

## **TECHNICAL MEMORANDUM**

**To:** Mark Tudor, DelDOT

cc: James Burnett, RK&K

**From:** Nancy Bergeron, RK&K  
Jeff Kuttesch, RK&K

**Date:** May 16, 2008

**RE: Churchmans Crossing Traffic Monitoring**  
Fall 2007 Counts

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This memo summarizes the latest updates to the Churchmans Crossing traffic monitoring program. Traffic data for the study was collected during the first and second weeks of November 2007. This represents the ninth time the intersections have been counted since the annual traffic monitoring program began in 2000. The number of intersections studied in 2007 was nine; the same nine locations were studied in 2005-2006.

The intersections studied in 2007 are listed below. The number in parentheses behind the intersection name is the identification number that the intersection has been referenced by in previous years.

- SR 2 / Harmony Road (1)
- SR 7 / SR 4 (Stanton Split) (4)
- SR 4 / SR 7 / J.P. Morgan (5)
- SR 4 / Harmony Road (8)
- SR 273 / Harmony Road (14)
- SR 273 / Chapman Road / Eagle Run Road (15)
- SR 273 / Old Baltimore Pike (16)
- SR 7 / SR 273 (17)
- SR 2 / Red Mill Road / Polly Drummond Hill Road (22)

This update also includes changes to the programs and software packages used to provide intersection LOS and delay results. Previously, Highway Capacity Software (HCS) 2000 and SYNCHRO Version 5 were used. For this update, the newest versions of those software programs were used: HCS+ version 5.21 and SYNCHRO Version 7 (Build 255). The upgrade to the latest analysis software may contribute to minor changes in levels of service (LOS) and delay due to refinements in the analysis approach.

### **Key Findings from 2007**

- In 2007, one intersection operated at a worse level of service in the AM peak than in 2006, and four intersections operated at a worse level of service in the PM peak than in 2006.
- The most significant decline in the level of service from 2006 to 2007 was observed at the SR 7 / SR 273 intersection during the AM peak; the level of service declined in 2007 from LOS C to LOS E using the CLV analysis method.
- Significant improvements were observed at SR 273 / Old Baltimore Pike and SR 2 / Red Mill Road / Polly Drummond Hill Road during the AM peak; the level of service improved in 2007 from LOS E to LOS C and LOS F to LOS D, respectively.

### **AM Peak Summary**

Attached to this memo are turning movement count data tables by intersection with the respective Level of Service (LOS) and volume to capacity ratio computed using the Critical Lane Volume (CLV) analysis method; also included are intersection LOS and delay in seconds computed using HCS+ and SYNCHRO Version 7. A comparison between the AM peak hour Levels of Service (LOS) computed using the three analysis methods for the 2006 and 2007 counts indicate that:





Traffic trends during the AM peak indicate that both eastbound and westbound traffic on SR 2 were relatively unchanged compared to 2006. At the intersection of SR 2 / Red Mill Road / Polly Drummond Hill Road, a significant decrease (-26%) in southbound through traffic on Polly Drummond Hill Road caused the level of service at the intersection to improve from LOS F to LOS D.

A decrease in traffic on eastbound and westbound SR 4 resulted in modest improvement or no change in AM peak levels of service through the intersections of SR 7 / SR 4 (Stanton Split), SR 4 / SR 7 / J.P. Morgan, and the intersection of SR 4 / Harmony Road.

Traffic trends on SR 273 varied throughout the corridor, which runs from Harmony Road east to SR 7. On eastbound SR 273, traffic trends indicate a gradual change from moderate decreases at Harmony Road, west of I-95, to moderate increases at SR 7, east of I-95. Westbound SR 273 traffic indicates decreased traffic along all intersections except for Harmony Road, where there is no change. The fluctuation in traffic along SR 273 resulted in improved LOS for the intersections at Harmony Road, Chapman Road/Eagle Run Road, and Old Baltimore Pike. The increase in traffic for eastbound SR 273 combined with the increase in SR 7 traffic resulted in worse level of service conditions for SR 273 at SR 7.

### **PM Peak Summary**

A comparison between the PM peak hour Levels of Service (LOS) for the October / November 2006 and November 2007 counts indicates that:

- Two intersections operated at a better LOS for all analysis methods
- Three intersections operated at a better LOS for at least one analysis method
- One intersection (Stanton Split at SR 4 / SR 7) operated at a worse LOS for the CLV and HCS methods, but operated at a better LOS for the SYNCHRO method.
- Three intersections operated at a worse LOS for at least one analysis method:
  - SR 2 / Harmony Road (1)
  - SR 4 / SR 7 / J.P. Morgan (5)
  - SR 7 / SR 273 (17)

Table 2 shows the Level of Service (LOS) computed by each analysis method for the November 2007 counts for the nine intersections that experienced a change in LOS during the PM peak; the change in LOS from 2006 to 2007 is also shown. The following trends and comparisons with prior counts are based primarily on the CLV results:

Traffic trends during the PM peak indicate that eastbound and westbound SR 2 traffic increased over 2006 levels. At the SR 2 / Harmony Road intersection, a significant increase in the number of northbound rights resulted in no change in level of service (LOS E), since these right turns operated as a "free right". Northbound Red Mill Road traffic decreased by 22% compared to 2006 levels, contributing to an improvement in level of service from LOS F to LOS E at the SR 2 / Red Mill Road / Polly Drummond Hill Road intersection.

An increase in traffic was observed in both directions of SR 7 traffic. These increases resulted in a decline in the level of service (LOS F) at the intersection of SR 4 / SR 7 (Stanton Split). The level of service at the intersection of SR 4 / SR 7 / J.P. Morgan remained unchanged, despite significant increases (+41%) on the northbound approach of SR 7. The level of service at SR 4 / Harmony Road also remained unchanged from 2006 levels.

SR 273 traffic decreased in both the eastbound and westbound directions at the SR 273 / Chapman Road intersection, resulting in improvement in the level of service from LOS F to LOS E. Similar decreases on SR 273 at SR 273 / Old Baltimore Pike, combined with decreases in both directions on Old Baltimore Pike, resulted in improvements in the level of service from LOS



E to LOS D. At the SR 273 / SR 7 intersection, increases in traffic on northbound SR 7 (+15%) and westbound lefts from SR 273 (+21%) result in a decline of level of service from LOS D to LOS E.

<b>Churchmans Crossing 2007 Traffic Monitoring</b>		<b>May 2008 RK&amp;K Engineers, LLP</b>	
<b>Table 2 PM Peak Hour Intersection Level of Service (LOS) Comparison For All Intersections Experiencing a Change in PM Peak LOS</b>			
	<b>Fall 2007 LOS (Change in LOS from 2006 to 2007)</b>		
	<b>CLV</b>	<b>HCS</b>	<b>SYNCHRO</b>
SR 2 / Harmony Road (1)	E ( )	C ( )	C (-)
SR 4 / SR 7 (Stanton Split) (4)	F (-)	F (-)	D (+)
SR 4 / SR 7 / J.P. Morgan (5)	D ( )	F (-)	C ( )
SR 4 / Harmony Road (8)	E ( )	D (+)	D ( )
SR 273 / Harmony Road (14)	E ( )	C (++)	D (+)
SR 273 / Chapman Road (15)	E (+)	D (++)	D (+)
SR 273 / Old Baltimore Pike (16)	D (+)	C (+++)	C (+)
SR 7 / SR 273 (17)	E (-)	F ( )	E ( )
SR 2 / Red Mill Road / Polly Drummond Hill Road (22)	E (+)	E ( )	D ( )
( ) No change in LOS      (+) Improved by 1 LOS      (++) Improved by 2 LOS      (-) Declined by 1 LOS (+++) Improved by 3 LOS			

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## Fall 2007 Traffic Summary

*NOTE: LOS comparisons based on Critical Lane Volume (CLV) analyses*

### 1. SR 2 / Harmony Road

**AM:** Level of service remained the same at LOS D. Intersection has operated at LOS D for five of the last six years. Increased traffic on northbound Harmony Road approach (+20%), primarily due to increase in northbound rights by 29%, while eastbound and westbound SR 2 are consistent with 2006 data.

**PM:** Level of service remained constant at LOS E. This intersection has operated at LOS E for eight of the last ten years. Significant increase in traffic on northbound Harmony Road approach (+108%), however, this movement is a "free" right which does not affect the level of service results. Increased traffic on westbound SR 2 approach (+14%). Westbound through traffic increased 19% over 2006 volumes. Eastbound SR 2 rights increased by 27%.

### 4. SR 7 / SR 4 (Stanton Split)

**AM:** Level of service improved from LOS D (V/C = 0.84) to LOS C (V/C = 0.80). Except for last year, this intersection has operated at LOS C consistently during this traffic monitoring program. Slight improvement in level of service due to decreased traffic on eastbound SR 4/SR 7 (-6%) and westbound SR 4 traffic (-13%).

**PM:** Level of service worsens from LOS E to LOS F. Intersection also operated at LOS F in 2004 - 2005. Southbound traffic on SR 7 increased by 14% from 2006 levels. Eastbound SR 4/SR 7 traffic increased by 7%.

