

- 1 The input areas on this sheet are highlighted in yellow.
- 2 On **AMPHR**, **OPPHR**, and **PMPHR**, enter volumes from the 24-hour counts collected for the corridor.  
This data is used to determine a peak-hour factor.
- 3 Enter the volumes for the turning movement counts on **PERVOLS** along with all the cross-street names.  
At the bottom of **PERVOLS**, enter the 24-hour bi-directional volume totals.
- 4 Enter the link lengths on **AMB**. This is the only place where they need to be entered.
- 5 For **EB.AMB**, **EB.AMA**, **WB.AMB**, **WB.AMA**, **EB.OPB**, **EB.OPA**, **WB.OPB**, **WB.OPA**, **EB.PMB**, **EB.PMA**, **WB.PMB**, **WB.PMA**, enter the "overall output stats" from PC Travel.
- 6 On **SOI**, enter the current cost per gallon of gasoline and cost of delay. DRCOG generally updates these values annually.
- 7 The benefit summary information is located on **SOI** (scroll to the right, if necessary). Also, a graph showing the travel time improvements is available on Combined Chart.

General note: On all the sheets where there are more rows than links in your corridor, carefully delete the **data** in the rows that are not needed. DO NOT DELETE the **rows** as this will corrupt the formulas elsewhere in the spreadsheet.

E. 104th Ave. (Colorado Boulevard to S. Platte)					
AM PEAK HOUR RATIO CALCULATION					
LOCATION:	104th - East of Colorado			104th - East of Riverdale	
	AM PERIOD 1			AM PERIOD 2	
	09/05/19			09/26/19	
	WB	EB		WB	EB
6:00-7:00 a.m.	453	521		415	664
7:00-8:00 a.m.	668	525		644	631
8:00-9:00 a.m.	642	416		647	575
TOTAL	1763	1462		1706	1870
	AM PEAK HOUR 1			AM PEAK HOUR 2	
	09/05/19			09/26/19	
	WB	EB		WB	EB
TOTAL	668	525		647	664
P.H.R.	2.639	2.785		2.637	2.816
AVERAGE	2.712			2.727	
OVERALL AVERAGE			2.719		

E. 104th Ave. (Colorado Boulevard to S. Platte)					
OFF PEAK HOUR RATIO CALCULATION					
LOCATION:	104th - East of Colorado			104th - East of Riverdale	
	OP PERIOD 1 09/05/19			OP PERIOD 2 09/26/19	
	WB	EB		WB	EB
9:00-10:00 a.m.	470	356		368	499
10:00-11:00 a.m.	478	405		425	513
11:00-12:00 a.m.	481	465		478	571
12:00-1:00 p.m.	481	466		573	579
1:00-2:00 p.m.	452	461		620	567
2:00-3:00 p.m.	547	520		656	631
7:00-8:00 p.m.	461	516		492	526
8:00-9:00 p.m.	338	317		318	396
9:00-10:00 p.m.	204	244		273	336
TOTAL	3912	3750		4203	4618
AM PERIOD	1763	1462		1706	1870
PM PERIOD	2646	2736		2842	2960
TOTAL	4409	4198		4548	4830
OP/PEAK PERIOD RATIO	0.887	0.893		0.924	0.956
AVG RATIO	0.890			0.940	
OVERALL AVG OP PERIOD RATIO:			0.915		

E. 104th Ave. (Colorado Boulevard to S. Platte)					
PM PEAK HOUR RATIO CALCULATION					
LOCATION:	104th - East of Colorado			104th - East of Riverdale	
	PM PERIOD 1 09/05/19			PM PERIOD 2 09/26/19	
	WB	EB		WB	EB
3:00-4:00 p.m.	630	687		715	767
4:00-5:00 p.m.	655	631		723	775
5:00-6:00 p.m.	709	741		739	795
6:00-7:00 p.m.	652	677		665	623
TOTAL	2646	2736		2842	2960
	PM PEAK HOUR 1 09/05/19			PM PEAK HOUR 2 09/26/19	
	WB	EB		WB	EB
TOTAL	709	741		739	795
P.H.R.	3.732	3.692		3.846	3.723
AVERAGE	3.712			3.785	
OVERALL AVERAGE			3.75		

E. 104th Ave. (Colorado Boulevard to S. Platte)

SYNCHRO LINK TRAFFIC VOLUMES

Synchro file link volumes

Link:		AM Peak Hour		AM Peak Period		PM Peak Hour		PM Peak Period		Off Peak Period	
between	and	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
Colorado Boulevard	Riverdale Road	796	1004	2,150	2,750	1114	968	4,200	3,650	5,800	5,900
Riverdale Road	McKay Road	753	1068	2,050	2,900	1295	1133	4,850	4,250	6,300	6,500
McKay Road	S. Platte	871	1254	2,350	3,400	1648	1579	6,200	5,900	7,800	8,500
S. Platte	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0
	0			0	0			0	0	0	0

