

**2006**

**OPTCS**

**ANNUAL**

**TRAVEL TIME RUNS**

**REVIEW**

**FOR THE CITY OF**

**OVERLAND PARK**

**AM AND PM PEAKS ONLY**

# 2006 OPTCS RUNS

## CLARIFICATIONS

The following pages summarize the results of floating car runs in each section.

Time period clarifications are normally as follows:

Abbreviation	Explanation	Time of Day
AM	AM PEAK	7:15-8:30
PM	PM PEAK	4:30-6:00

The following is an explanation of two columns in the Runs Summary.

The Cycle Length column, the third one from the left, indicates the cycle length that the Distributed Master (DM) fixed cycle length and offsets pattern was in effect. A “FREE” in this column indicates that OPTCS was not coordinating this section during those runs. An “A” in this column indicates that the Actuated Coordination feature of the DM was being used. A “D” indicates that at least one of the intersections was coordinated by double cycling. (Double cycling is where an intersection is allowed to cycle in half the time of the normal cycle length.) A “\*” indicated that at least one of the intersections was not coordinated.

The Direction column, the last one on the right of the page, groups the runs into three vertical groups. The third grouping of values listed vertically is weighted volume (WV). Since the coordination is always bi-directional this listing shows the average of the two directions weighted by through volumes from the latest vehicle turning movement counts.

Note: Please check the last page of this report to see the map which delineates the street intersection numbers for each section.

# OPTCS 2006

## ANNUAL

## TT REVIEW

## SUMMARY

In 2006 the number of coordinated signalized intersections increased from 153 to 157. The number of subsections stayed at 25. The new signals at 151<sup>st</sup> & Lowell, 135<sup>th</sup> & Glenwood, and I-435 & Antioch were coordinated this year as soon as they were turned on..

During 2006 we made about 1000 travel time runs along OPTCS sections. These runs took about 150 hours to accomplish and about 70 additional hours to compile the results. Some subsections were not studied due to on going construction projects.

**There are comments noted on each page of data.**

**Mostly these reports show either improvement or consistent progression results.**

There are 6 peak section patterns where the results were poorer and improvements are needed. Those are:

1. Section 3I, PM (NB) {Physical capacity increase needed at I-435 & Quivira}
2. Section 3S, AM (NB) “ “ “ “ at College & Quivira}
3. Section 3CW, AM (EB) “ “ “ “ at College & Quivira}
4. Section 9E, PM (WB) “ “ “ “ at 119<sup>th</sup> & Antioch}
5. Section 9A, AM (NB) “ “ “ “ at 119<sup>th</sup> & Antioch}
6. Section 9RN, PM (SB) “ “ “ “ at 119<sup>th</sup> & Nall}

During the next few months we will be collecting field data from these sections and making an effort to improve the progression in them. In all 6 of the situations physical capacity increase is needed thus diminishing the possibility of improving the results with timings only. However the good news is that four of these sections are scheduled in the CIP for widening projects in the next two years.

Gary Grimes, SCE

**SECTION REPORT - OPTCS RUNS**  
**Section 1 'N. METCALF' (65th - 83rd)**

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
1A	03/18/1994	138A	10	279.8	29.1	1.20	1@MID,8@12,2@13,1@14	AM	NB
1A	04/19/1995	138A	11	284.0	28.7	1.27	1@11,10@12,1@13,2@14		
1A	06/07/1995	FREE	9	378.9	21.5	3.56	3@17,7@11,10@12,6@13,6@14		
1A	10/02/1996	138A	12	283.6	28.8	1.58	1@11,3@M,8@12,3@M,1@13,3@14		
1A	06/05/1997	138A	11	287.4	28.4	0.82	1@11,6@12,2@14		
1A	06/03/1998	138A	14	288.9	28.2	1.21	1@17,1@11,10@12,3@Mid,2@13		
1A	08/04/1999	138A	11	271.6	30.0	1.18	2@11,6@12,4@13,1@14		
1A	10/18/2000	138A	9	307.8	26.5	1.56	6@11,5@12,1@MID,1@13,1@14		
1A	10/25/2000	FREE	6	457.2	17.8	4.00	3@17,4@11,9@12,1@MID,4@13,3@14		
1A	04/13/2001	138A	11	268.6	30.4	1.18	10@12,1@13,2@14		
1A	04/02/2002	138A	11	299.6	27.2	1.91	2@17,6@11,12@12, 1@14		
1A	03/25/2003	138A	11	283.0	28.8	1.18	3@11,4@12,1@13,3@14, 2@MID		
1A	03/27/2003	138A	9	273.3	29.8	1.33	1@11,7@12,2@13,2@14		
1A	06/02/2004	138A	10	276.1	29.5	1.00	7@12,3@14		
1A	03/30/2005	138A	11	274.4	29.7	1.09	3@11,7@12, 1@MID,1@14		
1A	06/13/2006	138A	10	271.8	30.0	1.10	1@11,5@12,2@Mid,1@13,2@14		
1A	03/18/1994	138A	10	271.1	30.1	1.20	3@11,7@12,1@MID,1@15	AM	SB
1A	04/19/1995	138A	11	263.9	30.9	1.09	2@11,8@12,1@13,1@15		
1A	06/07/1995	FREE	10	333.9	24.4	3.70	8@11,9@12,1@M,8@13,6@14,5@15		
1A	10/02/1996	138A	13	271.9	30.0	1.38	2@11,9@12,1@M,2@13,1@14,3@15		
1A	06/05/1997	138A	11	265.0	30.7	0.82	1@11,8@12		
1A	06/03/1998	138A	13	275.0	29.6	1.62	2@11,9@12,4@MID,2@13,4@15		
1A	08/04/1999	138A	11	288.4	28.3	1.55	6@11,6@12,2@MID,3@13		
1A	10/18/2000	138A	10	291.4	28.0	1.30	3@11,5@12,3@13,1@MID,1@15		
1A	10/25/2000	FREE	6	462.3	17.6	4.67	4@11,10@12,3@13,5@14,6@15		
1A	04/13/2001	138A	12	276.5	29.5	1.67	7@11,7@12,2@MID,2@13,2@15		
1A	04/02/2002	138A	11	261.5	31.2	1.00	4@11,4@12,1@13, 2@15		
1A	03/25/2003	138A	11	274.1	29.8	1.00	3@11,6@12,2@13		
1A	03/27/2003	138A	10	271.6	30.0	1.40	5@11,7@12, 1@15,1@MID		
1A	06/02/2004	138A	10	279.1	29.2	1.20	2@11,10@12		
1A	03/30/2005	138A	10	281.4	29.0	1.50	3@11,9@12,1@MID,2@13		
1A	06/13/2006	138A	9	274.1	29.8	0.89	2@11,5@12,1@13		
1A	03/18/1994	138A	10	276.0	29.6	1.20		AM	WV
1A	04/19/1995	138A	11	275.3	29.7	1.19			
1A	06/07/1995	FREE	9	359.5	22.8	3.62			
1A	10/02/1996	138A	12	278.6	29.3	1.49			
1A	06/05/1997	138A	11	277.7	29.4	0.82			
1A	06/03/1998	138A	13	282.4	28.9	1.40			
1A	08/04/1999	138A	11	279.5	29.2	1.35			
1A	10/18/2000	138A	9	300.3	27.2	1.44			
1A	10/25/2000	FREE	6	459.5	17.8	4.31			
1A	04/13/2001	138A	11	272.5	29.9	1.42			
1A	04/02/2002	138A	11	283.3	28.9	1.52			
1A	03/25/2003	138A	11	279.2	29.2	1.10			
1A	03/27/2003	138A	9	272.6	29.9	1.36			
1A	06/02/2004	138A	10	277.6	29.4	1.10			
1A	03/30/2005	138A	10	277.4	29.4	1.27			
1A	06/13/2006	138A	9	273.0	29.9	0.99			



**EVALUATION OF 2006 RUNS 1-AM**  
 {S1 has 6 inter. Over 2.3 mi.}

**GOOD**

The coordinated results weren't quite the best ever but they were close.

With the over capacity problems here, especially at 75<sup>th</sup> St, and a few mid block stops, the benefits of coordination are still evident compared with no coordination

Compared to the 2000 FREE WV runs, (that is runs done when the signals were not coordinated) motorists are saving over 180 sec (over 3 minutes) of TT and over 3 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 2 '75TH' (Switzer to Antioch)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
2A	08/22/1996	140A	10	177.4	20.5	1.50	6@22W,9@25	PM	EB
2A	03/18/1997	140A	11	138.0	26.4	0.73	1@22W,1@22E,6@25		
2A	05/13/1998	140A	9	147.4	24.7	1.00	2@22W,7@25		
2A	02/02/1999	140A	8	151.1	24.1	0.88	2@22W,5@25		
2A	02/25/1999	140A	9	155.3	23.4	0.89	2@2W,6@25		
2A	10/10/2000	140A	8	154.6	23.5	1.13	5@29,4@25		
2A	10/12/2000	FREE	10	293.6	12.4	3.80	4@28,8@29,8@22,8@23,1@MID,1@24		
2A	10/26/2000	140A	11	175.9	20.7	1.73	10@29,1@22,8@25		
2A	07/26/2001	140A	7	192.1	18.9	1.71	6@29, 1@23, 5@25		
2A	10/11/2001	140A	8	201.6	18.0	1.25	2@29,1@23,7@25		
2A	10/23/2001	140A	13	165.8	21.9	1.46	7@29,12@25		
2A	04/25/2002	140A	14	201.9	18.0	1.64	1@28,11@29,1@23,10@25		
2A	03/18/2003	140A	18	160.4	22.7	1.33	9@29, 15@25		
2A	03/17/2004	140A	8	176.0	20.7	1.50	5@29,7@25		
2A	05/12/2004	140A	8	173.8	20.9	1.38	4@29,7@25		
2A	06/22/2006	140A	12	231.9	15.7	2.17	1@28,9@29,1@23,1@24,14@25		
2A	08/22/1996	140A	10	124.5	29.2	0.40	1@21,1@22W,2@23	PM	WB
2A	03/18/1997	140A	11	118.8	30.6	0.27	2@21,1@22W		
2A	05/13/1998	140A	10	150.0	24.2	0.70	2@21,5@23		
2A	02/02/1999	140A	8	157.4	23.1	1.00	3@21,3@22W,2@23		
2A	02/25/1999	140A	10	119.2	30.5	0.30	1@21,1@Mid,1@22W		
2A	10/10/2000	140A	8	150.1	24.2	0.88	3@21,2@29,1@23,1@24		
2A	10/12/2000	FREE	10	363.9	10.0	4.40	8@21,3@28,6@29,8@22,15@23,4@24		
2A	10/26/2000	140A	12	113.0	32.2	0.00			
2A	07/26/2001	140A	8	160.1	22.7	0.75	1@28, 2@22,2@23,1@24		
2A	10/11/2001	140A	8	121.6	29.9	0.38	1@28,1@23,1@24		
2A	10/23/2001	140A	15	112.9	32.2	0.07	1@22		
2A	04/25/2002	140A	14	156.2	23.3	0.43	1@28,5@23		
2A	03/18/2003	140A	17	119.6	30.4	0.12	1@23,1@24		
2A	03/17/2004	140A	9	126.9	28.7	0.44	3@28,1@23		
2A	05/12/2004	140A	9	119.9	30.3	0.22	1@28,1@23		
2A	06/22/2006	140A	12	128.3	28.4	0.08	1@23		
2A	08/22/1996	140A	10	147.8	25.4	0.88		PM	WV
2A	03/18/1997	140A	11	127.3	28.7	0.47			
2A	05/13/1998	140A	9	148.9	24.4	0.83			
2A	02/02/1999	140A	8	153.5	23.7	0.93			
2A	02/25/1999	140A	9	134.3	27.5	0.55			
2A	10/10/2000	140A	8	152.0	23.9	0.98			
2A	10/12/2000	FREE	10	334.5	11.0	4.15			
2A	10/26/2000	140A	11	139.3	27.4	0.72			
2A	07/26/2001	140A	7	173.5	21.1	1.15			
2A	10/11/2001	140A	8	155.0	24.9	0.74			
2A	10/23/2001	140A	13	135.0	27.9	0.65			
2A	04/25/2002	140A	14	175.3	21.1	0.94			
2A	03/18/2003	140A	17	136.6	27.2	0.63			
2A	03/17/2004	140A	8	147.1	25.4	0.83			
2A	05/12/2004	140A	8	142.1	26.5	0.70			
2A	06/22/2006	140A	12	171.0	23.1	0.94			

**BACKGROUND:**

In 2000, #28 (75<sup>th</sup> & Wedd) was signalized, also #29 (the old #22W) was also separated from control with No 22E which helps coordination.

**EVALUATION OF 2006 RUNS**                      2-PM  
 {S2 has 7 int. over 1.0 mi. }

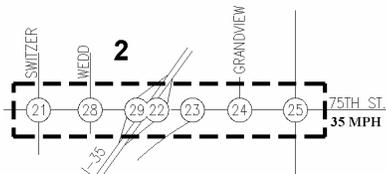
**GOOD - FAIR**

WB is the heaviest direction this time of day, and results are still good.

EB results were not as good as in the past but this was probably due to the heavier traffic caused by the construction on 87<sup>th</sup> St that had the I-35 ramps closed there is 2006

Compared to the FREE WV runs motorists are saving over 160 seconds (over 2 1/2 minutes) of TT and over 3 stops per average run.

G.Grimes, CE,S



## SECTION REPORT - OPTCS RUNS

### Section 3 'West 95th St.' (Quivira to Switzer)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
03	10/15/1992	87W	10	110.2	32.8	0.40	1@34,1@35,2@37	AM	EB
03	07/15/1993	87W	10	98.7	36.7	0.10	1@34		
03	03/29/1994	87W	8	107.6	33.6	0.25	1@35,1@36		
03	05/31/1995	87W	10	118.5	30.5	0.80	3@34,1@35,1@36,3@37		
03	06/01/1995	FREE	15	170.5	21.2	2.67	3@32,4@33,10@34,7@35,9@36,7@37		
03	02/13/1996	87W	12	98.3	36.8	0.08	1@37		
03	09/30/1997	100A	10	96.7	37.4	0.10	1@35		
03	06/24/1998	100A	12	101.2	35.8	0.08	1@37		
03	09/22/1999	100A	10	104.3	34.7	0.20	2@37		
03	03/07/2000	100A	9	107.0	33.8	0.11	1@37		
03	04/11/2000	FREE	15	160.4	22.5	2.13	5@32,3@33,5@34,9@35,7@36,3@37		
03	07/13/2001	100A	11	91.4	39.6	0.00			
03	03/15/2002	100A	9	101.4	35.7	0.56	1@32, 1@34,1@35,2@36		
03	05/01/2003	100A	8	109.0	33.2	0.50	1@32, 1@34,1@35,1@36		
03	05/12/2004	100A	8	102.6	35.3	0.00			
03	05/19/2005	FREE	11	177.8	20.4	2.64	1@32, 7@34,4@35,10@36,6@37		
03	05/26/2005	100A	9	108.2	33.4	0.00			
03	06/22/2006	100A	9	104.7	34.6	0.00			
03	10/15/1992	87W	11	118.7	30.5	0.54	1@31,1@32,4@34	AM	WB
03	07/15/1993	87W	10	116.5	31.1	0.70	2@31,3@34,2@36		
03	03/29/1994	87W	9	104.7	34.6	0.33	2@34,1@36		
03	05/31/1995	87W	10	117.9	30.7	0.60	2@31,1@32,2@34,1@36		
03	06/01/1995	FREE	16	148.6	24.3	2.50	11@31,7@32,4@33,11@34,5@35,2@36		
03	02/13/1996	87W	11	110.3	32.8	0.45	2@31,1@32,1@34,1@36		
03	09/30/1997	100A	10	107.8	33.6	0.20	2@31		
03	06/24/1998	100A	12	110.3	32.8	0.33	4@31		
03	09/22/1999	100A	11	109.2	33.1	0.27	1@31,1@35,1@36		
03	03/07/2000	100A	8	109.1	33.2	0.25	1@31,@34		
03	04/11/2000	FREE	14	158.6	22.8	2.07	10@31,1@32,9@34,7@35,2@36		
03	07/13/2001	100A	10	102.6	35.3	0.20	2@31		
03	03/15/2002	100A	8	120.6	30.0	0.75	5@31,1@32		
03	05/01/2003	100A	8	112.3	32.2	0.38	3@31		
03	05/12/2004	100A	8	133.4	27.1	0.40	3@31,1@36		
03	05/19/2005	FREE	12	186.6	19.4	2.42	8@31,5@32,1@33,7@34,3@35,5@36		
03	05/26/2005	100A	9	115.0	31.5	0.33	3@31		
03	06/22/2006	100A	10	125.1	28.9	0.60	6@31		
03	10/15/1992	87W	10	114.3	31.7	0.46		AM	WV
03	07/15/1993	87W	10	107.3	34.0	0.38			
03	03/29/1994	87W	8	106.2	34.1	0.28			
03	05/31/1995	87W	10	118.2	30.6	0.68			
03	06/01/1995	FREE	15	158.5	22.9	2.57			
03	02/13/1996	87W	11	104.9	34.6	0.28			
03	09/30/1997	100A	10	102.0	35.6	0.14			
03	06/24/1998	100A	12	105.5	34.3	0.20			
03	09/22/1999	100A	10	106.6	34.0	0.23			
03	03/07/2000	100A	8	108.0	33.5	0.18			
03	04/11/2000	FREE	14	159.6	22.7	2.10			
03	07/13/2001	100A	10	96.3	37.7	0.09			
03	03/15/2002	100A	8	109.9	33.2	0.64			
03	05/01/2003	100A	8	110.4	32.8	0.45			
03	05/12/2004	100A	8	115.8	31.8	0.21			
03	05/19/2005	FREE	11	181.7	19.9	2.54			
03	05/26/2005	100A	9	111.2	32.6	0.15			
03	06/22/2006	100A	9	113.4	32.1	0.26			

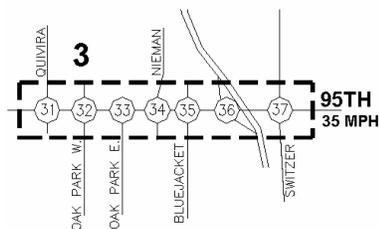
**EVALUATION OF 2006 RUNS      3-AM**  
 {S3 has 7 inter. Over 1.0 mi. }

**VERY GOOD**

With average stops of only about 0.26 and average speeds of about 32 mph (with a speed limit of 35 mph) these are good results.

Compared to the FREE WV runs motorists are saving about 70 seconds of TT and about 2.3 stops per average run.

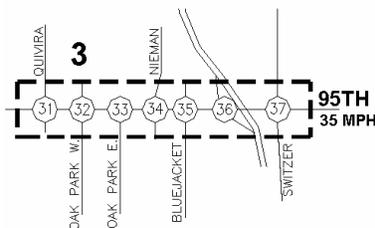
G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 3 'West 95th st.' (Quivira to Switzer)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
03	02/24/1994	100W	12	106.8	33.9	0.08	1@37	PM	EB
03	06/21/1995	100W	13	107.2	33.8	0.08	1@37		
03	06/27/1995	FREE	7	257.6	14.1	3.43	5@32,2@33,6@34,3@35,3@36,5@37		
03	03/26/1996	100W	11	109.0	33.2	0.18	2@37		
03	04/08/1997	100W	12	107.3	33.7	0.08	1@37		
03	05/20/1998	100W	11	99.9	36.2	0.00			
03	05/12/1999	100*	6	163.2	22.2	1.50	3@32,2@33,2@34,1@35,1@37		
03	05/18/1999	100A	10	110.7	32.7	0.10	1@37		
03	02/15/2000	100A	10	104.5	34.6	0.10	1@37		
03	04/11/2000	FREE	14	227.7	15.9	3.50	6@32,5@33,17@34,7@35,7@36,6@37		
03	07/12/2001	100A	13	99.6	36.3	0.00			
03	03/14/2002	100A	12	102.3	35.4	0.17	1@32,1@33		
03	05/01/2003	100A	13	101.6	35.6	0.08	1@32		
03	05/12/2004	100A	7	102.1	35.4	0.00			
03	05/18/2005	FREE	10	274.9	13.2	4.50	7@32,8@33,7@34,8@35,9@36,5@37		
03	06/01/2005	100A	9	104.9	34.5	0.22	1@33,1@37		
03	04/13/2006	100A	9	110.2	32.8	0.22	2@37		
03	02/24/1994	100W	11	122.2	29.6	0.45	3@32,1@34,1@35	PM	WB
03	06/21/1995	100W	13	120.5	30.0	0.08	1@34		
03	06/27/1995	FREE	8	212.9	17.0	3.50	5@31,7@32,4@33,6@34,3@35,3@36		
03	03/26/1996	100W	11	123.4	29.3	0.27	3@32		
03	04/08/1997	100W	12	120.5	30.0	0.42	1@31,3@32,1@35		
03	05/20/1998	100W	11	123.1	29.4	0.18	1@31,1@34		
03	05/12/1999	100*	6	165.2	21.9	1.50	4@31,4@32,1@33		
03	05/18/1999	100A	11	116.4	31.1	0.18	1@31,1@32		
03	02/15/2000	100A	11	116.6	31.0	0.27	3@31		
03	04/11/2000	FREE	13	219.7	16.5	3.23	11@31,10@32,3@22,11@34,3@35,4@36		
03	07/12/2001	100A	12	129.7	27.9	0.33	2@31,1@34,1@36		
03	03/14/2002	100A	12	128.6	28.1	0.75	7@31,1@32, 1@35		
03	05/01/2003	100A	12	129.8	27.9	0.50	3@31,1@32,1@34,1@35,1@36		
03	05/12/2004	100A	7	131.0	27.6	0.43	1@32,1@34,1@36		
03	05/18/2005	FREE	10	260.7	13.9	3.50	9@31,5@32,1@33,6@34,2@35,3@36		
03	06/01/2005	100A	10	127.6	28.4	0.50	5@31		
03	04/13/2006	100A	9	119.2	30.3	0.11	1@31		
03	02/24/1994	100W	11	114.5	31.7	0.26		PM	WV
03	06/21/1995	100W	13	113.6	32.0	0.08			
03	06/27/1995	FREE	7	234.6	15.6	3.46			
03	03/26/1996	100W	11	120.0	31.3	0.22			
03	04/08/1997	100W	12	113.8	31.9	0.25			
03	05/20/1998	100W	11	111.4	32.8	0.09			
03	05/12/1999	100*	6	164.2	22.0	1.50			
03	05/18/1999	100A	10	113.5	31.9	0.14			
03	02/15/2000	100A	10	110.8	32.7	0.19			
03	04/11/2000	FREE	13	223.5	16.2	3.36			
03	07/12/2001	100A	12	115.3	31.9	0.17			
03	03/14/2002	100A	12	112.6	32.5	0.40			
03	05/01/2003	100A	12	116.3	31.6	0.30			
03	05/12/2004	100A	7	116.3	31.6	0.21			
03	05/18/2005	FREE	10	267.9	13.5	4.01			
03	06/01/2005	100A	9	116.0	31.5	0.36			
03	04/13/2006	100A	9	114.6	31.6	0.17			



EVALUATION OF 2006 RUNS 3-PM  
 {S3 has 7 inter. Over 1.0 mi. }

**VERY GOOD**

With average stops of only about 0.2 and average speeds of 31.6 mph (with a speed limit of 35 mph) these are good results.

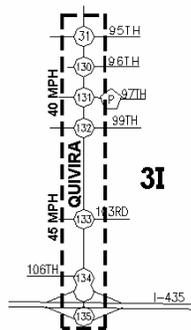
Compared to the FREE WV runs motorists are saving over 150 seconds (2 ½ minutes) of TT and over 3.8 stops per average run.