### 5. SR 4 / SR 7 / J.P. Morgan

**AM:** Level of service remained the same at LOS C. Southbound traffic on SR 7 increased by 16% and northbound traffic on SR 7 increased by 10%, while eastbound traffic on SR 4 decreased by 16%.

**PM:** Level of service remains constant at LOS D, despite a 41% increase in northbound traffic on SR 7 and a 45% increase in westbound traffic from the J.P. Morgan entrance (+196 veh).

### 8. SR 4 / Harmony Road

**AM:** Level of service remained constant at LOS E. Intersection has operated at LOS E each of the past six years. Westbound traffic on SR 4 decreased by 23% from 2006 levels. Northbound Harmony Road traffic decreased by 9%.

**PM:** Level of service remained constant at LOS E. Traffic on all four approaches is generally consistent with 2006 volumes.

### 14. SR 273 / Harmony Road

**AM:** Level of service improved from LOS E to LOS D. This is the first year this intersection has operated at LOS D. Southbound Harmony Road traffic decreased 19%. Traffic on eastbound SR 273 decreased by 16%.

**PM:** Level of service remained constant at LOS E. Westbound traffic on SR 273 decreased by 10%. All other approaches remain generally consistent with 2006 volumes.

### 15. SR 273 / Chapman Road / Eagle Run Road

**AM:** Level of service improved from LOS E to LOS D. Northbound Chapman Road traffic decreased by 18% and westbound SR 273 traffic decreased by 14%.

**PM:** Level of service improved from LOS F to LOS E due to decreased eastbound SR 273 traffic (-14%) and westbound SR 273 traffic (-15%). Intersection also operated at LOS E in 2005.

**16. SR 273 / Old Baltimore Pike**

**AM:** Level of service improved from LOS E to LOS C. Northbound left from Old Baltimore Pike decreased by 30% (-283 veh). Westbound SR 273 through traffic decreased by 13%.

**PM:** Level of service improved from LOS E to LOS D. Decreased traffic on all four approaches (-22% NB, -11% SB, -8% EB, -8% WB).

**17. SR 273 / SR 7**

**AM:** Level of service worsens from LOS C to LOS E. Intersection also operated at LOS E in 2005. Eastbound SR 273 traffic increased by 20%. Northbound SR 7 traffic increased by 14%.

**PM:** Level of service worsens from LOS D to LOS E. Northbound traffic on SR 7 increased by 15% and the westbound left turn increased by 21%.

**22. SR 2 / Red Mill Road / Polly Drummond Hill Road**

**AM:** Level of Service improved from LOS F (V/C = 1.01) to LOS D (V/C = 0.87). The intersection also operated at LOS D in 2005. Southbound traffic on Polly Drummond Hill Road decreased by 8%.

**PM:** Level of service improved from LOS F to LOS E. Northbound left from Red Mill Road decreased 22% and southbound through traffic from Polly Drummond Hill Road decreased 12%.

Churchmans Crossing Volume and  
Level of Service Comparison - AM Peak Hour

NOTE: Volumes shown in the following table represent the peak hour volumes at each intersection (e.g., they are not the peak volumes of an entire corridor). Therefore, the peak hours may vary among intersections, even between adjacent intersections. For example, the peak hour at SR 2 / Harmony Road was found to occur between 7:00 and 8:00 AM. However, the nearby intersection at SR 4 / Harmony Road was found to occur between 7:15 and 8:15 AM. As a result, the volumes in the following table may not balance between intersections.

SR 2 / HARMONY ROAD

# 1

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Oct) Count	Notes
NB Harmony	L	341	518	253	262	220	279	244	259	230	234	228	
	R	310	607	419	321	417	545	456	547	448	524	676	
SB	L												
	R												
EB SR 2	U			14	16	8	18	21	11	9	9	6	
	R	1077	1673	1105	963	1,010	1,155	1,125	1,063	1,081	1,186	1,141	
WB SR 2	L	506	536	723	604	537	651	618	616	548	572	569	
	R	863	985	956	902	929	883	930	981	778	897	877	
CLV LOS	D		F	E	C	C	D	D	D	C	D	D	
v/c	0.99	1.11	0.93	0.81	0.77	0.90	0.86	0.85	0.80	0.85	0.83		
HCS LOS	N/A	D	C	C	B	D	C	B	C	C	B		
Delay	N/A	47	34	26	18	38	24	20	21	24	20		
Synchro LOS	N/A	D	C	B	B	B	B	B	B	B	B		
Delay	N/A	40	21	15	14	19	15	15	15	14	17		

\*SR 2 intersections analyzed as pretimed in SYNCHRO due to large distance between signals.

SR 2 / DELAWARE PARK BOULEVARD

# 2

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Del Park	L	-	230	223	190	229	227	230	197				Right Turns into gas station were not counted Fall 2002. Shared NB/L was added before 10/02 and NB/SB approaches are split phased. Intersection not counted in Fall 2005.
	R	-	6	9	30	5	3	7	11				
SB Gas	L	-	15	23	13	7	12	24	16				
	R	-	7	9	11	6	9	3	9				
EB SR 2	L	-	16	18	48	13	25	33	14				
	R	-	1563	1731	1631	1,599	1,543	1,621	1,641				
WB SR 2	L	-	118	145	191	257	210	195	195				
	R	-	79	93	123	130	163	170	129				
WB SR 2	L	-	1073	1130	1165	1,201	1,201	1,134	1,323				
	R	-	26	16	27	13	--	25	47				
CLV LOS	N/A	B	C	C	C	C	C	C	C				
v/c	N/A	0.69	0.76	0.77	0.78	0.73	0.76	0.73					
HCS LOS	N/A	B	B	C	B	C	C	C					
Delay	N/A	18	18	21	17	21	20	21					
Synchro LOS	N/A	B	B	B	B	B	B	B					
Delay	N/A	16	16	18	15	18	16	16					

SR 7 / SR 2

# 3

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 7	L	175	193	181	157	212	164	291	150				Before 10/02, all free rights, except for the WB/R, were removed to accommodate 2nd EB & WB left turn lanes on SR 2. Intersection not counted in Fall 2005.
	T	540	551	687	690	707	711	602	656				
	R	308	347	427	396	396	381	518	418				
SB SR 7	L	754	622	700	527	617	644	597	568				
	R	1838	1070	1137	1122	1,049	1,158	1,156	1,097				
EB SR 2	L	48	57	49	65	70	43	54	47				
	R	115	98	154	133	138	129	112	122				
WB SR 2	T	1341	1402	1601	1268	1,384	1,508	1,571	1,355				
	R	198	191	153	189	187	139	180	147				
WB SR 2	L	297	290	312	290	403	298	374	393				
	T	1289	721	832	656	812	863	835	749				
WB SR 2	R	207	251	266	265	285	239	264	255				
	R												
CLV LOS	F	E	F	E	F	E	F	E					
v/c	1.21	0.97	1.10	0.93	1.07	0.98	1.04	0.93					
HCS LOS	N/A	E	E	E	E	E	E	E					
Delay	N/A	55	78	56	77	56	69	66					
Synchro LOS	N/A	D	E	D	E	D	E	D					
Delay	N/A	48	69	45	66	47	58	53					

Churchmans Crossing Volume and Level of Service Comparison - AM Peak Hour

SR 7 / SR 4 (Stanton Split)

# 4

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Mill Road	L	-	-	-	-	-	-	-	-	-	-	-	
	T	-	-	-	-	-	-	-	-	-	-	-	
	R	-	-	5	-	5	4	5	6	3	4	5	
SB SR 7	L	-	407	397	355	359	256	348	361	310	314	327	
	T	-	-	1	-	1	-	2	2	0	0	0	
	R	-	1091	1057	1178	1,154	1,123	1,213	1,247	1,218	1,326	1,280	
EB SR 4/SR 7	L	-	835	956	915	932	912	1,015	966	1,006	991	953	
	T	-	948	1001	1085	1,158	1,164	1,339	1,148	1,287	1,256	1,176	
	R	-	-	4	-	2	2	0	2	1	2	1	
WB SR 4	L	-	-	751	810	887	997	848	916	891	1,002	909	
	T	-	-	243	282	349	239	259	238	245	271	218	
	R	-	-	-	-	-	-	-	-	-	-	-	
CLV LOS		N/A	C	C	C	C	C	C	C	C	C	C	
v/c		N/A	0.72	0.74	0.73	0.78	0.78	0.80	0.81	0.79	0.84	0.80	
HCS LOS		N/A	C	C	C	C	D	C	C	C	C	C	
Delay		N/A	27	28	27	29	36	31	32	30	34	29	
Synchro LOS		N/A	C	C	C	D	D	D	D	D	D	D	
Delay		N/A	38	34	34	36	39	38	38	37	40	36	

