INTERSECTION ANALYSIS

CROSSTOWN DRIVE
&
PEACHTREE PARKWAY

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TABLE OF CONTENTS

1. EXECUTIVE SUMMARY **1**

2. INTRODUCTION **2**

3. PROJECT DESCRIPTION **3**

EXISTING CONDITIONS 3
TRAFFIC CONTROL 3

4. LAND USE **4**

5. EXISTING TRAFFIC VOLUMES **6**

OPERATIONAL ANALYSIS 7
EXISTING INTERSECTION LEVELS OF SERVICE 8

6. SIGNAL WARRANTS **9**

WARRANT ANALYSIS 9
SUMMARY 12

7. FORECAST TRAFFIC VOLUMES **13**

8. ANALYSIS OF POSSIBLE SIGNALIZATION **16**

9. GEOMETRIC IMPROVEMENTS **18**

10. RECOMMENDATIONS **21**

APPENDIX A – CAPACITY ANALYSIS ..... **A**

APPENDIX B – TRAFFIC COUNTS ..... **B**

LIST OF FIGURES

FIGURE 1 – AREA MAP 2
FIGURE 2 – AERIAL PHOTO OF SITE 4
FIGURE 3 – LANE CONFIGURATION 5
FIGURE 4 – EXISTING PEAK HOUR VOLUMES 6
FIGURE 5 – CROSSTOWN DRIVE & PEACHTREE PARKWAY DIRECTIONAL COUNTS 7
FIGURE 6 – WARRANT 2, FOUR-HOUR VEHICULAR VOLUME (70% FACTOR) 12
FIGURE 7 – PROJECTED 2012 VOLUMES 13
FIGURE 8 – PROJECTED 2017 VOLUMES 14
FIGURE 9 – PROJECTED 2027 VOLUMES 15
FIGURE 10 – PROPOSED WIDENING 19

LIST OF TABLES

TABLE 1 – LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS 8
TABLE 2 - LEVEL OF SERVICE CRITERIA FOR STOP SIGN CONTROLLED INTERSECTIONS 8
TABLE 3 - WARRANT 1, CONDITION A 10
TABLE 4 - WARRANT 1, CONDITION B 11
TABLE 5 – 2007 LOS WITH SIGNAL 16
TABLE 6 – 2012 LOS WITH SIGNAL 16
TABLE 7 – 2017 LOS WITH SIGNAL 17
TABLE 8 – 2027 LOS WITH SIGNAL 17
TABLE 9 – 2027 LOS WITH SIGNAL AND WIDENING 20

1. EXECUTIVE SUMMARY

Purpose of Study:
The purpose of this study is to evaluate the intersection of Crosstown Drive and Peachtree Parkway in Peachtree City, Georgia to determine if a traffic signal is warranted and what other improvements will be needed to improve the present levels of service (LOS) and maintain acceptable LOS in the future.

Major Findings of this Analysis:
Traffic volumes were projected to the years 2012, 2017 and 2027, and LOS analyses were conducted for each of those years. The analyses concluded that the intersection would experience increasing delays and deteriorating LOS as traffic volumes increase in the future.

Mitigation Measures Proposed:
Future conditions were tested for the intersection with the installation of a signal and LOS continued to decline. The intersection was then tested with both a signal and widening on the northbound and southbound approaches to add right turn lanes, and widening on the eastbound and westbound approaches to add left and right turn lanes. These measures provided acceptable LOS and low delays through 2027.