G.Grimes, SCE

## SECTION REPORT - OPTCS RUNS

### Section 3I 'Quivira' (95th to I-435 South)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
3I	09/18/1997	87W	10	191.2	29.3	1.20	5@31,2@131,5@133	AM	NB
3I	09/30/1997	100A	9	171.0	32.7	0.89	4@31,4@133		
3I	09/29/1998	100A	10	163.9	34.2	0.80	3@31,5@133		
3I	03/24/1999	100A	10	170.9	32.8	0.70	2@31,5@133		
3I	09/29/1999	100A	9	192.6	29.1	1.56	5@31,2@130,1@131,6@133		
3I	02/16/2000	100A	12	172.6	32.4	1.00	1@31,1@130,3@131,1@132,6@133		
3I	10/31/2000	FREE	12	202.4	27.7	2.08	11@31,1@131,3@132,7@133,3@134		
3I	09/12/2001	100A	12	172.6	32.4	0.92	2@31, 1@131, 8@133		
3I	04/03/2002	100A	11	179.1	31.3	1.27	6@31, 1@131, 7@133		
3I	09/10/2003	100A	9	183.3	30.5	1.22	2@31,1@131,8@133		
3I	09/11/2003	100A	10	175.9	31.8	1.10	2@31,1@131,7@133,1@134		
3I	09/12/2005	100A	9	166.2	33.7	0.67	1@31,5@133		
3I	05/12/2005	100A	8	181.8	30.8	1.13	4@31,5@133		
3I	10/25/2006	120*	10	168.1	33.3	0.50	4@133,1@234		
3I	09/18/1997	87W	9	210.1	26.7	1.44	1@130,1@132,3@133,7@134,1@135	AM	SB
3I	09/30/1997	100A	9	151.9	36.9	0.44	1@133,2@134,1@135		
3I	09/29/1998	100A	11	155.4	36.0	0.27	3@134		
3I	03/24/1999	100A	12	148.2	37.8	0.08	1@134N		
3I	09/29/1999	100A	9	153.8	36.4	0.11	1@134		
3I	02/16/2000	100A	11	165.4	33.9	0.55	1@131,4@133,1@134		
3I	10/31/2000	FREE	10	242.2	23.1	2.00	1@131,1@132,5@133,10@134,3@135		
3I	09/12/2001	100A	11	173.6	32.3	0.82	2@133,1@134,4@234,2@135		
3I	04/03/2002	100A	11	169.3	33.1	1.00	3@133,3@134,4@234,1@135		
3I	09/10/2003	100A	10	251.2	22.3	1.20	1@133,10@134,1@234		
3I	09/11/2003	100A	9	176.9	31.6	0.89	3@133,5@134		
3I	02/01/2005	100A	10	175.6	31.9	0.90	3@133,4@134,2@234		
3I	05/12/2005	100A	8	179.1	31.3	1.14	1@131,2@133,4@134,1@135		
3I	10/25/2006	120*	10	184.0	30.4	1.00	4@133,2@134,4@234		
3I	09/18/1997	87W	9	201.0	27.9	1.32		AM	WV
3I	09/30/1997	100A	9	161.1	34.9	0.65			
3I	09/29/1998	100A	10	159.5	35.1	0.52			
3I	03/24/1999	100A	10	159.1	35.4	0.38			
3I	09/29/1999	100A	9	172.4	32.9	0.80			
3I	02/16/2000	100A	11	168.8	33.2	0.77			
3I	10/31/2000	FREE	10	223.1	25.3	2.04			
3I	09/12/2001	100A	11	173.1	32.4	0.87			
3I	04/03/2002	100A	11	174.4	32.1	1.14			
3I	09/10/2003	100A	9	215.9	26.6	1.21			
3I	09/11/2003	100A	9	176.4	31.7	1.00			
3I	02/01/2005	100A	9	170.5	32.9	0.77			
3I	05/12/2005	100A	8	180.6	31.0	1.13			
3I	10/25/2006	120*	10	176.3	31.8	0.76			



#### BACKGROUND:

The I-N. part of #134 was split from 106<sup>th</sup> St in 2001 and we have numbered it #234.

In 2006 we had to increase the cycle length near I-435 to clear traffic, so 106<sup>th</sup> and South are running a 120 second cycle and 103<sup>rd</sup> and North a 100 second cycle.

EVALUATION OF 2006 RUNS                      3I-AM  
{S3I has 7 inter. Over 1.6 mi.}

#### GOOD - FAIR

The average speed was about 32 mph and average stops less than 1 for 7 intersections.

Compared to the FREE WV runs motorists are saving about 50 seconds of TT and over 1 stop per average run.

G.Grimes, SCE

## SECTION REPORT - OPTCS RUNS

### Section 3I 'Quivira' (95th to I-435 South)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
3I	06/03/1997	100A	12	172.8	32.4	0.42	1@130,4@133	PM	NB
3I	10/01/1998	100A	14	171.4	32.7	0.36	5@133		
3I	03/23/1999	100A	11	165.4	33.8	0.27	3@133		
3I	04/15/1999	120A	16	178.9	31.3	0.69	11@133		
3I	02/10/2000	136A	13	204.6	27.4	1.23	4@31,2@131,3@132,7@133		
3I	02/24/2000	FREE	9	279.3	20.0	3.00	7@31,3@130,6@131,4@132,7@133		
3I	09/13/2001	136A	8	207.8	27.0	1.38	4@31, 1@131, 6@133		
3I	03/19/2002	136A	12	218.0	25.7	1.83	7@31,1@130,2@131,5@132,7@133		
3I	07/16/2002	136A	10	241.4	23.2	1.70	3@31,1@130,4@131,9@133		
3I	04/22/2003	136A	14	211.3	26.5	1.79	8@31,2@130,3@131,5@132,6@133, 1@234		
3I	06/24/2004	136A	13	201.5	27.8	1.15	1@31,3@130,3@131,2@132,5@133, 1@234		
3I	05/11/2005	136A	8	193.3	29.0	0.75	3@31,1@130,1@131, 1@133		
3I	12/14/2006	140	10	231.6	24.2	1.20	3@31,3@131,1@132,4@133,1@234		
3I	06/03/1997	100A	12	187.9	29.8	0.83	4@131,6@134	PM	SB
3I	10/01/1998	100A	14	198.4	28.2	0.93	2@131,1@133,10@134		
3I	03/23/1999	100A	11	203.1	27.6	1.09	3@131,9@134N		
3I	04/15/1999	120A	16	197.9	28.3	1.31	8@131,1@133,12@134		
3I	02/10/2000	136A	14	184.6	30.3	0.71	1@132,6@133,3@134		
3I	02/24/2000	FREE	9	256.9	21.8	3.00	3@130,7@131,3@132,7@133,7@134		
3I	09/13/2001	136A	8	187.9	29.8	0.50	1@133,2@134, 1@135		
3I	03/19/2002	136A	13	204.3	27.4	1.15	1@130, 7@133,4@134,3@234		
3I	07/16/2002	136A	10	249.1	22.5	1.80	1@130,2@131,5@133,7@134,1@234,1@135		
3I	04/22/2003	136A	13	203.3	27.5	1.08	1@132,9@133, 2@234,2@135		
3I	06/24/2004	136A	13	204.6	27.4	0.92	2@133,9@134,1@234		
3I	05/11/2005	136A	9	187.3	29.9	0.89	1@131, 3@133,2@134,1@234,1@135		
3I	12/14/2006	140	10	237.0	23.6	1.50	1@131,6@133,7@134,1@234		
3I	06/03/1997	100A	12	180.8	31.0	0.63		PM	WV
3I	10/01/1998	100A	14	185.7	30.3	0.66			
3I	03/23/1999	100A	11	184.5	30.7	0.68			
3I	04/15/1999	120A	16	188.3	29.8	1.00			
3I	02/10/2000	136A	13	194.7	28.8	0.97			
3I	02/24/2000	FREE	9	268.2	20.9	3.00			
3I	09/13/2001	136A	8	197.9	28.4	0.94			
3I	03/19/2002	136A	12	211.2	26.5	1.50			
3I	07/16/2002	136A	10	245.2	22.8	1.75			
3I	04/22/2003	136A	13	207.3	27.0	1.44			
3I	06/24/2004	136A	13	203.0	27.6	1.04			
3I	05/11/2005	136A	8	190.3	29.4	0.82			
3I	12/14/2006	140	10	234.3	23.9	1.35			

#### BACKGROUND:

In 2006 we increased the cycle length at I-435 and 103<sup>rd</sup> to 140 seconds to help clear the traffic at the I-435 interchange while the north end of this section (95<sup>th</sup>-99<sup>th</sup>) had to remain in the 100 sec cycle to match 95<sup>th</sup> St.

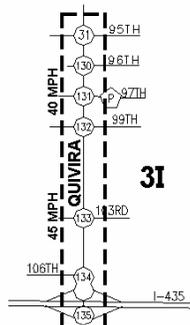
EVALUATION OF 2006 RUNS 3I-PM  
 {S3I has 7 inter over 1.6 mi. }

#### FAIR

The congestion at I-435 & Quivira really needs help by widening the bridge to allow dual N/S left turn bays.

Compared to the 2000 FREE WV runs motorists are saving over 30 seconds of TT and over 1.6 stops per average run.

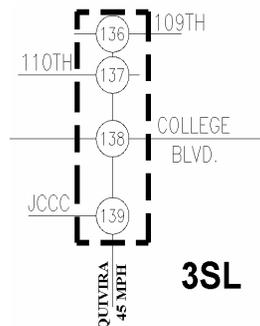
G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 3SL 'Quivira' (109th to JCCC)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
3SL	09/29/1998	136W	11	105.8	22.4	0.64	7@138	AM	NB
3SL	04/02/1999	136W	10	105.9	22.4	1.00	1@136,1@137,8@138		
3SL	09/30/1999	140A	8	83.0	28.5	0.63	5@138		
3SL	02/16/2000	140A	12	72.0	32.9	0.33	4@138		
3SL	10/31/2000	FREE	12	180.6	13.1	2.08	1@136,3@137,21@138		
3SL	09/12/2001	140W	12	157.8	15.0	1.25	15@138		
3SL	04/03/2002	140A	11	152.6	15.5	1.36	1@137,14@138		
3SL	09/10/2003	140A	10	177.0	13.4	1.50	15@138		
3SL	09/11/2003	140A	10	138.3	17.1	1.20	12@138		
3SL	02/01/2005	160A	10	114.8	20.6	0.90	9@138		
3SL	05/12/2005	160A	8	140.9	16.9	1.13	9@138		
3SL	10/25/2006	160A	15	112.0	21.1	0.80	12@138		
3SL	09/29/1998	136W	11	106.2	22.3	0.91	4@137,6@138	AM	SB
3SL	04/02/1999	136W	12	86.1	27.5	0.42	1@137,4@138		
3SL	09/30/1999	140A	7	88.0	26.9	0.71	2@137,2@138,1@139		
3SL	02/16/2000	140A	11	88.1	26.9	0.64	1@137,6@138		
3SL	10/31/2000	FREE	10	135.3	17.5	1.40	6@137,8@138		
3SL	09/12/2001	140W	11	90.6	26.2	0.55	1@137,5@138		
3SL	04/03/2002	140A	11	76.1	31.1	0.45	5@138		
3SL	09/10/2003	140A	10	95.7	24.8	0.50	5@138		
3SL	09/11/2003	140A	9	95.8	24.7	0.67	1@137,5@138		
3SL	02/01/2005	160A	10	86.4	27.4	0.40	1@137,3@138		
3SL	05/12/2005	160A	9	94.2	25.1	0.78	2@137,5@138		
3SL	10/25/2006	160A	15	84.7	28.0	0.53	3@137,4@138,1@139		
3SL	09/29/1998	136W	11	106.1	22.3	0.82		AM	WV
3SL	04/02/1999	136W	10	96.6	24.8	0.73			
3SL	09/30/1999	140A	7	85.3	27.8	0.66			
3SL	02/16/2000	140A	11	79.5	30.1	0.47			
3SL	10/31/2000	FREE	10	159.4	15.2	1.76			
3SL	09/12/2001	140W	11	126.3	20.2	0.92			
3SL	04/03/2002	140A	11	117.0	22.8	0.94			
3SL	09/10/2003	140A	10	145.6	17.8	1.11			
3SL	09/11/2003	140A	9	121.9	20.1	1.00			
3SL	02/01/2005	160A	10	101.5	23.8	0.67			
3SL	05/12/2005	160A	8	122.9	20.0	0.99			
3SL	10/25/2006	160A	15	100.1	24.1	0.68			



**BACKGROUND:**  
This section includes 4 intersections – 109<sup>th</sup>, 110<sup>th</sup>, College and JCCC east entrance.  
Quivira was widened from I-S. to College by 8/99, from 4 lanes to 6 lanes.

**EVALUATION OF 2006 RUNS 3SL-AM**  
{S3SL has 4 inter. Over 0.7 miles}

**FAIR - GOOD**

The heavy north, south and east volumes here, especially through College, make this section difficult to coordinate. The northbound queues at College are now so large that they don't normally clear in one cycle. That is why we increased the cycle length in 2004 to 160 seconds. SB, because of 6 lanes north of College, is still good.

To improve this section, more NB lanes are needed south of College.

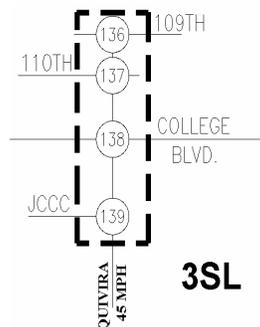
Compared to the Free WV runs motorists are saving about 60 seconds of TT and about 1.1 stops per average run.

G.GRIMES, SCE

## SECTION REPORT - OPTCS RUNS

### Section 3SL 'Quivira' (109th to JCCC)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
3SL	10/01/1998	136W	14	78.1	30.3	0.21	2@136,1@138	PM	NB
3SL	03/23/1999	136A	11	78.5	30.2	0.27	3@137		
3SL	02/10/2000	136A	13	70.9	33.4	0.15	2@138		
3SL	02/24/2000	FREE	9	117.1	20.2	1.33	4@137,8@138		
3SL	09/13/2001	136A	12	75.8	31.2	0.50	1@137,5@138		
3SL	03/19/2002	136A	14	78.3	30.3	0.43	6@138		
3SL	07/16/2002	136A	10	109.2	21.7	0.80	8@138		
3SL	04/01/2003	136A	8	95.9	24.8	0.38	3@138		
3SL	06/24/2004	160A	13	88.2	26.9	0.46	1@137,5@138		
3SL	05/11/2005	160A	7	93.7	25.3	0.86	1@136, 5@138		
3SL	12/14/2006	160	10	87.5	27.1	0.70	2@Mid, 5@138		
3SL	10/01/1998	136W	14	102.1	23.2	0.50	1@137,6@138	PM	SB
3SL	03/23/1999	136A	11	103.5	22.9	0.73	1@136,7@137		
3SL	02/10/2000	136A	12	82.9	28.6	0.25	2@138,1@137		
3SL	02/24/2000	FREE	9	144.1	16.4	2.00	7@137,9@138,2@139		
3SL	09/13/2001	136A	11	137.3	17.3	1.18	4@137,9@138		
3SL	03/19/2002	136A	13	108.5	21.8	0.62	1@137,7@138		
3SL	07/16/2002	136A	10	176.6	13.4	1.70	5@137,11@138,1@139		
3SL	04/01/2003	136A	8	137.3	17.3	1.13	2@137,7@138		
3SL	06/24/2004	160A	13	101.1	23.5	0.62	2@137,6@138		
3SL	05/11/2005	160A	8	104.4	22.8	0.63	2@137,3@138		
3SL	12/14/2006	160	10	138.1	17.2	1.20	4@137,1@Mid,7@138		
3SL	10/01/1998	136W	14	93.8	25.7	0.40		PM	WV
3SL	03/23/1999	136A	11	94.8	25.4	0.57			
3SL	02/10/2000	136A	12	78.8	30.3	0.22			
3SL	02/24/2000	FREE	9	129.7	18.5	1.64			
3SL	09/13/2001	136A	11	113.5	22.7	0.92			
3SL	03/19/2002	136A	13	96.8	25.1	0.54			
3SL	07/16/2002	136A	10	150.5	16.6	1.35			
3SL	04/01/2003	136A	8	121.2	20.2	0.83			
3SL	06/24/2004	160A	13	95.8	24.9	0.55			
3SL	05/11/2005	160A	7	100.3	23.8	0.71			
3SL	12/14/2006	160	10	118.9	20.9	1.01			



#### BACKGROUND:

This section includes 4 intersections 109<sup>th</sup>, 110<sup>th</sup>, College, and the JCCC east entrance.

EVALUATION OF 2006 RUNS 3SL-PM  
{S3SL has 4 inter. Over 0.7 miles}

#### FAIR - POOR

The heavy SB and WB volumes at College at this time of day make this section difficult to coordinate. The widening of Quivira from I-435 S to College, which was completed in 8-99, definitely helped the SB traffic.

The 160 second cycle pattern installed in 2004 definitely helps also.

More lanes are really needed south and west of College to help this situation.

Compared to the FREE WV runs motorists saved about 11 seconds of TT and over 0.6 stops per average run.

G.Grimes, SCE

## SECTION REPORT - OPTCS RUNS

### Section 3CWF 'College' (Quivira to Pflumm)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
3CWF	12/01/1999	140*	13	157.9	22.9	1.38	3@38,7@39,8@138	AM	EB
3CWF	12/07/1999	140A	10	126.7	28.5	0.60	3@39,3@138		
3CWF	04/14/2000	140A	9	125.9	28.7	0.67	2@39,4@138		
3CWF	05/17/2000	FREE	12	175.4	20.6	1.92	4@38,7@39,12@138		
3CWF	10/11/2001	140A	9	152.4	23.7	0.67	6@138		
3CWF	10/12/2001	140A	9	117.1	30.8	0.67	4@39,2@138		
3CWF	05/08/2002	140A	11	96.6	37.4	0.18	2@138		
3CWF	09/04/2003	140A	12	153.2	23.6	0.67	8@138		
3CWF	09/15/2004	160A	11	120.9	29.9	0.36	1@39,3@138		
3CWF	04/21/2005	160A	10	107.3	33.7	0.50	2@39,3@138		
3CWF	04/27/2005	FREE	11	182.0	19.8	1.82	2@38,8@39,10@138		
3CWF	09/28/2006	160A	10	193.1	18.7	1.20	3@39,9@138		
3CWF	12/01/1999	140*	13	119.7	30.2	0.92	9@300,2@38,1@39	AM	WB
3CWF	12/07/1999	140A	11	119.3	30.3	0.45	5@300		
3CWF	04/14/2000	140A	7	94.9	38.1	0.29	1@300,1@39		
3CWF	05/17/2000	FREE	11	164.4	22.0	1.91	9@300,3@38,9@39		
3CWF	10/11/2001	140A	9	120.4	30.0	0.78	3@300,1@38,3@39		
3CWF	10/12/2001	140A	9	96.3	37.5	0.22	2@300		
3CWF	05/08/2002	140A	12	126.5	28.5	0.67	7@300,1@39		
3CWF	09/04/2003	140A	12	142.1	25.4	0.75	8@300,1@39		
3CWF	09/15/2004	160A	11	99.0	36.5	0.09	1@300		
3CWF	04/21/2005	160A	10	97.2	37.2	0.20	2@300		
3CWF	04/27/2005	FREE	11	176.6	20.5	1.73	9@300,5@38,5@39		
3CWF	09/28/2006	160A	10	87.1	41.5	0.00			
3CWF	12/01/1999	140*	13	144.7	25.4	1.22		AM	WV
3CWF	12/07/1999	140A	10	124.2	29.1	0.55			
3CWF	04/14/2000	140A	7	115.2	31.9	0.54			
3CWF	05/17/2000	FREE	11	171.6	21.1	1.92			
3CWF	10/11/2001	140A	9	141.5	25.9	0.70			
3CWF	10/12/2001	140A	9	108.9	33.2	0.51			
3CWF	05/08/2002	140A	11	107.8	34.1	0.36			
3CWF	09/04/2003	140A	12	149.0	24.3	0.70			
3CWF	09/15/2004	160A	11	112.7	32.3	0.26			
3CWF	04/21/2005	160A	10	103.8	34.9	0.40			
3CWF	04/27/2005	FREE	11	180.1	20.0	1.79			
3CWF	09/28/2006	160A	10	156.7	26.5	0.79			

#### BACKGROUND:

The intersection of College & Pflumm was widened to dual left turn lanes in all four directions early in 2006

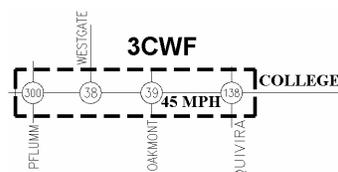
EVALUATION OF 2006 RUNS 3CWF-AM  
{S3CW has 4 inter. Over 1.0 mi.}

#### FAIR - GOOD

EB is the heaviest direction this time of day.  
WB the stops were eliminated at Pflumm.  
We will study this section in 2007 in an effort to help improve the EB.

Compared to the 2005 FREE WV runs, motorists are saving over 20 seconds of TT and 1.0 stop per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 3CWF 'College' (Quivira to Pflumm)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
3CWF	12/08/1999	136*	9	159.7	22.6	1.33	3@38,1@39,8@138	PM	EB
3CWF	12/15/1999	136A	8	116.5	31.0	0.63	1@39,4@138		
3CWF	04/13/2000	136A	10	167.0	21.6	1.00	2@39,8@138		
3CWF	09/13/2000	FREE	9	192.1	18.8	1.78	1@38,6@39,9@138		
3CWF	09/20/2001	136A	9	189.0	19.1	1.11	1@39,9@138		
3CWF	05/09/2002	136A	10	180.1	20.0	1.00	1@39,9@138		
3CWF	09/09/2003	160	7	169.0	21.5	1.00	1@38,6@138		
3CWF	09/02/2004	160A	8	196.4	18.4	1.00	1@39,7@138		
3CWF	04/29/2005	FREE	10	198.3	18.2	1.60	3@38,6@39,7@138		
3CWF	05/03/2005	160A	8	128.6	28.1	0.75	4@38,2@138		
3CWF	05/04/2005	160A	10	117.5	30.7	0.40	1@38,3@138		
3CWF	12/07/2006	160A	6	227.7	15.9	1.00	6@138		
3CWF	12/08/1999	136*	9	158.0	22.9	1.11	8@300,2@39	PM	WB
3CWF	12/15/1999	136A	7	105.4	34.3	0.98	2@300		
3CWF	04/13/2000	136A	10	96.5	37.4	0.00			
3CWF	09/13/2000	FREE	9	235.3	15.4	2.67	12@300,4@38,8@39		
3CWF	09/20/2001	136A	9	134.3	26.9	0.67	6@300		
3CWF	05/09/2002	136A	11	162.4	22.2	1.18	12@300, 1@39		
3CWF	09/09/2003	160	7	120.9	29.9	0.29	2@300		
3CWF	09/02/2004	160A	8	104.8	34.5	0.13	1@300		
3CWF	04/29/2005	FREE	10	198.9	18.2	1.80	10@300,3@38,5@39		
3CWF	05/03/2005	160A	8	148.0	24.4	1.00	6@300,1@38,1@39		
3CWF	05/04/2005	160A	10	115.3	31.3	0.50	3@300,1@38,1@39		
3CWF	12/07/2006	160A	6	128.3	28.1	0.67	2@300,1@39,1@38		
3CWF	12/08/1999	136*	9	158.7	22.8	1.20		PM	WV
3CWF	12/15/1999	136A	7	110.0	32.9	0.43			
3CWF	04/13/2000	136A	10	125.9	30.9	0.42			
3CWF	09/13/2000	FREE	9	217.3	16.8	2.30			
3CWF	09/20/2001	136A	9	155.8	23.8	0.84			
3CWF	05/09/2002	136A	10	169.4	21.3	1.11			
3CWF	09/09/2003	160	7	140.4	26.5	0.58			
3CWF	09/02/2004	160A	8	142.0	27.9	0.48			
3CWF	04/29/2005	FREE	10	198.7	18.2	1.72			
3CWF	05/03/2005	160A	8	140.1	25.9	0.90			
3CWF	05/04/2005	160A	10	116.1	31.1	0.46			
3CWF	12/07/2006	160A	6	168.8	23.1	0.80			

#### BACKGROUND:

The intersection of College & Pflumm was widened to dual left turn lanes in all four directions early in 2006

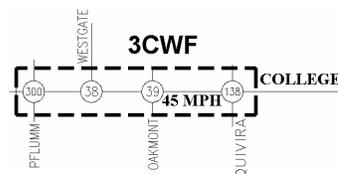
EVALUATION OF 2006 RUNS 3CWF-PM  
{S3CW has 4 inter. Over 1.0 mi.}

#### FAIR - GOOD

WB is the heaviest direction this time of day.  
WB the stops were reduced at Pflumm.  
We will study this section in 2007 in an effort to help improve the EB.