SR 4 / SR 7 / J.P. MORGAN

# 5

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 7	L	19	41	78	114	156	170	279	271	186	227	225	Only two lanes per direction open on NB and SB SR 7 during February 2000 count. NB and EB left turn lanes added prior to 2000 counts.
	T	1421	1492	1395	1672	1,728	1,671	2,380	1,935	1,716	1,742	1,998	
	R	119	125	70	137	167	177	105	227	226	275	200	
SB SR 7	L	126	174	213	174	201	202	159	192	212	183	180	
	T	1563	1473	1242	1261	1,512	1,450	1,538	1,550	1,400	1,444	1,583	
	R	441	595	693	708	754	690	782	887	777	561	767	
EB SR 4	L	323	369	437	424	402	535	537	507	550	575	474	
	T	57	113	145	92	117	121	92	127	183	135	113	
	R	28	46	53	26	31	38	51	43	53	64	64	
WB J.P. Morgan	L	23	32	15	9	11	8	6	11	9	11	11	
	T	8	7	6	11	11	7	10	20	13	16	4	
	R	8	8	5	6	14	5	10	14	9	9	0	
CLV LOS		A	B	C	B	B	C	D	C	C	C	C	
v/c		0.58	0.63	0.78	0.69	0.71	0.75	0.90	0.75	0.72	0.72	0.75	
HCS LOS		N/A	C	C	C	C	C	D	C	D	D	D	
Delay		N/A	23	26	26	25	35	42	30	38	38	41	
Synchro LOS		N/A	C	C	C	C	C	D	C	C	C	C	
Delay		N/A	24	26	24	25	30	37	24	25	23	23	

SR 4 / CHURCHMANS ROAD / DELAWARE PARK

# 6

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Churchmans	L	-	550	543	546	706	736	800	840				Intersection not counted in Fall 2005.
	T	-	47	23	41	35	18	45	49				
	R	-	14	38	34	46	42	51	52				
SB Del Park	L	-	5	5	7	19	4	4	6				
	T	-	11	7	18	16	15	18	22				
	R	-	6	8	16	4	24	10	16				
EB SR 4	L	-	37	30	51	35	73	51	61				
	T	-	440	575	505	552	845	688	725				
	R	-	595	704	613	613	871	715	661				
WB SR 4	L	-	71	97	100	97	88	92	83				
	T	-	451	467	529	563	649	707	747				
	R	-	4	10	10	7	10	18	16				
CLV LOS		N/A	A	A	A	A	A	A	A				
v/c		N/A	0.43	0.48	0.47	0.52	0.62	0.60	0.62				
HCS LOS		N/A	C	C	C	C	C	C	C				
Delay		N/A	22	22	23	24	25	29	33				
Synchro LOS		N/A	C	C	C	C	C	C	C				
Delay		N/A	22	21	24	23	21	25	26				

SR 4 / CHRISTIANA HOSPITAL / HYGEIA DRIVE

# 7

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Hospital	L	-	-	75	73	75	77	95	148				Intersection not counted in Fall 2005.
	T	-	-	3	10	12	7	17	17				
	R	-	-	32	25	33	35	53	58				
SB Hygeia	L	-	-	28	33	47	45	50	44				
	T	-	-	5	4	9	11	12	2				
	R	-	-	18	22	25	38	35	28				
EB SR 4	L	-	-	183	125	197	215	229	203				
	T	-	-	1249	836	1,140	1,376	1,213	1,301				
	R	-	-	336	219	344	474	488	411				
WB SR 4	L	-	-	110	191	154	157	165	136				
	T	-	-	706	1098	944	1,009	994	1,198				
	R	-	-	202	369	239	244	248	264				
CLV LOS		N/A	N/A	A	A	A	B	A	B				
v/c		N/A	N/A	0.55	0.50	0.54	0.63	0.59	0.63				
HCS LOS		N/A	N/A	N/A	N/A	N/A	N/A	B	B				
Delay		N/A	N/A	N/A	N/A	N/A	N/A	11	14				
Synchro LOS		N/A	N/A	N/A	N/A	N/A	N/A	A	B				
Delay		N/A	N/A	N/A	N/A	N/A	N/A	10	14				



SR 4 / HARMONY ROAD

# 8

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Harmony	L	-	145	118	112	114	90	135	112	99	123	77	
	T	-	315	310	275	235	261	270	277	262	290	270	
	R	-	377	384	316	282	302	433	374	279	371	369	
SB Harmony	L	-	654	668	684	705	774	785	704	775	755	838	
	T	-	553	382	346	250	305	279	274	337	295	269	
	R	-	158	162	174	223	219	191	154	156	139	88	
EB SR 4	L	-	148	168	121	186	231	220	214	233	220	213	
	T	-	731	1171	1128	1,099	1,225	1,252	1,330	1,214	1,375	1,311	
	R	-	110	97	96	66	66	50	83	67	62	45	
WB SR 4	L	-	64	81	95	52	78	83	79	73	84	75	
	T	-	332	391	531	550	587	527	638	588	582	453	
	R	-	301	215	197	272	290	231	351	284	282	203	
CLV LOS v/c	N/A	C	D	D	D	E	E	E	E	E	E	E	
		N/A	0.73	0.90	0.88	0.82	0.93	0.95	0.94	0.92	0.99	0.98	
HCS LOS Delay	N/A	D	E	D	D	E	E	E	E	E	E	D	
		N/A	54	61	55	51	66	68	72	61	80	54	
Synchro LOS Delay	N/A	D	D	D	D	D	D	D	D	D	D	D	
		N/A	37	47	42	41	51	44	45	42	53	50	

CHURCHMANS ROAD / CONTINENTAL DRIVE

# 9

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Continental	L	-	-	16	29	31	28						Churchmans Road under construction in 2000; finished by 2001 count. Before the 10/02 count, left turn lanes were added to NB & SB Continental Dr. Churchman's Place. Intersection was not counted in 10/03, 10/04, or 10/05.
	T	-	-	14	6	10	4						
	R	-	-	159	128	161	68						
SB Churchmans Place	L	-	-	44	41	31	38						
	T	-	-	31	103	86	68						
	R	-	-	10	0	8	8						
EB Churchmans	L	-	-	37	5	7	6						
	T	-	-	566	650	662	556						
	R	-	-	60	146	107	95						
WB Churchmans	L	-	-	510	595	611	467						
	T	-	-	996	1277	1,319	1,402						
	R	-	-	66	41	31	46						
CLV LOS v/c	N/A	N/A	A	A	A	A							
		N/A	N/A	0.42	0.50	0.51	0.42						

SR 7 / CHURCHMANS ROAD (Ramp A)

# 10

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 7	L	-	581										Churchmans Road under construction in 2000; finished by 2001 count. Intersection was not counted in 10/03, 10/04, or 10/05.
	T	-	1441										
	R	-	192										
SB SR 7	L	-	371	149	230	169	180						
	T	-	1084	379	406	414	522						
	R	-	103	95	69	113	96						
EB Churchmans	L	-	130	332	382	285	344						
	T	-	392	437	540	442	446						
	R	-	573	431	540	442	446						
WB Churchmans	L	-	326	231	232	294	252						
	T	-	1170	1572	1856	1,942	1,839						
	R	-	653										
CLV LOS v/c	N/A	F	D	B	B	B							
		N/A	1.09	0.85	0.72	0.63	0.64						

SR 7 / CHURCHMANS ROAD (Ramp B/C)

# 11

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 7	L	-	581										Churchmans Road under construction in 2000; finished by 2001 count. Intersection was not counted in 10/03, 10/04, or 10/05.
	T	-	1441										
	R	-	192										
SB SR 7	L	-	371	147	178	163	153						
	T	-	1084	11	16	24	18						
	R	-	103	509	658	669	609						
EB Churchmans	L	-	130	24	34	44	29						
	T	-	392	456	548	462	448						
	R	-	573	14	18	26	18						
WB Churchmans	L	-	326	33	26	31	32						
	T	-	1170	1654	1489	1,492	1,510						
	R	-	653	153	316	368	331						
CLV LOS v/c	N/A	F	D	C	C	C							
		N/A	1.09	0.89	0.78	0.79	0.76						

Churchmans Crossing Volume and Level of Service Comparison - AM Peak Hour

CHURCHMANS ROAD / DEL TECH

# 12

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Driveway	L	-	-	64	73	109	75						Churchmans Road under construction in 2000; finished by 2001 count. Intersection was not counted in 10/03, 10/04, or 10/05.
	R	-	-	28	20	21	23						
SB Del Tech	L	-	-	112	77	65	26						
	R	-	-	22	21	6	31						
EB Churchmans	L	-	-	98	159	80	150						
	R	-	-	494	512	458	430						
WB Churchmans	L	-	-	1700	1687	1,732	1,769						
	R	-	-	469	593	379	435						
CLV LOS		N/A	N/A	C	A	A	A						
v/c		N/A	N/A	0.74	0.60	0.57	0.59						

CHURCHMANS ROAD / COUNTRY CLUB DRIVE

# 13

		1993 Count	1998 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB C.C.	L	-	-	190	220	223	190						Intersection was not counted in 10/03, 10/04, or 10/05.
	R	-	-	108	78	67	75						
SB	L	-	-										
	R	-	-										
EB Churchmans	L	-	-	662	704	600	554						
	R	-	-	44	40	48	52						
WB Churchmans	L	-	-	22	20	14	17						
	R	-	-	405	492	489	530						
CLV LOS		N/A	N/A	A	A	A	A						
v/c		N/A	N/A	0.55	0.59	0.52	0.48						