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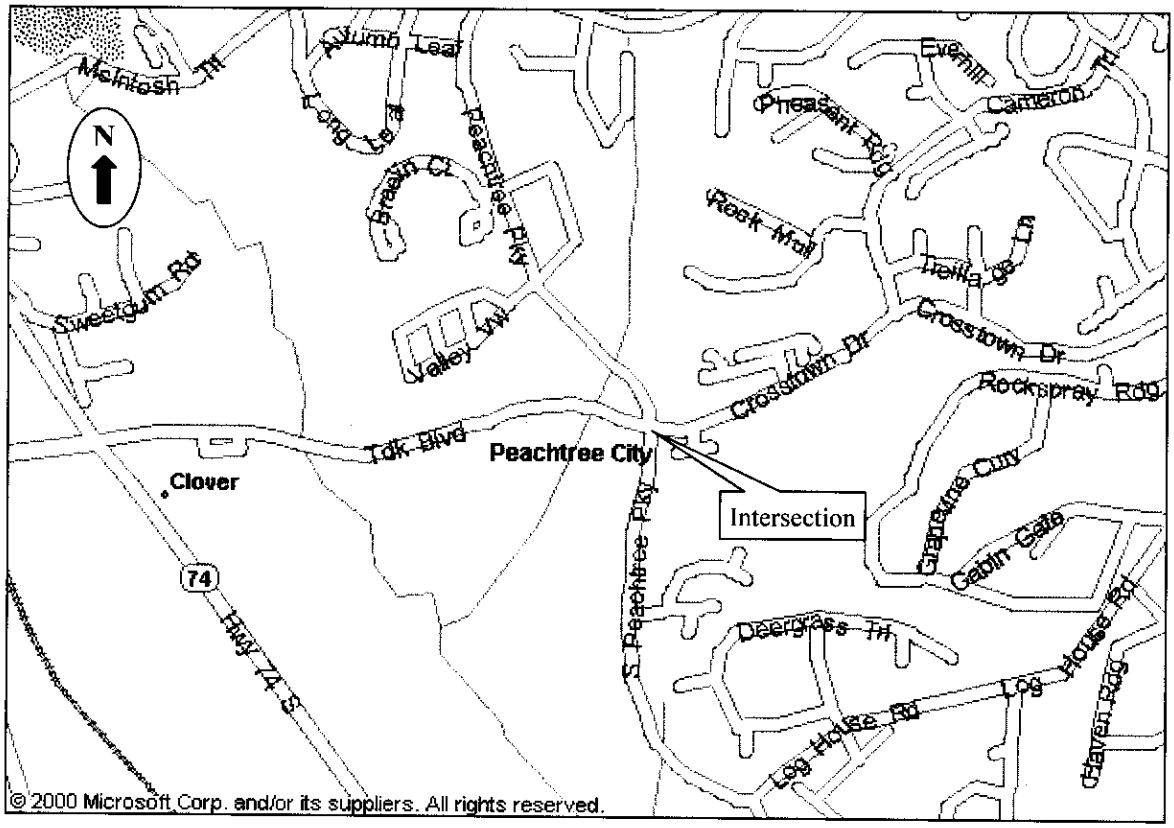
2. INTRODUCTION

The purpose of this study is to evaluate the intersection of Peachtree Parkway and Crosstown Drive in Peachtree City, Georgia to determine what improvements will be needed to improve the present levels of service (LOS) and maintain acceptable LOS in the future. Figure 1 shows the location of the site and the surrounding area.

Figure 1 – Area Map



3. PROJECT DESCRIPTION

Existing Conditions

Peachtree Parkway is an important roadway that extends from SR 74 on the north across SR 54 and down to the southern portions of Peachtree City. It provides a vital connectivity from the northern portion of the City to the southern portion, and connects both areas to SR 54 and SR 74. Crosstown Drive runs from SR 74 to Peachtree Parkway, continues through a residential area to the east and ends at Robinson Road.

Traffic Control

The intersection of Peachtree Parkway and Crosstown Drive is controlled by an all-way stop. Peachtree Parkway is a four-lane roadway with a median in this area, with left turn lanes and channelized right turn lanes at Crosstown Drive. Crosstown Drive is a two-lane roadway with short medians at the intersection and additional channelized right turn lanes at the intersection. There are not any left turn lanes on Crosstown Drive The speed limit on both roadways is 40 mph. There are no pedestrian facilities at the intersection.

Peachtree City has an extensive network of off-road golf cart paths. There are golf cart paths in the shopping area northeast of the intersection and in the residential areas adjacent to the intersection that are connected by tunnels under the roadways north, south and west of the Peachtree Parkway/Crosstown Drive intersection. There are no golf cart paths or crossings at the intersection.