Compared to the 2005 FREE WV runs, motorists are saving 30 seconds of TT and about 1.0 stop per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 4E 'EAST 95th st.' (Lamar to Ranchmart)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
4E	12/13/1994	96W	12	192.0	30.7	0.75	2@144,1@145,5@146,1@147	AM	EB
4E	02/22/1995	96W	10	182.9	32.2	0.40	1@144,1@146,1@147		
4E	06/20/1995	FREE	8	231.9	25.4	2.38	7@144,1@145,6@146,3@147,2@148		
4E	08/21/1996	96W	8	175.1	33.6	0.25	1@144,1@146		
4E	10/10/1997	96W	11	201.2	29.3	1.00	3@144,1@145,3@146,4@147		
4E	07/08/1998	96W	8	181.5	32.5	0.38	2@144,1@147		
4E	09/22/1999	96W	7	208.3	28.3	0.71	1@144,2@146,2@147		
4E	07/25/2000	96W	11	169.7	34.7	0.09	1@146		
4E	07/26/2000	FREE	9	257.2	22.9	2.44	7@144,1@145,3@146,8@147,3@148		
4E	08/22/2001	96W	8	198.5	29.7	0.63	2@144, 2@146,1@147		
4E	08/28/2001	100A	9	179.8	32.8	0.11	1@147		
4E	04/24/2002	100A	7	181.6	32.4	0.29	1@146,1@147		
4E	05/07/2003	100A	10	198.3	29.7	0.70	5@144, 1@146, 1@148		
4E	06/10/2003	100A	9	194.4	30.3	0.67	1@144,3@146,2@147		
4E	05/11/2004	100A	11	187.2	31.5	0.36	2@144,1@146,1@147		
4E	06/08/2005	100A	9	213.4	27.6	1.22	1@Mid,7@144,2@146,1@147		
4E	06/16/2005	FREE	8	232.8	25.3	2.25	7@144,1@145,4@146,5@147,1@148		
4E	08/08/2006	100A	10	176.4	33.4	0.20	1@144,1@146		
4E	12/13/1994	96W	12	180.9	32.6	0.50	3@144,3@147	AM	WB
4E	02/22/1995	96W	10	172.3	34.2	0.10	1@144		
4E	06/20/1995	FREE	8	218.4	27.0	2.13	3@143,2@144,1@145,3@146,8@147		
4E	08/21/1996	96W	8	178.1	33.1	0.50	3@144,1@147		
4E	10/10/1997	96W	10	176.5	33.4	0.40	4@144		
4E	07/08/1998	96W	8	192.0	30.7	1.00	6@144,1@146,1@147		
4E	09/22/1999	96W	8	171.4	34.4	0.13	1@144		
4E	07/25/2000	96W	10	191.9	30.7	0.70	3@144,2@146,2@147		
4E	07/26/2000	FREE	9	253.6	23.2	2.67	4@143,8@144,1@145,5@146,6@147		
4E	08/22/2001	96W	8	190.1	31.0	0.50	3@144, 2@147		
4E	08/28/2001	100A	9	185.7	31.7	1.14	1@143,4@144		
4E	04/24/2002	100A	7	191.4	30.8	0.43	3@144		
4E	05/07/2003	100A	9	206.7	28.5	1.11	2@143,5@144,1@145,1@146,1@147		
4E	06/10/2003	100A	9	176.2	33.4	0.22	2@144		
4E	05/11/2004	100A	11	183.8	32.1	0.36	3@144,1@147		
4E	06/08/2005	100A	9	185.2	31.8	0.56	3@144,1@145,1@146		
4E	06/16/2005	FREE	8	234.1	25.2	2.00	2@143,4@144,2@145,4@146,4@147		
4E	08/08/2006	100A	10	191.0	30.8	0.40	2@144,2@146		
4E	12/13/1994	96W	12	186.5	31.6	0.62		AM	WV
4E	02/22/1995	96W	10	177.7	33.2	0.25			
4E	06/20/1995	FREE	8	225.2	26.2	2.25			
4E	08/21/1996	96W	8	176.6	33.4	0.37			
4E	10/10/1997	96W	10	188.8	31.4	0.69			
4E	07/08/1998	96W	8	186.8	31.6	0.69			
4E	09/22/1999	96W	7	189.8	31.3	0.42			
4E	07/25/2000	96W	10	179.9	32.9	0.37			
4E	07/26/2000	FREE	9	255.5	23.0	2.55			
4E	08/22/2001	96W	8	194.6	30.3	0.63			
4E	08/28/2001	100A	9	182.5	32.3	0.32			
4E	04/24/2002	100A	7	186.1	31.7	0.35			
4E	05/07/2003	100A	9	202.2	29.1	0.89			
4E	06/10/2003	100A	9	186.0	31.7	0.46			
4E	05/11/2004	100A	11	185.8	31.7	0.36			
4E	06/08/2005	100A	9	200.4	29.5	0.91			
4E	06/16/2005	FREE	8	233.4	25.2	2.13			
4E	08/08/2006	100A	10	183.0	32.2	0.29			

**EVALUATION OF 2005 RUNS**      4E-AM  
 {S4E has 6 inter. Over 1.6 mi.}

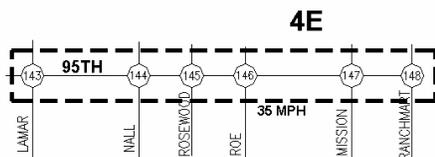
**GOOD - FAIR**

For the most part the results here are good with an average speed of 32 mph (in a 35 mph zone) and the average stops being far less than 1.

Due to the increased N/S volumes at Nall (#144) the WB runs haven't been quite as good the last few years. .

Compared to the FREE WV runs the motorists are saving about 50 seconds of TT and over 1.8 stops per average run.

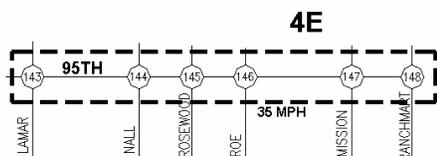
G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 4E 'EAST 95th st.' (Lamar to Ranchmart)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
4E	04/07/1994	108W	11	210.4	28.0	0.64	5@144,1@146,1@147	PM	EB
4E	12/13/1994	108W	11	202.5	29.1	1.00	8@144,3@147		
4E	02/16/1995	108W	12	177.6	33.2	0.42	4@144,1@147		
4E	07/25/1995	FREE	8	259.3	22.7	2.13	8@144,1@145,5@146,2@147,1@148		
4E	07/30/1996	120W	8	182.6	32.3	0.25	1@144,1@147		
4E	06/04/1997	120W	11	220.9	26.7	0.73	6@144,2@147		
4E	07/07/1998	120W	8	186.1	31.6	0.50	2@144,1@146,1@147		
4E	06/17/1999	120W	11	199.7	29.5	0.82	7@144,1@146,1@147		
4E	07/15/1999	130W	10	191.6	30.8	0.70	5@144,1@147,1@148		
4E	06/22/2000	130W	8	190.3	31.0	0.75	4@144,1@147,1@148		
4E	08/02/2000	FREE	10	313.9	18.8	3.00	10@144,1@145,4@146,8@147,7@148		
4E	08/16/2001	130W	12	191.3	30.8	0.75	4@144, 3@147,2@148		
4E	04/03/2002	130W	8	201.1	29.3	0.88	1@143,3@144, 1@146,2@147		
4E	07/17/2003	130W	10	196.6	30.0	1.00	5@144, 1@146,4@147		
4E	05/15/2004	130W	9	203.3	29.0	0.78	3@144, 1@146,3@147		
4E	06/07/2005	FREE	7	280.4	21.0	2.71	6@144,1@145,3@146,6@147,3@148		
4E	06/14/2005	130W	9	184.8	31.9	0.67	1@144, 1@146,3@147,1@148		
4E	09/12/2006	130A	7	192.4	30.6	0.43	1@144,2@147		
4E	04/07/1994	108W	11	201.2	29.3	0.91	1@143,1@MID,1@144,2@145,4@147	PM	WB
4E	12/13/1994	108W	11	200.4	29.4	0.82	1@143,1@MID,1@144,1@145,5@147		
4E	02/16/1995	108W	12	194.8	30.2	0.75	2@143,1@144,2@145,1@146,3@147		
4E	07/25/1995	FREE	9	289.7	20.3	3.44	5@143,8@144,2@145,5@146,9@147		
4E	07/30/1996	120W	8	193.4	30.5	0.63	1@MID,2@144,2@147		
4E	06/04/1997	120W	11	212.8	27.7	0.55	1@143,2@145,1@146,2@147		
4E	07/07/1998	120W	8	209.4	28.1	0.63	2@144,3@147		
4E	06/17/1999	120W	11	221.1	26.6	1.27	7@144,4@145,1@MID,1@146,1@147		
4E	07/15/1999	130W	9	206.7	28.5	1.22	3@143,1@Mid,1@144,3@145,2@146,1@147		
4E	06/22/2000	130W	7	210.6	28.0	1.29	3@144,2@145,4@147		
4E	08/03/2000	FREE	10	280.9	21.0	3.10	7@143,8@144,5@145,4@146,7@147		
4E	08/16/2001	130W	11	216.1	27.3	1.55	6@143,3@144,5@145,2@146,1@147		
4E	04/03/2002	130W	7	226.6	26.0	1.43	1@143,4@144,2@145,2@146,1@147		
4E	07/17/2003	130W	9	209.0	28.2	1.00	5@144,3@145, 1@147		
4E	05/15/2004	130W	10	203.8	28.9	0.60	2@144,4@145		
4E	06/07/2005	FREE	7	292.3	20.1	2.86	1@143,5@144,4@145,6@146,4@147		
4E	06/14/2005	130W	8	207.8	28.4	1.38	2@143,1@MID,1@144,4@145,3@146		
4E	09/12/2006	130A	7	204.3	28.8	0.86	1@143,3@144,1@145,1@147		
4E	04/07/1994	108W	11	205.3	28.7	0.78		PM	WV
4E	12/13/1994	108W	11	201.3	29.3	0.90			
4E	02/16/1995	108W	12	187.1	31.6	0.60			
4E	07/25/1995	FREE	8	276.0	21.4	2.85			
4E	07/30/1996	120W	8	188.1	31.3	0.44			
4E	06/04/1997	120W	11	216.7	27.2	0.63			
4E	07/07/1998	120W	8	198.3	29.8	0.57			
4E	06/17/1999	120W	11	210.9	28.0	1.06			
4E	07/15/1999	130W	9	199.5	29.6	0.97			
4E	06/22/2000	130W	7	200.9	29.4	1.03			
4E	08/03/2000	FREE	10	296.6	19.9	3.05			
4E	08/16/2001	130W	11	204.3	28.9	1.17			
4E	04/03/2002	130W	7	214.4	27.6	1.16			
4E	07/17/2003	130W	9	203.1	29.0	1.00			
4E	05/15/2004	130W	9	203.6	28.9	0.68			
4E	06/07/2005	FREE	7	286.6	20.6	2.79			
4E	06/14/2005	130W	8	196.2	30.1	1.02			
4E	09/12/2006	130A	7	198.4	29.7	0.64			



**EVALUATION OF 2006 RUNS 4E-PM**  
 {S4E has 6 inter. Over 1.6 mi. }

**GOOD**

The results this year were very similar to last year. With an average speed of close to 30 mph and an average stop of less than one these are good results.

Compared to the FREE WV runs the motorists are saving about 90 seconds (1 1/2 minutes) of TT and over 2.1 stops per average run.

G.Grimes, SCE

## SECTION REPORT - OPTCS RUNS

### Section 4C 'S4 & S5 ALONG METCALF' (87th to College)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
4C	02/22/1995	110A	10	337.6	32.4	1.90	1@43,2@44,5@45,2@46,6@52,1@54	AM	NB
4C	06/13/1995	FREE	7	532.7	20.6	6.57	6@43,4@45,4@46,5@51,5@52,5@55		
4C	07/24/1996	110A	9	330.7	33.1	1.67	2@42,3@43,6@45,1@52,3@55		
4C	07/30/1997	110A	10	329.9	33.2	1.50	1@44,4@45,3@46,6@52,1@54		
4C	07/01/1998	110A	10	342.2	31.9	1.80	1@41,1@43,1@44,3@45,4@46,1@51,7@52		
4C	03/17/1999	110A	9	330.1	33.2	1.56	1@42,1@44,5@45,2@46,1@51,4@52		
4C	04/18/2000	110A	9	343.2	31.9	1.44	1@42,3@45,2@46,2@51,3@52,1@54,1@55		
4C	04/26/2000	FREE	8	471.5	23.2	5.62	4@41,4@43,5@45,3@51,4@52,3@53,7@54		
4C	07/26/2001	110A	10	338.4	32.3	1.50	2@41,1@42, 2@45,4@46, 4@52, 1@54,1@55		
4C	11/19/2002	110A	12	328.8	33.3	1.67	3@41,2@43,4@45,4@46, 2@51,3@52		
4C	06/05/2003	110A	8	316.1	34.6	0.88	1@42,4@45,1@51,1@53		
4C	06/03/2004	110A	9	331.3	33.0	1.44	1@42,5@45,2@46,1@51,3@52,1@53		
4C	06/08/2004	110A	10	340.3	32.2	1.80	2@41,1@43,1@44,7@45,2@46,1@51,4@52		
4C	06/22/2005	110A	9	337.2	32.5	1.11	1@43, 7@45,2@46		
4C	06/28/2006	110A	8	344.5	31.8	1.13	1@43,1@44,4@45,2@46,1@53		
4C	02/22/1995	110A	11	326.3	33.6	1.91	2@43,7@45,2@46,3@51,1@53,5@55	AM	SB
4C	06/13/1995	FREE	8	584.4	18.7	6.75	6@43,7@45,5@46,6@51,8@53,6@56		
4C	07/24/1996	110A	9	319.7	34.3	1.67	1@42,1@45,6@46,1@51,6@52		
4C	07/30/1997	110A	9	316.0	34.6	1.56	1@43,9@45,3@55,1@56		
4C	07/01/1998	110A	10	294.6	36.9	0.90	2@44,3@45,1@54,2@55,1@56		
4C	03/17/1999	110A	9	338.4	32.4	2.00	1@42,3@43,7@45,2@53,1@54,2@55,2@56		
4C	04/18/2000	110A	9	337.9	32.4	1.33	2@43,1@44,5@45,1@53,3@55		
4C	04/26/2000	FREE	8	541.0	20.2	6.38	5@43,9@45,5@46,5@51,5@54,7@55,5@56		
4C	07/26/2001	110A	9	362.9	30.2	2.22	1@42,4@43,1@44,7@45,1@46, 1@53, 5@55		
4C	11/19/2002	110A	12	380.7	28.8	2.83	2@42,3@43,8@45, 3@51,5@53,7@55,2@56		
4C	06/05/2003	110A	8	344.3	31.8	1.38	1@43,1@44,3@45,1@51,2@52,1@53,1@54,1		
4C	06/03/2004	110A	9	340.4	32.2	1.89	3@43,6@45,1@47,2@53,5@55		
4C	06/08/2004	110A	10	348.7	31.4	2.10	4@43,1@44,7@45,1@47,2@53,6@55		
4C	06/22/2005	110A	9	358.8	30.5	2.33	3@43,1@44,7@45, 1@53,2@54,7@55		
4C	06/28/2006	110A	8	419.3	26.1	2.88	4@42,4@43,5@45,4@53,3@54,5@55		
4C	02/22/1995	110A	10	330.8	33.1	1.91		AM	WV
4C	06/13/1995	FREE	7	563.7	19.5	6.67			
4C	07/24/1996	110A	9	324.1	33.8	1.66			
4C	07/30/1997	110A	9	322.7	33.9	1.53			
4C	07/01/1998	110A	10	317.6	34.5	1.33			
4C	03/17/1999	110A	9	334.4	32.8	1.79			
4C	04/18/2000	110A	9	340.5	32.2	1.38			
4C	04/26/2000	FREE	8	507.5	21.7	6.01			
4C	07/26/2001	110A	9	352.1	31.1	1.90			
4C	11/19/2002	110A	12	357.8	30.8	2.32			
4C	06/05/2003	110A	8	331.9	33.0	1.16			
4C	06/03/2004	110A	9	336.6	32.5	1.70			
4C	06/08/2004	110A	10	345.1	31.7	1.97			
4C	06/22/2005	110A	9	349.7	31.3	1.82			
4C	06/28/2006	110A	8	387.7	28.5	2.14			

[Sections 4 & 5 combined]

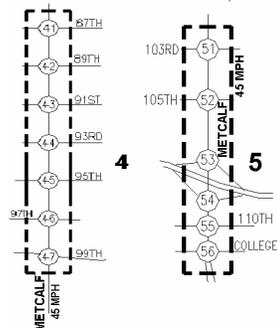
EVALUATION OF 2006 RUNS      4C-AM  
 {S4C has 13 inter. Over 3 mi.}

**GOOD - FAIR**

These runs continue to show consistent results NB with the speed staying above 30 MPH and stops below two per average run.

Compared to the FREE WV runs motorists are saving 120 seconds ( 2 minutes) of TT and almost 4 stops per average run.

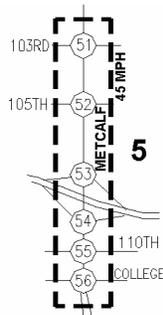
G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 5 'SOUTH METCALF' (103rd to College)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
5M	07/13/1993	110W	11	124.6	29.0	0.91	8@52,2@54	AM	NB
5M	06/15/1994	110A	10	127.3	28.4	0.80	7@52,1@54		
5M	02/22/1995	110A	10	122.2	29.6	0.80	1@51,6@52,1@54		
5M	06/13/1995	FREE	7	229.1	15.8	3.14	5@51,5@52,4@53,3@54,5@55		
5M	07/24/1996	110A	9	117.9	30.7	0.78	1@51,6@52		
5M	07/30/1997	110A	9	113.3	31.9	0.56	5@52		
5M	07/01/1998	110A	10	120.0	30.1	0.80	1@51,7@52		
5M	03/17/1999	110A	12	116.2	31.1	0.75	2@51,7@52		
5M	04/18/2000	110A	9	126.4	28.6	0.77	2@41,3@52,1@54,1@55		
5M	04/26/2000	FREE	8	203.6	17.8	2.75	4@52,3@53,5@54,7@55,5@56		
5M	07/26/2001	110A	10	125.5	28.8	0.60	4@52, 1@54,1@55		
5M	11/19/2002	110A	12	117.3	30.9	0.42	2@51,3@52		
5M	06/05/2003	110A	8	113.1	32.0	0.25	1@51,1@53		
5M	06/03/2004	110A	9	120.2	30.1	0.67	2@51,3@52,1@53		
5M	06/08/2004	110A	10	119.6	30.2	0.60	3@51,1@52,2@55		
5M	06/22/2005	110A	9	111.8	32.4	0.00			
5M	06/28/2006	110A	8	113.8	31.8	0.13	1@53		
5M	07/13/1993	110W	11	112.1	32.3	0.73	2@53,5@55,1@56	AM	SB
5M	06/15/1994	110A	10	105.7	34.2	0.40	1@53,3@55		
5M	02/22/1995	110A	11	106.2	34.1	0.55	1@53,5@55		
5M	06/13/1995	FREE	8	221.0	16.4	3.25	6@52,8@53,1@54,5@55,6@56		
5M	07/24/1996	110A	9	104.6	34.6	0.44	1@52,3@55		
5M	07/30/1997	110A	9	109.1	33.2	0.44	3@55,1@56		
5M	07/01/1998	110A	10	104.8	34.5	0.40	1@54,2@55,1@56		
5M	03/17/1999	110A	10	119.4	30.3	0.60	1@53,1@54,3@55,1@56		
5M	04/18/2000	110A	9	115.8	31.2	0.44	1@53,3@55		
5M	04/26/2000	FREE	8	218.0	16.6	3.00	5@51,4@52,3@53,7@54,3@55		
5M	07/26/2001	110A	10	117.6	30.8	0.60	1@53, 5@55		
5M	11/19/2002	110A	12	157.0	23.0	1.33	1@253,5@53,1@54,7@55,2@56		
5M	06/05/2003	110A	8	133.1	27.2	0.63	2@52,1@53,1@54,1@55		
5M	06/03/2004	110A	9	123.4	29.3	0.78	2@53,5@55		
5M	06/08/2004	110A	10	125.4	28.8	0.80	2@53,6@55		
5M	06/22/2005	110A	8	137.8	26.3	1.25	1@53,2@54,7@55,		
5M	06/28/2006	110A	8	192.5	18.8	1.63	4@53,3@54,5@55,1@56		
5M	07/13/1993	110W	11	117.6	30.8	0.80		AM	WV
5M	06/15/1994	110A	10	116.4	31.3	0.59			
5M	02/22/1995	110A	10	114.1	31.9	0.67			
5M	06/13/1995	FREE	7	225.0	16.1	3.20			
5M	07/24/1996	110A	9	111.2	32.7	0.60			
5M	07/30/1997	110A	9	111.2	32.6	0.49			
5M	07/01/1998	110A	10	112.3	32.4	0.60			
5M	03/17/1999	110A	10	117.8	30.7	0.67			
5M	04/18/2000	110A	9	121.0	30.0	0.60			
5M	04/26/2000	FREE	8	210.9	17.2	2.88			
5M	07/26/2001	110A	10	121.2	29.9	0.60			
5M	11/19/2002	110A	12	139.1	26.6	0.92			
5M	06/05/2003	110A	8	124.1	29.3	0.46			
5M	06/03/2004	110A	9	122.1	29.6	0.73			
5M	06/08/2004	110A	10	122.9	29.4	0.71			
5M	06/22/2005	110A	8	126.7	28.9	0.72			
5M	06/28/2006	110A	8	159.1	24.3	0.99			



**EVALUATION OF 2006 RUNS 5-AM**  
 {S5M has 6 inter. Over 1.0mi.}

**GOOD FAIR**

The results here compare favorably with the other years NB. With the speed being over to 30 MPH and the stops under 1 these are good results. The SB results were not as good and will be investigated in 2007.

For six intersections and the heavy volume coming off the interstate ramps at this time of day we are doing good here.

Compared to the FREE WV runs motorists are saving over 50 seconds of TT and about 2 stops per average run.

G.Grimes, SCE

**SECTION REPORT - OPTCS RUNS**  
**Section 5C 'COLLEGE' (Metcalf to Lamar)**

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
5C	06/15/2000	FREE	10	76.8	23.8	1.20	7@203,5@204	AM	EB
5C	09/06/2000	110A	9	53.4	34.1	0.22	1@203,1@204		
5C	08/28/2001	110A	12	48.5	37.8	0.00			
5C	11/07/2001	110A	14	55.8	32.6	0.29	2@203,2@204		
5C	11/08/2001	110A	12	49.5	36.8	0.08	1@203		
5C	11/12/2002	110A	11	46.1	39.5	0.00			
5C	07/10/2003	110A	9	46.9	38.8	0.00			
5C	07/20/2004	110A	9	49.3	36.9	0.00			
5C	08/02/2006	120A	10	43.6	41.8	0.00			
5C	06/15/2000	FREE	10	81.3	22.5	0.80	7@56,1@204	AM	WB
5C	09/06/2000	110A	10	80.3	22.7	1.10	5@56,6@204		
5C	08/28/2001	110A	12	71.3	25.7	1.08	8@56,5@204		
5C	11/07/2001	110A	13	78.8	23.1	1.15	11@56,4@204		
5C	11/08/2001	110A	12	61.8	29.4	0.42	4@56,1@204		
5C	11/12/2002	110A	11	68.4	26.6	0.40	1@56,3@204		
5C	07/10/2003	110A	9	81.3	22.4	1.00	3@56,6@204		
5C	07/20/2004	110A	9	71.9	25.3	0.67	3@56,3@204		
5C	08/02/2006	120A	10	72.3	25.2	1.40	10@56,4@204		
5C	06/15/2000	FREE	10	78.6	23.3	1.04		AM	WV
5C	09/06/2000	110A	9	63.9	29.6	0.56			
5C	08/28/2001	110A	12	57.4	33.1	0.42			
5C	11/07/2001	110A	13	64.4	29.1	0.61			
5C	11/08/2001	110A	12	54.1	34.0	0.21			
5C	11/12/2002	110A	10	54.4	34.7	0.15			
5C	07/10/2003	110A	9	59.8	32.7	0.37			
5C	07/20/2004	110A	9	56.8	33.0	0.22			
5C	08/02/2006	120A	10	54.3	35.6	0.52			

**BACKGROUND:**

Coordination started here in September of 2000. It includes Metcalf, Glenwood and Lamar.

On 11/08/2001 lagging left turns were installed at Lamar and Glenwood.

In 6/2002 the N/S phases were split at College & Glenwood.

**EVALUATION OF 2006 RUNS**      5C-AM  
 {S5C has 3 inter over 0.5 mi.}

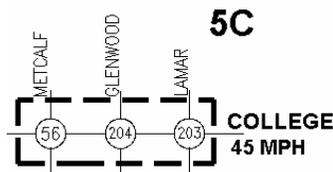
**GOOD - FAIR**

EB, the heaviest direction this time of day, the results continue to be very good with no stops.