RAW AVERAGE				2,183	3,017			5,083	4,600	6,633	6,967
AVERAGE				2,200	3,000			5,100	4,600	6,650	6,950
AVG.TOTAL PERIOD				28,500							
Sum 24 Hour Counts:	104th - East of Colorado			23,464							
	104th - East of Riverdale			17,964							











PM Peak (before)

E. 104th Ave. (Colorado Boulevard to S. Platte)

PM Peak (before)

EB

Colorado to US-85

Street	Distance into (feet)	Volume	Corridor Averages							Fuel Consumption				Carbon Monoxide				Hydrocarbons				Nitrogen Oxides				Carbon Dioxide				SUMMARY TABLE						
			Travel			Time Below				DISTANCE TRAVELLED AT 5 AND 20 MPH	AVERAGE SPEED TRAVELED OVER 30 MPH	Travel	Stop	<10	<30	Travel	Stop	<10	<30	Travel	Stop	<10	<30	Travel	Stop	<10	<30	Travel	Stop	<10	<30	Ave Travel Time:				
			Time (s)	0	10	30	(sec)	(sec)	(sec)																											
			(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	(sec)	
Colorado Boulevard																																			660.0	142.6
Riverdale Road	3,446	4,200	269640	64.2	2.7	0.0	0.0		-20	37	145.2	2.5	(2.8)	0.0	32.0	0.4	(0.5)	0.0	1.2	0.0	(0.0)	0.0	3.4	0.0	(0.0)	0.0	2,781.9	48.4	(53.7)	0.0			142.6	109		
McKay Road	2,985	4,850	2615120	539.2	139.9	0.0	0.0		-1025	5	655.6	151.1	(167.6)	0.0	110.3	22.1	(28.2)	0.0	6.8	1.6	(1.8)	0.0	11.3	2.5	(2.9)	0.0	12,564.3	2,898.5	(3,212.7)	0.0			1020.9	185.8		
S. Platte	4,150	6,200	350920	56.6	0.0	0.0	0.0		0	50	236.9	0.0	0.0	0.0	49.7	0.0	0.0	0.0	1.7	0.0	0.0	0.0	5.9	0.0	0.0	0.0	4,536.6	0.0	0.0	0.0			185.8	9.6		
0	0	0	0	0.0	0.0	0.0	0.0		0	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2	19563.4	
TOTALS	10,581	5,083	3235680	660.0	142.6	0.0	0.0				1,037.7	153.6	(170.4)	0.0	192.0	22.5	(28.7)	0.0	9.8	1.7	(1.8)	0.0	20.6	2.5	(2.9)	0.0	19,882.8	2,946.9	(3,266.4)	0.0			898.8			

WB

US-85 to Colorado

Corridor Averages

Fuel Consumption

Carbon Monoxide

Hydrocarbons

Nitrogen Oxides

Carbon Dioxides



These daily pollutant emission and fuel consumption rates have been calculated from MOVES2014a and are based on model runs for summer weekdays on urban unrestricted roadways in 2015. The rates were provided by Dale Wells at the Air Pollution Control Division using the 2015 MOVES2014a modeling assumptions (temperature, meteorology, fleet mix, etc)

mph	gal	grams	grams	grams	grams
SPEED	(veh*mi)	(veh*mi)	(veh*mi)	(veh*mi)	(veh*mi)
	FUEL	CO	CO2	VOC	NOX
0	0.80	53.17	6,959	3.90	5.95
2.5	0.32	21.27	2,783	1.56	2.38
3	0.29	19.72	2,535	1.42	2.18
4	0.24	16.64	2,039	1.13	1.78
5	0.18	13.55	1,543	0.84	1.39
6	0.16	12.78	1,421	0.77	1.29
7	0.15	12.00	1,298	0.70	1.20
8	0.14	11.23	1,175	0.62	1.11
9	0.12	10.46	1,052	0.55	1.01
10	0.11	9.69	929	0.48	0.92
11	0.10	9.43	889	0.46	0.89
12	0.10	9.17	849	0.43	0.86
13	0.09	8.92	809	0.41	0.83
14	0.09	8.66	769	0.38	0.80
15	0.08	8.40	729	0.36	0.77
16	0.08	8.22	708	0.35	0.76
17	0.08	8.03	687	0.33	0.74
18	0.08	7.84	665	0.32	0.73
19	0.07	7.65	644	0.31	0.71
20	0.07	7.46	623	0.30	0.69
21	0.07	7.22	609	0.29	0.68
22	0.07	6.99	596	0.28	0.67
23	0.07	6.75	582	0.27	0.66
24	0.07	6.52	568	0.26	0.65
25	0.06	6.28	554	0.25	0.64
26	0.06	6.21	543	0.25	0.63
27	0.06	6.13	531	0.24	0.62
28	0.06	6.05	520	0.23	0.61
29	0.06	5.98	509	0.23	0.60
30	0.06	5.90	497	0.22	0.59
31	0.06	5.80	491	0.22	0.58
32	0.06	5.70	484	0.21	0.58
33	0.05	5.61	477	0.21	0.57
34	0.05	5.51	470	0.20	0.56
35	0.05	5.41	464	0.20	0.56
36	0.05	5.33	460	0.20	0.56
37	0.05	5.25	457	0.19	0.55
38	0.05	5.17	453	0.19	0.55
39	0.05	5.08	449	0.19	0.55
40	0.05	5.00	446	0.18	0.55
41	0.05	4.95	443	0.18	0.55
42	0.05	4.89	440	0.18	0.55
43	0.05	4.84	438	0.18	0.55
44	0.05	4.79	435	0.17	0.55
45	0.05	4.74	432	0.17	0.55