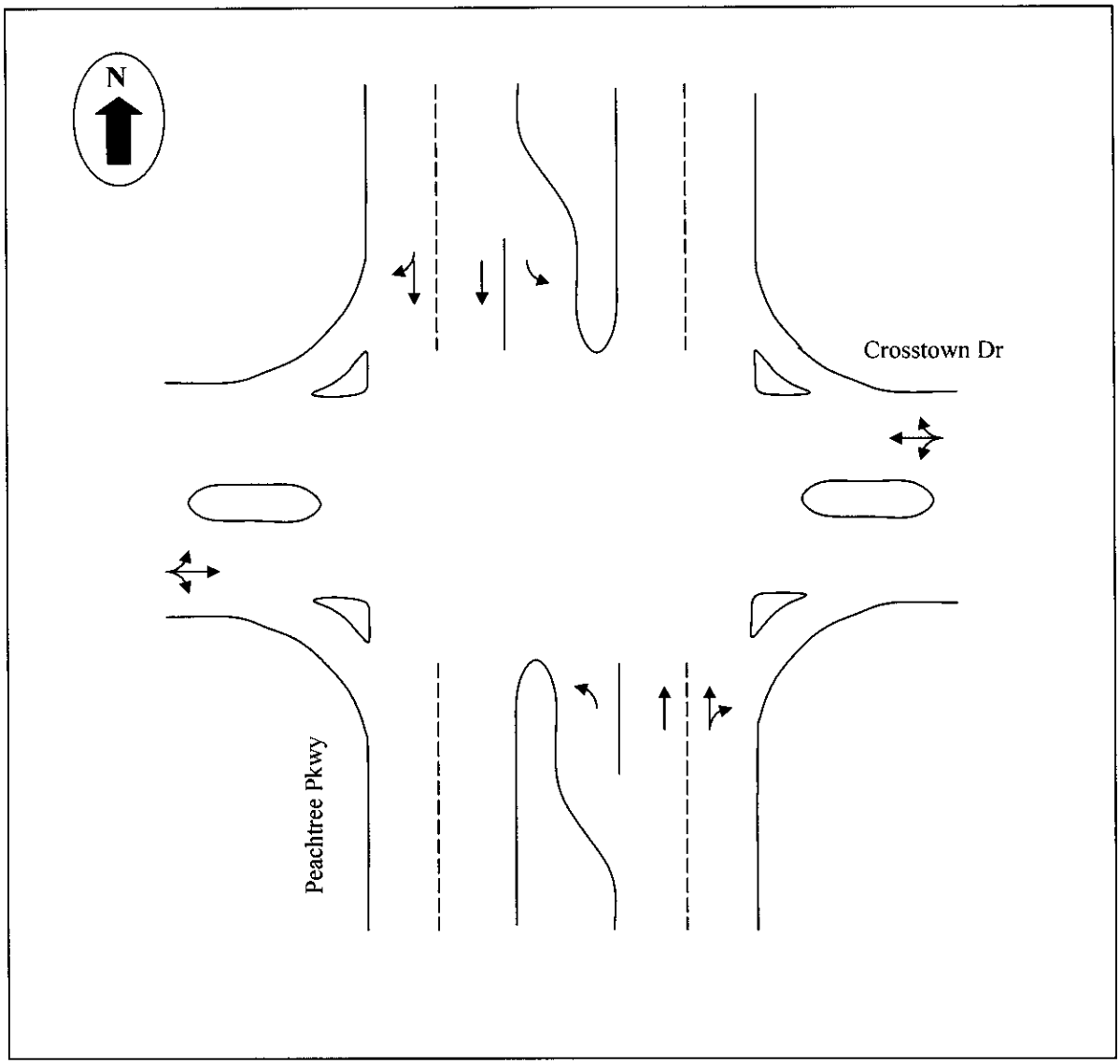
4. LAND USE

The areas south and east of the intersection are residential. There is a retail/commercial area in the northwest quadrant of the intersection. Figure 2 is an aerial photo of the site.

Figure 2 – Aerial Photo of Site

Figure 3 shows the lane configuration at the intersection.