WB the results were not as good. Part of that is due to the N/S phases at Glenwood being split apart in June of 2002 which requires more time for N/S.

Compared to the FREE EB runs motorists are saving over 30 seconds of TT and over 1 stop per average run.

G.Grimes, CE,S



## SECTION REPORT - OPTCS RUNS

### Section 5C 'COLLEGE' (Metcalf to Lamar)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
5C	06/15/2000	FREE	10	77.2	23.7	1.20	6@203,6@204	PM	EB
5C	09/06/2000	140A	11	78.1	23.3	0.82	9@203		
5C	07/19/2001	140A	12	81.6	22.3	1.00	11@203,1@204		
5C	11/06/2001	140A	13	76.8	23.7	0.92	12@203		
5C	11/07/2001	140A	11	71.8	25.4	0.64	7@203		
5C	11/08/2001	140A	12	53.7	33.9	0.17	2@203		
5C	11/07/2002	140A	12	53.0	34.3	0.08	1@203		
5C	07/06/2003	140A	11	51.5	35.4	0.09	1@203		
5C	10/14/2004	140A	10	51.0	35.7	0.00			
5C	07/28/2005	140A	9	56.1	32.4	0.11	1@203		
5C	12/19/2006	140A	8	57.8	31.5	0.25	2@203		
5C	06/15/2000	FREE	10	122.3	14.9	1.60	10@56,6@204	PM	WB
5C	09/06/2000	140A	11	99.9	18.2	1.09	6@56,6@204		
5C	07/19/2001	140A	12	90.8	20.0	0.67	3@56,5@204		
5C	11/06/2001	140A	12	74.7	24.4	0.58	7@56		
5C	11/07/2001	140A	11	90.0	20.2	0.45	4@56,1@204		
5C	11/08/2001	140A	12	93.6	19.5	0.92	6@56,5@204		
5C	11/07/2002	140A	12	90.2	20.2	0.83	4@56,6@204		
5C	07/06/2003	140A	13	92.8	19.6	0.69	1@56,8@204		
5C	10/14/2004	140A	10	89.1	20.4	1.00	4@56,6@204		
5C	07/28/2005	140A	10	125.7	14.5	1.40	7@56,7@204		
5C	12/19/2006	140A	6	85.8	21.2	0.83	2@56,3@204		
5C	06/15/2000	FREE	10	103.7	18.5	1.43		PM	WV
5C	09/06/2000	140A	11	90.9	20.3	0.98			
5C	07/19/2001	140A	12	87.0	21.0	0.81			
5C	11/06/2001	140A	12	75.6	24.1	0.72			
5C	11/07/2001	140A	11	82.5	22.3	0.53			
5C	11/08/2001	140A	12	77.1	25.4	0.61			
5C	11/07/2002	140A	12	74.8	26.0	0.52			
5C	07/06/2003	140A	11	75.7	26.1	0.44			
5C	10/14/2004	140A	10	73.4	26.7	0.59			
5C	07/28/2005	140A	9	96.3	22.1	0.85			
5C	12/19/2006	140A	6	74.3	25.5	0.59			

**BACKGROUND:**

On 11/08/01 lagging left turns were implemented at #203,204, mostly helping the EB.

**EVALUATION OF 2006 RUNS**      **5C-PM**  
 {S5C has 3 inter over 0.5 mi. }

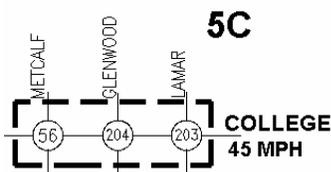
**GOOD - FAIR**

WB, the heaviest direction this time of day, the results showed some improvement. EB the results were good.

In 2002 the N/S phases at Glenwood were split apart causing a little longer time for the side street thus causing a few more stops or slow downs there.

Compared to the FREE WV runs, motorists are saving almost 30 seconds of TT and over 0.8 stops per average run.

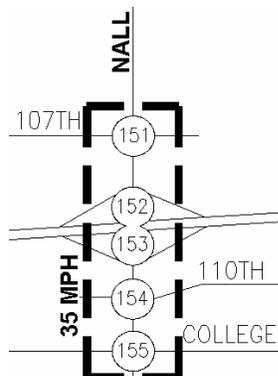
G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 5N 'NALL' (107th to College)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
5N	11/20/1996	FREE	9	94.4	19.1	2.00	2@151,5@152,7@153,4@154	AM	NB
5N	11/26/1996	110A	13	73.1	24.6	0.85	1@151,3@152,7@153		
5N	10/07/1997	110A	12	70.0	25.7	0.50	1@152,4@153,1@154		
5N	03/05/1998	110A	22	76.2	23.6	1.05	8@152,14@153,1@154		
5N	03/26/1998	FREE	15	114.3	15.7	2.13	4@151,11@152,8@153,9@154		
5N	10/06/1999	110A	11	76.0	23.7	1.00	8@152,3@153		
5N	10/07/1999	110A	12	75.2	24.0	1.00	8@152,4@153		
5N	05/31/2001	110A	11	74.4	24.2	1.18	7@152,6@153		
5N	06/06/2001	FREE	9	102.6	17.5	2.22	2@151,5@152,6@153,7@154		
5N	03/13/2002	110A	15	57.4	31.4	0.20	1@151, 2@153		
5N	07/02/2003	140A	13	70.5	25.5	0.92	6@152,6@153		
5N	07/21/2004	140A	14	82.6	21.8	0.93	5@152,8@153		
5N	07/20/2005	140A	14	66.0	27.3	0.64	1@151,2@152,6@153		
5N	07/11/2006	140A	8	63.6	28.3	0.38	1@152,2@153		
5N	07/12/2006	140A	11	63.8	28.2	0.36	3@153,1@154		
5N	11/20/1996	FREE	9	121.6	14.8	2.67	8@152,5@153,2@154,9@155	AM	SB
5N	11/26/1996	110A	12	65.1	27.6	0.58	3@152,1@153,2@154,1@155		
5N	10/07/1997	110A	11	84.0	21.4	0.73	4@152,2@154,2@155		
5N	03/05/1998	110A	22	87.5	20.6	1.24	8@152,1@153,7@154,10@155		
5N	03/26/1998	FREE	17	149.9	12.0	2.59	10@152,14@153,8@154,12@155		
5N	10/06/1999	110A	11	116.9	15.4	1.55	3@152,3@153,4@154,7@155		
5N	10/07/1999	110A	12	81.0	22.2	0.75	3@152,2@154,4@155		
5N	05/31/2001	110A	10	70.1	25.7	0.50	1@152,3@154,1@155		
5N	06/05/2001	FREE	9	141.6	12.7	2.33	8@152,1@153,4@154,8@155		
5N	03/13/2002	110A	16	71.5	25.2	0.63	2@153,7@154,1@155		
5N	07/02/2003	140A	15	62.7	28.7	0.40	1@152,3@154,2@155		
5N	07/21/2004	140A	14	72.1	25.0	0.43	2@152,1@153,2@154,1@155		
5N	07/20/2005	140A	17	64.2	28.0	0.47	1@153,5@154,2@155		
5N	07/11/2006	140A	8	74.8	24.1	0.50	2@153,1@154,1@155		
5N	07/12/2006	140A	13	58.8	30.6	0.38	1@152,3@153,1@155		
5N	11/20/1996	FREE	9	110.0	16.6	2.38		AM	WV
5N	11/26/1996	110A	12	65.1	27.7	0.58			
5N	10/07/1997	110A	11	78.0	23.2	0.63			
5N	03/05/1998	110A	22	82.7	21.9	1.16			
5N	03/26/1998	FREE	15	134.8	13.6	2.39			
5N	10/06/1999	110A	11	99.0	19.0	1.31			
5N	10/07/1999	110A	12	78.4	23.0	0.86			
5N	05/31/2001	110A	10	71.8	25.1	0.77			
5N	06/06/2001	FREE	9	126.0	14.6	2.29			
5N	03/13/2002	110A	15	65.3	27.9	0.44			
5N	07/02/2003	140A	13	65.0	27.8	0.55			
5N	07/21/2004	140A	14	75.1	24.0	0.57			
5N	07/20/2005	140A	14	64.7	27.8	0.52			
5N	07/11/2006	140A	8	71.4	25.3	0.46			
5N	07/12/2006	140A	11	60.3	29.9	0.37			



**EVALUATION OF 2006 RUNS**      5N-AM  
 {S5N has 5 inter. over 0.5 mi. }

**GOOD**

SB is by far the heaviest direction in the AM peak.

After the 7/11/06 runs we adjusted the offsets and splits at the ramps on I-435, that helped the SB results.

Compared to the FREE VW runs motorists are saving over 60 seconds (over 1 minute) of TT and almost 2 stops per average run.

G.Grimes, SCE

## SECTION REPORT - OPTCS RUNS

### Section 5N 'NALL' (107th to College)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
5N	08/01/1996	100*	13	74.9	24.0	0.62	2@152,1@153,5@154	PM	NB
5N	11/21/1996	130A	11	56.1	32.1	0.09	1@154		
5N	11/26/1996	FREE	9	86.3	20.9	1.33	2@151,2@152,5@153,3@154		
5N	07/17/1997	130A	11	57.5	31.3	0.18	1@153,1@154		
5N	03/04/1998	130A	17	52.6	34.2	0.06	1@151		
5N	01/12/1999	140A	13	63.3	28.4	0.23	1@151,1@152,1@153		
5N	01/13/1999	140A	13	54.0	33.3	0.00			
5N	03/03/1999	FREE	18	98.5	18.3	1.67	4@151,7@152,8@153,11@154		
5N	04/18/2000	140A	11	67.3	26.8	0.27	3@154		
5N	01/25/2001	140A	15	51.8	34.8	0.00			
5N	03/12/2002	140A	19	48.4	37.2	0.11	2@153		
5N	07/02/2003	140A	10	53.3	33.8	0.00			
5N	05/26/2004	140A	10	57.3	31.4	0.00			
5N	07/20/2005	140A	24	50.2	35.9	0.04	1@154		
5N	07/13/2006	140A	9	54.2	33.2	0.11	1@153		
5N	08/01/1996	100*	12	96.8	18.6	1.42	6@152,6@154,5@155	PM	SB
5N	11/21/1996	130A	11	90.1	20.0	1.00	4@152,4@154,3@155		
5N	11/26/1996	FREE	7	127.1	14.2	2.14	5@152,3@153,2@154,5@155		
5N	07/17/1997	130A	11	100.2	18.0	1.18	6@152,1@153,1@154,5@155		
5N	03/04/1998	130A	16	93.1	19.3	0.81	3@152,10@155		
5N	01/12/1999	140A	14	174.6	10.3	2.07	8@152,2@153,7@154,12@155		
5N	01/13/1999	140A	14	108.4	16.6	1.07	4@152,3@154,8@155		
5N	03/03/1999	FREE	18	205.9	8.7	3.22	16@152,8@153,17@154,17@155		
5N	04/18/2000	140A	11	77.9	23.1	0.46	2@152,1@154,2@155		
5N	01/25/2001	140A	15	76.5	23.5	0.47	3@152,2@153,1@154,1@155		
5N	03/12/2002	140A	20	65.2	27.6	0.55	11@155		
5N	07/02/2003	140A	10	105.4	17.1	1.00	5@152,1@153, 4@155		
5N	05/26/2004	140A	10	81.6	22.1	0.30	2@152,1@155		
5N	07/20/2005	140A	24	62.8	28.7	0.75	4@152,13@153,1@154		
5N	07/13/2006	140A	10	62.6	28.8	0.30	2@153,1@155		
5N	08/01/1996	100*	12	85.4	21.4	0.99		PM	WV
5N	11/21/1996	130A	11	72.2	26.4	0.52			
5N	11/26/1996	FREE	7	105.7	17.7	1.71			
5N	07/17/1997	130A	11	75.3	25.7	0.59			
5N	03/04/1998	130A	16	69.4	28.0	0.37			
5N	01/12/1999	140A	13	115.2	20.0	1.09			
5N	01/13/1999	140A	13	79.3	25.5	0.50			
5N	03/03/1999	FREE	18	148.6	13.8	2.39			
5N	04/18/2000	140A	11	72.2	25.0	0.36			
5N	01/25/2001	140A	15	63.3	29.5	0.22			
5N	03/12/2002	140A	19	56.8	32.4	0.33			
5N	07/02/2003	140A	10	73.5	27.3	0.39			
5N	05/26/2004	140A	10	66.7	27.8	0.12			
5N	07/20/2005	140A	24	57.3	31.8	0.44			
5N	07/13/2006	140A	9	58.9	30.7	0.22			

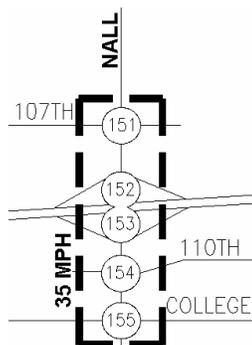
**EVALUATION OF 2006 RUNS      5N-PM**  
 {S5N has 5 inter. over 0.5 mi. }

**GOOD**

NB, the heaviest direction before 5:30, (the volumes continue to grow both NB & SB) the results continue to be good with almost no stops. SB the results were a little better than last year.

Compared to the FREE VW runs motorists are saving about 90 seconds or (1 & 1/2 minutes) of TT and over 2.1 stops per average run.

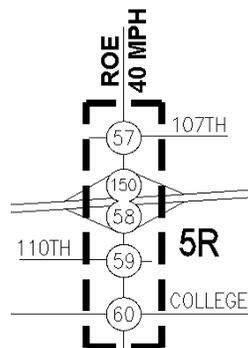
G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 5R 'ROE (107th to College)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
5R	09/28/1994	120W	10	64.4	28.1	0.60	4@58N,2@58S	AM	NB
5R	03/01/1995	120W	13	62.6	28.9	0.31	3@58N,1@58S		
5R	08/09/1995	FREE	16	86.7	20.9	1.75	6@57,9@58N,8@58S,5@59		
5R	10/09/1996	120W	13	61.9	29.2	0.69	3@57,3@58N,3@58S		
5R	10/30/1996	110W	12	49.0	36.9	0.08	1@I-S		
5R	08/05/1997	110W	12	48.0	37.7	0.17	1@58N,1@58S		
5R	02/19/1998	110W	7	54.3	33.3	0.43	2@150,1@60		
5R	02/20/1998	110A	13	45.5	39.8	0.00			
5R	10/05/1999	110A	9	58.8	30.8	0.44	2@150,2@58		
5R	05/30/2001	FREE	14	94.3	19.2	1.71	8@57,5@150,9@58,2@59		
5R	05/31/2001	110A	13	75.2	24.1	1.00	1@57,5@150,6@58,1@59		
5R	02/27/2002	110A	19	56.8	31.9	0.16	1@150,1@58,1@59		
5R	07/08/2003	110A	17	57.5	31.5	0.24	1@150,3@58		
5R	11/05/2004	110A	11	46.7	38.7	0.00			
5R	08/03/2005	110A	9	67.9	26.6	0.67	2@57,2@150,2@58		
5R	08/09/2006	110	8	58.4	31.0	0.38	2@150,1@58		
5R	08/10/2006	120	10	46.4	39.0	0.00			
5R	09/28/1994	120W	10	65.0	27.8	0.60	1@58N,2@59,3@60	AM	SB
5R	03/01/1995	120W	13	68.7	26.3	0.62	2@58N,1@59,5@60		
5R	08/09/1995	FREE	16	86.6	20.9	1.19	4@58N,2@59,13@60		
5R	10/09/1996	120W	13	61.5	29.4	0.85	2@58N,3@58S,1@59,5@60		
5R	10/30/1996	110W	12	59.4	30.5	0.75	1@I-N,1@MID,1@I-S,1@59,5@60		
5R	08/05/1997	110W	11	59.4	30.5	0.73	1@58S,3@59,4@60		
5R	02/19/1998	110W	9	47.9	37.8	0.00			
5R	02/20/1998	110A	12	49.8	36.3	0.08	1@60		
5R	10/05/1999	110A	10	65.8	27.5	0.70	1@150,1@58,1@59,4@60		
5R	05/30/2001	FREE	14	131.6	13.8	2.14	8@150,8@58,3@59,11@60		
5R	05/31/2001	110A	14	99.3	18.2	1.29	8@150,5@58,2@59,3@60		
5R	02/27/2002	110A	19	64.8	27.9	0.47	1@150,1@58, 7@60		
5R	07/08/2003	110A	18	64.8	27.9	0.44	2@59,6@60		
5R	11/05/2004	110A	13	69.6	26.0	0.62	3@59,5@60		
5R	08/03/2005	110A	9	57.5	31.4	0.44	2@150,2@60		
5R	08/09/2006	110	9	85.0	21.3	0.78	2@59,5@60		
5R	08/10/2006	120	13	74.3	24.4	0.69	1@150,1@59,7@60		
5R	09/28/1994	120W	10	64.7	28.0	0.60		AM	WV
5R	03/01/1995	120W	13	65.0	27.9	0.42			
5R	08/09/1995	FREE	16	86.7	20.9	1.53			
5R	10/09/1996	120W	13	61.7	29.3	0.75			
5R	10/30/1996	110W	12	54.6	33.4	0.44			
5R	08/05/1997	110W	11	54.1	33.8	0.46			
5R	02/19/1998	110W	7	51.2	35.5	0.23			
5R	02/20/1998	110A	12	47.5	38.1	0.04			
5R	10/05/1999	110A	9	61.4	29.6	0.54			
5R	05/30/2001	FREE	14	113.4	16.4	1.93			
5R	05/31/2001	110A	13	87.5	21.1	1.15			
5R	02/27/2002	110A	19	60.9	29.8	0.32			
5R	07/08/2003	110A	17	61.3	29.6	0.34			
5R	11/05/2004	110A	11	59.8	31.5	0.35			
5R	08/03/2005	110A	9	62.0	29.4	0.54			
5R	08/09/2006	110	8	74.7	25.0	0.63			
5R	08/10/2006	120	10	63.5	30.0	0.42			



#### BACKGROUND:

After 1997, #58N is labeled #150.

EVALUATION OF 2006 RUNS      5R-AM  
 {S5R has 5 inter. Over 0.5 mi.}

#### GOOD

SB is the heaviest flow of traffic this time of day. After the 8/09/06 runs we installed a 120 second plan to help SB.

The FREE TT runs reflect the heavy SB movement and show how beneficial coordination is.

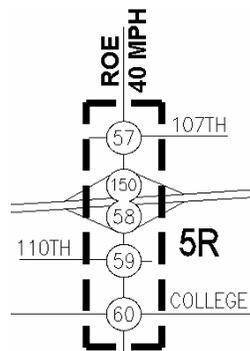
Compared to the FREE WV runs motorists are saving 50 seconds of TT and 1.5 stops per average run.

G.Grimes, SCE

## SECTION REPORT - OPTCS RUNS

### Section 5R 'ROE (107th to College)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
5R	10/30/1996	140W	14	72.3	25.0	0.86	4@57,2@I-N,1@I-S,5@59	PM	NB
5R	10/31/1996	120W	15	52.9	34.2	0.20	2@57,1@59		
5R	07/23/1997	120W	14	53.2	34.0	0.21	3@57		
5R	02/18/1998	120W	12	55.8	32.5	0.33	2@57,2@150		
5R	02/24/1998	120A	12	50.2	36.1	0.08	1@58		
5R	08/05/1999	120A	12	62.3	29.0	0.50	1@57,1@150,3@58,1@59		
5R	09/14/1999	120A	14	56.1	32.3	0.21	2@57,1@59		
5R	04/27/2000	120A	13	52.4	34.5	0.15	2@57		
5R	05/02/2000	FREE	8	96.4	18.8	2.00	4@57,1@150,5@58,6@59		
5R	07/12/2001	140A	12	50.2	36.1	0.00			
5R	03/07/2002	140A	21	55.4	32.7	0.19	1@57, 2@58,1@59		
5R	07/02/2003	140A	11	52.6	34.4	0.09	1@58		
5R	07/10/2003	140A	12	51.6	35.1	0.08	1@57		
5R	11/04/2004	140A	11	53.0	34.1	0.09	1@57		
5R	08/04/2005	140A	10	56.6	32.0	0.00			
5R	10/03/2006	140A	10	51.8	34.9	0.00			
5R	10/30/1996	140W	14	86.8	20.9	1.00	2@I-N,4@59,8@60	PM	SB
5R	10/31/1996	120W	15	61.6	29.4	0.33	1@I-N,2@59,2@60		
5R	07/23/1997	120W	15	69.3	26.1	0.67	4@I-N,1@59,5@60		
5R	02/18/1998	120W	12	62.6	28.9	0.50	2@59,4@60		
5R	02/24/1998	120A	10	56.6	32.0	0.20	1@59,1@60		
5R	08/05/1999	120A	13	96.7	18.7	0.85	3@59,8@60		
5R	09/14/1999	120A	13	65.5	27.6	0.31	1@150,1@59,2@60		
5R	04/27/2000	120A	14	67.4	26.9	0.38	1@59,4@60		
5R	05/02/2000	FREE	8	217.8	8.3	3.38	8@150,3@58,8@59,8@60		
5R	07/12/2001	140A	11	62.1	29.1	0.09	1@60		
5R	03/07/2002	140A	20	56.3	32.2	0.15	1@59,2@60		
5R	07/02/2003	140A	11	101.6	17.8	1.18	5@59,8@60		
5R	07/10/2003	140A	12	70.1	25.8	0.33	1@150,3@60		
5R	11/04/2004	140A	10	55.0	32.9	0.10	1@60		
5R	08/04/2005	140A	10	82.3	22.0	0.60	6@150,		
5R	10/03/2006	140A	10	70.4	25.7	0.50	1@150,4@60		
5R	10/30/1996	140W	14	78.7	23.2	0.92		PM	WV
5R	10/31/1996	120W	15	56.7	32.1	0.25			
5R	07/23/1997	120W	14	60.3	30.5	0.41			
5R	02/18/1998	120W	12	59.4	30.5	0.42			
5R	02/24/1998	120A	10	53.0	34.3	0.13			
5R	08/05/1999	120A	12	79.7	23.8	0.67			
5R	09/14/1999	120A	13	60.8	29.9	0.26			
5R	04/27/2000	120A	13	60.0	30.7	0.27			
5R	05/02/2000	FREE	8	157.7	13.5	2.69			
5R	07/12/2001	140A	11	56.3	32.5	0.00			
5R	03/07/2002	140A	20	55.8	32.4	0.17			
5R	07/02/2003	140A	11	77.4	26.0	0.64			
5R	07/10/2003	140A	12	60.4	30.7	0.21			
5R	11/04/2004	140A	10	54.0	33.5	0.10			
5R	08/04/2005	140A	10	68.8	27.2	0.29			
5R	10/03/2006	140A	10	60.4	30.7	0.23			



**BACKGROUND:**

107<sup>th</sup> St double cycles during this time period.  
 After 1997, I-N is labeled #150 not #58N.

**EVALUATION OF 2006 RUNS**      5R-PM  
 {S5R has 5 inter. Over 0.5 mi. }

**GOOD**

The NB and SB volumes are about equal this time of day. The timings were adjusted after the 7/02/03 runs and the SB results have definitely improved since then. This year SB were not quite as good because we allowed #57 to double cycle.

The FREE TT runs show how beneficial coordination is.

Compared to the FREE WV runs motorists are saving almost 100 seconds (over 1½ minutes) of TT and over 2.4 stops per average run.