Note the denominator f

46	0.05	4.71	430	0.17	0.55
47	0.05	4.69	428	0.17	0.55
48	0.05	4.66	426	0.17	0.55
49	0.05	4.64	423	0.16	0.55
50	0.05	4.61	421	0.16	0.55
51	0.05	4.62	420	0.16	0.55
52	0.05	4.62	419	0.16	0.55
53	0.05	4.62	417	0.16	0.55
54	0.05	4.62	416	0.16	0.56
55	0.05	4.62	415	0.16	0.56

or this value is  $\text{veh} \cdot \text{hr}$  - it is the idle value

EB AM Peak Before

Number Overall Statistics	Section Length (ft)	Section Name	Travel Time (s)	Before Runs (miles per hour)		
				Speed 1 0	Speed 2 10	Speed 3 30
1	0	Colorado Boulevard	0.0	0.0	0.0	0.0
2	3,446	Riverdale Road	60.8	2.6		
3	2,985	McKay Road	67.2	18.0		
4	4,150	S. Platte	56.6	0.0		
5	0		0			
6	0		0			
7	0		0			
8	0		0			
9	0		0			
10	0		0			
11	0		0			
12	0		0			
13	0		0			
14	0		0			
15	0		0			
16	0		0			
17	0		0			
18	0		0			
19	0		0			
20	0		0			
21	0		0			
22	0		0			
23	0		0			
24	0		0			
25	0		0			
26	0		0			
27	0		0			
28	0		0			
29	0		0			
30	0		0			

31 0  
32 0  
33 0  
34 0  
35 0  
36 0  
37 0  
38 0  
39 0  
40 0

10,581

OVERALL

0				
0				
0				
0				
0				
0				
0				
0				
0				
0				
0				

184.6

20.6

0.0

0.0



EB AM Peak After

Number Overall Statistics	Section Length (ft)	Section Name	Travel Time (s)	After Runs (miles per hour)		
				Speed 1 0	Speed 2 10	Speed 3 30
1	0	Colorado Boulevard	0.0	0.0	0.0	0.0
2	3,446	Riverdale Road	58.4	2.7		
3	2,985	McKay Road	61.6	16.9		
4	4,150	S. Platte	56.6	0.0		
5	0		0			
6	0		0			
7	0		0			
8	0		0			
9	0		0			
10	0		0			
11	0		0			
12	0		0			
13	0		0			
14	0		0			
15	0		0			
16	0		0			
17	0		0			
18	0		0			
19	0		0			
20	0		0			
21	0		0			
22	0		0			
23	0		0			
24	0		0			
25	0		0			
26	0		0			
27	0		0			
28	0		0			
29	0		0			
30	0		0			

31 0  
32 0  
33 0  
34 0  
35 0  
36 0  
37 0  
38 0  
39 0  
40 0

10,581

OVERALL

0				
0				
0				
0				
0				
0				
0				
0				
0				
0				
0				

176.6

19.6

0.0

0.0

WB AM Peak Before

Number Section Length (ft) Section Name Travel Time (s) Before Runs (miles per hour)  
Overall Statistics Speed 1 Speed 2 Speed 3  
0 10 30

Number	Section Length (ft)	Section Name	Travel Time (s)	Speed 1	Speed 2	Speed 3
1	0	US-85	0.0	0.0	0.0	0.0
2	0					
3	0					
4	0					
5	0					
6	0					
7	0					
8	0					
9	0					
10	0					
11	0					
12	0					
13	0					
14	0					
15	0					
16	0					
17	0					
18	0					
19	0					
20	0					
21	0					
22	0					
23	0					
24	0					
25	0					
26	0					
27	0					
28	0					
29	0					
30	0					

31	0	0				
32	0	0				
33	0	0				
34	0	0				
35	0	0				
36	0	0				
37	0 S. Platte					
38	4,150 McKay Road	131.4	50.7			
39	2,985 Riverdale Road	77.1	17.0			
40	3,446 Colorado Boulevard	113.8	46.3			
10,581	OVERALL	322.3	114.0	0.0	0.0	

WB AM Peak After

Number Section Length (ft) Section Name Travel Time (s) After Runs (miles per hour)  
Overall Statistics Speed 1 Speed 2 Speed 3  
0 10 30