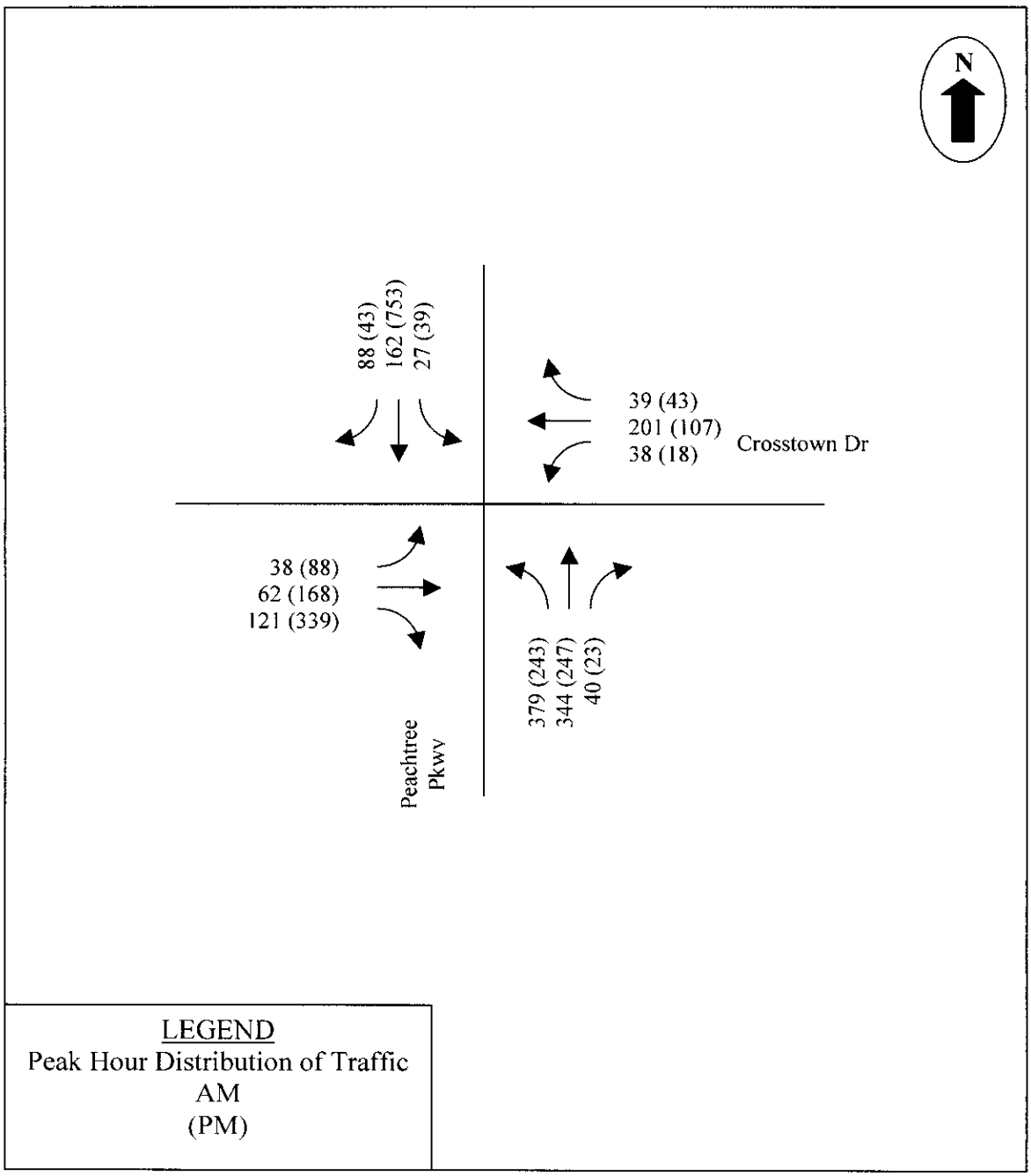
Figure 3 – Lane Configuration



5. EXISTING TRAFFIC VOLUMES

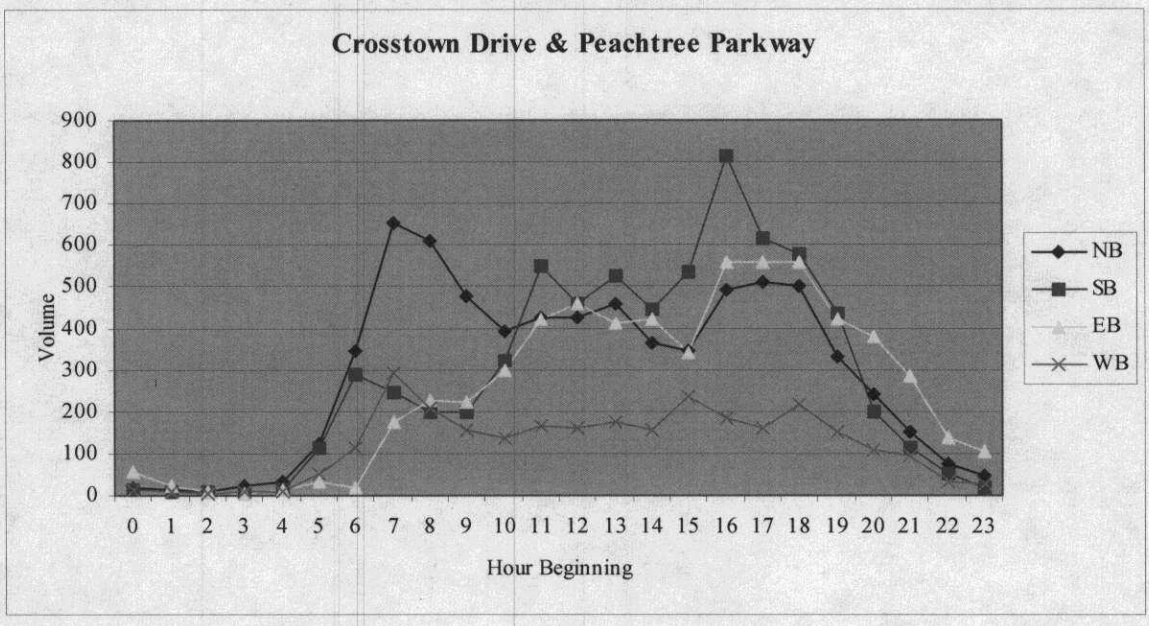
Peak hour turning movement counts were conducted on Tuesday, August 21, 2007 at the Crosstown Drive/Peachtree Parkway intersection. The Figure 4 shows the results of those counts. Copies of the counts are included in the Appendix.