G.Grimes, SCE

## SECTION REPORT - OPTCS RUNS

### Section 6 'MID ANTIOCH' (85th to 87th)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
06	06/15/1995	FREE	13	64.6	14.0	1.38	7@61,11@62	AM	NB
06	06/11/1996	110A	10	41.2	22.0	0.20	2@62		
06	07/22/1997	110A	13	37.3	24.3	0.15	2@62		
06	06/11/1998	110W	11	42.3	21.4	0.36	3@62,1@PED		
06	07/14/1999	110A	13	37.6	24.1	0.23	3@62		
06	03/15/2000	120A	8	26.8	33.8	0.13	1@62		
06	05/03/2000	FREE	10	72.6	12.5	1.40	5@61,9@62		
06	09/25/2001	120A	10	33.8	26.8	0.10	1@62		
06	09/13/2002	120A	12	35.7	25.4	0.17	2@62		
06	06/03/2003	120A	12	30.9	29.3	0.17	1@61,1@62		
06	06/16/2004	120A	10	38.0	23.8	0.40	1@61,3@62		
06	02/23/2005	FREE	11	53.0	17.1	0.73	2@61,6@62		
06	06/02/2005	120A	12	36.3	24.9	0.33	2@61,2@62		
06	06/06/2006	120A	11	33.4	27.1	0.27	1@61,2@62		
06	06/15/1995	FREE	13	67.5	13.4	1.31	10@62,7@63	AM	SB
06	06/11/1996	110A	11	26.3	34.5	0.00			
06	07/22/1997	110A	13	30.8	29.4	0.15	2@62		
06	06/11/1998	110W	11	27.5	33.0	0.09	1@62		
06	07/14/1999	110A	13	31.5	28.8	0.08	1@62		
06	03/15/2000	120A	8	28.5	31.8	0.13	1@62		
06	05/03/2000	FREE	9	54.6	16.6	0.89	5@62,3@63		
06	09/25/2001	120A	10	37.4	24.2	0.10	1@62		
06	09/13/2002	120A	12	28.9	31.3	0.00			
06	06/03/2003	120A	13	32.2	28.2	0.15	2@62		
06	06/16/2004	120A	11	35.6	25.4	0.27	3@62		
06	02/23/2005	FREE	11	67.4	13.4	1.09	9@62,3@63		
06	06/02/2005	120A	11	32.5	27.9	0.09	1@62		
06	06/06/2006	120A	11	31.1	29.1	0.09	1@62		
06	06/15/1995	FREE	13	65.9	13.7	1.35		AM	WV
06	06/11/1996	110A	10	34.6	27.5	0.11			
06	07/22/1997	110A	13	34.4	26.6	0.15			
06	06/11/1998	110W	11	35.0	27.1	0.23			
06	07/14/1999	110A	13	34.6	26.4	0.16			
06	03/15/2000	120A	8	27.6	32.8	0.13			
06	05/03/2000	FREE	9	63.8	14.5	1.15			
06	09/25/2001	120A	10	35.7	25.5	0.10			
06	09/13/2002	120A	12	32.2	28.5	0.08			
06	06/03/2003	120A	12	31.6	28.7	0.16			
06	06/16/2004	120A	10	36.9	24.6	0.34			
06	02/23/2005	FREE	11	59.6	15.4	0.90			
06	06/02/2005	120A	11	34.5	26.3	0.22			
06	06/06/2006	120A	11	32.3	28.0	0.19			

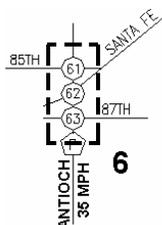
**EVALUATION OF 2006 RUNS**      6-AM  
 {S6 has 3 inter. Over 0.25 mi. }

### GOOD -FAIR

The results this year were a little better than last year.

Compared to the 2005 FREE WV runs  
 motorists are saving over 27 seconds of TT  
 and over 0.7 stop per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 6 'MID ANTIOCH' (85th to 87th)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
06	03/16/1995	FREE	11	63.2	14.3	0.91	5@61,5@62	PM	NB
06	03/21/1995	140D	12	34.4	26.3	0.17	2@62		
06	07/02/1996	140D	13	42.3	21.4	0.23	1@61,2@62		
06	07/23/1997	140D	8	30.0	30.2	0.00			
06	06/23/1998	140D	12	32.1	28.2	0.17	2@62		
06	07/20/1999	140D	11	38.9	23.3	0.36	2@61,2@62		
06	03/02/2000	140D	11	36.6	24.7	0.18	1@61,1@62		
06	05/04/2000	FREE	11	84.6	10.7	1.55	8@61,9@62		
06	08/23/2001	140D	10	39.4	23.0	0.30	1@61,2@62		
06	09/18/2002	140D	15	35.5	25.5	0.07	1@62		
06	06/04/2003	140D	11	39.5	23.0	0.18	2@62		
06	06/17/2004	140D	12	36.4	24.9	0.17	1@61,1@62		
06	02/23/2005	FREE	10	82.6	11.0	1.60	7@61,9@62		
06	04/06/2005	140D	11	33.8	26.8	0.09	1@62		
06	10/17/2006	140D	13	35.2	25.7	0.23	3@61		
06	03/16/1995	FREE	11	90.6	10.0	1.45	8@62,8@63	PM	SB
06	03/21/1995	140D	12	43.7	20.7	0.50	6@62		
06	07/02/1996	140D	14	31.8	28.5	0.07	1@62		
06	07/23/1997	140D	8	35.8	25.3	0.25	2@62		
06	06/23/1998	140D	12	27.8	32.5	0.00			
06	07/20/1999	140D	12	30.2	30.0	0.08	1@62		
06	03/02/2000	140D	12	31.1	29.1	0.08	1@62		
06	05/04/2000	FREE	11	84.3	10.7	1.55	10@62,7@63		
06	08/23/2001	140D	10	34.9	25.9	0.10	1@62		
06	09/18/2002	140D	15	43.7	20.7	0.47	6@62,1@63		
06	06/04/2003	140D	11	41.9	21.6	0.18	1@62,1@63		
06	06/17/2004	140D	12	41.0	22.1	0.17	2@62		
06	02/23/2005	FREE	10	76.7	11.8	1.20	7@62,5@63		
06	04/06/2005	140D	11	41.5	21.8	0.18	2@62		
06	10/17/2006	140D	13	39.5	23.0	0.31	3@62,1@63		
06	03/16/1995	FREE	11	77.8	12.0	1.19		PM	WV
06	03/21/1995	140D	12	39.4	23.3	0.34			
06	07/02/1996	140D	13	36.7	25.2	0.14			
06	07/23/1997	140D	8	33.4	27.3	0.14			
06	06/23/1998	140D	12	29.6	30.8	0.07			
06	07/20/1999	140D	11	33.8	27.2	0.20			
06	03/02/2000	140D	11	34.5	26.4	0.15			
06	05/04/2000	FREE	11	84.4	10.7	1.55			
06	08/23/2001	140D	10	36.9	24.6	0.19			
06	09/18/2002	140D	15	40.0	22.9	0.29			
06	06/04/2003	140D	11	40.8	22.2	0.18			
06	06/17/2004	140D	12	39.1	23.3	0.17			
06	02/23/2005	FREE	10	79.2	11.4	1.37			
06	04/06/2005	140D	11	38.3	23.9	0.14			
06	10/17/2006	140D	13	37.2	24.3	0.27			

EVALUATION OF 2006 RUNS 6-PM  
 {S6 has 3 inter. Over 0.25 mi. }

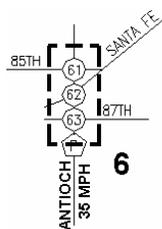
### GOOD -FAIR

The results this year were a little better SB and not quite as good NB. Overall these results have stayed fairly consistent.

The signal at 85<sup>th</sup> (#61) double-cycles this time of day so that makes it more difficult to make it through Santa Fe (#62) SB.

Compared to the FREE WV runs motorists are saving over 40 seconds of TT and 1.1 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 6S 'ANTIOCH' (95th to 99th)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
6S	06/07/1994	110W	12	68.4	28.2	0.67	2@65,6@66S	AM	NB
6S	06/06/1995	110W	10	73.4	26.3	0.70	5@65,2@66N		
6S	06/15/1995	FREE	13	95.9	20.1	1.31	10@65,1@66N,6@66S		
6S	06/11/1996	110W	10	61.4	31.4	0.20	1@65,1@66S		
6S	07/22/1997	110W	14	67.8	28.5	0.36	4@65,1@66S		
6S	06/11/1998	110W	11	67.2	28.7	0.18	1@65,1@66S		
6S	07/14/1999	110W	13	66.5	29.0	0.31	4@65		
6S	03/15/2000	120A	7	70.3	27.5	0.43	3@65		
6S	05/03/2000	FREE	10	145.3	13.3	1.90	10@65,1@66N,8@66S		
6S	09/25/2001	120A	10	70.1	27.5	0.20	2@65		
6S	09/13/2002	120A	11	69.3	27.9	0.45	3@65,1@66N,1@66S		
6S	06/03/2003	120A	13	71.3	27.1	0.38	3@65,2@66S		
6S	06/16/2004	120A	11	65.4	29.5	0.45	3@65,1@66N,1@66S		
6S	02/23/2005	FREE	11	93.7	20.6	1.27	10@65, 4@66S		
6S	06/02/2005	120A	12	69.7	27.7	0.50	4@65,2@66S		
6S	06/06/2006	120A	11	69.6	27.7	0.45	2@65,1@66N,1@66S		
6S	06/07/1994	110W	12	53.8	35.9	0.00		AM	SB
6S	06/06/1995	110W	10	52.0	37.1	0.00			
6S	06/15/1995	FREE	13	66.1	29.2	0.54	3@66N,1@66S,3@67		
6S	06/11/1996	110W	11	55.1	35.0	0.09	1@67		
6S	07/22/1997	110W	13	55.0	35.1	0.00			
6S	06/11/1998	110W	11	54.8	35.4	0.00			
6S	07/14/1999	110W	13	54.2	35.6	0.08	1@66S		
6S	03/15/2000	120A	7	53.1	36.3	0.00			
6S	05/03/2000	FREE	9	83.4	23.1	1.22	5@66N,1@66S,5@67		
6S	09/25/2001	120A	10	57.0	33.9	0.00			
6S	09/13/2002	120A	12	55.8	34.6	0.00			
6S	06/03/2003	120A	13	56.1	34.4	0.15	1@66N,1@66S		
6S	06/16/2004	120A	11	54.5	35.4	0.00			
6S	02/23/2005	FREE	11	70.3	27.5	0.73	1@66N,4@66S,3@67		
6S	06/02/2005	120A	11	53.4	36.2	0.00			
6S	06/06/2006	120A	11	55.9	34.5	0.00			
6S	06/07/1994	110W	12	59.6	32.8	0.26		AM	WV
6S	06/06/1995	110W	10	61.1	32.5	0.29			
6S	06/15/1995	FREE	13	78.7	25.3	0.86			
6S	06/11/1996	110W	10	57.8	33.5	0.13			
6S	07/22/1997	110W	13	60.2	32.4	0.14			
6S	06/11/1998	110W	11	59.8	32.6	0.07			
6S	07/14/1999	110W	13	59.1	33.0	0.17			
6S	03/15/2000	120A	7	60.1	32.7	0.17			
6S	05/03/2000	FREE	9	108.4	19.1	1.49			
6S	09/25/2001	120A	10	62.6	31.1	0.09			
6S	09/13/2002	120A	11	62.0	31.5	0.20			
6S	06/03/2003	120A	13	62.6	31.3	0.25			
6S	06/16/2004	120A	11	59.0	32.9	0.19			
6S	02/23/2005	FREE	11	80.0	24.6	0.95			
6S	06/02/2005	120A	11	59.7	32.9	0.19			
6S	06/06/2006	120A	11	61.2	31.9	0.18			

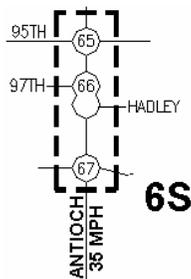
**EVALUATION OF 2006 RUNS 6S-AM**  
 {S6S has 4 inter. Over 0.5 mi.}

**GOOD**

The results here have been consistently good for the last several years. In late '99 we modified the patterns during this time period by a small increase in the cycle length to help insure that all of the standing queues cleared, mainly at 95<sup>th</sup> & Antioch.

Compared to the FREE WV runs motorists are saving about 20 seconds of TT and almost 0.8 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 6S 'ANTIOCH' (95th to 99th)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
6S	08/10/1994	140D	14	109.1	17.7	0.71	10@65	PM	NB
6S	03/16/1995	FREE	11	150.5	12.8	1.82	10@65,10@66S		
6S	03/21/1995	140D	11	119.6	16.1	0.91	9@65,1@66S		
6S	07/02/1996	140D	12	117.3	16.5	1.08	12@65,1@66S		
6S	07/23/1997	140D	8	81.1	23.8	0.63	5@65		
6S	08/23/1998	140D	12	102.4	18.8	1.00	10@65,2@66S		
6S	07/20/1999	140D	12	91.8	21.0	1.00	9@65,3@66S		
6S	03/02/2000	140D	12	88.0	21.9	0.83	7@65,3@66		
6S	05/04/2000	FREE	11	153.6	12.6	1.45	11@65,5@66S		
6S	08/23/2001	140D	10	96.6	20.0	1.00	8@65,2@66S		
6S	09/18/2002	140D	13	92.4	20.9	0.69	9@65		
6S	06/04/2003	140D	11	93.6	20.6	0.64	6@65,1@66S		
6S	06/17/2004	140D	12	103.8	18.6	0.83	9@65,1@66S		
6S	02/23/2005	FREE	8	134.3	14.4	1.50	8@65, 4@66S		
6S	04/07/2005	140D	10	102.5	18.8	1.10	8@65, 3@66S		
6S	10/17/2006	140D	12	89.7	21.5	0.83	9@65,1@66S		
6S	08/10/1994	140D	14	57.6	33.5	0.07	1@66N	PM	SB
6S	03/16/1995	FREE	11	76.8	25.1	1.00	3@66N,1@66S,7@67		
6S	03/21/1995	140D	12	57.5	33.6	0.00			
6S	07/02/1996	140D	13	57.2	33.8	0.00			
6S	07/23/1997	140D	8	61.8	31.3	0.13	1@67		
6S	06/23/1998	140D	12	56.7	34.1	0.00			
6S	07/20/1999	140D	12	60.9	31.7	0.25	1@66N,2@66S		
6S	03/02/2000	140D	12	56.8	34.0	0.00			
6S	05/04/2000	FREE	11	82.1	23.5	1.00	1@66N,3@66S,7@67		
6S	08/23/2001	140D	10	58.6	32.9	0.10	1@66S		
6S	09/18/2002	140D	14	59.9	32.2	0.07	1@66S		
6S	06/04/2003	140D	10	63.2	30.5	0.00			
6S	06/17/2004	140D	12	62.5	30.9	0.25	1@MID,2@66N		
6S	02/23/2005	FREE	10	73.3	26.3	0.80	1@66N,3@66S,4@67		
6S	04/07/2005	140D	10	57.6	33.5	0.00			
6S	10/17/2006	140D	12	56.8	34.0	0.00			
6S	08/10/1994	140D	14	82.8	25.8	0.38		PM	WV
6S	03/16/1995	FREE	11	116.0	18.6	1.43			
6S	03/21/1995	140D	11	90.5	24.3	0.48			
6S	07/02/1996	140D	12	89.1	24.6	0.57			
6S	07/23/1997	140D	8	72.1	27.3	0.39			
6S	06/23/1998	140D	12	79.9	26.3	0.51			
6S	07/20/1999	140D	12	76.6	26.3	0.63			
6S	03/02/2000	140D	12	73.0	27.7	0.43			
6S	05/04/2000	FREE	11	119.1	17.8	1.23			
6S	08/23/2001	140D	10	77.1	26.6	0.54			
6S	09/18/2002	140D	13	75.8	26.7	0.37			
6S	06/04/2003	140D	10	78.0	25.7	0.31			
6S	06/17/2004	140D	12	83.9	24.5	0.55			
6S	02/23/2005	FREE	8	104.8	20.1	1.16			
6S	04/07/2005	140D	10	80.8	25.9	0.57			
6S	10/17/2006	140D	12	73.8	27.5	0.43			

**EVALUATION OF 2006 RUNS 6-PM**  
 {S6 has 3 inter. Over 0.25 mi. }

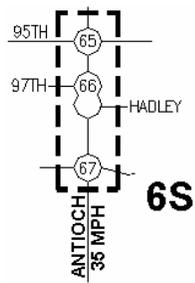
**GOOD**

The results here have been consistently good SB for the last several years.

NB it is difficult to get through 95<sup>th</sup> & Antioch without stopping because of the major cross street traffic here, but it did show some improvement.

Compared to the FREE WV runs motorists are saving 30 seconds of TT and over 0.7 stops per average run.

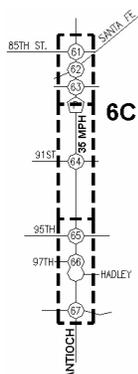
G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 6C 'COMBINED ANTIOCH' (85th to 99th)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
6C	07/28/1993	110A	10	208.7	31.1	0.80	2@63,2@65,2@66S,1@66N	AM	NB
6C	06/07/1994	110A	12	220.3	29.3	1.25	4@62,3@64,2@65,6@66S		
6C	06/06/1995	110A	10	240.7	26.8	2.00	3@62,4@63,6@64,5@65,2@66N		
6C	06/15/1995	FREE	13	276.4	23.3	3.54	7@61,11@62,9@63,10@65,6@66S		
6C	06/11/1996	110A	10	209.7	30.8	0.70	2@62,2@63,1@64,1@65,1@66S		
6C	07/22/1997	110A	13	211.4	30.5	0.62	2@62,1@63,1@64,3@65,1@66S		
6C	06/11/1998	110A	11	215.0	30.0	0.64	3@62,1@63,1@65,1@66S,1@PED		
6C	07/14/1999	110A	13	218.0	29.6	0.92	3@62,5@63,4@65		
6C	03/15/2000	120A	7	206.7	31.2	0.86	1@62,2@64,3@65		
6C	05/03/2000	FREE	10	350.3	18.4	4.10	5@61,9@62,2@63,5@64,10@65,8@66S		
6C	09/25/2001	120A	10	219.6	29.4	0.50	1@62,1@63,1@64,2@65		
6C	09/13/2002	120A	11	214.9	30.0	0.73	2@62,1@64,3@65,1@66N,1@66S		
6C	06/03/2003	120A	12	216.8	29.8	0.83	1@61,1@62,2@63,1@64,3@65,2@66S		
6C	06/16/2004	120A	11	216.1	29.9	1.45	1@61,3@62,2@63,4@64,3@65,1@66N,1@		
6C	02/23/2005	FREE	11	273.5	23.6	2.73	2@61,5@62,5@63,4@64,10@65,4@66S		
6C	06/02/2005	120A	12	214.8	30.0	1.08	2@61,2@62,2@63,1@64,4@65,2@66S		
6C	06/06/2006	120A	11	218.4	29.5	0.91	1@61,2@62,2@62,1@64,2@65,2@66		
6C	07/28/1993	110A	10	222.5	29.2	1.20	1@62,2@64,9@65	AM	SB
6C	06/07/1994	110A	12	218.6	29.5	1.00	2@62,1@63,6@64,3@65		
6C	06/06/1995	110A	10	212.8	30.3	1.20	2@62,4@64,6@65		
6C	06/15/1995	FREE	13	280.6	23.0	3.23	10@62,7@63,7@64,11@65,3@66N		
6C	06/11/1996	110A	11	214.8	30.0	1.36	4@64,10@65,1@67		
6C	07/22/1997	110A	13	213.8	30.2	1.08	2@62,4@64,8@65		
6C	06/11/1998	110A	11	202.4	31.9	0.82	1@62,2@64,6@65		
6C	07/14/1999	110A	13	204.5	31.5	0.69	1@62,1@SCHX,1@64,5@65,1@66S		
6C	03/15/2000	120A	7	200.7	32.1	0.86	1@64,5@65		
6C	05/03/2000	FREE	9	302.9	21.3	3.44	5@62,3@63,2@64,9@65,5@66N,5@67		
6C	09/25/2001	120A	9	230.8	28.0	0.50	1@62,1@64,3@65		
6C	09/13/2002	120A	12	228.5	28.2	1.00	4@64,8@65		
6C	06/03/2003	120A	13	211.4	30.5	0.77	2@62,2@64,4@65,1@66N,1@66S		
6C	06/16/2004	120A	11	218.4	29.5	1.09	3@62,2@64,7@65		
6C	02/23/2005	FREE	11	282.5	22.8	3.18	9@62,3@63,3@64,12@65,1@66N,4@66S,3		
6C	06/02/2005	120A	11	225.3	28.6	1.27	1@62,6@64,7@65		
6C	06/06/2006	120A	11	211.9	30.4	0.73	1@62,1@64,6@65		
6C	07/28/1993	110A	10	215.9	30.1	1.00		AM	WV
6C	06/07/1994	110A	12	219.4	29.4	1.11			
6C	06/06/1995	110A	10	226.6	28.6	1.59			
6C	06/15/1995	FREE	13	278.5	23.1	3.38			
6C	06/11/1996	110A	10	214.8	30.0	1.03			
6C	07/22/1997	110A	13	212.6	30.3	0.85			
6C	06/11/1998	110A	11	208.3	31.0	0.74			
6C	07/14/1999	110A	13	210.8	30.6	0.80			
6C	03/15/2000	120A	7	203.5	31.7	0.86			
6C	05/03/2000	FREE	9	324.8	20.0	3.75			
6C	09/25/2001	120A	9	225.7	28.6	0.50			
6C	09/13/2002	120A	11	222.3	29.0	0.88			
6C	06/03/2003	120A	12	213.9	30.2	0.80			
6C	06/16/2004	120A	11	217.3	29.7	1.26			
6C	02/23/2005	FREE	11	278.3	23.2	2.97			
6C	06/02/2005	120A	11	220.4	29.3	1.18			
6C	06/06/2006	120A	11	215.0	30.0	0.81			



#### BACKGROUND:

[Section 6C is 6 & 6S combined]

#### EVALUATION OF 2006 RUNS 6C-AM

{S6C has 8 inter. Over 1.3 mi.}

### GOOD

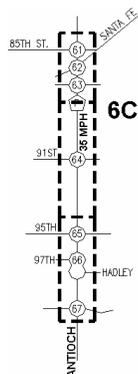
Overall these results are pretty consistent over the last several years. The heavy E/W traffic at 95<sup>th</sup> Street makes it difficult to get through here without a stop.

Compared to the FREE WV runs motorists are saving over 60 seconds (1 minute) of TT and about 2.2 stops per average run.

G.Grimes, SCE

**SECTION REPORT - OPTCS RUNS**  
**Section 6C 'COMBINED ANTIOCH' (85th to 99th)**

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
6C	08/10/1994	140D	14	281.2	22.9	2.00	1@61,4@62,8@63,5@64,10@65	PM	NB
6C	03/16/1995	FREE	11	341.5	18.9	3.27	5@61,5@62,4@3,2@4,10@65,10@66		
6C	03/21/1995	140D	11	278.5	23.2	1.73	2@62,7@63,9@65,1@66S		
6C	06/27/1996	140D	7	292.3	22.1	2.43	2@62,4@63,3@64,7@65,1@66S		
6C	07/18/1996	140D	10	277.6	23.2	2.20	1@61,10@63,10@65,1@66S		
6C	07/23/1997	140D	8	239.9	26.9	1.38	6@63,5@65		
6C	06/23/1998	140D	12	272.5	23.7	1.92	2@62,9@63,10@65,2@66S		
6C	07/20/1999	140D	11	270.6	23.8	2.18	2@61,2@62,9@63,8@65,3@66		
6C	03/02/2000	140D	12	251.5	25.6	1.83	2@61,2@62,8@63,7@65,3@66		
6C	05/04/2000	FREE	11	377.2	17.1	4.27	8@61,9@62,9@63,4@64,11@65,6@66S		
6C	08/23/2001	140D	10	273.8	23.6	2.10	1@61,2@62,8@63,8@65,2@66S		
6C	09/18/2002	140D	13	274.5	23.5	1.92	1@62,12@63,1@64,10@65,1@66S		
6C	06/04/2003	140D	11	273.4	23.6	1.55	2@62,8@63,6@65,1@66S		
6C	06/17/2004	140D	12	274.9	23.5	1.67	1@61,1@62,8@63,9@65,1@66S		
6C	02/22/2005	FREE	8	346.1	18.6	3.88	5@61,7@62,2@63,5@64,8@65,4@66S		
6C	04/06/2005	140D	10	270.7	23.8	1.90	1@62,7@63,8@65,3@66S		
6C	10/17/2006	140D	12	263.2	24.5	1.83	3@61,8@63,1@64,9@65,1@66S		
6C	08/10/1994	140D	14	241.9	26.7	1.79	12@62,2@64,10@65,1@66N	PM	SB
6C	03/16/1995	FREE	11	352.1	18.3	3.91	8@62,8@63,3@4,12@65,4@66,7@67		
6C	03/21/1995	140D	11	242.3	26.6	1.45	5@62,4@64,7@65		
6C	06/27/1996	140D	7	260.6	24.8	1.43	1@62,4@64,5@65		
6C	07/18/1996	140D	11	227.1	28.4	0.45	5@65		
6C	07/23/1997	140D	8	245.3	26.3	1.25	2@62,1@64,6@65,1@67		
6C	06/23/1998	140D	12	224.2	28.8	0.67	8@65		
6C	07/20/1999	140D	12	227.2	28.4	1.17	1@62,1@64,1@M,8@65,3@66		
6C	03/02/2000	140D	12	235.9	27.3	0.75	1@62,2@64,6@65		
6C	05/04/2000	FREE	11	389.1	16.6	4.00	10@62,7@63,3@64,13@65,1@66N,3@66		
6C	08/23/2001	140D	10	212.9	30.3	0.70	1@62,1@64,4@65,1@66S		
6C	09/18/2002	140D	12	256.8	25.1	1.08	4@62,8@65,1@66S		
6C	06/04/2003	140D	9	241.0	26.8	0.56	1@63,4@65		
6C	06/17/2004	140D	12	239.0	27.0	0.92	2@62,1@64,1@MID,5@65,2@66N		
6C	02/22/2005	FREE	10	335.1	19.3	3.50	7@62,5@63,6@64,9@65,1@66N,3@66S,4		
6C	04/06/2005	140D	10	250.2	25.8	0.90	2@62,7@65		
6C	10/17/2006	140D	12	222.4	29.0	0.83	3@62,1@63,6@65		
6C	08/10/1994	140D	14	260.6	24.9	1.89		PM	WV
6C	03/16/1995	FREE	11	346.8	18.6	3.59			
6C	03/21/1995	140D	11	260.1	24.9	1.59			
6C	06/27/1996	140D	7	273.3	23.4	1.92			
6C	07/18/1996	140D	10	252.2	25.8	1.32			
6C	07/23/1997	140D	8	242.6	26.6	1.31			
6C	06/23/1998	140D	12	246.4	26.4	1.25			
6C	07/20/1999	140D	11	247.2	26.3	1.63			
6C	03/02/2000	140D	12	243.5	26.5	1.27			
6C	05/04/2000	FREE	11	383.3	16.8	4.13			
6C	08/23/2001	140D	10	242.3	27.0	1.38			
6C	09/18/2002	140D	12	265.4	24.3	1.49			
6C	06/04/2003	140D	9	256.6	25.2	1.04			
6C	06/17/2004	140D	12	255.8	25.3	1.27			
6C	02/22/2005	FREE	8	340.2	19.0	3.67			
6C	04/06/2005	140D	10	259.8	24.9	1.37			
6C	10/17/2006	140D	12	242.8	26.8	1.33			



**BACKGROUND:**

[Sections 6 & 6S combined]

The intersections at 85<sup>th</sup>, 97<sup>th</sup>, Hadley and 99<sup>th</sup> all are allowed to double cycle (cycle in half the time) at this time of day.