Number	Section Length (ft)	Section Name	Travel Time (s)	Speed 1	Speed 2	Speed 3
1		US-85	0.0	0.0	0.0	0.0
2	0					
3	0					
4	0					
5	0					
6	0					
7	0					
8	0					
9	0					
10	0					
11	0					
12	0					
13	0					
14	0					
15	0					
16	0					
17	0					
18	0					
19	0					
20	0					
21	0					
22	0					
23	0					
24	0					
25	0					
26	0					
27	0					
28	0					
29	0					
30	0					

31	0	0				
32	0	0				
33	0	0				
34	0	0				
35	0	0				
36	0	0				
37	0 S. Platte					
38	4,150 McKay Road	80.9	17.8			
39	2,985 Riverdale Road	47.7	3.5			
40	3,446 Colorado Boulevard	113.1	47.0			
10,581	OVERALL	241.7	68.3	0.0	0.0	

EB Off Peak Before

Number	Section Length (ft)	Section Name	Travel Time (s)	Before Runs (miles per hour)		
				Speed 1	Speed 2	Speed 3
Overall Statistics				0	10	30
1		Colorado Boulevard	0.0	0.0	0.0	0.0
2	3,446	Riverdale Road	64.2	4.0		
3	2,985	McKay Road	52.8	5.0		
4	4,150	S. Platte	56.6	0.0		
5	0		0			
6	0		0			
7	0		0			
8	0		0			
9	0		0			
10	0		0			
11	0		0			
12	0		0			
13	0		0			
14	0		0			
15	0		0			
16	0		0			
17	0		0			
18	0		0			
19	0		0			
20	0		0			
21	0		0			
22	0		0			
23	0		0			
24	0		0			
25	0		0			
26	0		0			
27	0		0			
28	0		0			
29	0		0			
30	0		0			

31 0  
32 0  
33 0  
34 0  
35 0  
36 0  
37 0  
38 0  
39 0  
40 0

10,581

OVERALL

0				
0				
0				
0				
0				
0				
0				
0				
0				
0				
0				
0				

173.6

9.0

0.0

0.0



EB Off Peak After

Number Section Length (ft) Section Name Travel Time (s) After Runs (miles per hour)  
Overall Statistics Speed 1 Speed 2 Speed 3  
0 10 30

Number	Section Length (ft)	Section Name	Travel Time (s)	Speed 1	Speed 2	Speed 3
1		Colorado Boulevard	0.0	0.0	0.0	0.0
2	3,446	Riverdale Road	51.3	3.7		
3	2,985	McKay Road	48.9	4.9		
4	4,150	S. Platte	56.6	0.0		
5	0		0			
6	0		0			
7	0		0			
8	0		0			
9	0		0			
10	0		0			
11	0		0			
12	0		0			
13	0		0			
14	0		0			
15	0		0			
16	0		0			
17	0		0			
18	0		0			
19	0		0			
20	0		0			
21	0		0			
22	0		0			
23	0		0			
24	0		0			
25	0		0			
26	0		0			
27	0		0			
28	0		0			
29	0		0			
30	0		0			

31 0  
32 0  
33 0  
34 0  
35 0  
36 0  
37 0  
38 0  
39 0  
40 0

10,581

OVERALL

0				
0				
0				
0				
0				
0				
0				
0				
0				
0				
0				

156.8

8.6

0.0

0.0

WB Off Peak Before

Number Section Length (ft) Section Name Travel Time (s) Before Runs (miles per hour)  
Overall Statistics Speed 1 Speed 2 Speed 3  
0 0 10 30

Number	Section Length (ft)	Section Name	Travel Time (s)	Speed 1	Speed 2	Speed 3
1	0	US-85	0.0	0.0	0.0	0.0
2	0					
3	0					
4	0					
5	0					
6	0					
7	0					
8	0					
9	0					
10	0					
11	0					
12	0					
13	0					
14	0					
15	0					
16	0					
17	0					
18	0					
19	0					
20	0					
21	0					
22	0					
23	0					
24	0					
25	0					
26	0					
27	0					
28	0					
29	0					
30	0					

31	0	0				
32	0	0				
33	0	0				
34	0	0				
35	0	0				
36	0	0				
37	0 S. Platte					
38	4,150 McKay Road	70.5	7.6			
39	2,985 Riverdale Road	49.4	3.3			
40	3,446 Colorado Boulevard	94.4	37.6			
10,581	OVERALL	214.3	48.5	0.0	0.0	

WB Off Peak After

Number Section Length (ft) Section Name Travel Time (s) After Runs (miles per hour)  
Overall Statistics Speed 1 Speed 2 Speed 3  
0 10 30

Number	Section Length (ft)	Section Name	Travel Time (s)	Speed 1	Speed 2	Speed 3
1		US-85	0.0	0.0	0.0	0.0
2	0					
3	0					
4	0					
5	0					
6	0					
7	0					
8	0					
9	0					
10	0					
11	0					
12	0					
13	0					
14	0					
15	0					
16	0					
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18	0					
19	0					
20	0					
21	0					
22	0					
23	0					
24	0					
25	0					
26	0					
27	0					
28	0					
29	0					
30	0					