Figure 4 – Existing Peak Hour Volumes



48-hour directional counts were conducted on all approaches to the Crosstown Drive /Peachtree Parkway intersection on August 21 and 22, 2007. The two days were averaged and a graph showing the results is shown in Figure 5. A copy of the count is included in the appendix.

Figure 5 – Crosstown Drive & Peachtree Parkway Directional Counts



Operational Analysis

Operational analyses were performed to evaluate the intersection with respect to the current and future volumes. Procedures outlined in the *2000 Highway Capacity Manual* were used to conduct the capacity analyses. Synchro software was used to facilitate the analysis process.

The Highway Capacity Manual (HCM) defines level of service (LOS) in terms of the amount of control delay experienced by road users. The LOS definitions for signalized intersections are provided in Table 1.

Table 1 – Level of Service Criteria for Signalized Intersections

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (SEC)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

The levels of service definitions for stop-controlled intersections are provided in Table 2.

Table 2 - Level of Service Criteria for Stop Sign Controlled Intersections

LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (SEC)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

The HCM indicates that levels of service "A" through "D" are considered to be acceptable to most drivers. Levels of service "E" and "F" indicate long delays that most drivers generally consider to be unacceptable. LOS "D" will be the desired goal for this study.

Existing Intersection Levels of Service

The HCM does not define LOS for all-way stop-controlled intersections with more than two lanes on an approach. Since Peachtree Parkway has two through lanes and a left turn lane for a total of three lanes on both approaches, it is not possible to calculate the LOS for this intersection as an all-way stop. Later in this report, LOS will be given for the intersection with a traffic signal.

6. SIGNAL WARRANTS

The Crosstown Drive/Peachtree Parkway intersection presently operates as an all-way stop. This portion of the study will determine if the minimum requirements are met for the installation of a traffic signal.

The *Manual on Uniform Traffic Control Devices* (MUTCD), published by the Federal Highway Administration, lists eight warrants that may be considered when determining if an intersection should be signalized. The warrants are:

- Warrant 1, Eight Hour Vehicular Volume
- Warrant 2, Four Hour Vehicular Volume
- Warrant 3, Peak Hour
- Warrant 4, Pedestrian Volume
- Warrant 5, School Crossing
- Warrant 6, Coordinated Signal System
- Warrant 7, Crash Experience
- Warrant 8, Roadway Network

The MUTCD states that "The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal." However, one or more warrants should be met before a signal is installed.

After reviewing conditions at the intersection, it is apparent that Warrants 1, 2 and 3 are the best candidates for this intersection. Warrants 4 and 5 are related to pedestrians crossing the streets. The required number of pedestrians crossing is very high and there is no evidence of pedestrian crossings even approaching the required numbers.

Warrant 6 relates to a roadway system, such as a downtown grid, with multiple signals. That does not apply to this intersection. Warrant 7 is justified when an intersection has experienced a large number of accidents (5 or more within a 12-month period) of types that are susceptible of correction by the installation of a signal. There was no evidence of the occurrence of such a number of accidents. Warrant 8 is for the crossing of two or more major routes.

Warrant Analysis

Traffic conditions at the Crosstown Drive/Peachtree Parkway intersection were compared to the requirements of Warrants 1, 2 and 3 to determine if the requirements are met. Following is a summary of the findings.

Warrant 1 is broken into two parts, only one of which must be met to justify the installation of a signal.

Warrant 1, Condition A requires that the streets have certain minimum volumes, depending on the number of lanes on the streets and other factors. The MUTCD provides

that if the major street speed is 40 mph or greater, the required volumes may be reduced to 70% of the otherwise required levels. Since Peachtree Parkway is the major street and the speed limit is 40 mph, the allowed reduction in volume was used in this study. With the reduction taken, conditions at Crosstown Drive and Peachtree Parkway require that the major street have a minimum of 420 vehicles per hour in both directions combined and that the minor street have a minimum of 105 vehicles per hour on the heaviest approach. These volumes must be present for at least 8 hours of an average day for the warrant to be met. Table 3 shows the volumes at the intersection and the number of hours Warrant 1, Condition A is met.