**EVALUATION OF 2006 RUNS 6C-PM**

{S6C has 8 inter. Over 1.3 mi.}

**GOOD -FAIR**

These results were fairly consistent with the previous years results. Most of the difficulty is getting through Santa Fe and 95<sup>th</sup> Street where there is heavy E/W traffic.

Compared to the FREE WV runs motorists are saving almost 100 seconds (over 1 1/2 minute) of TT and over 2.3 stops per average run.

G.Grimes, SCE

## SECTION REPORT - OPTCS RUNS

### Section 9NL 'METCALF/BLEU VALLEY PKWY' (115th to 123rd)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
9NL	8/16/1995	136*	9	137.8	23.8	1.00	1@88,8@95	AM	NB
9NL	8/18/1995	FREE	10	150.3	21.8	1.50	5@88,10@95		
9NL	5/21/1997	136F	19	120.4	27.2	0.84	3@88,13@95		
9NL	10/17/2001	150A	13	101.4	32.3	0.23	1@88,2@95		
9NL	11/21/2002	150A	9	117.7	27.8	0.33	3@95		
9NL	2/20/2003	FREE	10	219.1	14.9	1.70	7@88,10@95		
9NL	8/19/2004	140A	5	139.2	23.5	0.80	2@88,1@95,1@77		
9NL	8/20/2004	140A	5	99.0	33.1	0.20	1@95		
9NL	7/14/2005	140A	8	101.0	32.4	0.25	2@95		
9NL	7/15/2005	140A	13	72.8	44.9	0.00			
9NL	9/13/2006	140A	10	83.0	39.4	0.00			
9NL	8/16/1995	136*	9	94.2	34.7	0.67	3@87,3@95	AM	SB
9NL	8/18/1995	FREE	10	112.7	29.0	1.10	7@95,4@87		
9NL	5/21/1997	136F	19	108.6	30.1	0.89	9@95,8@87		
9NL	10/17/2001	150A	13	146.9	22.3	1.31	9@95,8@87		
9NL	11/21/2002	150A	9	152.4	21.5	1.44	5@95,8@87		
9NL	2/20/2003	FREE	12	141.4	23.1	1.42	11@95,6@87		
9NL	8/19/2004	140A	5	125.0	26.2	1.40	3@95,1@77,3@87		
9NL	8/20/2004	140A	6	78.0	42.0	0.17	1@77		
9NL	7/14/2005	140A	9	153.2	21.4	1.44	5@95,3@77,5@87		
9NL	7/15/2005	140A	14	85.1	38.4	0.64	2@95,7@87		
9NL	9/13/2006	140A	10	92.5	35.4	0.60	6@87		
9NL	8/16/1995	136*	9	130.4	25.6	0.94		AM	WV
9NL	8/18/1995	FREE	10	144.0	23.0	1.43			
9NL	5/21/1997	136F	19	118.2	27.7	0.84			
9NL	10/17/2001	150A	13	110.5	30.3	0.45			
9NL	11/21/2002	150A	9	124.6	26.5	0.56			
9NL	2/20/2003	FREE	10	203.5	16.6	1.64			
9NL	8/19/2004	140A	5	134.3	24.4	1.01			
9NL	8/20/2004	140A	5	91.8	36.1	0.19			
9NL	7/14/2005	140A	8	111.5	30.2	0.49			
9NL	7/15/2005	140A	13	75.3	43.6	0.13			
9NL	9/13/2006	140A	10	86.0	38.2	0.19			

#### BACKGROUND:

Late in 2003 two new signals were added in this section. They are 117<sup>th</sup> and 121<sup>st</sup>.

EVALUATION OF 2006 RUNS 9NL-AM  
{S9NL has 5 inter. Over 0.9 mi.}

#### GOOD

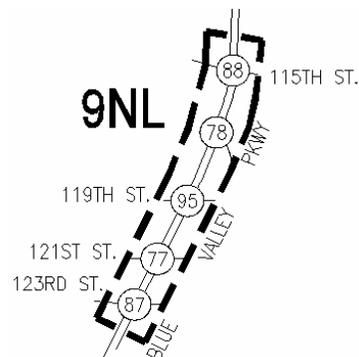
NB is by far the heaviest this time of day.

The results show some of the benefits of widening this section to 6 lanes in 2004.

After the 7/14/05 runs we added some lagging left turns and adjusted some offsets which resulted in the best NB runs and WV runs ever.

Compared to the FREE NB runs the motorists are saving close to 140 seconds of TT (about 2 ½ minutes) and 1.7 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 9E+ '119th St' (Antioch to Lamar)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
9E+	05/24/2000	150*	9	228.1	24.0	1.78	1@91,4@92,3@93,3@94,4@95,1@98	AM	EB
9E+	05/25/2000	FREE	8	294.3	18.6	5.25	2@91,5@92,1@93,9@94,7@95,5@96,5@97		
9E+	05/31/2000	150A	11	162.7	33.6	0.91	4@92,1@94,3@95,2@98		
9E+	06/27/2001	150A	14	196.4	27.9	1.07	11@95,1@96,3@97		
9E+	05/22/2002	150A	8	258.9	21.1	2.25	2@92,1@94,6@95,4@97,5@98		
9E+	10/09/2002	150A	10	175.1	31.2	0.70	3@95, 1@97,3@98		
9E+	11/19/2003	150A	14	166.4	32.9	0.79	3@94,4@95,2@97,2@98		
9E+	06/24/2004	150A	10	181.6	30.1	0.70	1@94,2@95,3@96,1@97		
9E+	07/22/2004	140A	7	161.9	33.8	0.57	1@92, 2@94,1@95		
9E+	07/27/2004	140A	12	143.2	38.2	0.42	5@98		
9E+	06/29/2005	140A	18	153.4	35.7	0.39	1@95, 6@98,		
9E+	07/06/2006	140A	11	154.6	35.4	0.27	1@95,1@96,1@98		
9E+	05/24/2000	150*	8	263.1	20.8	2.38	6@90,1@91,1@92,5@95,6@97	AM	WB
9E+	05/25/2000	FREE	7	333.4	16.4	4.14	6@90,1@92,2@93,5@94,5@95,5@96,5@97		
9E+	05/31/2000	150A	9	230.8	23.7	1.33	2@90,7@95,1@96,2@97		
9E+	06/27/2001	150A	14	225.4	24.3	1.43	2@90,8@95,4@96,6@97		
9E+	05/22/2002	150A	7	258.3	21.2	2.00	3@90,1@91,4@95,3@96,3@97		
9E+	10/09/2002	150A	9	211.4	25.9	1.56	2@90, 1@93, 6@95,2@96,3@97		
9E+	11/19/2003	150A	13	236.9	23.1	2.00	4@90,1@93,1@94,7@95,5@96,8@97		
9E+	06/24/2004	150A	9	243.9	22.4	1.67	1@90,1@93,1@94,6@95,3@96,3@97		
9E+	07/22/2004	140A	6	152.8	35.8	0.67	2@95, 2@97		
9E+	07/27/2004	140A	11	187.6	29.2	1.09	3@90, 1@93,1@94,4@95,3@96		
9E+	06/29/2005	140A	15	154.6	35.4	0.33	5@97,		
9E+	07/06/2006	140A	11	173.1	31.6	0.82	1@93,3@95,5@97		
9E+	05/24/2000	150*	8	238.4	23.0	1.96		AM	WV
9E+	05/25/2000	FREE	7	305.8	18.0	4.92			
9E+	05/31/2000	150A	9	182.7	30.7	1.03			
9E+	06/27/2001	150A	14	205.2	26.8	1.18			
9E+	05/22/2002	150A	7	258.7	21.1	2.17			
9E+	10/09/2002	150A	9	186.2	29.6	0.96			
9E+	11/19/2003	150A	13	180.3	31.0	1.03			
9E+	06/24/2004	150A	9	193.9	28.6	0.89			
9E+	07/22/2004	140A	6	160.1	34.2	0.59			
9E+	07/27/2004	140A	11	152.0	36.4	0.55			
9E+	06/29/2005	140A	15	153.6	35.6	0.38			
9E+	07/06/2006	140A	11	158.3	34.6	0.38			

#### BACKGROUND:

On 5/24/00, Antioch and Lowell were not coordinated. From 5/31/00 on, all of the intersections from Antioch through Lamar were coordinated. .

EVALUATION OF 2006 RUNS 9E+-AM  
{S9E+ has 10 inter. Over 1.7 mi.}

#### GOOD

EB, the heaviest direction, the TT runs were pretty good, at least partly due to the widening project in '03.

In 2004 we reduced the cycle length a little and extended the time that this new cycle length stays in control, (thus reducing the transition time and helping to reduce the number of stops).

Compared to the FREE WV runs the motorists are saving about 150 seconds (2 1/2 minutes) of TT and over 4.5 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 9E+ '119th St' (Antioch to Lamar)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
9E+	05/23/2000	140*	6	208.3	26.3	1.17	1@93,2@94,2@95,1@96,1@98	PM	EB
9E+	05/25/2000	FREE	7	323.3	16.9	4.43	3@91,2@92,4@93,4@94,7@95,2@96,4		
9E+	05/31/2000	160A	9	185.6	29.5	0.88	2@95,1@96,2@97,3@98		
9E+	06/07/2001	160A	8	190.6	28.7	0.88	1@92,1@95,3@96,1@97,1@98		
9E+	06/26/2001	160A	11	145.4	37.6	0.18	1@92,1@95		
9E+	10/09/2002	160A	12	180.1	30.4	0.92	2@91,3@93,2@95,2@96,2@97		
9E+	11/18/2003	160A	10	174.2	31.4	0.60	1@92,1@93,2@94,2@95		
9E+	03/25/2004	160A	8	169.8	32.2	0.38	1@94,2@96		
9E+	07/07/2004	140A	9	255.8	21.4	1.78	4@95,1@96,9@97,2@98		
9E+	07/07/2005	160A	10	176.6	31.0	0.30	3@95		
9E+	12/07/2006	160A	7	217.1	25.2	0.71	5@95		
9E+	05/23/2000	140*	7	375.9	14.6	3.57	12@90,1@91,7@95,2@96,3@97	PM	WB
9E+	05/25/2000	FREE	7	648.6	8.4	6.57	5@90,2@92,3@93,4@94,7@95,13@96,1		
9E+	05/31/2000	160A	7	293.6	18.6	2.43	6@90,5@95,5@97,1@96		
9E+	06/07/2001	160A	8	389.4	14.1	3.38	12@90,1@93,3@94,7@95,3@96,1@97		
9E+	06/26/2001	160A	10	322.3	17.0	3.20	4@90,1@94,12@95,12@96,3@97		
9E+	10/09/2002	160A	13	293.1	18.7	2.54	13@90,9@95,8@96,3@97		
9E+	11/18/2003	160A	12	389.3	14.1	2.83	11@90,1@91,6@95,12@96,4@97		
9E+	03/25/2004	160A	8	238.8	22.9	2.00	1@90,4@95,9@96,2@97		
9E+	07/07/2004	140A	8	302.5	18.1	1.63	6@90, 4@95,3@96		
9E+	07/07/2005	160A	10	335.9	10.8	2.90	9@90,2@94,3@95,5@96,7@97		
9E+	12/07/2006	160A	10	352.2	15.5	2.50	8@90,1@92,1@93,1@94,3@95,3@96,7@97		
9E+	05/23/2000	140*	6	296.2	20.1	2.43		PM	WV
9E+	05/25/2000	FREE	7	493.9	12.5	5.55			
9E+	05/31/2000	160A	7	242.2	23.8	1.69			
9E+	06/07/2001	160A	8	306.2	20.2	2.33			
9E+	06/26/2001	160A	10	248.3	25.6	1.94			
9E+	10/09/2002	160A	12	245.8	23.6	1.86			
9E+	11/18/2003	160A	10	315.4	20.0	2.06			
9E+	03/25/2004	160A	8	215.1	26.1	1.44			
9E+	07/07/2004	140A	8	286.5	19.2	1.68			
9E+	07/07/2005	160A	10	281.1	17.8	2.01			
9E+	12/07/2006	160A	7	305.8	18.9	1.89			

#### BACKGROUND:

On 7/07/04 we tried a 140 second cycle pattern. It would help us coordinate with the Metcalf section as that is the cycle length that it runs. However because of the WB problem at Antioch the results were worse. So we are currently running the 160 second cycle pattern.

EVALUATION OF 2006 RUNS 9E+-PM  
{S9E+ has 10 inter. Over 1.7 mi.}

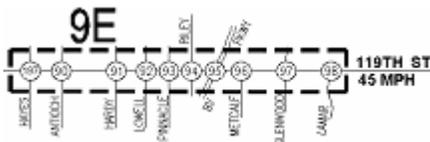
#### GOOD - FAIR

WB is the heaviest direction this time of day.

With the constant growth of traffic in this section, these results are fairly good. The widening of 119<sup>th</sup> helped in 2004 but now Antioch WB, with just two through lanes, is the main problem.

Compared to the FREE WV runs the motorists are saving about 190 seconds (over 3 minutes) of TT and over 3.6 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 9A 'ANTIOCH' (119th to 127th)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
9A	09/09/1999	160	14	112.7	32.2	0.50	7@90	AM	NB
9A	04/25/2000	160	10	106.8	33.9	0.40	3@90,1@89		
9A	05/25/2000	FREE	11	173.9	20.8	1.64	10@90,6@89,2@172		
9A	05/31/2000	150A	15	102.3	35.4	0.40	4@90,1@89,1@172		
9A	08/01/2001	150A	13	112.5	32.2	0.77	7@90,2@89,1@172		
9A	09/11/2002	150	9	140.7	25.8	0.67	3@89,3@90		
9A	05/28/2003	150A	10	99.7	36.3	0.10	1@90		
9A	06/23/2004	150A	10	103.6	35.0	0.00			
9A	07/28/2004	140A	8	111.9	32.4	0.13	1@90		
9A	07/21/2005	140A	9	105.4	34.4	0.11	1@172		
9A	04/28/2006	140A	7	152.9	23.7	0.86	4@90,1@89,1@172		
9A	09/09/1999	160	15	99.3	36.5	0.47	3@89,4@171	AM	SB
9A	04/25/2000	160	10	95.4	38.0	0.40	2@89,1@171,1@172		
9A	05/25/2000	FREE	11	101.4	35.8	0.55	1@89,5@171		
9A	05/31/2000	150A	15	93.2	38.9	0.20	2@89,1@171		
9A	08/01/2001	150A	13	99.0	36.6	0.31	1@89,1@172,2@171		
9A	09/11/2002	150	8	84.9	42.7	0.00			
9A	05/28/2003	150A	11	84.6	42.8	0.00			
9A	06/23/2004	150A	10	86.8	41.8	0.10	1@171		
9A	07/28/2004	140A	8	82.4	44.0	0.00			
9A	07/21/2005	140A	9	85.2	42.5	0.00			
9A	04/28/2006	140A	7	92.9	39.2	0.14	1@171		
9A	09/09/1999	160	14	110.5	32.9	0.50		AM	WV
9A	04/25/2000	160	10	104.9	34.6	0.40			
9A	05/25/2000	FREE	11	161.8	23.3	1.46			
9A	05/31/2000	150A	15	100.8	36.0	0.37			
9A	08/01/2001	150A	13	108.3	33.6	0.63			
9A	09/11/2002	150	8	131.4	28.6	0.56			
9A	05/28/2003	150A	10	97.2	37.4	0.08			
9A	06/23/2004	150A	10	101.1	36.0	0.01			
9A	07/28/2004	140A	8	107.5	34.1	0.11			
9A	07/21/2005	140A	9	102.5	35.6	0.09			
9A	04/28/2006	140A	7	144.0	26.0	0.75			

#### BACKGROUND:

We started coordinating this section in 1999.

In 2000 we linked the E/W coordination of Section 9E on 119<sup>th</sup> St with this section which is why we changed the cycle length.

EVALUATION OF 2006 RUNS 9A-AM  
{S9A has 4 inter. Over 1 mi. }

#### GOOD -FAIR

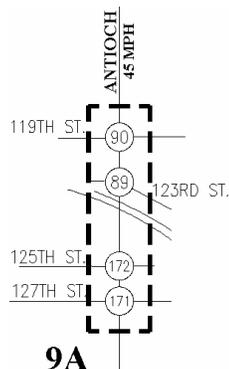
In 2004 we reduced the cycle length mainly for the 119<sup>th</sup> & Metcalf corridor. The TT runs were hurt a little here but overall delay was reduced.

NB, which is by far the heaviest direction this time of day, the results were not as good. We will investigate this in 2007.

SB the results were still good with only one stop.

Compared to the FREE WV runs motorists are saving about 20 seconds of TT and about 0.7 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 9A 'ANTIOCH' (119th to 127th)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
9A	07/28/1999	FREE	11	116.2	31.2	0.91	2@90,6@89,2@172	PM	NB
9A	10/07/1999	FREE	10	143.1	25.3	1.30	5@90,5@89,3@172		
9A	04/18/2000	FREE	9	182.4	19.9	2.11	7@90,6@89,6@172		
9A	05/31/2000	160A	10	132.4	27.4	0.70	2@90,5@89		
9A	07/19/2001	160A	11	116.4	31.1	0.73	8@89		
9A	09/12/2002	160A	10	192.9	18.8	1.20	6@90,6@89		
9A	09/18/2002	160A	9	108.7	33.3	0.67	6@89		
9A	06/04/2003	160A	10	135.2	26.8	1.00	1@90,9@89		
9A	08/27/2004	160A	6	134.3	27.0	1.00	6@89		
9A	07/21/2005	160A	9	124.0	29.2	0.78	6@89,1@172		
9A	05/24/2006	160A	10	157.6	23.0	1.20	5@90,7@89		
9A	07/28/1999	FREE	11	108.7	33.3	0.73	3@89,2@172,3@171	PM	SB
9A	10/07/1999	FREE	10	113.8	31.8	0.80	3@89,1@172,4@171		
9A	04/18/2000	FREE	9	117.0	31.0	0.89	1@89,4@172,3@171		
9A	05/31/2000	160A	10	87.8	41.3	0.00			
9A	07/19/2001	160A	11	86.0	42.1	0.00			
9A	09/12/2002	160A	9	109.2	33.2	0.33	2@89,1@171		
9A	09/18/2002	160A	9	88.4	41.0	0.00			
9A	06/04/2003	160A	9	99.3	36.5	0.22	1@89,1@171		
9A	08/27/2004	160A	9	88.7	40.9	0.00			
9A	07/21/2005	160A	9	95.6	37.9	0.11	1@171		
9A	05/24/2006	160A	10	88.7	40.9	0.00			
9A	07/28/1999	FREE	11	111.2	32.6	0.79		PM	WB
9A	10/07/1999	FREE	10	123.7	29.6	0.97			
9A	04/18/2000	FREE	9	139.0	27.2	1.30			
9A	05/31/2000	160A	10	102.8	36.6	0.24			
9A	07/19/2001	160A	11	96.2	38.4	0.24			
9A	09/12/2002	160A	9	137.4	28.3	0.62			
9A	09/18/2002	160A	9	95.2	38.4	0.23			
9A	06/04/2003	160A	9	111.4	33.2	0.48			
9A	08/27/2004	160A	6	103.2	36.5	0.32			
9A	07/21/2005	160A	9	104.6	35.2	0.32			
9A	05/24/2006	160A	10	112.2	34.8	0.41			

**BACKGROUND:**  
 We started coordinating this section in 1999. The new signals at 125<sup>th</sup> & Antioch in '99 and at 119<sup>th</sup> & Hayes in 2000 were the reason.

**EVALUATION OF 2006 RUNS**      9A-PM  
 {S9A has 4 inter. Over 1 mi. }

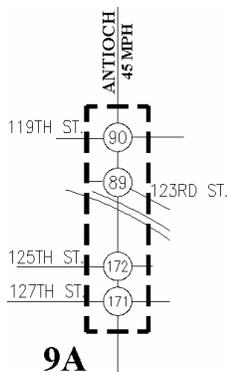
**GOOD - FAIR**

SB is the heaviest direction this time of day. SB the runs were good with nostops. NB the results were not as good as last year. No.89 (123<sup>rd</sup> St) has a heavy WB movement this time of day.

These results do not show the problem at 119<sup>th</sup> & Antioch that the SB and the WB queues have clearing the intersection. This problem can only be solved with more lanes and the construction is scheduled in 2008.

Compared to the latest FREE SB runs motorists are saving about 30 seconds of TT and almost 1 stop per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS

### Section 9R '119th St' (Nall to Roe)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
9R	02/20/1997	FREE	12	61.4	29.3	0.42	1@192,4@100	AM	EB
9R	03/07/1997	90A	12	44.9	40.1	0.00			
9R	10/09/1998	100A	8	49.1	36.6	0.00			
9R	08/31/1999	100A	12	60.2	29.9	0.42	2@191,3@100		
9R	10/19/1999	120A	14	52.1	34.6	0.21	3@100		
9R	05/02/2000	FREE	11	69.9	25.8	0.64	2@192,5@100		
9R	12/07/2000	120A	14	59.6	30.2	0.42	1@192,5@100		
9R	10/24/2001	120A	14	65.1	27.6	0.57	1@192,7@100		
9R	10/02/2002	120A	12	57.6	31.3	0.42	5@100		
9R	05/06/2003	120A	14	61.8	29.1	0.50	1@192,6@100		
9R	12/03/2004	120A	10	49.1	36.7	0.10	1@100		
9R	08/09/2005	120A	10	62.3	28.9	0.40	1@192,3@100		
9R	08/10/2005	120A	11	54.6	32.9	0.09	1@100		
9R	09/20/2006	120A	10	48.1	37.4	0.00			
9R	02/20/1997	FREE	12	93.7	19.2	1.25	11@99,1@191,3@192	AM	WB
9R	03/07/1997	90A	12	51.8	34.7	0.17	2@99		
9R	10/09/1998	100A	8	54.3	33.2	0.25	2@99		
9R	08/31/1999	100A	11	60.1	30.0	0.36	4@99		
9R	10/19/1999	120A	14	57.1	31.5	0.21	3@99		
9R	05/02/2000	FREE	11	106.6	16.9	1.36	11@99,1@191,3@192		
9R	12/07/2000	120A	14	52.7	34.2	0.14	2@99		
9R	10/24/2001	120A	14	50.3	35.8	0.07	1@99		
9R	10/02/2002	120A	12	50.1	35.9	0.08	1@99		
9R	05/06/2003	120A	13	53.4	33.7	0.08	1@99		
9R	12/03/2004	120A	10	53.1	33.9	0.20	2@99		
9R	08/09/2005	120A	9	64.4	27.9	0.33	3@99		
9R	08/10/2005	120A	11	57.2	31.5	0.18	2@99		
9R	09/20/2006	120A	10	51.7	34.8	0.20	2@99		
9R	02/20/1997	FREE	12	79.4	23.7	0.88		AM	WB
9R	03/07/1997	90A	12	48.8	37.1	0.09			
9R	10/09/1998	100A	8	51.8	34.9	0.13			
9R	08/31/1999	100A	11	60.2	29.9	0.39			
9R	10/19/1999	120A	14	54.7	33.0	0.21			
9R	05/02/2000	FREE	11	88.8	21.2	1.01			
9R	12/07/2000	120A	14	56.1	32.2	0.28			
9R	10/24/2001	120A	14	57.3	32.0	0.31			
9R	10/02/2002	120A	12	53.6	33.7	0.24			
9R	05/06/2003	120A	13	57.3	31.6	0.28			
9R	12/03/2004	120A	10	51.2	35.2	0.15			
9R	08/09/2005	120A	9	63.5	28.4	0.36			
9R	08/10/2005	120A	11	56.1	32.1	0.14			
9R	09/20/2006	120A	10	50.1	36.0	0.11			

**BACKGROUND:**

This section includes Nall, Rosewood, Hawthorne and Roe. In '99 we had to increase the cycle length in order to clear the heavy NB queues at Nall.

