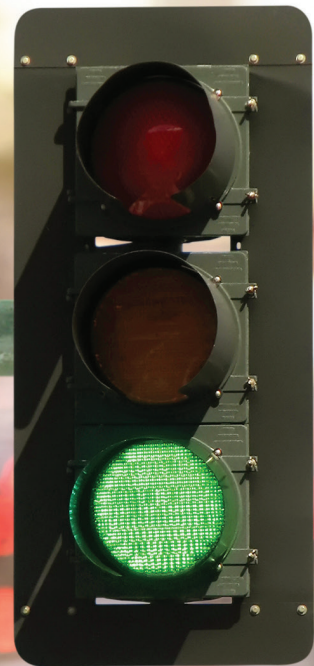
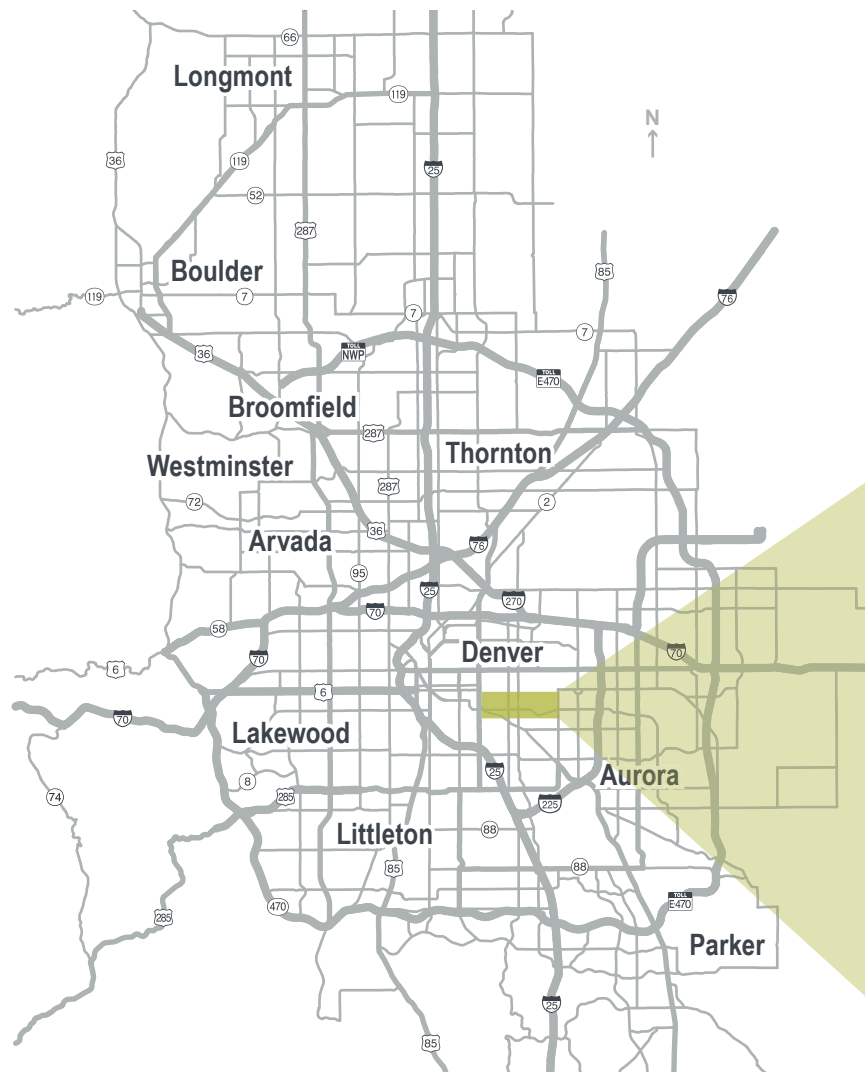