SR 273 / HARMONY ROAD

# 14

		1993 Count	1998 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Gerald Drive	L	-	18	24	21	27	23	22		19	21	10	Before 10/02, an exclusive WB right turn lane was added. Intersection was not counted in 10/04.
	R	-	30	23	18	18	17	18		22	26	25	
SB Harmony	L	-	682	665	547	392	450	400		455	461	367	
	R	-	6	17	15	7	9	14		9	13	8	
EB SR 273	L	-	26	30	22	9	62	69		40	42	51	
	R	-	1530	1675	1598	1,889	1,695	1,898		1,945	2,063	1,721	
WB SR 273	L	-	14	30	30	22	26	31		66	41	31	
	R	-	34	27	30	29	27	38		31	21	22	
CLV LOS		N/A	E	F	E	E	F	F		E	E	D	
	v/c	N/A	0.95	1.04	0.95	0.95	0.96	1.00		0.96	0.98	0.86	
HCS LOS		N/A	E	E	D	E	D	E		E	E	C	
Delay		N/A	56	71	49	58	50	72		67	65	31	
Synchro LOS		N/A	D	E	D	D	D	E		E	E	C	
Delay		N/A	45	61	43	52	45	65		62	63	31	

SR 273 / CHAPMAN ROAD / EAGLE RUN ROAD

# 15

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Chapman	L	-	10	490	563	498	578	566		543	591	528	NBL in 1997 was affected by something unknown. No count performed in 2004 due to ongoing construction at I-95/SR 273 interchange. Intersection was not counted in 10/04.
	R	-	2	21	22	16	42	36		28	41	39	
SB Eagle Run	L	-	26	34	29	51	38	43		35	39	34	
	R	-	23	16	20	35	28	22		11	18	35	
EB SR 273	L	-	83	61	81	56	81	86		75	65	79	
	R	-	232	195	267	147	242	261		182	166	193	
WB SR 273	L	-	775	893	898	1,260	1,002	1,212		948	929	892	
	R	-	859	773	910	711	701	555		735	594	598	
CLV LOS		N/A	N/A	E	E	D	E	E		E	E	D	
	v/c	N/A	N/A	0.91	0.96	0.84	0.93	0.98		0.93	0.99	0.89	
HCS LOS		N/A	C	E	F	D	E	F		E	F	D	
Delay		N/A	33	70	118	46	75	87		69	82	40	
Synchro LOS		N/A	B	D	D	D	D	E		D	E	C	
Delay		N/A	20	44	53	36	46	59		55	65	34	

Churchmans Crossing Volume and Level of Service Comparison - AM Peak Hour

SR 273 / OLD BALTIMORE PIKE

# 16

		1993 Count	1998 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Old Balt	L	-	788	875	868	638	802	780	699	746	939	656	Main Street was closed 10:01. Intersection operates as split-phased in the northbound/southbound directions during the 2002 counts.
	T	-	127	123	142	187	169	142	160	157	173	110	
	R	-	441	442	614	358	476	460	530	438	386	382	
SB Old Balt	L	-	9	13	52	14	12	13	18	14	12	6	
	T	-	35	21	22	43	36	35	34	43	43	40	
	R	-	63	55	10	156	39	65	53	43	67	59	
EB SR 273	L	-	25	16	8	282	30	42	47	34	58	70	
	T	-	1380	842	882	1,056	848	918	951	850	792	784	
	R	-	168	155	219	192	199	213	181	182	199	245	
WB SR 273	L	-	173	192	215	157	230	171	239	164	155	160	
	T	-	1333	1351	835	1,215	1,331	1,464	1,481	1,476	1,422	1,231	
	R	-	8	25	55	23	15	15	11	13	20	8	
CLV LOS		N/A	D	D	D	E	D	D	D	D	E	C	
v/c		N/A	0.90	0.82	0.88	0.96	0.82	0.88	0.86	0.86	0.95	0.78	
HCS LOS		N/A	D	D	E	E	E	E	D	D	E	C	
Delay		N/A	47	48	67	73	55	59	65	50	62	30	
Synchro LOS		N/A	D	D	D	D	D	D	D	D	D	C	
Delay		N/A	43	48	39	52	51	43	40	42	47	27	

SR 7 / SR 273

# 17

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 7	L	500	736	558	790	586	659	657	637	661	609	656	An additional WB/L was added to the intersection prior to the 2001 count.
	T	48	66	47	126	146	111	130	106	161	180	149	
	R	698	885	1064	1112	830	859	718	575	895	718	913	
SB SR 7	L	39	47	43	52	78	37	57	36	57	51	35	
	T	20	22	19	29	43	20	29	18	21	25	16	
	R	3	7	13	9	14	8	11	10	4	5	6	
EB SR 273	L	12	15	11	8	16	7	12	10	7	6	10	
	T	822	747	1309	1320	1,120	1,068	1,112	1,194	1,090	971	1,118	
	R	190	200	268	188	211	241	229	163	184	183	273	
WB SR 273	L	157	221	204	229	175	239	247	214	251	204	209	
	T	499	767	961	853	836	908	979	1,018	1,005	892	764	
	R	38	58	45	92	92	25	58	58	74	70	37	
CLV LOS		C	D	F	F	E	E	D	C	E	C	E	
v/c		0.73	0.83	1.13	1.19	0.93	0.92	0.85	0.78	0.95	0.80	0.97	
HCS LOS		N/A	F	F	F	F	F	F	F	F	F	F	
Delay		N/A	180	130	237	117	144	118	92	165	121	102	
Synchro LOS		N/A	F	F	F	F	F	F	F	F	F	F	
Delay		N/A	170	138	162	126	139	122	103	138	124	92	

SR 273 / SB SR 1 RAMP

# 18

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB	L	-	-	-	-	-	-	-	-	-	-	-	Intersection was not counted in 10/05.
	T	-	-	-	-	-	-	-	-	-	-	-	
	R	-	-	-	-	-	-	-	-	-	-	-	
SB SR 1	L	-	-	119	129	180	146	153	165	-	-	-	
	T	-	-	1	-	-	-	-	-	-	-	-	
	R	-	-	116	157	156	170	170	199	-	-	-	
EB SR 273	L	-	-	-	-	-	-	-	-	-	-	-	
	T	-	-	2259	1132	1,811	1,699	1,774	1,988	-	-	-	
	R	-	-	157	130	153	179	157	237	-	-	-	
WB SR 273	L	-	-	76	67	92	64	71	84	-	-	-	
	T	-	-	1134	1279	1,013	1,066	1,075	1,105	-	-	-	
	R	-	-	-	-	-	-	-	-	-	-	-	
CLV LOS		N/A	N/A	D	A	C	C	C	D	-	-	-	
v/c		N/A	N/A	0.90	0.54	0.79	0.73	0.76	0.86	-	-	-	
HCS LOS		N/A	N/A	N/A	N/A	N/A	N/A	B	B	-	-	-	
Delay		N/A	N/A	N/A	N/A	N/A	N/A	12	14	-	-	-	
Synchro LOS		N/A	N/A	N/A	N/A	N/A	N/A	A	A	-	-	-	
Delay		N/A	N/A	N/A	N/A	N/A	N/A	9	9	-	-	-	

SR 273 / NB SR 1 RAMP

# 19

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 1	L	-	-	294	351	388	368	372	373	-	-	-	Intersection was not counted in 10/05.
	T	-	-	-	-	-	-	-	-	-	-	-	
	R	-	-	280	390	353	362	345	370	-	-	-	
SB	L	-	-	-	-	-	-	-	-	-	-	-	
	T	-	-	-	-	-	-	-	-	-	-	-	
	R	-	-	-	-	-	-	-	-	-	-	-	
EB SR 273	L	-	-	615	542	570	597	546	524	-	-	-	
	T	-	-	1763	1306	1,351	1,279	1,403	1,633	-	-	-	
	R	-	-	-	-	-	-	-	-	-	-	-	
WB SR 273	L	-	-	916	758	780	813	781	779	-	-	-	
	T	-	-	340	397	375	341	340	370	-	-	-	
	R	-	-	-	-	-	-	-	-	-	-	-	
CLV LOS		N/A	N/A	D	D	D	D	D	D	-	-	-	
v/c		N/A	N/A	0.88	0.84	0.87	0.88	0.84	0.83	-	-	-	
HCS LOS		N/A	N/A	N/A	N/A	N/A	N/A	D	C	-	-	-	
Delay		N/A	N/A	N/A	N/A	N/A	N/A	37	33	-	-	-	
Synchro LOS		N/A	N/A	N/A	N/A	N/A	N/A	C	C	-	-	-	
Delay		N/A	N/A	N/A	N/A	N/A	N/A	29	27	-	-	-	

