

# Downing Street: Park Avenue to Walnut Street

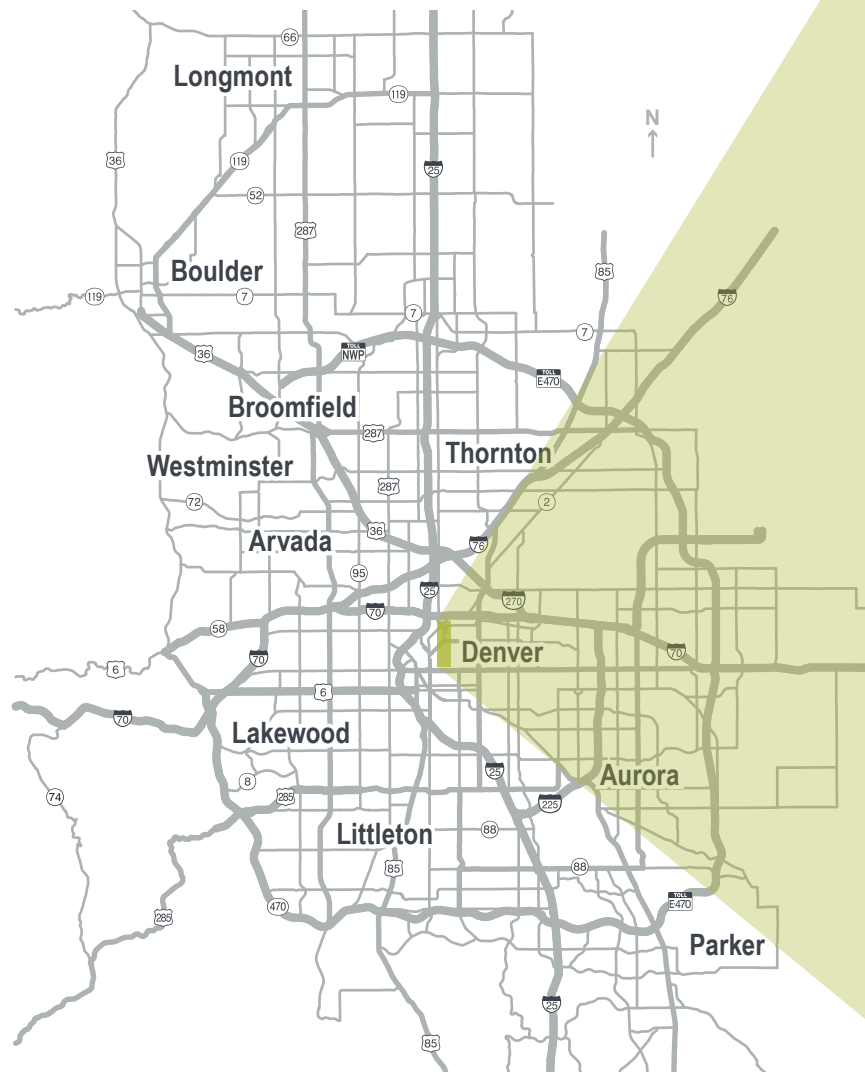


## Federal Funds for Denver

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

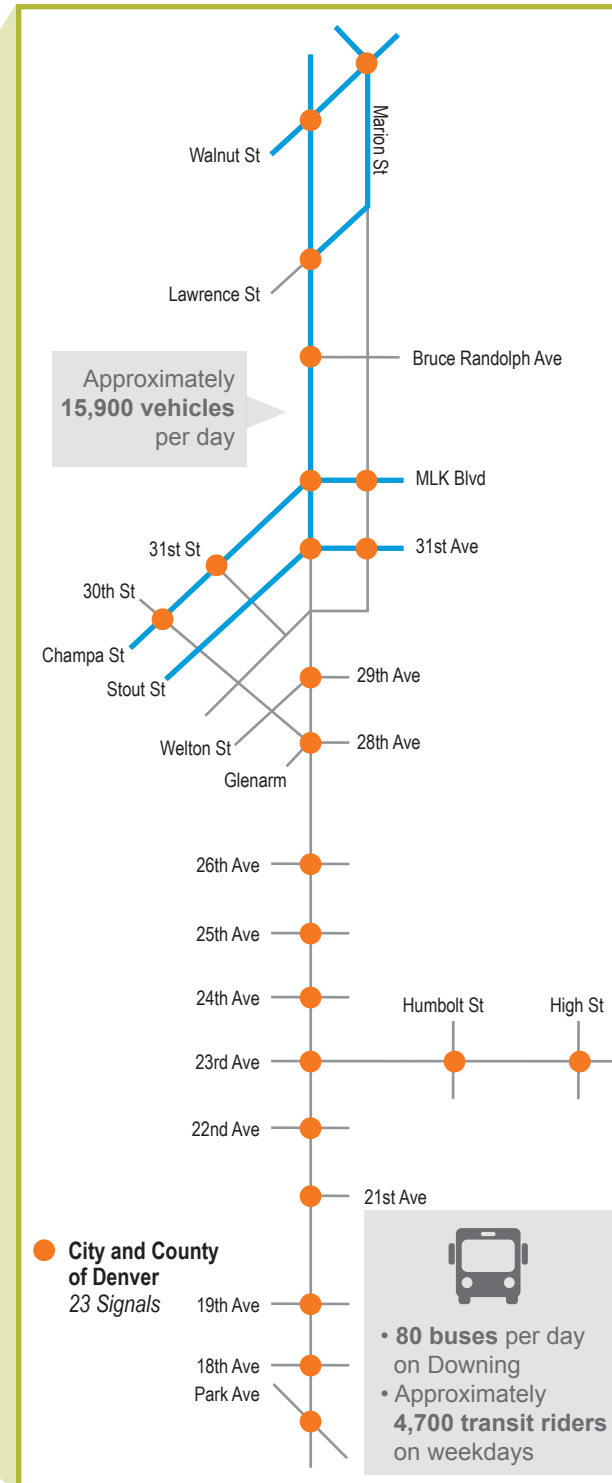
## Project Achievements

Performance Measures	Daily Reduction
Vehicle travel time	213 hours
Fuel consumption	161 gallons
Time and fuel costs	\$5,150 savings daily (\$1.29 million annually)
Greenhouse gas emissions	3,189 pounds
Emissions of six EPA-regulated pollutants	31 pounds