31	0	0				
32	0	0				
33	0	0				
34	0	0				
35	0	0				
36	0	0				
37	0 S. Platte					
38	4,150 McKay Road	66.2	6.4			
39	2,985 Riverdale Road	46.0	3.0			
40	3,446 Colorado Boulevard	92.2	36.8			
10,581	OVERALL	204.4	46.2	0.0	0.0	

EB PM Peak Before

Number Overall Statistics	Section Length (ft)	Section Name	Travel Time (s)	Before Runs (miles per hour)		
				Speed 1 0	Speed 2 10	Speed 3 30
1		Colorado Boulevard	0.0	0.0	0.0	0.0
2	3,446	Riverdale Road	64.2	2.7		
3	2,985	McKay Road	539.2	139.9		
4	4,150	S. Platte	56.6	0.0		
5	0		0			
6	0		0			
7	0		0			
8	0		0			
9	0		0			
10	0		0			
11	0		0			
12	0		0			
13	0		0			
14	0		0			
15	0		0			
16	0		0			
17	0		0			
18	0		0			
19	0		0			
20	0		0			
21	0		0			
22	0		0			
23	0		0			
24	0		0			
25	0		0			
26	0		0			
27	0		0			
28	0		0			
29	0		0			
30	0		0			

31 0  
32 0  
33 0  
34 0  
35 0  
36 0  
37 0  
38 0  
39 0  
40 0

10,581  
OVERALL

0				
0				
0				
0				
0				
0				
0				
0				
0				
0				
0				

660.0 142.6 0.0 0.0



EB PM Peak After

Number Overall Statistics	Section Length (ft)	Section Name	Travel Time (s)	After Runs (miles per hour)		
				Speed 1 0	Speed 2 10	Speed 3 30
1		Colorado Boulevard	0.0	0.0	0.0	0.0
2	3,446	Riverdale Road	56.3	2.1		
3	2,985	McKay Road	64.1	20.8		
4	4,150	S. Platte	56.6	0.0		
5	0		0			
6	0		0			
7	0		0			
8	0		0			
9	0		0			
10	0		0			
11	0		0			
12	0		0			
13	0		0			
14	0		0			
15	0		0			
16	0		0			
17	0		0			
18	0		0			
19	0		0			
20	0		0			
21	0		0			
22	0		0			
23	0		0			
24	0		0			
25	0		0			
26	0		0			
27	0		0			
28	0		0			
29	0		0			
30	0		0			

31 0  
32 0  
33 0  
34 0  
35 0  
36 0  
37 0  
38 0  
39 0  
40 0

10,581  
OVERALL

0				
0				
0				
0				
0				
0				
0				
0				
0				
0				
0				

177.0 22.9 0.0 0.0

WB PM Peak Before

Number Section Length (ft) Section Name Travel Time (s) Before Runs (miles per hour)  
Overall Statistics Speed 1 Speed 2 Speed 3  
0 10 30

Number	Section Length (ft)	Section Name	Travel Time (s)	Speed 1	Speed 2	Speed 3
1		US-85	0.0	0.0	0.0	0.0
2	0					
3	0					
4	0					
5	0					
6	0					
7	0					
8	0					
9	0					
10	0					
11	0					
12	0					
13	0					
14	0					
15	0					
16	0					
17	0					
18	0					
19	0					
20	0					
21	0					
22	0					
23	0					
24	0					
25	0					
26	0					
27	0					
28	0					
29	0					
30	0					

31	0	0				
32	0	0				
33	0	0				
34	0	0				
35	0	0				
36	0	0				
37	0 S. Platte					
38	4,150 McKay Road	125.9	46.8			
39	2,985 Riverdale Road	57.0	8.3			
40	3,446 Colorado Boulevard	91.9	31.4			
	10,581					
	OVERALL	274.8	86.5	0.0	0.0	

WB PM Peak After

Number Section Length (ft) Section Name Travel Time (s) After Runs (miles per hour)  
Overall Statistics Speed 1 Speed 2 Speed 3  
0 10 30

Number	Section Length (ft)	Section Name	Travel Time (s)	Speed 1	Speed 2	Speed 3
1		US-85	0.0	0.0	0.0	0.0
2	0					
3	0					
4	0					
5	0					
6	0					
7	0					
8	0					
9	0					
10	0					
11	0					
12	0					
13	0					
14	0					
15	0					
16	0					
17	0					
18	0					
19	0					
20	0					
21	0					
22	0					
23	0					
24	0					
25	0					
26	0					
27	0					
28	0					
29	0					
30	0					

31	0	0				
32	0	0				
33	0	0				
34	0	0				
35	0	0				
36	0	0				
37	0 S. Platte					
38	4,150 McKay Road	85.9	22.0			
39	2,985 Riverdale Road	49.8	3.8			
40	3,446 Colorado Boulevard	82.5	31.9			
10,581	OVERALL	218.2	57.7	0.0	0.0	