Table 3 - Warrant 1, Condition A

Crosstown Drive & Peachtree Parkway				
Start Time	**NB Avg**	**SB Avg**	**Total**	**EB Avg**
0	18	11	29	60
1	12	8	20	25
2	8	7	15	10
3	22	6	28	7
4	30	17	46	13
5	128	116	244	35
6	352	298	650	72
7	670	255	925	182
8	627	205	831	233
9	489	207	695	231
10	401	330	730	308
11	435	568	1002	435
12	435	475	909	471
13	472	544	1016	425
14	373	458	831	436
15	356	552	908	352
16	503	839	1342	578
17	526	632	1157	574
18	515	593	1108	578
19	341	451	792	433
20	248	205	453	390
21	155	115	270	294
22	77	56	133	141
23	49	25	73	108
Number of Hours Met			**15**	**17**

As Table 3 shows, Warrant 1, Condition A is met for 15 hours on both the major and minor streets. Since the warrant only requires 8 hours, this warrant is satisfied.

After taking the reduction to 70 %, Warrant 1, Condition B requires 630 vehicles per hour for both directions combined on the major street and 53 vehicles per hour for the heaviest direction on the minor street each hour for 8 hours of an average weekday. Table 4 compares the volumes at the intersection to the requirements of Warrant 1, Condition B.

Table 4 - Warrant 1, Condition B

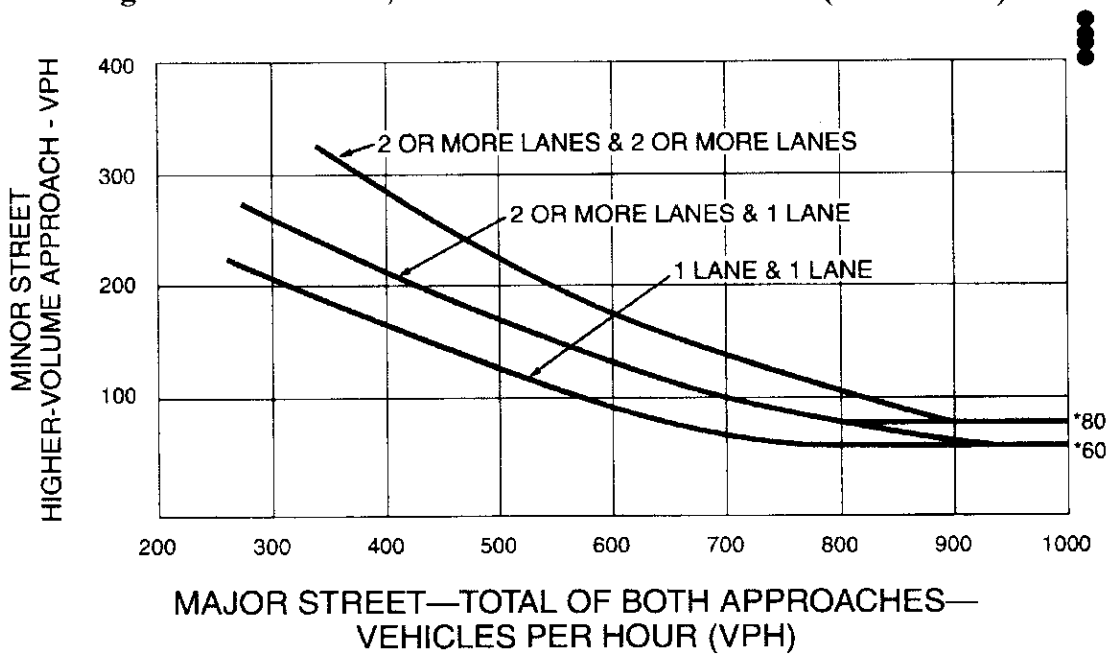
Crosstown Drive & Peachtree Parkway				
Start Time	**NB Avg**	**SB Avg**	**Total**	**EB Avg**
0	18	11	29	60
1	12	8	20	25
2	8	7	15	10
3	22	6	28	7
4	30	17	46	13
5	128	116	244	35
6	352	298	650	72
7	670	255	925	182
8	627	205	831	233
9	489	207	695	231
10	401	330	730	308
11	435	568	1002	435
12	435	475	909	471
13	472	544	1016	425
14	373	458	831	436
15	356	552	908	352
16	503	839	1342	578
17	526	632	1157	574
18	515	593	1108	578
19	341	451	792	433
20	248	205	453	390
21	155	115	270	294
22	77	56	133	141
23	49	25	73	108
Number of Hours Met			**14**	**19**

Table 4 shows that both the major and minor streets meet the minimum requirements of Warrant 1, Condition B for 14 hours. Since both streets must meet this warrant for only 8 hours, Warrant 1, Condition B is satisfied.