**SB SR 1 RAMPS / ROAD A**

# 20

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes				
NB	L	-	153	104	68	58	70						Intersection was not counted in 1003, 1004, or 1005.				
	R	-	2	12	6	12	19										
SB SR 1	L	-												Intersection was not counted in 1003, 1004, or 1005.			
	R	-															
EB Road A	L	-	178	192	342	277	213								Intersection was not counted in 1003, 1004, or 1005.		
	R	-	23	26	7	14	15										
WB Road A	L	-	13	26	25	28	31									Intersection was not counted in 1003, 1004, or 1005.	
	R	-	76	81	36	37	28										
CLV LOS		N/A	A	A	A	A	A										Intersection was not counted in 1003, 1004, or 1005.
v/c		N/A	0.22	0.20	0.27	0.23	0.20										

**NB SR 1 RAMPS / ROAD A**

# 21

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes				
NB SR 1	L	-	59	45	34	25	14						Intersection was not counted in 1003, 1004, or 1005.				
	R	-	97	334	624	770	540										
SB Mall	L	-	9	13	16	21	17							Intersection was not counted in 1003, 1004, or 1005.			
	R	-	34	27	29	29	29										
EB Road A	L	-	45	99	181	159	134								Intersection was not counted in 1003, 1004, or 1005.		
	R	-	124	108	167	137	122										
WB	L	-														Intersection was not counted in 1003, 1004, or 1005.	
	R	-															
CLV LOS		N/A	A	A	A	A	A										Intersection was not counted in 1003, 1004, or 1005.
v/c		N/A	0.11	0.27	0.50	0.58	0.43										

**SR 2 / RED MILL ROAD / POLLY DRUMMOND HILL ROAD**

# 22

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes					
NB Red Mill	L	-	-	335	384	323	357	496	412	335	343	317						
	R	-	-	308	357	319	309	298	319	289	309	325						
SB Polly	L	-	-	139	161	107	104	144	117	135	126	131						
	R	-	-	278	328	233	297	364	250	214	266	258						
EB SR 2	L	-	-	481	514	579	409	480	479	443	577	428						
	R	-	-	376	333	247	269	264	281	266	263	337						
WB SR 2	L	-	-	283	250	491	239	337	291	232	301	280						
	R	-	-	1115	931	1,253	1,020	1,095	1,109	1,012	1,223	1,132						
WB SR 2	L	-	-	396	417	436	406	358	424	367	306	363						
	R	-	-	199	173	204	136	180	157	115	158	126						
CLV LOS		N/A	N/A	E	E	F	D	F	E	D	F	D						
	v/c	N/A	N/A	0.93	0.93	1.11	0.84	1.06	0.97	0.84	1.01	0.87						
HCS LOS Delay		N/A	N/A	E	E	F	D	E	E	D	E	D						
		N/A	N/A	66	66	87	55	79	63	52	69	53						
Synchro LOS Delay		N/A	N/A	D	D	E	D	E	D	D	E	D						
		N/A	N/A	47	49	70	42	63	49	40	57	48						

**SR 7 / SCHOOL BELL ROAD**

# 24

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes				
NB SR 7	L	-	-	1,349	-	-	1,361						Intersection was not counted in 1003, 1004, or 1005.				
	R	-	-	69	-	-	71										
SB SR 7	L	-	-	60	-	-	79							Intersection was not counted in 1003, 1004, or 1005.			
	R	-	-	379	-	-	403										
EB	L	-	-		-	-									Intersection was not counted in 1003, 1004, or 1005.		
	R	-	-		-	-											
WB School	L	-	-	31	-	-	31									Intersection was not counted in 1003, 1004, or 1005.	
	R	-	-	181	-	-	223										
CLV LOS		N/A	N/A	E	N/A	N/A	E										Intersection was not counted in 1003, 1004, or 1005.
	v/c	N/A	N/A	0.96	N/A	N/A	0.99										

**SR 4 / TELEGRAPH ROAD**

# 25

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Happy Harry's	L	-	-	-	-	-	-	-	5				Intersection was not counted in 1005.
	T	-	-	-	-	-	-	-					
SB Telegraph	L	-	-	-	-	-	-	-	204				
	T	-	-	-	-	-	-	-					
EB SR 4	L	-	-	-	-	-	-	-	239				
	T	-	-	-	-	-	-	-	1,911				
WB SR 4	L	-	-	-	-	-	-	-	9				
	T	-	-	-	-	-	-	-	4				
CLV LOS v/c	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	C				
	T	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.72				
HCS LOS Delay	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	C				
	T	N/A	N/A	N/A	N/A	N/A	N/A	N/A	32				
Synchro LOS Delay	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	B				
	T	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16				

**SR 2 / ST. JAMES CHURCH ROAD**

# 26

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB St. James Church	L	-	-	-	-	-	-	-	80				Intersection was not counted in 1005.
	T	-	-	-	-	-	-	-	31				
SB Griffin Drive	L	-	-	-	-	-	-	-	54				
	T	-	-	-	-	-	-	-	60				
EB SR 2	L	-	-	-	-	-	-	-	37				
	T	-	-	-	-	-	-	-	59				
WB SR 2	L	-	-	-	-	-	-	-	1,698				
	T	-	-	-	-	-	-	-	150				
CLV LOS v/c	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A				
	T	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.61				
HCS LOS Delay	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	C				
	T	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30				
Synchro LOS Delay	L	N/A	N/A	N/A	N/A	N/A	N/A	N/A	C				
	T	N/A	N/A	N/A	N/A	N/A	N/A	N/A	28				

Churchmans Crossing Volume and Level of Service Comparison - **PM** Peak Hour

**NOTE:** Volumes shown in the following table represent the peak hour volumes at each intersection (e.g., they are not the peak volumes of an entire corridor). Therefore, the peak hours may vary among intersections, even between adjacent intersections. For example, the peak hour at SR 2 / Harmony Road was found to occur between 7:00 and 8:00 AM. However, the nearby intersection at SR 4 / Harmony Road was found to occur between 7:15 and 8:15 AM. As a result, the volumes in the following table may not balance between intersections.

**SR 2 / HARMONY ROAD**

# 1

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Harmony	L	647	433	544	475	447	586	454	545	417	430	405	
	R	542	662	632	655	673	944	792	754	703	672	1,399	
SB	L												
	R												
EB SR 2	L	13		28	17	5	28	14	16	19	19	22	
	R	1157	1258	1063	1078	1,126	1,314	1,103	1,093	1,190	1,040	1,055	
WB SR 2	L	507	503	626	500	607	548	598	651	501	623	646	
	R	1409	1367	1441	1340	1,313	1,205	1,382	1,301	1,265	1,265	1,503	
CLV LOS		F	E	E	D	E	E	E	E	D	E	E	
v/c		1.12	0.94	0.96	0.86	0.93	1.00	0.92	0.99	0.88	0.91	0.92	
HCS LOS		N/A	C	C	C	C	D	C	D	D	C	C	
Delay		N/A	30	33	30	28	38	29	38	37	29	23	
Synchro LOS		N/A	C	C	B	C	C	C	C	C	B	C	
Delay		N/A	21	23	19	20	26	20	31	29	19	21	

**SR 2 / DELAWARE PARK BOULEVARD**

# 2

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Del Park	L	149	277	292	289	329	326	349	331				Right Turns into gas station were not counted Fall 2002. Shared NBL was added before 10/02 and NB/SB approaches are split phased. Intersection was not counted in Fall 2005.
	R	311	122	129	121	90	154	150	149				
SB Gas Station	L	20	14	30	20	8	16	19	24				
	R	50	50	59	66	37	47	56	70				
EB SR 2	L	50	19	55	41	32	52	69	46				
	R	1628	1297	1389	1356	1,670	1,494	1,468	1,505				
WB SR 2	L	100	156	162	178	192	232	213	185				
	R	354	176	184	154	205	188	187	176				
CLV LOS		D	D	D	D	E	D	D	D				
	v/c	0.86	0.89	0.85	0.87	0.92	0.85	0.83	0.84				
HCS LOS		N/A	C	B	B	B	B	B	C				
Delay		N/A	25	17	17	19	16	16	31				
Synchro LOS		N/A	B	B	B	B	B	B	C				
Delay		N/A	20	16	15	17	16	15	29				

**SR 7 / SR 2**

# 3

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 7	L	372	266	272	276	338	248	392	237				Before 10/02, all free rights, except for the WBR, were removed to accommodate 2nd EB & WB left turn lanes on SR 2. Intersection was not counted in Fall 2005.
	R	1047	802	914	969	941	958	904	977				
SB SR 7	L	423	451	452	404	458	365	538	587				
	R	436	403	539	358	502	409	427	399				
EB SR 2	L	785	743	768	727	802	805	815	864				
	R	118	88	113	93	113	124	101	83				
WB SR 2	L	220	224	259	217	237	285	321	312				
	R	1044	1059	1073	996	1,097	1,097	1,197	1,054				
CLV LOS		L	426	417	458	490	471	572	634	696			
	R	1554	1898	2060	1648	1,542	1,832	1,620	1,650				
v/c		F	F	F	F	F	F	F	F				
		1.05	1.04	1.20	1.02	1.08	1.05	1.01	1.01				
HCS LOS		N/A	E	F	E	E	E	E	F				
Delay		N/A	65	98	69	78	66	63	84				
Synchro LOS		N/A	E	F	E	E	E	E	E				
Delay		N/A	59	87	64	70	60	59	62				