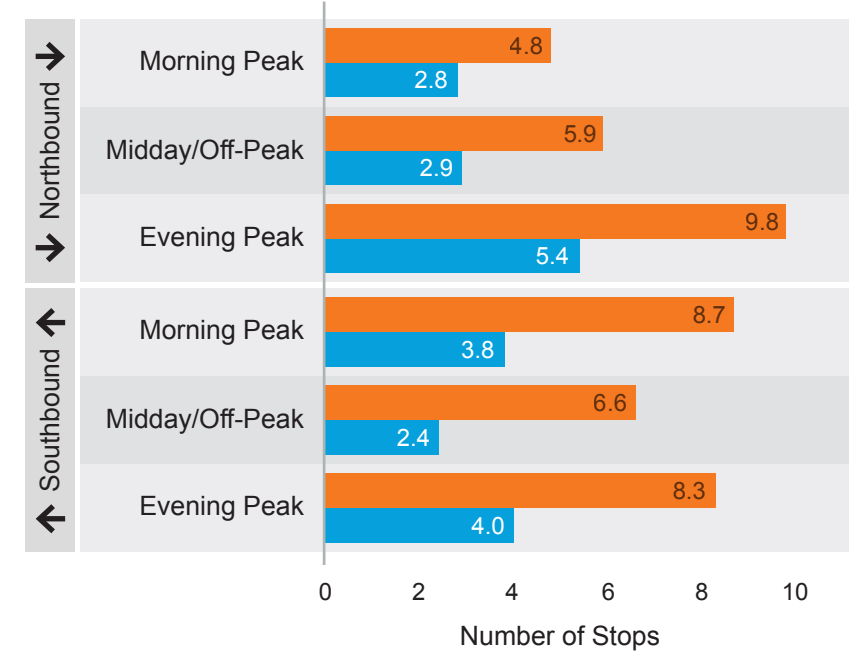
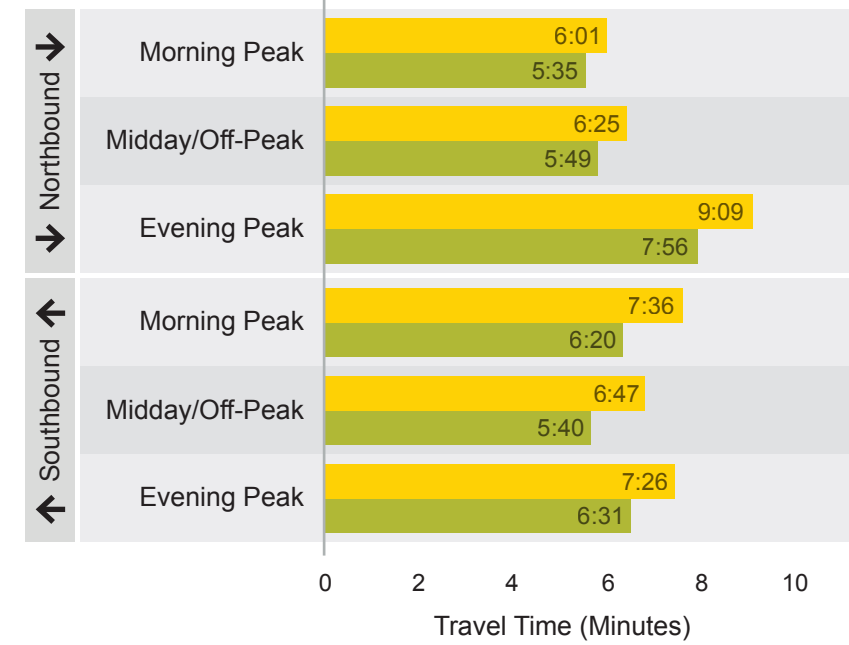


## Project Scope

Downing Street (7.0 miles)



## Overall Improvements



## 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	18:30
1 Downing St & Park Ave	90-second cycle												
2 Downing St & 18th Ave													
3 Downing St & 19th Ave													
4 Downing St & 21st Ave													
5 Downing St & 22nd Ave													
6 Downing St & 23rd Ave													
7 Downing St & 24th Ave													
8 Downing St & 25th Ave													
9 Downing St & 26th Ave													
10 Downing St & 28th Ave/ Glenarm Pl/30th St													
11 Downing St & 29th Ave/Welton St													
12 Downing St & 31st Ave/Stout St													
13 Downing St & MLK Blvd/Champa St													
14 Downing St & Bruce Randolph Ave													
15 Downing St & Lawrence St													
16 Downing St & Walnut St													
17 Marion St & Walnut St/38th St													
18 23rd Ave & Humbolt St													
19 23rd Ave & High St													
20 31st Ave & Marion St													
21 MLK Blvd & Marion St													
22 Champa St and 31st St													
23 Champa St and 30th St													

# SIGNAL TIMING PROJECT BRIEF

## Downing Street: Park Avenue to Walnut 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.

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