Colorado to US-85 -- SUMMARY OF IMPROVEMENTS

		Average Travel Time (sec)	Average Stopped Time (sec)	Average Travel Speed (mph)	Fuel Consump- tion (gal/day)	Pollutant Emissions (VOC)					Total Travel Time (veh*hrs)		
						Carbon Monoxide (lbs/day)	Hydro- Carbons (lbs/day)	Nitrogen Oxides (lbs/day)	Cabon Dioxide (lbs/day)				
Morning Peak (6:00 - 8:30 a.m.)													
EB	Before	185	21	39	229	50	2	5	4,395	112			
	After	177	20	41	227	49	2	5	4,346	107			
	Improvement	8	4%	1	5%	2	5%	2	1%	1	0	0	49
WB	Before	322	114	22	424	93	4	9	8,124	273			
	After	242	68	30	357	78	3	8	6,849	201			
	Improvement	80	25%	46	40%	8	36%	67	16%	15	1	1	1,275
Off Peak (All other times.)													
EB	Before	174	9	42	685	147	5	16	13,115	318			
	After	157	9	46	669	141	5	16	12,816	291			
	Improvement	17	10%	0	0%	4	10%	16	2%	6	0	0	299
WB	Before	214	49	34	781	168	6	18	14,977	410			
	After	204	46	35	773	165	6	18	14,812	390			
	Improvement	10	5%	3	6%	1	3%	8	1%	3	0	0	165
Evening Peak (3:00 - 6:30 p.m.)													
EB	Before	660	143	11	1,021	186	10	20	19,563	899			
	After	177	23	41	533	114	4	13	10,204	250			
	Improvement	483	73%	120	84%	30	273%	488	48%	72	6	7	9,359
WB	Before	275	87	26	604	132	5	13	11,585	367			
	After	218	58	33	525	116	4	12	10,057	283			
	Improvement	57	21%	29	33%	7	27%	79	13%	16	1	1	1,528
Totals	Before				3,744	776	32	81	71,759	2,379			
	After				3,084	663	24	72	59,084	1,522			
	Improvement	111	32	9	660	113	8	9	12,675	857			
	percent	37	47	29	18	15	25	11	18	36			

Daily user costs: \$20,350  
 Yearly user cost: \$5.09 million

TECH BRIEF GRAPH MATRICIES:

**Travel Time**

EB				WB	
AM	185	177		322	242
OFF-PEAK	174	157		214	204
PM	660	177		275	218
	Travel Time Before	Travel Time After		Travel Time Before	Travel Time After