**EVALUATION OF 2006 RUNS 9R-AM**  
{S9R has 4 inter. Over 0.5 mi.}

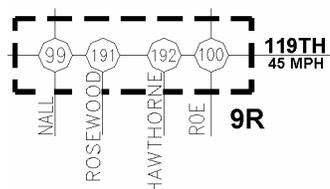
**GOOD**

This year we made the WBLT at Roe lag which helped the TT runs. This helped the EB and WB runs.

WB, the heaviest direction this time of day, the results were good as well as EB.

Compared to the 2000 FREE WB runs motorists are saving about 55 seconds of TT and almost 1.2 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 9R '119th St' (Nall to Roe)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
9R	02/27/1997	FREE	15	72.9	24.7	1.00	2@191,6@192,7@100	PM	EB
9R	03/06/1997	120A	19	50.8	35.4	0.21	1@191,3@100		
9R	07/09/1998	120A	15	56.2	32.0	0.13	2@100		
9R	07/16/1998	FREE	8	111.	16.2	1.63	2@191,4@192,7@100		
9R	09/21/1999	120A	12	55.1	32.7	0.08	1@100		
9R	04/27/2000	120A	13	56.1	32.1	0.15	1@191,1@100		
9R	07/17/2001	120A	12	55.0	32.7	0.17	2@100		
9R	11/01/2001	120A	12	60.3	29.9	0.42	1@191,1@192,3@100		
9R	05/16/2002	120A	10	72.6	24.8	0.30	3@100		
9R	06/12/2003	120A	13	52.8	34.1	0.00			
9R	12/02/2004	140A	11	56.5	31.8	0.18	1@191, 1@100		
9R	07/13/2005	140A	8	53.4	33.7	0.13	1@100		
9R	12/06/2006	140	7	61.0	29.5	0.14	1@100		
9R	12/07/2006	140	7	56.7	31.7	0.00			
9R	02/27/1997	FREE	15	109.	16.5	1.67	11@99,8@191,6@192	PM	WB
9R	03/06/1997	120A	20	66.6	27.0	0.85	8@99,7@191,2@192		
9R	07/09/1998	120A	15	69.7	25.8	0.60	7@99,2@191		
9R	07/16/1998	FREE	8	127.	14.1	1.88	8@99,6@191,1@192		
9R	09/21/1999	120A	11	71.9	25.0	0.82	8@99,1@191		
9R	04/27/2000	120A	13	74.8	24.1	0.62	7@99		
9R	07/17/2001	120A	11	76.3	23.6	1.00	11@99		
9R	11/01/2001	120A	12	81.8	22.0	0.92	10@99,1@191		
9R	05/16/2002	120A	10	83.4	21.6	1.10	9@99,2@191		
9R	06/12/2003	120A	12	76.2	23.6	1.00	11@99,1@191		
9R	12/02/2004	140A	11	99.2	18.1	1.09	10@99,2@191		
9R	07/13/2005	140A	8	98.3	18.3	1.25	7@99,2@191,1@192		
9R	12/06/2006	140	7	110.	16.2	1.00	7@99		
9R	12/07/2006	140	7	76.1	23.6	0.57	4@99		
9R	02/27/1997	FREE	15	89.2	21.0	1.30		PM	WV
9R	03/06/1997	120A	19	58.5	31.3	0.52			
9R	07/09/1998	120A	15	63.0	28.9	0.37			
9R	07/16/1998	FREE	8	119.	15.1	1.76			
9R	09/21/1999	120A	11	63.5	28.8	0.45			
9R	04/27/2000	120A	13	65.5	28.1	0.39			
9R	07/17/2001	120A	11	65.2	28.3	0.57			
9R	11/01/2001	120A	12	70.6	26.1	0.66			
9R	05/16/2002	120A	10	78.3	23.1	0.72			
9R	06/12/2003	120A	12	64.0	29.1	0.48			
9R	12/02/2004	140A	11	77.4	25.1	0.63			
9R	07/13/2005	140A	8	77.2	25.5	0.72			
9R	12/06/2006	140	7	84.0	23.4	0.54			
9R	12/07/2006	140	7	65.7	28.0	0.26			

**BACKGROUND:**

In 2004 we had to increase the cycle length due to increased traffic, mostly southbound.

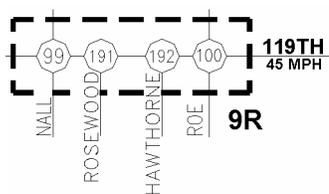
**EVALUATION OF 2006 RUNS**      9R-PM  
 {S9R has 4 inter. Over 0.5 mi. }

**GOOD**

EB, the heaviest direction this time of day, the results were good. On 12/07/06 we adjusted the timings and allowed the WBLT to lag at Nall. This produced the improved results, mostly for WB.

Compared to the FREE WV runs motorists are saving over 50 seconds of TT and over 1.5 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 9W '119th St' (Switzer to US-69)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
9W	06/09/1999	110A	16	60.0	26.3	0.31	3@84,1@85,1@86	AM	EB
9W	08/11/1999	110A	24	46.1	34.2	0.08	1@84,1@85		
9W	04/20/2000	110A	12	50.4	31.2	0.08	1@84		
9W	12/07/2000	FREE	14	151.4	10.4	2.57	15@84,12@85,9@86		
9W	05/04/2001	110A	13	62.3	25.3	0.31	1@84,2@85,1@86		
9W	09/11/2001	120A	12	80.8	19.5	1.00	4@84,6@85,2@86		
9W	09/14/2001	150A	21	52.9	29.8	0.10	2@84		
9W	05/22/2002	150A	9	97.2	16.2	0.67	2@84,2@85,2@86		
9W	11/05/2003	140A	18	51.7	30.5	0.17	1@84,2@86		
9W	07/22/2004	140A	7	65.9	23.9	0.43	2@84,1@85		
9W	07/27/2004	140A	12	45.1	34.9	0.00			
9W	06/22/2005	120A	5	43.6	36.1	0.00			
9W	07/07/2005	140A	8	45.3	34.8	0.00			
9W	04/12/2006	140A	7	86.0	18.3	0.43	3@84		
9W	04/14/2006	140A	8	46.3	34.0	0.00			
9W	06/09/1999	110A	15	46.2	34.1	0.40	4@83,2@85	AM	WB
9W	08/11/1999	110A	23	42.5	37.0	0.13	3@85		
9W	04/20/2000	110A	12	42.8	36.8	0.08	1@85		
9W	12/07/2000	FREE	13	82.2	19.2	1.54	6@83,8@84,6@85		
9W	05/04/2001	110A	13	42.2	37.4	0.00			
9W	09/11/2001	120A	10	45.5	34.6	0.10	1@85		
9W	09/14/2001	150A	19	44.5	35.4	0.11	2@85		
9W	05/22/2002	150A	8	43.5	36.2	0.00			
9W	11/05/2003	140A	18	44.5	35.4	0.06	1@85		
9W	07/22/2004	140A	6	91.3	17.2	1.17	1@83,7@84		
9W	07/27/2004	140A	10	37.3	42.2	0.00			
9W	06/22/2005	120A	5	77.4	20.4	0.80	2@84,2@85		
9W	07/07/2005	140A	8	40.6	38.8	0.00			
9W	04/12/2006	140A	7	40.0	39.4	0.00			
9W	04/14/2006	140A	8	40.5	38.9	0.00			
9W	06/09/1999	110A	15	57.3	27.8	0.33		AM	WV
9W	08/11/1999	110A	23	45.4	34.8	0.09			
9W	04/20/2000	110A	12	48.9	32.3	0.08			
9W	12/07/2000	FREE	13	137.7	12.1	2.37			
9W	05/04/2001	110A	13	58.3	27.7	0.25			
9W	09/11/2001	120A	10	73.8	22.5	0.82			
9W	09/14/2001	150A	19	51.2	30.9	0.10			
9W	05/22/2002	150A	8	86.6	20.2	0.54			
9W	11/05/2003	140A	18	50.3	31.4	0.15			
9W	07/22/2004	140A	6	72.1	22.3	0.61			
9W	07/27/2004	140A	10	43.2	36.7	0.00			
9W	06/22/2005	120A	5	67.4	25.0	0.56			
9W	07/07/2005	140A	8	44.4	35.5	0.00			
9W	04/12/2006	140A	7	77.7	22.1	0.35			
9W	04/14/2006	140A	8	45.2	34.9	0.00			

**BACKGROUND:**

At US-69 E.(#86) to go NB there are very large EBLT queues. In 2003 construction widened the EBLT here and the SB off ramp.

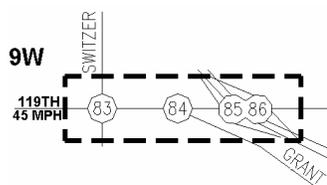
EVALUATION OF 2006 RUNS 9W-AM  
{S9W has 4 inter. Over 0.4 mi.}

**GOOD**

On 4/12/06 there were heavy back ups on US-69 NB and EB was backing up from Antioch that is why the EB runs were so poor. On 4/14/06 there were no backups either on US-69 NB or 119<sup>th</sup> EB from Antioch, that is why the runs were better. This just shows why the improvement projects are needed on US-69 & I-435 and on 119<sup>th</sup> (the widening from Lowell to US-69).

Compared to the FREE EB runs motorists are saving over 100 seconds (over 1½ minutes) of TT and almost 2.6 stops per average run.

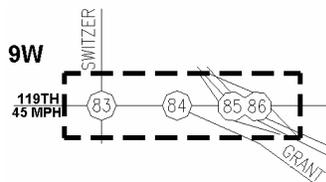
G.Grimes, SCE



## SECTION REPORT - OPTCS

### Section 9W '119th St' (Switzer to US-69)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP	TIME OF DAY	DIRECTION
9W	04/19/1994	90A	17	52.3	29.9	0.29	5@84	PM	EB
9W	07/13/1995	90A	18	51.9	30.4	0.33	2@84,1@85,3@86		
9W	07/26/1995	FREE	15	73.5	21.4	1.27	6@84,11@85,2@86		
9W	10/08/1996	90A	17	49.5	31.8	0.24	3@84,1@86		
9W	12/03/1997	90A	17	45.6	34.5	0.24	2@84,1@85,1@86		
9W	08/25/1998	90A	18	53.7	29.3	0.50	6@84,1@85,2@86		
9W	01/26/1999	90A	18	50.3	31.3	0.44	3@84,5@86		
9W	04/19/2000	110A	12	55.9	28.2	0.08	1@86		
9W	04/20/2000	120A	23	42.8	36.8	0.04	1@86		
9W	11/30/2000	FREE	14	104.8	15.0	1.71	7@84,13@85,4@86		
9W	06/07/2001	120W	9	51.2	30.8	0.33	3@86		
9W	06/26/2001	120A	13	51.5	30.6	0.15	1@85,1@86		
9W	05/14/2002	120A	16	48.3	32.6	0.31	1@84,2@85,2@86		
9W	11/07/2003	120A	15	42.0	37.5	0.00			
9W	02/26/2004	120A	14	39.8	39.6	0.00			
9W	06/22/2005	120A	5	43.6	36.1	0.00			
9W	07/06/2005	120A	13	42.0	37.5	0.00			
9W	04/11/2006	120A	11	44.7	35.2	0.00			
9W	04/19/1994	90A	16	58.2	26.9	0.69	6@83,5@84	PM	WB
9W	07/13/1995	90A	18	50.4	31.2	0.39	5@83,2@84		
9W	07/26/1995	FREE	15	67.1	23.5	1.20	6@83,8@84,4@85		
9W	10/08/1996	90A	17	46.9	33.6	0.35	2@83,3@84,1@85		
9W	12/03/1997	90A	17	51.8	30.4	0.41	2@83,5@84		
9W	08/25/1998	90A	18	55.1	28.6	0.50	5@83,3@84,1@85		
9W	01/26/1999	90A	19	51.9	30.4	0.42	5@83,3@84		
9W	04/19/2000	110A	12	65.6	24.0	0.50	2@83,2@84,2@85		
9W	04/20/2000	120A	23	51.3	30.7	0.22	4@84,1@85		
9W	11/30/2000	FREE	15	92.3	17.1	1.73	8@83,9@84,9@85		
9W	06/07/2001	120W	8	82.0	19.2	0.63	3@84,2@85		
9W	06/26/2001	120A	11	60.6	26.0	0.36	1@83,2@84,1@85		
9W	05/14/2002	120A	16	61.2	25.7	0.44	5@84,2@85		
9W	11/07/2003	120A	14	51.6	30.5	0.14	2@85		
9W	02/26/2004	120A	14	59.9	26.3	0.29	1@84,3@85		
9W	06/22/2005	120A	5	77.4	20.4	0.80	2@84,2@85		
9W	07/06/2005	120A	13	46.6	33.8	0.00			
9W	04/11/2006	120A	11	49.9	31.6	0.09	1@84		
9W	04/19/1994	90A	16	55.8	28.1	0.52		PM	WV
9W	07/13/1995	90A	18	51.0	30.9	0.36			
9W	07/26/1995	FREE	15	69.5	22.7	1.22			
9W	10/08/1996	90A	17	47.9	32.9	0.30			
9W	12/03/1997	90A	17	49.5	32.0	0.34			
9W	08/25/1998	90A	18	54.2	29.0	0.50			
9W	01/26/1999	90A	18	51.3	30.7	0.43			
9W	04/19/2000	110A	12	62.1	25.5	0.35			
9W	04/20/2000	120A	23	48.2	33.0	0.15			
9W	11/30/2000	FREE	14	96.8	16.3	1.72			
9W	06/07/2001	120W	8	70.9	23.4	0.52			
9W	06/26/2001	120A	12	57.4	27.6	0.29			
9W	05/14/2002	120A	16	56.6	28.2	0.39			
9W	11/07/2003	120A	14	48.2	33.0	0.09			
9W	02/26/2004	120A	14	53.2	30.7	0.19			
9W	06/22/2005	120A	5	67.4	25.0	0.56			
9W	07/06/2005	120A	13	45.3	34.9	0.00			
9W	04/11/2006	120A	11	48.4	32.6	0.06			



**EVALUATION OF 2006 RUNS 9W-PM**  
 {S9W has 4 inter. Over 0.4 mi.}

**GOOD**

WB is the heaviest this time of day. WB the results were good with only one stop in eleven runs.

The 2000 FREE travel time results were worse showing the effect of increased traffic.

Compared to the 2000 FREE WV runs motorists are saving about 50 seconds of TT and about 1.7 stops per average run.

G.Grimes, SCE

## SECTION REPORT - OPTCS RUNS

### Section 9RN 'NALL' (115th to 119th)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
9RN	10/24/2001	120A	9	50.7	37.1	0.00		AM	NB
9RN	10/31/2001	120A	14	47.0	40.0	0.00			
9RN	01/23/2002	FREE	11	95.9	19.6	1.27	9@195,5@196		
9RN	02/12/2003	120A	19	54.4	34.7	0.11	1@195,1@196		
9RN	12/07/2004	120A	10	48.8	38.7	0.10	1@196		
9RN	07/12/2005	120A	12	46.5	40.5	0.00			
9RN	09/07/2006	120A	11	53.0	35.5	0.18	1@196,1@195		
9RN	10/24/2001	120A	9	149.6	12.6	1.89	9@99,8@196	AM	SB
9RN	10/31/2001	120A	13	77.6	24.2	0.92	10@99,2@196		
9RN	01/23/2002	FREE	11	110.2	17.1	1.45	6@196,10@99		
9RN	02/12/2003	120A	18	94.2	20.0	1.06	6@196,13@99		
9RN	12/07/2004	120A	10	83.2	22.7	0.70	7@99		
9RN	07/12/2005	120A	11	88.2	21.3	0.82	9@99		
9RN	09/07/2006	120A	10	91.7	20.5	1.10	3@196,8@99		
9RN	10/24/2001	120A	9	72.0	31.9	0.41		AM	WV
9RN	10/31/2001	120A	13	53.6	36.6	0.20			
9RN	01/23/2002	FREE	11	104.6	18.1	1.38			
9RN	02/12/2003	120A	18	63.0	31.5	0.31			
9RN	12/07/2004	120A	10	56.2	35.3	0.23			
9RN	07/12/2005	120A	11	57.6	35.4	0.22			
9RN	09/07/2006	120A	10	63.3	31.5	0.42			

#### BACKGROUND:

After the 10/24/01 runs we studied this section and then made the SBLT lagging at 117<sup>th</sup>.

EVALUATION OF 2006 RUNS 9RN –AM  
{S9RN has 3 inter. Over 0.5 mi.}

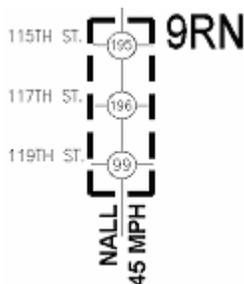
#### GOOD

By making the SBLT lagging at 117<sup>th</sup> and adjusting the timings accordingly, we were able to greatly help the SB runs and improve the NB a little.

NB is the heaviest direction this time of day. This year's results NB were the best ever.

Compared to the FREE WV runs, motorists are saving over 40 seconds of TT and about 1.0 stop per average run.

G.Grimes, SCE



**SECTION REPORT - OPTCS RUNS**  
**Section 9RN 'NALL' (115th - 119th)**

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
9RN	10/29/2001	120A	9	99.2	19.0	1.11	6@195,4@196	PM	NB
9RN	10/30/2001	120A	11	85.0	22.1	0.82	1@195,8@196		
9RN	11/01/2001	120A	9	84.1	22.4	0.89	8@196		
9RN	01/17/2002	FREE	13	106.3	17.7	1.38	7@195,11@196		
9RN	02/12/2003	120A	11	90.2	20.9	1.00	11@196		
9RN	12/08/2004	140A	9	88.8	21.3	0.89	8@196		
9RN	07/19/2005	140A	10	93.9	20.1	0.90	9@196		
9RN	10/09/2006	140A	10	73.8	25.5	0.40	4@195		
9RN	11/09/2006	140	8	78.6	23.9	0.50	4@196		
9RN	10/29/2001	120A	9	93.1	20.2	0.67	3@196,3@99	PM	SB
9RN	10/30/2001	120A	12	89.1	21.1	0.75	1@196,8@99		
9RN	11/01/2001	120A	9	61.4	30.6	0.11	1@99		
9RN	01/17/2002	FREE	14	110.3	17.1	1.36	8@196,11@99		
9RN	02/12/2003	120A	11	59.5	31.8	0.18	2@99		
9RN	12/08/2004	140A	9	69.7	27.1	0.33	1@196,2@99		
9RN	07/19/2005	140A	9	62.6	30.2	0.22	2@99		
9RN	10/09/2006	140A	9	89.4	21.0	1.00	9@99		
9RN	11/09/2006	140	8	113.3	16.6	1.38	1@196,10@99		
9RN	10/29/2001	120A	9	95.5	19.7	0.84		PM	WV
9RN	10/30/2001	120A	11	88.0	21.4	0.77			
9RN	11/01/2001	120A	9	70.3	27.4	0.41			
9RN	01/17/2002	FREE	13	108.7	17.3	1.37			
9RN	02/12/2003	120A	11	67.7	28.9	0.40			
9RN	12/08/2004	140A	9	74.8	25.5	0.48			
9RN	07/19/2005	140A	9	72.4	27.0	0.44			
9RN	10/09/2006	140A	9	82.6	23.0	0.74			
9RN	11/09/2006	140	8	98.1	19.8	1.00			

**EVALUATION OF 2006 RUNS 9RN –PM**  
 {S9RN has 3 inter. Over 0.5 mi. }

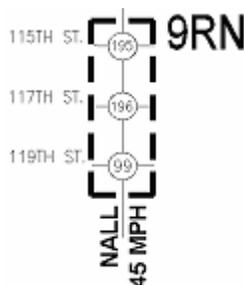
**GOOD - FAIR**

SB is the heaviest this time of day and definitely growing. The results are poorer, especially for the last set of runs that we did in 2006. We will be investigating this in 2007.

SB at 119<sup>th</sup> apparently needs more lanes or capacity to clear here in the PM peak.

Compared to the FREE WV runs, motorists are saving over 10 seconds of TT and almost 0.4 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 10 'W. 103RD ST' (US69 W. to Mastin)

SECTIO	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
10	10/14/1992	80W	11	35.8	27.4	0.36	2@101E,2@102	AM	EB
10	06/24/1993	80W	12	31.4	31.9	0.08	1@101E		
10	04/05/1994	80W	23	38.7	25.3	0.52	4@101E,8@102		
10	06/14/1995	FREE	17	48.2	20.4	1.00	6@101E,11@102		
10	06/28/1995	80W	11	29.0	33.8	0.09	1@102		
10	06/26/1996	80W	18	28.3	34.6	0.06	1@101E		
10	06/20/1997	80W	18	28.8	34.1	0.06	1@101E		
10	07/22/1998	80W	15	30.4	32.5	0.13	1@101E,1@102		
10	10/05/1999	80W	13	32.5	30.1	0.15	2@101E		
10	02/22/2000	80W	15	32.5	30.2	0.13	2@102		
10	03/01/2000	FREE	10	59.7	16.4	0.80	2@101E,6@102		
10	08/22/2001	80W	11	32.1	30.5	0.00			
10	09/18/2002	80W	11	32.2	30.5	0.00			
10	05/01/2003	80W	12	29.8	32.9	0.00			
10	06/29/2004	80W	12	33.8	29.0	0.17	2@102		
10	08/11/2005	80W	12	31.1	31.5	0.00			
10	11/08/2006	120	10	29.0	33.8	0.00			
10	10/14/1992	80W	10	36.6	26.8	0.30	2@101W,1@101E	AM	WB
10	06/24/1993	80W	10	32.8	30.3	0.30	2@101W,1@101E		
10	04/05/1994	80W	23	34.0	28.9	0.26	3@101W,3@101E		
10	06/14/1995	FREE	17	56.1	17.5	0.88	5@101W,10@101		
10	06/28/1995	80W	11	28.5	34.5	0.18	1@101W,1@101E		
10	06/26/1996	80W	18	31.9	30.7	0.17	3@101W		
10	06/20/1997	80W	18	32.0	30.6	0.17	2@101W,1@101E		
10	07/22/1998	80W	15	28.5	34.4	0.07	1@101W		
10	10/05/1999	80W	13	29.1	33.6	0.08	1@101W		
10	02/22/2000	80W	15	30.3	32.3	0.07	1@101W		
10	03/01/2000	FREE	11	40.7	24.1	0.36	2@101W,2@101E		
10	08/22/2001	80W	12	30.8	31.8	0.08	1@101W		
10	09/18/2002	80W	11	30.3	32.4	0.00			
10	05/01/2003	80W	12	29.3	33.4	0.08	1@101W		
10	06/29/2004	80W	12	31.6	31.0	0.08	1@101E		
10	08/11/2005	80W	12	29.2	33.6	0.08	1@101W		
10	11/08/2006	120	10	30.9	31.7	0.10	1@101E		
10	10/14/1992	80W	10	36.2	27.1	0.33		AM	WV
10	06/24/1993	80W	10	32.0	31.2	0.18			
10	04/05/1994	80W	23	36.9	26.7	0.42			
10	06/14/1995	FREE	17	51.2	19.3	0.95			
10	06/28/1995	80W	11	28.8	34.1	0.12			
10	06/26/1996	80W	18	29.7	33.1	0.09			
10	06/20/1997	80W	18	30.0	32.8	0.09			
10	07/22/1998	80W	15	29.7	33.2	0.11			
10	10/05/1999	80W	13	31.3	31.4	0.12			
10	02/22/2000	80W	15	31.7	31.0	0.11			
10	03/01/2000	FREE	10	52.6	19.3	0.64			
10	08/22/2001	80W	11	31.6	31.0	0.03			
10	09/18/2002	80W	11	31.5	31.2	0.00			
10	05/01/2003	80W	12	29.6	33.1	0.04			
10	06/29/2004	80W	12	33.0	29.8	0.14			
10	08/11/2005	80W	12	30.4	32.3	0.03			
10	11/08/2006	120	10	29.7	32.9	0.04			

**EVALUATION OF 2006 RUNS 10-AM**  
 {S10 has 3 inter. Over 0.3 mi.}

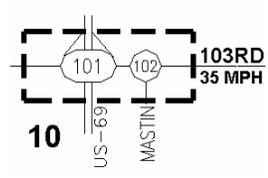
**GOOD**

The results this year were very similar to the previous years which included the best ever. The number of stops is close to zero and the average speed is close to the speed limit. (Note: We did these runs keeping in mind that coordination is most beneficial to the initial queues, especially in this arterial.)