Martin Luther King, Jr Boulevard/31st Avenue: Downing Street to Quebec Street



Project Achievements

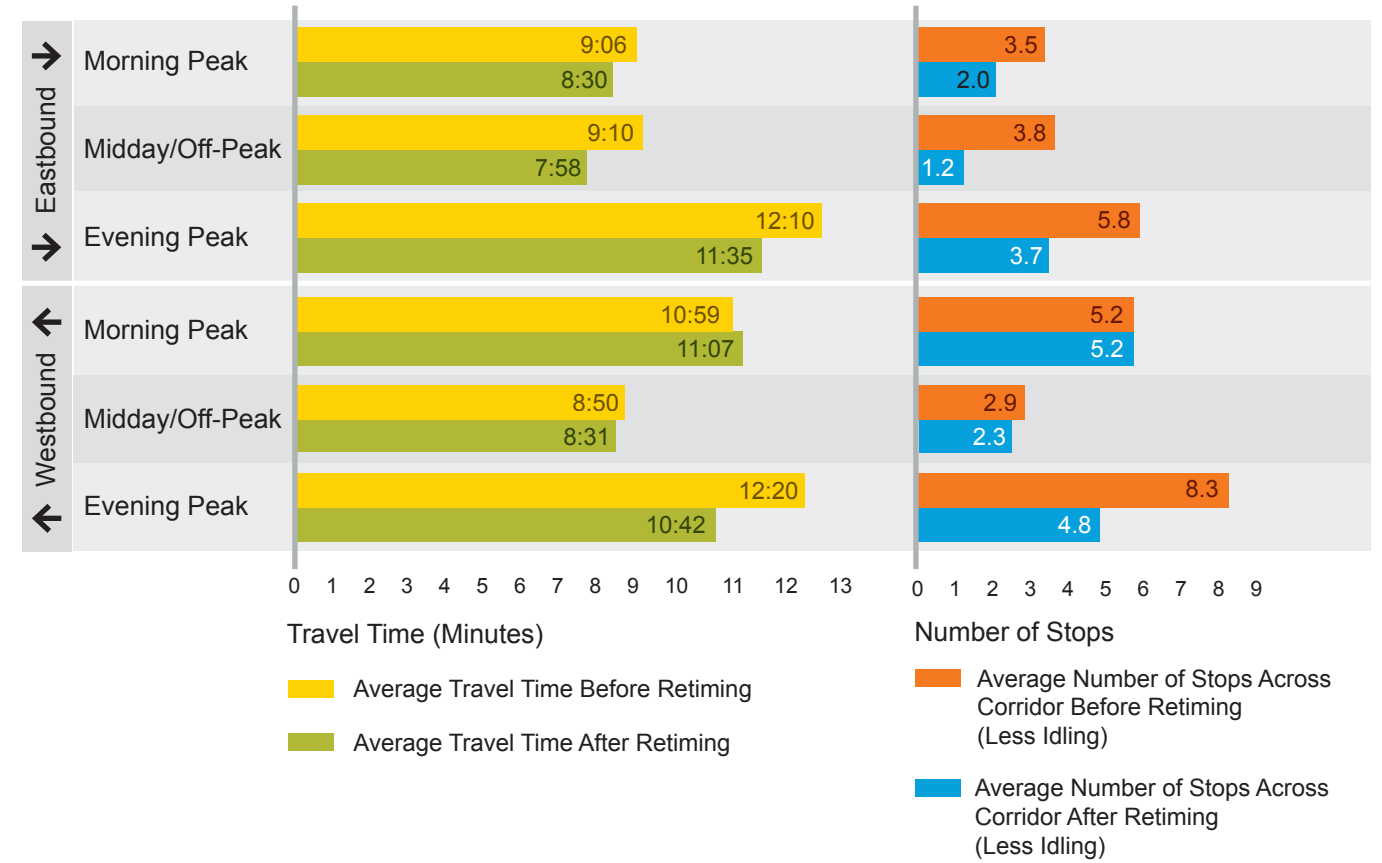
Performance Measures	Daily Reduction
Vehicle travel time	300 hours
Fuel consumption	200 gallons
Time and fuel costs	\$7,000 savings daily and \$1,750,000 annual savings
Greenhouse gas emissions	4,300 pounds
Emissions of six EPA-regulated pollutants	50 pounds