Warrant 2, Four Hour Volumes is intended for use at intersections where the volume of intersecting traffic is the principal reason to consider installing a traffic signal, but the volumes required by Warrant 1 are not present for the required 8 hours. Warrant 2 plots the highest four-hour volumes against a graph. If the plotted points are above the curve entitled "2 Lanes & 1 Lane" on the graph, the warrant is satisfied. Again, the MUTCD

provides a graph for speeds of 40 mph or greater. Figure 6 compares the intersection volumes to the requirements of Warrant 2.

Figure 6 – Warrant 2, Four-Hour Vehicular Volume (70% Factor)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

As Figure 6 shows, the 4 highest volume plots all fall well above the curve entitled "2 Lanes & 1 Lane". In fact, the plotted points are off the chart. Warrant 2 is satisfied.

Summary

The intersection of Crosstown Drive and Peachtree Parkway meets Warrant 1, Condition A; Warrant 1, Condition B and Warrant 2 with existing traffic volumes. Only one warrant must be met, so signalization can be considered for this intersection.

7. FORECAST TRAFFIC VOLUMES

Traffic volumes were projected to 5, 10 and 20 years in the future (2012, 2017 and 2027), based upon a 2% compounded annual growth rate. Again, the performance was not evaluated because the HCM does not define LOS for all-way stop intersections with more than two lanes on an approach. Figure 7 shows the 2012 volumes.

Figure 7 – Projected 2012 Volumes

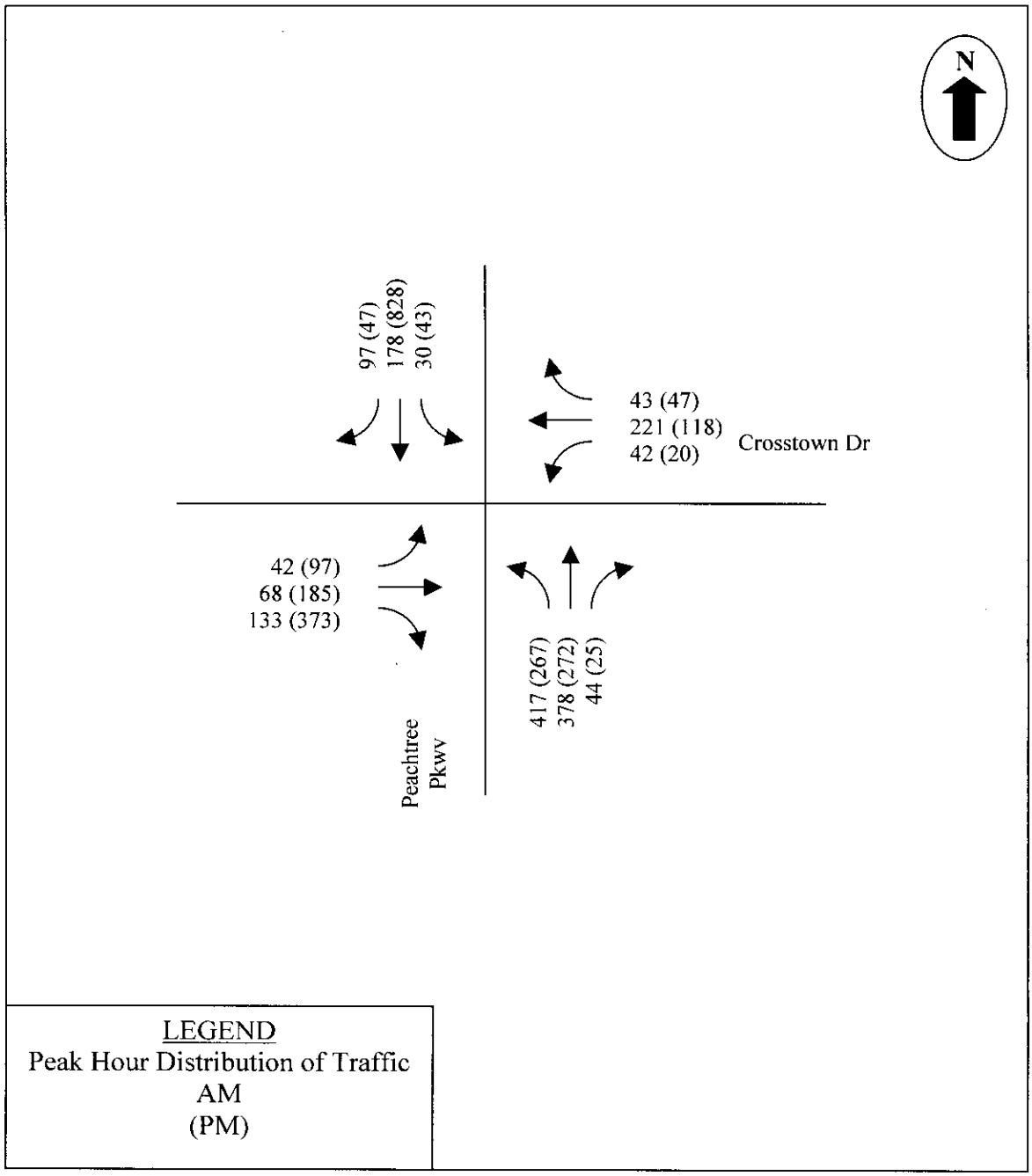


Figure 8 shows the 2017 traffic projected traffic.