Churchmans Crossing Volume and Level of Service Comparison - PM Peak Hour

SR 7 / SR 4 (Stanton Split)

# 4

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Mill Road	L	BAD DATA						-	-	-	-		
	T	923?	311	311	340	279	272	295	254	231	218	329	
	R			8		6	8	2	6	6	4	3	
SB SR 7	L												
	R	431?	1028	972	1128	1,002	1,159	1,266	1,426	1,356	1,272	1,370	
EB SR 4/SR 7	L	351?	1261	1226	1274	1,078	1,341	1,213	1,259	1,260	1,101	1,257	
	R	955?	1044	990	1213	1,213	1,266	1,271	1,204	1,173	1,182	1,178	
WB SR 4	L												
	R	1316? 0?	1033 342	1031 316	1044 384	1,024 294	1,254 291	1,163 306	1,288 241	1,299 232	1,292 198	1,222 241	
CLV LOS v/c		N/A	D	D	E	D	F	E	F	F	E	F	
		N/A	0.91	0.89	0.92	0.86	1.03	0.96	1.01	1.00	0.94	1.01	
HCS LOS Delay		N/A	E	E	E	D	F	E	F	F	E	F	
		N/A	76	72	75	50	100	74	95	95	75	87	
Synchro LOS Delay		N/A	D	D	E	D	E	D	E	E	E	D	
		N/A	54	48	58	41	67	51	68	65	58	54	

SR 4 / SR 7 / J.P. MORGAN

# 5

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 7	L	35	28	57	55	61	65	87	68	93	82	121	Only two lanes per direction open on NB and SB SR 7 during February 2000 count. New EB and NB left turn lanes added prior to 2004 counts.
	R	1693 3	1581 15	1360 3	1501 5	1,464 6	1,572 5	1,660 3	1,527 6	1,473 7	1,361 6	1,919 8	
SB SR 7	L	7	11	14	21	18	16	19	11	12	21	7	
	R	1552 476	1653 690	1435 500	1670 532	1,896 511	1,959 542	2,238 631	2,762 677	2,253 716	1,922 562	2,066 606	
EB SR 4	L	607	655	690	807	828	879	930	903	811	824	773	
	R	6 47	11 87	35 82	12 241	17 358	16 478	7 554	22 571	22 501	14 461	16 375	
WB J.P. Morgan	L	244	307	147	171	214	177	138	202	214	200	245	
	R	49 103	88 244	87 167	95 218	108 174	94 166	97 147	126 162	121 215	131 103	143 242	
CLV LOS v/c		E	D	D	D	E	E	F	F	E	D	D	
		0.92	0.82	0.88	0.88	0.92	0.93	1.03	1.05	0.91	0.83	0.88	
HCS LOS Delay		N/A	D	D	E	E	F	F	F	E	E	F	
		N/A	48	40	59	79	90	127	134	85	63	94	
Synchro LOS Delay		N/A	C	C	D	D	D	E	E	C	C	C	
		N/A	30	31	39	45	48	62	67	32	22	24	

SR 4 / CHURCHMANS ROAD / DELAWARE PARK

# 6

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Churchmans	L	1009	809	808	709	793	1016	814	782				Intersection not counted in Fall 2005.
	T	3	22	56	70	69	90	41	73				
	R	69	66	115	130	158	238	156	142				
SB Del Park	L	0	4	4	18	19	45	42	54				
	R	38	57	87	85	81	117	157	136				
EB SR 4	L	4	20	35	47	70	71	67	79				
	R	536 688	522 655	542 747	730 630	775 532	1023 836	917 767	1,054 749				
WB SR 4	L	17	8	79	37	40	38	35	40				
	R	523 0	383 1	551 8	513 12	563 15	521 13	614 14	619 19				
CLV LOS v/c		A	A	A	B	B	D	C	C				
		0.59	0.62	0.60	0.67	0.65	0.86	0.76	0.80				
HCS LOS Delay		N/A	C	C	C	C	D	C	D				
		N/A	24	25	27	29	44	33	35				
Synchro LOS Delay		N/A	B	C	C	C	C	C	C				
		N/A	19	22	21	23	30	29	32				

SR 4 / CHRISTIANA HOSPITAL / HYGEIA DRIVE

# 7

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Hospital	L	-	-	393	395	376	447	353	377				Intersection not counted in Fall 2005.
	T	-	-	12	18	17	12	17	21				
	R	-	-	133	173	138	239	214	168				
SB Hygeia	L	-	-	229	252	213	229	238	246				
	R	-	-	10	13	16	10	13	28				
EB SR 4	L	-	-	202	232	183	182	227	211				
	R	-	-	96	70	63	78	113	117				
WB SR 4	L	-	-	763	905	1,021	1,242	1,213	1,328				
	R	-	-	102	140	110	116	102	85				
WB SR 4	L	-	-	36	47	48	63	52	36				
	R	-	-	1174 133	1190 94	1,165 73	1,453 116	1,308 110	1,457 97				
CLV LOS v/c		N/A	N/A	B	B	C	D	C	D				
		N/A	N/A	0.72	0.71	0.75	0.83	0.75	0.83				
HCS LOS Delay		N/A	N/A	N/A	N/A	N/A	N/A	B	C				
		N/A	N/A	N/A	N/A	N/A	N/A	19	22				
Synchro LOS Delay		N/A	N/A	N/A	N/A	N/A	N/A	B	C				
		N/A	N/A	N/A	N/A	N/A	N/A	17	23				

Churchmans Crossing Volume and Level of Service Comparison - PM Peak Hour

SR 4 / HARMONY ROAD

# 8

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Harmony	L	118	98	108	112	131	173	139	130	99	111	109	
	T	673	489	425	395	397	303	333	333	317	311	329	
	R	124	123	109	104	97	131	107	132	135	103	157	
SB Harmony	L	453	406	360	424	325	454	436	359	411	388	421	
	T	651	496	348	354	261	308	260	302	215	263	288	
	R	96	143	208	186	254	220	211	260	219	243	144	
EB SR 4	L	190	253	287	287	302	294	321	331	305	280	273	
	R	624	715	683	760	775	1,068	800	832	824	803	853	
WB	L	250	267	223	233	182	178	200	196	164	179	204	
	R	731	742	662	530	505	613	672	712	794	698	635	
CLV LOS	E	D	D	E	D	D	D	E	E	E	E	E	
v/c	0.96	0.87	0.88	0.92	0.90	0.88	0.95	0.92	0.94	0.94	0.94	0.92	
HCS LOS	N/A	F	E	E	E	D	E	E	F	E	D	D	
Delay	N/A	94	62	60	56	52	58	66	84	77	47	47	
Synchro LOS	N/A	D	D	D	D	D	D	D	D	D	D	D	
Delay	N/A	52	44	43	43	39	45	44	46	46	42	42	

CHURCHMANS ROAD / CONTINENTAL DRIVE

# 9

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Continental	L	-	-	61	179	184	163						Churchmans Road under construction in 2000; finished by 2001 count. Before the 10/02 count, left turn lanes were added to NB & SB Continental Dr., Churchmans Plaza. Intersection was not counted in 10/03, 10/04, or 10/05.
	T	-	-	69	71	87	80						
	R	-	-	491	500	540	324						
SB Churchmans Pl.	L	-	-	185	73	91	92						
	T	-	-	10	11	9	11						
	R	-	-	45	1	7	13						
EB Churchmans	L	-	-	127	22	22	50						
	R	-	-	1032	1212	1,407	1,344						
WB Churchmans	L	-	-	214	120	150	130						
	R	-	-	619	1005	990	985						
CLV LOS	N/A	N/A	C	B	C	A							
v/c	N/A	N/A	0.78	0.67	0.75	0.60							

SR 7 / CHURCHMANS ROAD (Ramp A)

# 10

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 7	L	317	429										Churchmans Road under construction in 2000; finished by 2001 count. Intersection was not counted in 10/03, 10/04, or 10/05.
	T	1057	1057										
	R	222	335										
SB SR 7	L	270	290	90	128	190	180						
	R	1455	1956	429	678	677	789						
EB Churchmans	L	182	317										
	R	459	693	511	652	960	745						
WB Churchmans	L	1161	1335	1277	871	734	1,037						
	R	430	405	484	560	1,046	483						
WB Churchmans	T	854	975	958	1194	1,209	1,150						
	R	500	641										
CLV LOS	F	F	E	E	E	E							
v/c	1.39	1.66	0.98	0.96	0.97	0.91							

During the October 2001 PM period count, several eastbound right-turns were made from the eastbound right-most through lane. The volumes are shown below. These vehicles have been included in the eastbound right-turn volume above.

