rd													

■ CDOT ■ City of Arvada

SIGNAL TIMING PROJECT BRIEF

64th Avenue: Quaker Street to Ward 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.

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



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