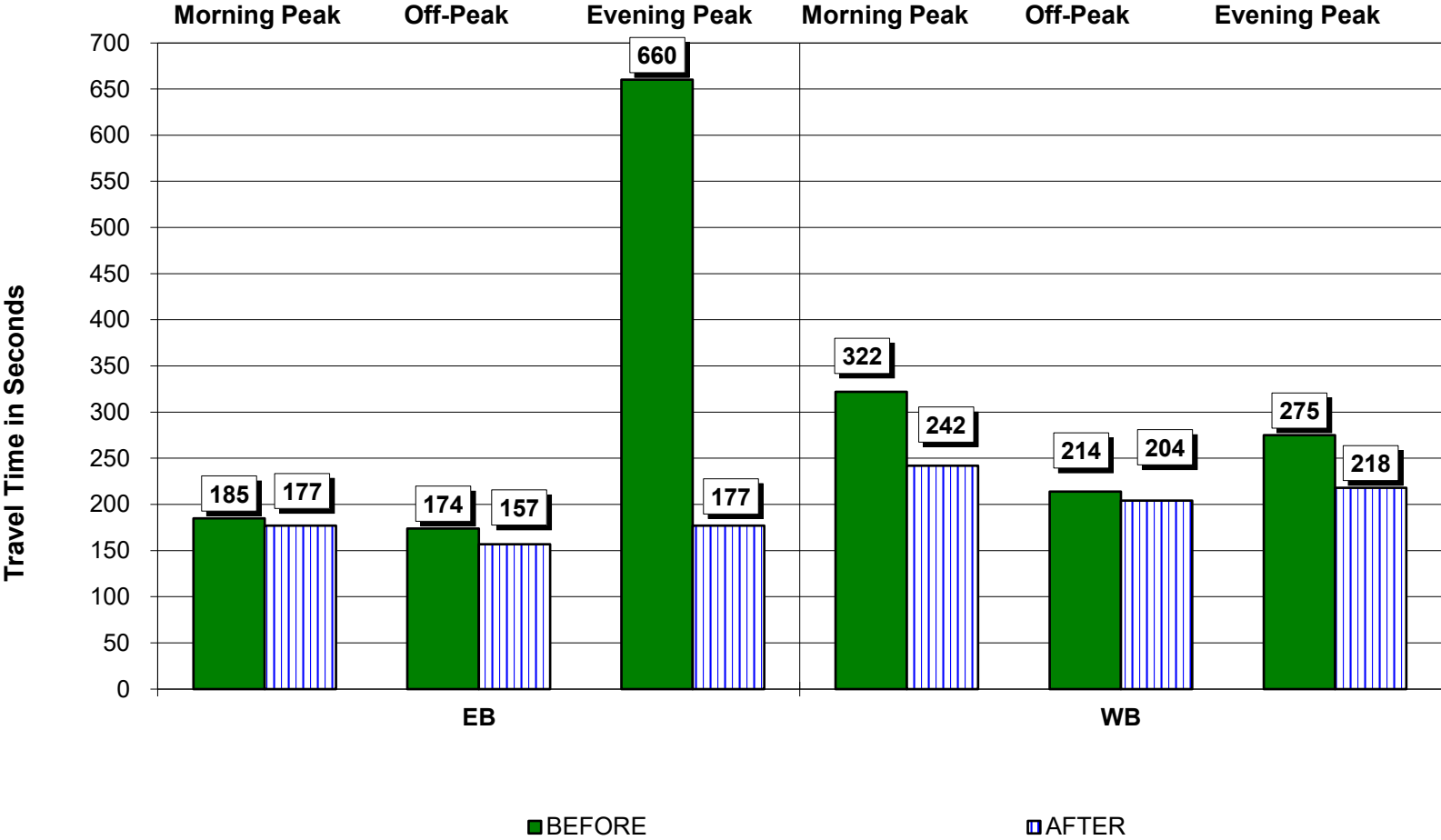
**Speed**

EB				WB	
AM	39	41		22	30
OFF-PEAK	42	46		34	35
PM	11	41		26	33
	Speed Before	Speed After		Speed Before	Speed After



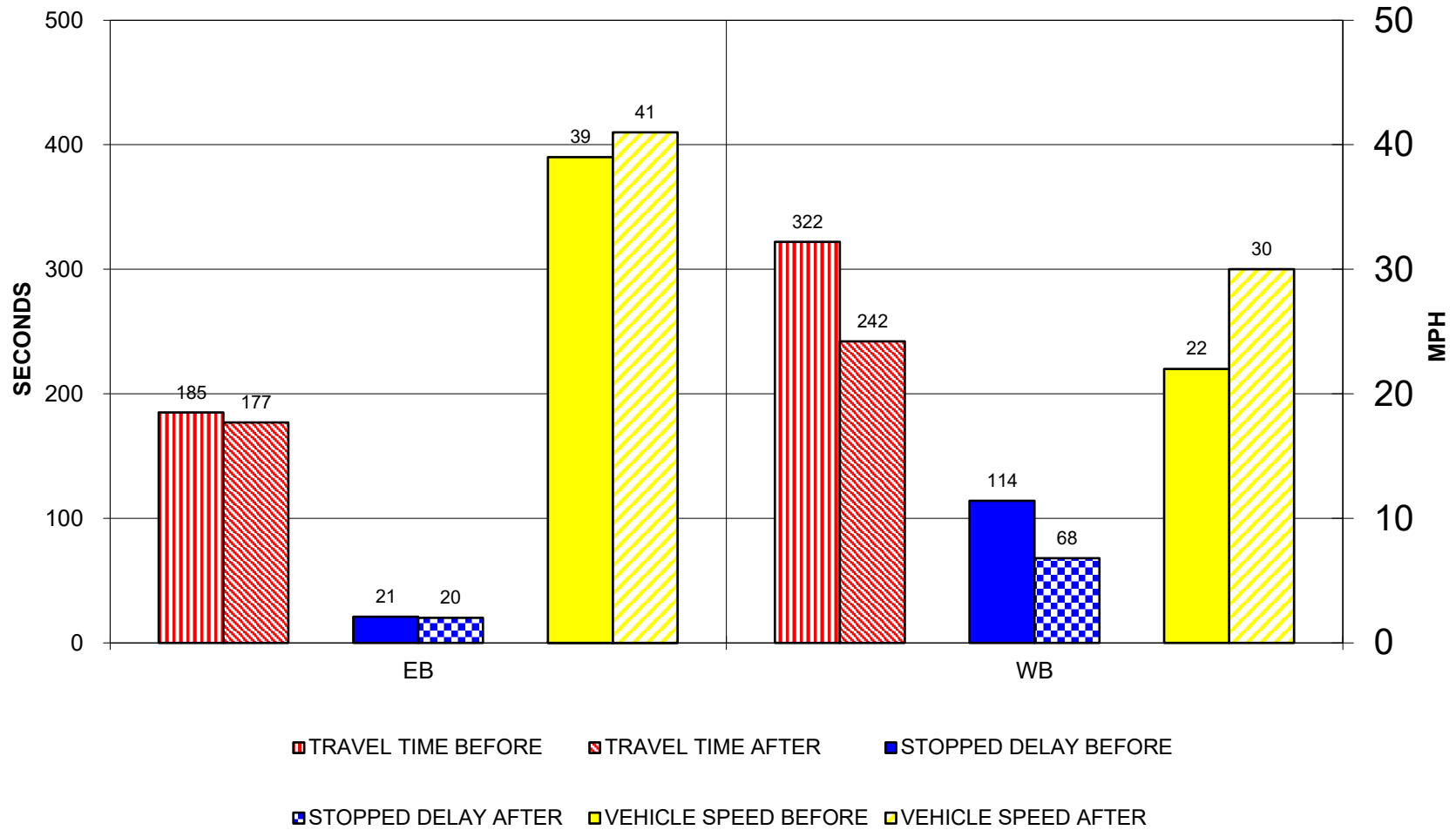
# 144th Ave.