We increased the cycle length here this year due to construction.

Compared to the FREE WV runs motorists are saving over 20 seconds of TT and 0.6 stops per average run.

G.Grimes, SCE



# SECTION REPORT - OPTCS

## Section 10 'W. 103RD ST' (US-69W to Mastin)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP	TIME OF DAY	DIRECTION
10	06/18/1991	96W	12	35.7	27.5	0.33	3@101E,1@102		EB
10	06/09/1992	96W	11	42.5	23.1	0.45	2@101E,3@102		
10	08/19/1993	96W	10	40.9	25.0	0.40	1@101E,3@102		
10	04/26/1994	96W	14	36.6	26.8	0.21	1@101E,2@102		
10	06/07/1995	96W	19	31.6	31.0	0.05	1@102		
10	06/13/1995	FREE	17	54.1	18.1	1.12	7@101E,12@102		
10	08/13/1996	96W	13	35.4	27.7	0.31	2@101E,2@102		
10	05/15/1997	96W	24	32.6	30.1	0.08	1@101E, 1@102		
10	11/05/1998	96W	19	33.2	29.5	0.11	2@102		
10	08/05/1999	96W	17	36.2	27.1	0.18	3@102		
10	05/16/2000	96W	17	33.5	29.2	0.18	1@101E,2@102		
10	05/18/2000	FREE	11	58.2	16.9	1.00	5@101E,6@102		
10	08/08/2001	96W	12	28.4	34.5	0.00			
10	05/14/2002	96W	13	32.1	30.6	0.08	1@102		
10	04/30/2003	96W	14	31.6	31.1	0.07	1@102		
10	06/01/2004	96W	12	27.9	35.1	0.00			
10	03/30/2005	FREE	12	55.6	17.6	0.83	2@101E,8@102		
10	08/09/2005	96W	11	26.9	36.4	0.00			
10	11/09/2006	96W	8	40.0	24.5	0.25	2@102		
10	06/18/1991	96W	12	39.9	24.6	0.42	5@101W	PM	WB
10	06/09/1992	96W	11	33.5	29.3	0.18	1@101W,1@101E		
10	08/19/1993	96W	10	36.8	28.2	0.20	1@101W,1@101E		
10	04/26/1994	96W	14	29.1	33.7	0.07	1@101E		
10	06/07/1995	96W	19	28.3	34.7	0.05	1@101W		
10	06/13/1995	FREE	17	48.8	20.1	0.76	4@101W,9@101E		
10	08/13/1996	96W	13	34.8	28.1	0.23	2@101W,1@101E		
10	05/15/1997	96W	23	33.7	29.1	0.09	1@101W, 1@101E		
10	11/05/1998	96W	19	33.6	29.2	0.16	2@101W,1@101E		
10	08/05/1999	96W	17	32.9	29.8	0.06	1@101W		
10	05/16/2000	96W	17	30.2	32.5	0.12	2@101W		
10	05/18/2000	FREE	11	50.7	19.3	0.64	1@101W,6@101E		
10	08/08/2001	96W	12	30.4	32.2	0.00			
10	05/14/2002	96W	13	29.9	32.8	0.00			
10	04/30/2003	96W	14	28.6	34.2	0.00			
10	06/01/2004	96W	12	29.7	33.0	0.00			
10	03/30/2005	FREE	12	50.3	19.5	0.75	6@101W,3@101E		
10	08/09/2005	96W	11	29.2	33.6	0.00			
10	11/09/2006	96W	8	28.9	34.0	0.00			
10	06/18/1991	96W	12	37.9	26.0	0.37		PM	WV
10	06/09/1992	96W	11	37.8	26.3	0.31			
10	08/19/1993	96W	10	38.9	26.6	0.30			
10	04/26/1994	96W	14	32.9	30.2	0.14			
10	06/07/1995	96W	19	29.8	33.0	0.05			
10	06/13/1995	FREE	17	51.3	19.2	0.92			
10	08/13/1996	96W	13	35.1	27.9	0.26			
10	05/15/1997	96W	23	33.2	29.5	0.09			
10	11/05/1998	96W	19	33.4	29.4	0.14			
10	08/05/1999	96W	17	34.4	28.5	0.12			
10	05/16/2000	96W	17	31.8	31.0	0.15			
10	05/18/2000	FREE	11	54.2	18.2	0.81			
10	08/08/2001	96W	12	29.6	33.2	0.00			
10	05/14/2002	96W	13	30.8	31.9	0.03			
10	04/30/2003	96W	14	30.0	32.7	0.03			
10	06/01/2004	96W	12	28.9	33.9	0.00			
10	03/30/2005	FREE	12	52.5	18.7	0.79			
10	08/09/2005	96W	11	28.2	34.8	0.00			
10	11/09/2006	96W	8	33.6	30.0	0.11			

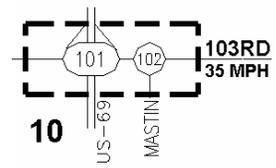
**EVALUATION OF 2006 RUNS 10-PM**  
 {S10 has 3 inter. Over 0.3 mi. }

**GOOD**

Coordination results remain very consistent in this small arterial. The stops were zero and the average speed is close to the speed limit WB. (Note: We did these runs keeping in mind that coordination is most beneficial to the initial queues.)

Compared to the FREE WV runs motorists are saving about 20 seconds of TT and close to 0.7 stops per average run.

G.Grimes, CE,S



## SECTION REPORT - OPTCS RUNS Section 10C 'COLLEGE' (US-69W to Lowell)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
10C+	06/15/2001	140*	13	202.3	28.5	1.62	4@123,2@124,8@125,7@126	AM	EB
10C+	07/03/2001	140A	7	187.6	30.7	1.57	1@122,3@123,3@124,4@125		
10C+	07/20/2001	140+	11	160.3	36.0	0.18	2@125		
10C+	10/02/2002	140+	14	182.4	31.6	0.64	3@123, 6@125		
10C+	06/11/2003	140A	8	169.0	35.0	0.38	3@125		
10C+	06/12/2003	140A	11	163.9	36.1	0.27	1@122,1@124,1@125		
10C+	08/12/2004	140A	11	150.6	38.3	0.18	1@122, 1@125		
10C+	03/10/2005	FREE	7	262.7	22.0	2.43	4@122,2@123,3@124,6@125,2@126		
10C+	08/04/2005	140A	7	145.0	40.8	0.00			
10C+	04/13/2006	140A	9	157.9	37.5	0.33	1@124,2@125,		
10C+	06/15/2001	140*	12	226.9	25.4	1.67	1@122,4@123,5@124,10@125	AM	WB
10C+	07/03/2001	140A	7	184.7	31.1	1.29	2@123,3@124,4@125		
10C+	07/20/2001	140+	9	165.6	34.8	0.89	4@124,4@125		
10C+	10/02/2002	140+	13	196.1	29.4	1.31	6@123,1@124,10@125		
10C+	06/11/2003	140A	11	176.9	33.4	0.82	4@124,5@125		
10C+	06/12/2003	140A	12	182.3	32.5	1.00	3@123,5@124,4@125		
10C+	08/12/2004	140A	11	194.7	29.6	1.27	5@123,3@124,6@125		
10C+	03/10/2005	FREE	10	209.5	27.5	1.80	2@122,7@123,4@124,5@125,		
10C+	08/04/2005	140A	7	208.7	28.4	1.43	3@124,7@125		
10C+	04/13/2006	140A	8	200.0	29.6	1.38	1@123,3@124,7@125,		
10C+	06/15/2001	140*	12	207.0	27.9	1.63		AM	WV
10C+	07/03/2001	140A	7	187.0	30.8	1.52			
10C+	07/20/2001	140+	9	161.5	35.7	0.34			
10C+	10/02/2002	140+	13	185.4	31.1	0.79			
10C+	06/11/2003	140A	9	170.8	34.7	0.47			
10C+	06/12/2003	140A	11	168.3	35.2	0.44			
10C+	08/12/2004	140A	11	159.6	36.5	0.41			
10C+	03/10/2005	FREE	7	251.8	23.1	2.30			
10C+	08/04/2005	140A	7	159.7	37.9	0.33			
10C+	04/13/2006	140A	8	167.6	35.6	0.57			

### BACKGROUND:

During the 6/15/01 runs #125,126 (Antioch and Lowell) were not coordinated.

During the 7/03/01 runs #125,126 were added to coordination.

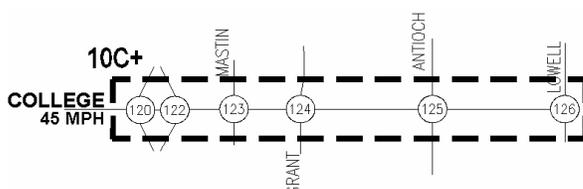
EVALUATION OF 2006 RUNS 10C+-AM  
{S10C+ has 6 inter. Over 1.6 mi.}

### GOOD

The EB volume is very heavy here at this time of day, about 3500 vehicles per hour. Considering this fact these results are good.

Compared to the 2005 FREE WV runs motorists are saving over 80 seconds (almost 1 1/2 minutes of TT) and about 2.0 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 10C 'COLLEGE' (US-69W to Lowell)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
10C+	06/20/2001	136*	15	228.7	25.2	2.13	2@122,10@123,2@124,12@125,6@126	PM	EB
10C+	07/06/2001	140	9	224.7	25.6	2.11	3@123,1@124,9@125,6@126		
10C+	07/10/2001	140A	9	171.6	33.6	1.20	8@125,3@126		
10C+	09/26/2002	140A	7	230.3	25.1	2.43	3@122,3@123, 7@125,4@126		
10C+	07/31/2003	140A	14	185.4	31.9	0.93	2@123,1@124,10@125		
10C+	08/07/2003	FREE	16	251.4	23.5	2.31	3@122,7@123,8@124,13@125,6@126		
10C+	09/28/2004	140A	14	181.7	32.6	0.93	11@125,2@126		
10C+	07/28/2005	140A	9	198.8	29.8	1.33	1@122,2@123,8@125,1@126		
10C+	03/02/2006	140A	7	182.7	31.6	1.00	6@125,1@126		
10C+	06/20/2001	136*	15	247.9	23.2	2.00	4@122,3@123,5@124,15@125,3@125	PM	WB
10C+	07/06/2001	140	8	196.1	29.4	0.88	7@125		
10C+	07/10/2001	140A	13	162.0	35.6	0.62	8@125		
10C+	09/26/2002	140A	7	207.4	27.8	1.29	3@122,2@123, 4@125		
10C+	07/31/2003	140A	13	172.0	34.4	0.69	2@123,7@125		
10C+	08/07/2003	FREE	15	277.1	21.4	2.40	11@123,9@124,16@125		
10C+	09/28/2004	140A	14	184.5	32.1	0.71	2@123, 8@125		
10C+	07/28/2005	140A	8	269.4	22.0	2.13	6@123,3@124,8@125		
10C+	03/02/2006	140A	7	184.9	31.2	0.86	1@123,5@125		
10C+	06/20/2001	136*	15	232.4	24.8	2.11		PM	WV
10C+	07/06/2001	140	8	219.3	26.4	1.88			
10C+	07/10/2001	140A	9	169.8	34.0	1.11			
10C+	09/26/2002	140A	7	215.0	26.9	1.67			
10C+	07/31/2003	140A	13	176.5	33.6	0.77			
10C+	08/07/2003	FREE	15	268.5	22.1	2.37			
10C+	09/28/2004	140A	14	183.6	32.2	0.79			
10C+	07/28/2005	140A	8	247.1	24.4	1.87			
10C+	03/02/2006	140A	7	184.2	31.3	0.90			

**BACKGROUND:**

During the 6/20/01 runs #125,126 (Antioch and Lowell) were not coordinated.

During the 7/06/01 runs #125,126 were added to coordination.

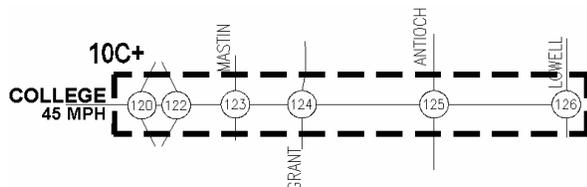
EVALUATION OF 2006 RUNS 10C-PM  
{S10C has 6 inter. Over 1.6 mi. }

**GOOD**

WB (the heaviest direction in the PM) was better this year.

Compared to the FREE WV runs motorists saved over 80 seconds of TT and about 1.5 stops per average run.

G.Grimes, SCE



## SECTION REPORT - OPTCS RUNS

### Section 11 '135TH ST' (Antioch to Nall)

SECTIO	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
11+	3/1/2000	150*	12	217.4	33.4	0.83	1@115,2@116,1@118,6@119	AM	EB
11+	3/16/2000	150A	12	180.9	40.1	0.17	1@115,1@119		
11+	3/29/2000	FREE	7	396.7	18.3	3.71	15@115,5@116,4@117,2@119		
11+	5/2/2001	150A	8	275.5	26.3	1.63	9@115,3@116,1@117		
11+	5/8/2001	180A	8	227.9	31.8	1.00	3@115,4@116,1@119		
11+	12/19/2006	150	9	171.3	42.3	0.00			
11+	3/1/2000	150*	12	236.8	30.6	1.58	8@114,1@115,6@117,4@118	AM	WB
11+	3/16/2000	150A	11	196.6	36.9	0.55	4@114,2@117		
11+	3/29/2000	FREE	7	244.0	29.7	2.43	6@114,2@115,5@116,4@117		
11+	5/2/2001	150A	7	229.1	31.6	1.00	5@114,2@117		
11+	5/8/2001	180A	8	202.9	35.8	0.63	4@114,1@117		
11+	12/19/2006	150	8	182.5	39.7	0.25	1@114,1@216		
11+	3/1/2000	150*	12	224.2	32.4	1.09		AM	WV
11+	3/16/2000	150A	11	186.4	39.0	0.30			
11+	3/29/2000	FREE	7	343.6	22.3	3.26			
11+	5/2/2001	150A	7	259.4	28.2	1.41			
11+	5/8/2001	180A	8	219.2	33.2	0.87			
11+	12/19/2006	150	8	174.8	41.5	0.08			

**BACKGROUND:**

On 3/01/00 Lamar and Nall were not coordinated. On 3/16/00 Lamar and Nall were coordinated.

Since 2002, 3 additional signals have been installed in this section, Hemlock, Riley and Glenwood.

**EVALUATION OF 2006 TT RUNS**

11+AM

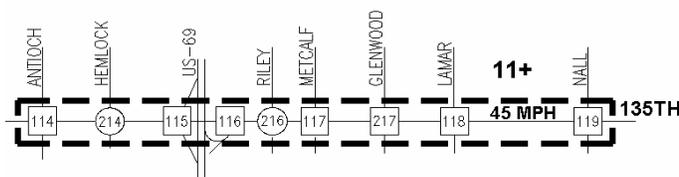
{S11+ has 9 inter over 1.9 mi.}

**GOOD**

We have not done any runs from 2001 until 2006, mainly due to construction.

Compared to the FREE WV runs motorists are saving almost 170 seconds (nearly 3 minutes) of TT and over 3 stops per average run.

G.Grimes, CE,S



## SECTION REPORT - OPTCS RUNS

### Section 11+ '135TH ST' (Antioch to Nall)

SECTIO	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP	TIME OF DAY	DIRECTION
11+	02/22/2000	120*	6	205.8	35.2	0.67	1@117,1@118,2@119	PM	EB
11+	03/09/2000	120A	14	227.3	31.9	1.29	5@115,2@116,7@117,4@119		
11+	03/16/2000	120A	12	194.4	37.3	0.33	2@115,1@116,3@117		
11+	03/28/2000	FREE	10	282.6	25.7	2.50	4@115,9@116,9@117,3@119		
11+	05/01/2001	120A	7	188.0	38.6	0.00			
11+	05/15/2001	140A	13	250.5	29.0	1.38	9@115,2@116,7@117		
11+	05/22/2001	140A	7	243.4	29.8	1.57	6@115,1@116,3@117,1@119		
11+	02/21/2002	FREE	10	320.9	22.6	3.60	3@214,8@115,7@116,7@117,4@118,7@		
11+	02/26/2002	140A	12	280.2	25.9	2.42	12@115,7@116,8@117,1@118,1@119		
11+	04/09/2003	140A	9	245.0	29.6	1.33	1@115,2@116,2@117, 7@119		
11+	12/12/2006	150	9	268.2	27.0	1.56	1@214,2@115,2@116,3@117		
11+	02/22/2000	120*	6	232.0	31.3	1.33	5@114,2@117,1@118	PM	WB
11+	03/09/2000	120A	14	214.1	33.9	0.93	5@114,5@117,3@118		
11+	03/16/2000	120A	11	194.8	37.2	0.55	5@114,1@117		
11+	03/28/2000	FREE	9	278.8	26.0	2.44	8@114,4@115,1@116,8@117,1@118		
11+	05/01/2001	120A	7	300.6	24.1	2.43	9@114,2@115,5@117,1@118		
11+	05/15/2001	140A	12	248.8	29.2	1.25	6@114,1@115,8@117		
11+	05/22/2001	140A	7	238.6	30.4	1.14	3@114,1@115,1@116,3@117		
11+	02/21/2002	FREE	10	340.1	21.3	3.60	9@114,9@214,3@115,3@116,7@117		
11+	02/26/2002	140A	12	186.5	38.9	0.42	2@114, 2@117,1@118		
11+	04/09/2003	140A	10	228.1	31.8	0.80	2@114,1@214, 4@117,1@118		
11+	12/12/2006	150	9	197.1	36.8	0.44	2@117,1@217,1@118		
11+	02/22/2000	120*	6	220.0	33.1	1.03		PM	WV
11+	03/09/2000	120A	14	220.1	33.0	1.10			
11+	03/16/2000	120A	11	194.6	37.3	0.45			
11+	03/28/2000	FREE	9	280.5	25.9	2.47			
11+	05/01/2001	120A	7	248.9	30.8	1.32			
11+	05/15/2001	140A	12	249.5	29.1	1.31			
11+	05/22/2001	140A	7	240.6	30.1	1.32			
11+	02/21/2002	FREE	10	327.6	22.2	3.60			
11+	02/26/2002	140A	12	226.5	33.3	1.27			
11+	04/09/2003	140A	9	235.3	30.9	1.03			
11+	12/12/2006	150	9	227.5	32.6	0.92			

#### BACKGROUND:

S11 on 135<sup>th</sup> St from Antioch to Metcalf has been coordinated since 1991. In 2000 we added Lamar and Nall due to increased traffic warranting coordination.

Since 2002, 3 additional signals have been installed in this section; Hemlock, Riley and Glenwood.

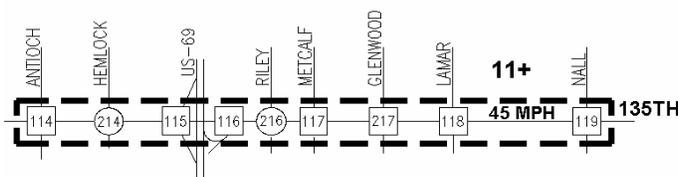
EVALUATION OF 2006 RUNS 11+PM  
{S11 has 9 inter over 1.9 mi.}

#### GOOD

The WB traffic is heaviest this time of day. Major improvements were completed here in early 2006.

Compared to the 2002 FREE WV runs motorists are saving over 100 seconds (over 1 ½ minutes) of TT and about 2.7 stops per average run.

G.Grimes, CE,S



## SECTION REPORT - OPTCS

### Section 12+ '151ST' (Hardy to Conser)

SECTION	DATE	CYCLE LENGTH	NO. RUNS	AVERAGE TRAVEL TIME	AVERAGE SPEED	AVERAGE STOPS	STOP LOCATIONS	TIME OF DAY	DIRECTION
12+	10/9/2002	120*	12	48.0	31.4	0.25	2@156,1@158	AM	EB
12+	12/4/2002	120A	11	53.0	28.4	0.27	3@156		
12+	9/24/2003	120A	15	49.7	30.3	0.20	3@156		
12+	7/1/2004	120*	12	41.3	36.5	0.00			
12+	9/29/2005	120*	11	49.2	30.6	0.27	2@156,1@158		
12+	9/30/2005	120A	12	40.6	37.1	0.00			
12+	6/29/2006	120A	11	48.0	31.4	0.18	1@175,1@156		
12+	10/9/2002	120*	12	53.6	28.1	0.25	3@157	AM	WB
12+	12/4/2002	120A	11	52.5	28.7	0.09	1@156		
12+	9/24/2003	120A	15	55.4	27.2	0.33	2@163,1@156,2@1		
12+	7/1/2004	120*	12	58.6	25.7	0.33	3@157,1@163		
12+	9/29/2005	120*	12	61.6	24.5	0.67	6@163,2@157		
12+	9/30/2005	120A	12	50.8	29.7	0.17	2@157		
12+	6/29/2006	120A	12	52.9	28.5	0.17	2@157		
12+	10/9/2002	120*	12	50.1	30.1	0.25		AM	WV
12+	12/4/2002	120A	11	52.8	28.5	0.20			
12+	9/24/2003	120A	15	51.9	29.1	0.25			
12+	7/1/2004	120*	12	47.9	32.3	0.13			
12+	9/29/2005	120*	11	53.8	28.3	0.42			
12+	9/30/2005	120A	12	44.4	34.3	0.06			
12+	6/29/2006	120A	11	49.8	30.3	0.18			

**BACKGROUND:**

These TT runs don't reflect the congestion problem from all of the EB and WB traffic going NB onto US-69 in the AM Peak. However our coordination timings do help to reduce these related backups.

In 2/2006 the new signal at Lowell (#175) was installed.

**EVALUATION OF 2006 RUNS S12 -AM**  
 {S12+ has 5 inter. Over 0.4 mi.}

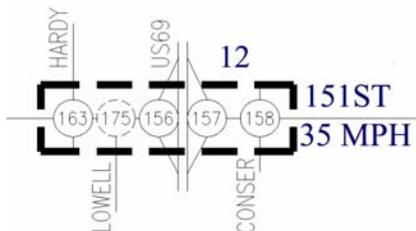
**GOOD**

EB is the heaviest this time of day.

With an average overall speed of 30 mph and stops of under 0.2 these are good results.

We will do FREE TT runs here in 2007.

G.Grimes, SCE



# OVERLAND PARK TRAFFIC CONTROL SYSTEM

REV. 1/29/2007

- 58 OPTCS INTERSECTION (PHONE LINE)
- 58 OPTCS INTERSECTION (CABLE)
- 58 OPTCS INTERSECTION (FIBER)
- 58 OPTCS INTERSECTION (FIBER)(2070)
- 58 INTERSECTION WITHOUT COMMUNICATION
- P PEDESTRIAN SIGNAL
- F FIRE STATION SIGNAL
- 58 FUTURE SIGNAL



INTERSECTIONS WITH COMMUNICATION	193	
- TELECABLE	101	
- PHONE LINE	29	
- FIBER OPTIC	63	
- 2070	51	
- 170	12	
INTERSECTIONS WITHOUT COMMUNICATION	37	
PED SIGNALS	7, FIRE STATION SIGNALS	3
TOTAL SIGNALS	242 (INCL. PEDS/FIRE SIG)	
INTERSECTIONS WITH VIDEO DETECTION	83	
COORDINATED INTERSECTIONS	155	