Federal Funds for Denver

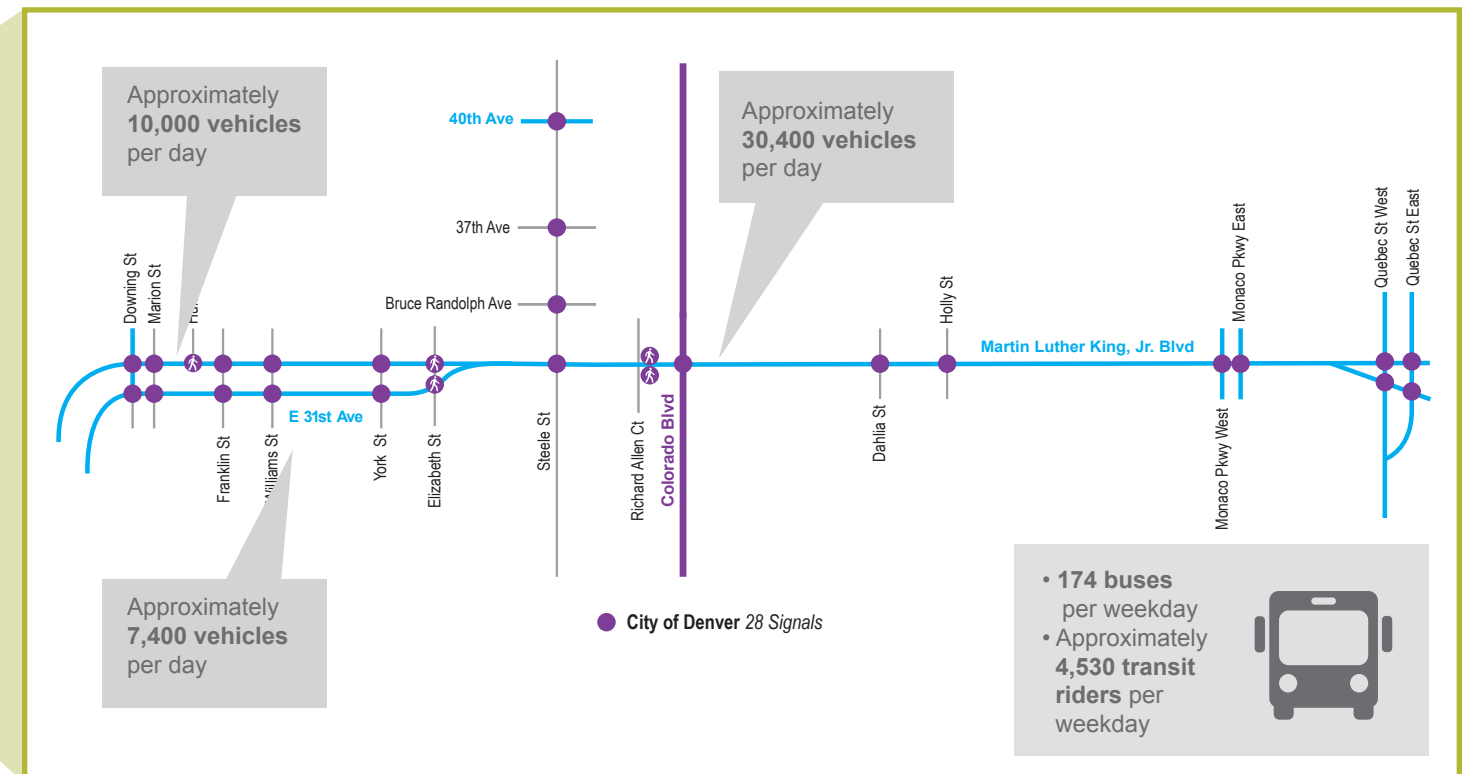
DRCOG engineering staff developed the signal timing and coordination plans in partnership with the project stakeholders.

Overall Improvements



Project Scope

MLK Boulevard/31st Avenue (3.8 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	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	19:00
1	Downing St and 31st Ave	90-second cycle												
2	31st Ave and Marion St													
3	31st Ave and Franklin St													
4	31st Ave and Williams St													
5	York St and 31st Ave													
6	Downing St and MLK Blvd													
7	MLK Blvd and Marion St													
8	MLK Blvd and Humboldt St pedestrian signal													
9	MLK Blvd and Franklin St													
10	MLK Blvd and Williams St													
11	York St and MLK Blvd													
12	MLK Blvd and Elizabeth St pedestrian signal EB													
13	MLK Blvd and Elizabeth St pedestrian signal WB													
14	MLK Blvd and Steele St													
15	MLK Blvd and Richard Allen Ct pedestrian signal EB													
16	MLK Blvd and Richard Allen Ct pedestrian signal WB													
17	MLK Blvd and Colorado Blvd	120-second cycle												
18	MLK Blvd and Dahlia	90-second cycle												
19	MLK Blvd and Holly St													
20	MLK Blvd and Monaco St SB													
21	MLK Blvd and Monaco St NB													
22	Quebec St and MLK Blvd NW	110-second cycle				120-second cycle								
23	Quebec St and MLK Blvd NE													
24	Quebec St and MLK Blvd SW													
25	Quebec St and MLK Blvd SE													
26	Steele and Bruce Randolph St	90-second cycle												
27	Steele St and 37th Ave													
28	Steele St and 40th Ave													

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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TPO-SB-T17-21-07-27-V2



SIGNAL TIMING PROJECT BRIEF

Martin Luther King, Jr Boulevard/31st Avenue: Downing Street to Quebec Street

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.