4:00 PM	7	5:00 PM	19
4:15 PM	13	5:15 PM	14
4:30 PM	9	5:30 PM	13
4:45 PM	10	5:45 PM	6

SR 7 / CHURCHMANS ROAD (Ramp B/C)

# 11

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 7	L	317	429										Churchmans Road under construction in 2000; finished by 2001 count. Intersection was not counted in 10/03, 10/04, or 10/05.
	T	1057	1057										
	R	222	335										
SB SR 7	L	270	290	117	186	167	152						
	R	1455	1956	72	69	97	74						
EB Churchmans	L	98	12	276	300	326	326						
	R	182	317	67	97	111	138						
WB Churchmans	L	459	693	455	595	576	663						
	R	1161	1335	62	77	129	100						
WB Churchmans	L	430	405	134	141	116	127						
	R	854	975	1355	1266	1,289	1,274						
WB Churchmans	T	500	641	286	340	363	378						
	R												
CLV LOS	F	F	B	A	A	A							
v/c	1.39	1.66	0.64	0.50	0.53	0.52							



Churchmans Crossing Volume and Level of Service Comparison - **PM** Peak Hour

**CHURCHMANS ROAD / DEL TECH**

# 12

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Driveway	L	-	-	217	251	396	247						Churchmans Road under construction in 2000; finished by 2001 count. Intersection was not counted in 1003, 1004, or 1005.
	T	-	-	23	18	17	17						
	R	-	-	44	55	80	47						
SB Del Tech	L	-	-	131	128	102	106						
	T	-	-	-	-	-	-						
	R	-	-	108	78	140	73						
EB Churchmans	L	-	-	29	125	58	112						
	T	-	-	489	613	762	620						
	R	-	-	54	76	69	62						
WB Churchmans	L	-	-	1600	1486	1,515	1,399						
	T	-	-	-	-	-	-						
	R	-	-	133	192	143	209						
CLV LOS		N/A	N/A	C	A	A	A						
v/c		N/A	N/A	0.74	0.62	0.62	0.58						

**CHURCHMANS ROAD / COUNTRY CLUB DRIVE**

# 13

		1993 Count	1998 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB C.C.	L	-	96	90	80	106	96						Intersection was not counted in 1003, 1004, or 1005.
	T	-	-	-	-	-	-						
	R	-	56	47	39	40	36						
SB	L	-	-	-	-	-	-						
	T	-	-	-	-	-	-						
	R	-	-	-	-	-	-						
EB Churchmans	L	-	-	-	-	-	-						
	T	-	564	586	683	716	729						
	R	-	179	172	155	186	199						
WB Churchmans	L	-	67	78	59	50	72						
	T	-	710	771	844	785	780						
	R	-	-	-	-	-	-						
CLV LOS		N/A	A	A	A	A	A						
v/c		N/A	0.50	0.54	0.58	0.56	0.56						

**SR 273 / HARMONY ROAD**

# 14

		1993 Count	1998 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Gerald Drive	L	-	18	7	12	10	10	11		14	22	13	Before 10/02, an exclusive WB right turn lane was added. No count performed in 2004 due to ongoing construction at I-95 / SR 273 interchange. Intersection was not counted in 1004.
	T	-	17	19	10	6	20	27		34	14	10	
	R	-	89	99	72	94	80	57		63	66	68	
SB Harmony	L	-	829	675	701	478	504	501		498	465	457	
	T	-	21	31	21	20	14	17		18	13	11	
	R	-	17	10	14	16	5	25		14	13	31	
EB SR 273	L	-	36	20	27	27	30	44		15	31	58	
	T	-	1612	1653	1925	2,156	1,613	2,157		2,099	2,082	2,062	
	R	-	15	14	19	25	27	23		28	25	16	
WB SR 273	L	-	55	75	65	79	66	113		70	74	69	
	T	-	1700	1873	1647	1,972	1,816	1,919		1,877	2,022	1,793	
	R	-	767	574	602	513	495	620		555	547	524	
CLV LOS		N/A	E	E	F	F	D	F		F	E	E	
v/c		N/A	0.99	1.00	1.02	1.03	0.89	1.04		1.00	0.98	0.96	
HCS LOS Delay		N/A	E	E	E	F	D	E		E	E	C	
Synchro LOS Delay		N/A	67	62	61	82	45	67		76	72	35	
Synchro LOS Delay		N/A	D	D	E	E	D	F		E	E	D	
Synchro LOS Delay		N/A	54	52	55	75	41	83		74	72	36	

**SR 273 / CHAPMAN ROAD / EAGLE RUN ROAD**

# 15

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Chapman	L	626	753	755	722	890	792	718		766	706	704	No counts performed in 2004 due to ongoing construction on I-95 SR 273 interchange. Intersection was not counted in 1004.
	T	31	6	21	27	9	29	18		30	18	22	
	R	332	384	407	370	375	466	405		435	428	415	
SB Eagle Run	L	142	42	68	61	60	66	59		56	50	52	
	T	59	22	22	18	12	20	25		14	16	11	
	R	347	73	132	149	119	150	114		147	100	130	
EB SR 273	L	58	51	69	92	41	96	66		49	47	48	
	T	1400	1643	1614	1590	1,709	1,626	1,817		1,691	1,898	1,672	
	R	717	892	393	728	653	640	610		539	615	485	
WB SR 273	L	154	230	197	161	228	233	249		214	244	269	
	T	841	902	1219	1121	1,578	1,240	1,297		1,387	1,566	1,269	
	R	21	18	18	16	6	31	30		24	24	30	
CLV LOS		D	E	E	D	F	E	F		E	F	E	
v/c		0.85	0.95	0.93	0.89	1.07	1.00	1.03		0.96	1.02	0.95	
HCS LOS Delay		N/A	F	E	E	F	F	F		E	F	D	
Synchro LOS Delay		N/A	99	66	66	86	77	86		74	94	49	
Synchro LOS Delay		N/A	E	D	D	E	D	E		D	E	D	
Synchro LOS Delay		N/A	57	48	43	65	52	64		54	70	47	

\*Assume SB count in 1997 was affected by something unknown.

SR 273 / OLD BALTIMORE PIKE

# 16

		1993 Count	1998 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Old Balt	L	-	280	259	297	294	318	318	312	300	361	254	Main Street was closed 10/01. Intersection operates as split phased in the northbound/southbound directions during the 2002 counts.
	T	-	104	97	67	131	188	171	150	142	138	132	
	R	-	293	302	388	297	528	358	574	385	367	292	
SB Old Balt	L	-	35	22	68	26	43	24	11	18	23	27	
	T	-	143	135	95	155	249	163	158	200	189	187	
	R	-	51	32	13	259	125	80	175	149	191	143	
EB SR 273	L	-	23	15	2	220	91	135	105	116	127	131	
	R	-	1323	1341	920	1,240	1,269	1,385	1,324	1,335	1,322	1,142	
WB SR 273	L	-	418	346	669	362	479	380	555	414	422	398	
	R	-	1046	1042	1088	1,089	1,144	1,293	1,154	1,076	1,225	1,173	
CLV LOS		N/A	D	C	C	E	F	D	F	E	E	D	
v/c		N/A	0.84	0.79	0.75	0.93	1.00	0.89	1.02	0.94	0.99	0.85	
HCS LOS		N/A	D	D	E	F	F	E	F	F	F	C	
Delay		N/A	41	53	79	89	105	56	102	83	86	32	
Synchro LOS		N/A	B	C	D	D	D	C	E	D	D	C	
Delay		N/A	20	21	47	42	55	26	60	37	40	32	

SR 7 / SR 273

# 17

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 7	L	313	410	345	393	350	472	340	460	352	321	372	An additional WB/L was added to the intersection prior to the 2001 count.
	T	64	57	49	76	74	70	64	83	52	86	88	
	R	318	511	416	715	459	501	480	301	465	433	510	
SB SR 7	L	67	62	112	71	119	113	116	99	113	124	113	
	T	156	111	165	120	136	197	102	111	123	153	129	
	R	3	27	24	6	56	5	36	39	20	23	20	
EB SR 273	L	5	3	7	13	10	6	12	10	11	12	7	
	R	777	1190	1530	1114	959	1,036	1,157	1,300	1,154	1,140	1,176	
WB SR 273	L	580	650	562	647	695	606	826	646	710	708	858	
	R	635	1083	1153	1161	1,026	1,110	1,528	1,297	1,200	1,300	1,265	
CLV LOS		B	F	F	D	C	D	D	E	D	D	E	
v/c		0.65	1.01	1.06	0.87	0.79	0.84	0.89	0.91	0.85	0.85	0.93	
HCS LOS		N/A	F	F	F	E	E	F	E	F	F	F	
Delay		N/A	138	124	82	64	79	91	71	115	103	89	
Synchro LOS		N/A	F	E	F	E	E	D	E	E	E	E	
Delay		N/A	100	77	92	68	73	73	52	66	63	78	