(Huron Street to Washington St)  
 Travel Time Improvements (1.0 miles network total)



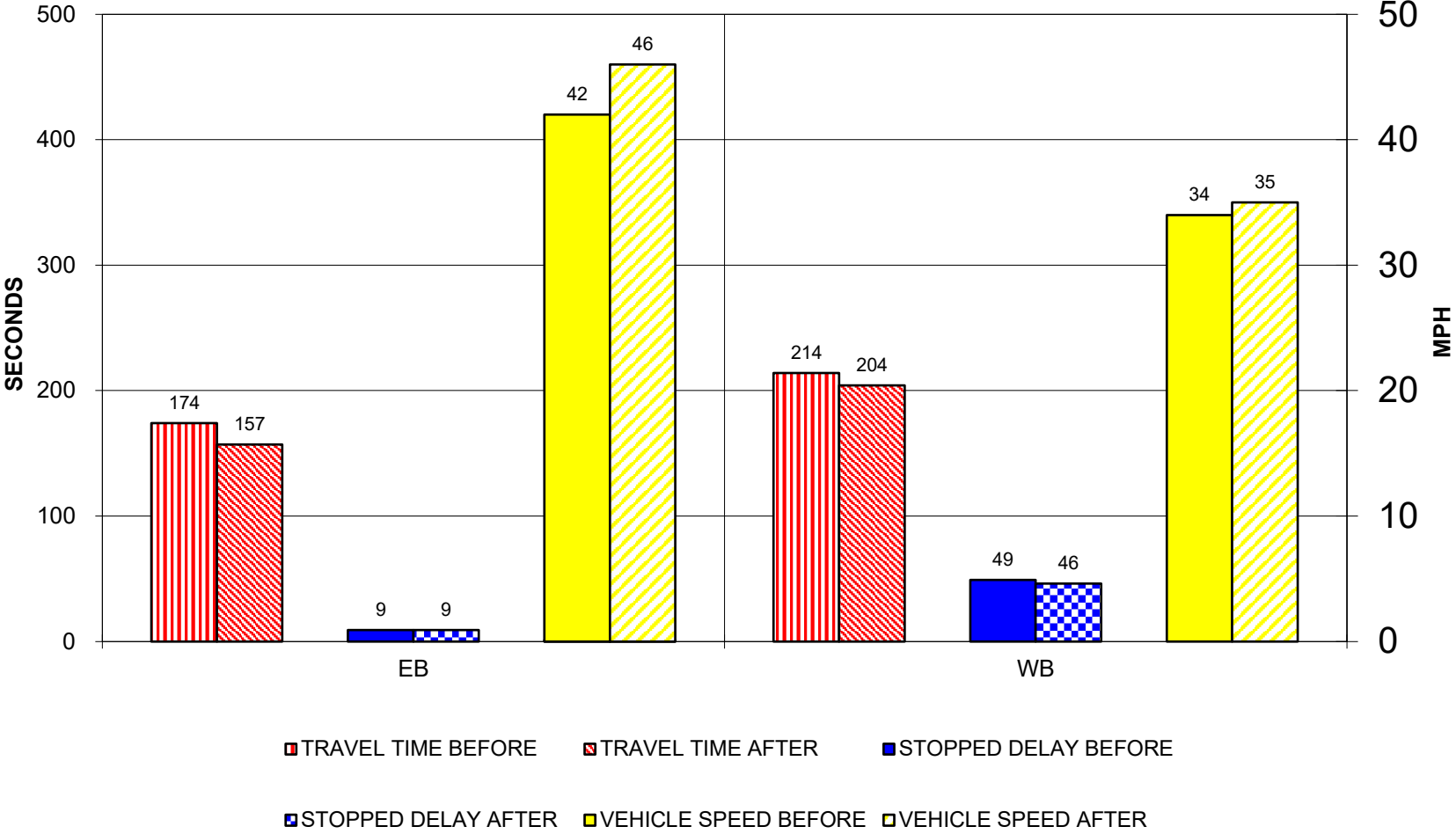
# 144th AVE MORNING PEAK

Travel Time, Stopped Delay, and Speed



# 144th AVE OFF-PEAK

## Travel Time, Stopped Delay, and Speed



# 144TH AVE EVENING PEAK

Travel Time, Stopped Delay, and Speed