SR 273 / SB SR 1 RAMP

# 18

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB	L	-	-	-	-	-	-	-	-	-	-	-	Intersection was not counted in 10/03, 10/04, or 10/05.
	T	-	-	-	-	-	-	-	-	-	-	-	
	R	-	-	-	-	-	-	-	-	-	-	-	
SB SR 1	L	-	266	324	303	315	271	371	338	-	-	-	
	T	-	-	11	4	-	-	-	-	-	-	-	
	R	-	204	331	446	502	438	434	468	-	-	-	
EB SR 273	L	-	-	-	-	-	-	-	-	-	-	-	
	R	-	1353	1864	1581	1,264	1,242	1,410	1,452	-	-	-	
WB SR 273	L	-	152	214	182	203	181	195	228	-	-	-	
	R	-	1601	1585	980	1,474	1,520	1,538	1,671	-	-	-	
CLV LOS		N/A	C	E	E	D	D	D	E	-	-	-	
v/c		N/A	0.73	0.98	0.94	0.88	0.81	0.88	0.93	-	-	-	
HCS LOS		N/A	N/A	N/A	N/A	N/A	N/A	C	D	-	-	-	
Delay		N/A	N/A	N/A	N/A	N/A	N/A	27	39	-	-	-	
Synchro LOS		N/A	N/A	N/A	N/A	N/A	N/A	C	C	-	-	-	
Delay		N/A	N/A	N/A	N/A	N/A	N/A	22	30	-	-	-	

SR 273 / NB SR 1 RAMP

# 19

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB SR 1	L	-	130	141	162	181	203	209	208	-	-	-	Intersection was not counted in 10/03, 10/04, or 10/05.
	T	-	-	-	-	-	-	-	-	-	-	-	
	R	-	106	114	139	147	171	189	178	-	-	-	
SB	L	-	-	-	-	-	-	-	-	-	-	-	
	T	-	-	-	-	-	-	-	-	-	-	-	
	R	-	-	-	-	-	-	-	-	-	-	-	
EB SR 273	L	-	260	315	297	376	305	385	313	-	-	-	
	R	-	1358	1873	1204	1,172	1,288	1,428	1,406	-	-	-	
WB SR 273	L	-	-	-	-	-	-	-	-	-	-	-	
	R	-	1623	1658	1456	1,518	1,512	1,532	1,668	-	-	-	
CLV LOS		N/A	C	D	C	D	D	D	D	-	-	-	
v/c		N/A	0.80	0.86	0.79	0.87	0.84	0.90	0.90	-	-	-	
HCS LOS		N/A	N/A	N/A	N/A	N/A	N/A	C	D	-	-	-	
Delay		N/A	N/A	N/A	N/A	N/A	N/A	30	46	-	-	-	
Synchro LOS		N/A	N/A	N/A	N/A	N/A	N/A	C	D	-	-	-	
Delay		N/A	N/A	N/A	N/A	N/A	N/A	25	41	-	-	-	

**SB SR 1 RAMPS / ROAD A**

# 20

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes				
NB SR 1	L	126	149	144	94	104	136						Intersection was not counted in 10/03, 10/04, or 10/05.				
	R	11	6	29	49	70	66										
SB	L													Intersection was not counted in 10/03, 10/04, or 10/05.			
	R																
EB Road A	L	263	256	263	337	491	353								Intersection was not counted in 10/03, 10/04, or 10/05.		
	R	30	47	70	49	84	65										
WB Road A	L	196	199	236	280	456	326									Intersection was not counted in 10/03, 10/04, or 10/05.	
	R	120	108	199	227	336	200										
CLV LOS v/c		A 0.37	A 0.38	A 0.41	A 0.44	B 0.66	A 0.51										

**NB SR 1 RAMPS / ROAD A**

# 21

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes				
NB SR 1	L	10	20	20	12	16	11						Intersection was not counted in 10/03, 10/04, or 10/05.				
	R	187	214	269	297	344	358										
SB Mail	L	94	100	163	194	236	264							Intersection was not counted in 10/03, 10/04, or 10/05.			
	R	212	278	416	484	557	518										
EB Road A	L	81	136	200	253	262	314								Intersection was not counted in 10/03, 10/04, or 10/05.		
	R	120	174	114	124	149	106										
WB	L															Intersection was not counted in 10/03, 10/04, or 10/05.	
	R																
CLV LOS v/c		A 0.17	A 0.23	A 0.29	A 0.34	A 0.38	A 0.43										

**SR 2 / RED MILL ROAD / POLLY DRUMMOND HILL ROAD**

# 22

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes				
NB Red Mill	L	-	-	218	238	254	194	296	199	208	274	215					
	R	-	-	374	426	412	434	421	312	359	401	391					
SB Polly	L	-	-	233	171	312	177	200	209	189	201	200					
	R	-	-	375	380	453	288	319	301	323	366	323					
EB SR 2	L	-	-	411	346	368	352	381	282	358	353	369					
	R	-	-	1091	1024	1,169	1,172	1,142	1,164	997	993	1,129					
WB SR 2	L	-	-	210	202	254	214	260	196	180	204	226					
	R	-	-	1259	1207	1,305	1,107	1,326	1,305	1,270	1,326	1,306					
CLV LOS v/c		N/A	N/A	F 1.01	E 0.96	F 1.06	E 0.95	F 1.03	D 0.90	E 0.96	F 1.01	E 1.00					
HCS LOS Delay		N/A	N/A	E 67	E 63	E 79	E 56	E 67	D 52	E 58	E 71	E 59					
Synchro LOS Delay		N/A	N/A	D 54	D 47	E 61	D 42	D 53	D 39	D 44	D 54	D 53					

**SR 7 / SCHOOL BELL ROAD**

# 24

		1993 Count	1997 Count	2000 Count	2001 (Feb) Count	2001 (Oct) Count	2002 (Oct) Count	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes				
NB SR 7	L	-	-	752	-	-	787						Intersection was not counted in 10/03, 10/04, or 10/05.				
	R	-	-	42	-	-	66										
SB SR 7	L	-	-	117	-	-	216							Intersection was not counted in 10/03, 10/04, or 10/05.			
	R	-	-	1,198	-	-	1,345										
EB	L	-	-	-	-	-	-								Intersection was not counted in 10/03, 10/04, or 10/05.		
	R	-	-	-	-	-	-										
WB School	L	-	-	58	-	-	68									Intersection was not counted in 10/03, 10/04, or 10/05.	
	R	-	-	58	-	-	184										
CLV LOS v/c		N/A	N/A	C 0.79	N/A	N/A	D 0.88										

**SR 4 / TELEGRAPH ROAD**

# 25

		Count 118	Count 98	Count 108	Count 112	Count 131	Count 173	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB Happy Harry's	L	-	-	-	-	-	-	-	14				Intersection was not counted in Fall 2005.
	T	-	-	-	-	-	-	-					
	R	-	-	-	-	-	-	-	27				
SB Telegraph	L	-	-	-	-	-	-	-	129				
	T	-	-	-	-	-	-	-					
	R	-	-	-	-	-	-	-	299				
EB SR 4	L	-	-	-	-	-	-	-	508				
	T	-	-	-	-	-	-	-	2,309				
	R	-	-	-	-	-	-	-	54				
WB SR 4	L	-	-	-	-	-	-	-	11				
	T	-	-	-	-	-	-	-	2,470				
	R	-	-	-	-	-	-	-	233				
CLV LOS v/c		N/A	N/A	N/A	N/A	N/A	N/A	N/A	E				
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00				
HCS LOS Delay		N/A	N/A	N/A	N/A	N/A	N/A	N/A	D				
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	49				
Synchro LOS Delay		N/A	N/A	N/A	N/A	N/A	N/A	N/A	C				
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	34				

\*HCS results based on pretimed signal (not actuated-coordinated) and do not account for upstream signal impacts. SYNCHRO results based on actuated-coordinated signal system on SR 4.

**SR 2 / ST. JAMES CHURCH ROAD**

# 26

		Count 118	Count 98	Count 108	Count 112	Count 131	Count 173	2003 (Oct) Count	2004 (Oct) Count	2005 (Oct) Count	2006 (Oct) Count	2007 (Nov) Count	Notes
NB St. James	L	-	-	-	-	-	-	-	204				Intersection was not counted in Fall 2005.
	T	-	-	-	-	-	-	-	53				
	R	-	-	-	-	-	-	-	152				
SB Griffin Drive	L	-	-	-	-	-	-	-	111				
	T	-	-	-	-	-	-	-	70				
	R	-	-	-	-	-	-	-	98				
EB SR 2	L	-	-	-	-	-	-	-	120				
	T	-	-	-	-	-	-	-	1,436				
	R	-	-	-	-	-	-	-	84				
WB SR 2	L	-	-	-	-	-	-	-	237				
	T	-	-	-	-	-	-	-	1,700				
	R	-	-	-	-	-	-	-	32				
CLV LOS v/c		N/A	N/A	N/A	N/A	N/A	N/A	N/A	B				
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.68				
HCS LOS Delay		N/A	N/A	N/A	N/A	N/A	N/A	N/A	D				
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	38				
Synchro LOS Delay		N/A	N/A	N/A	N/A	N/A	N/A	N/A	C				
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	29				