Figure 8 – Projected 2017 Volumes

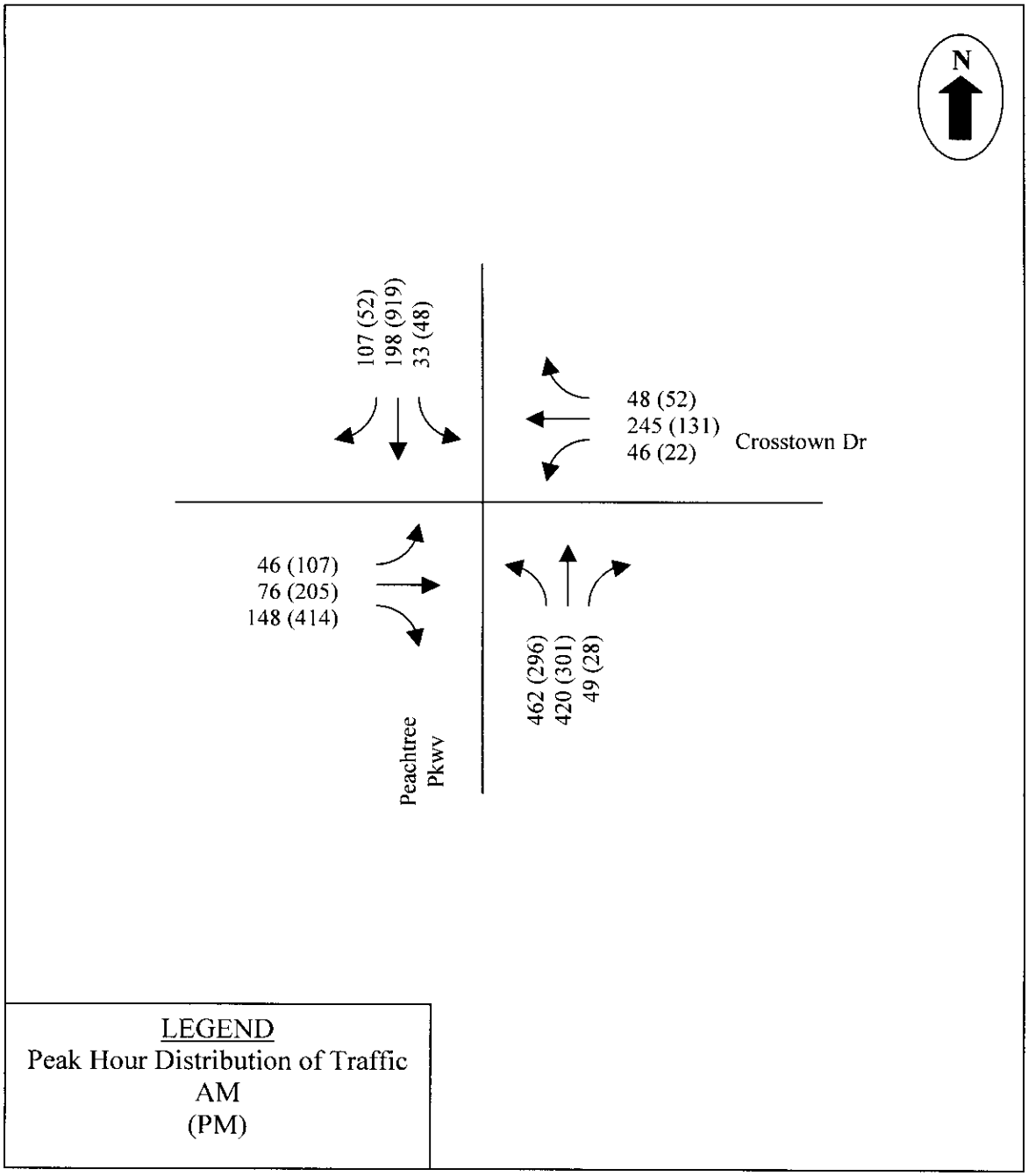
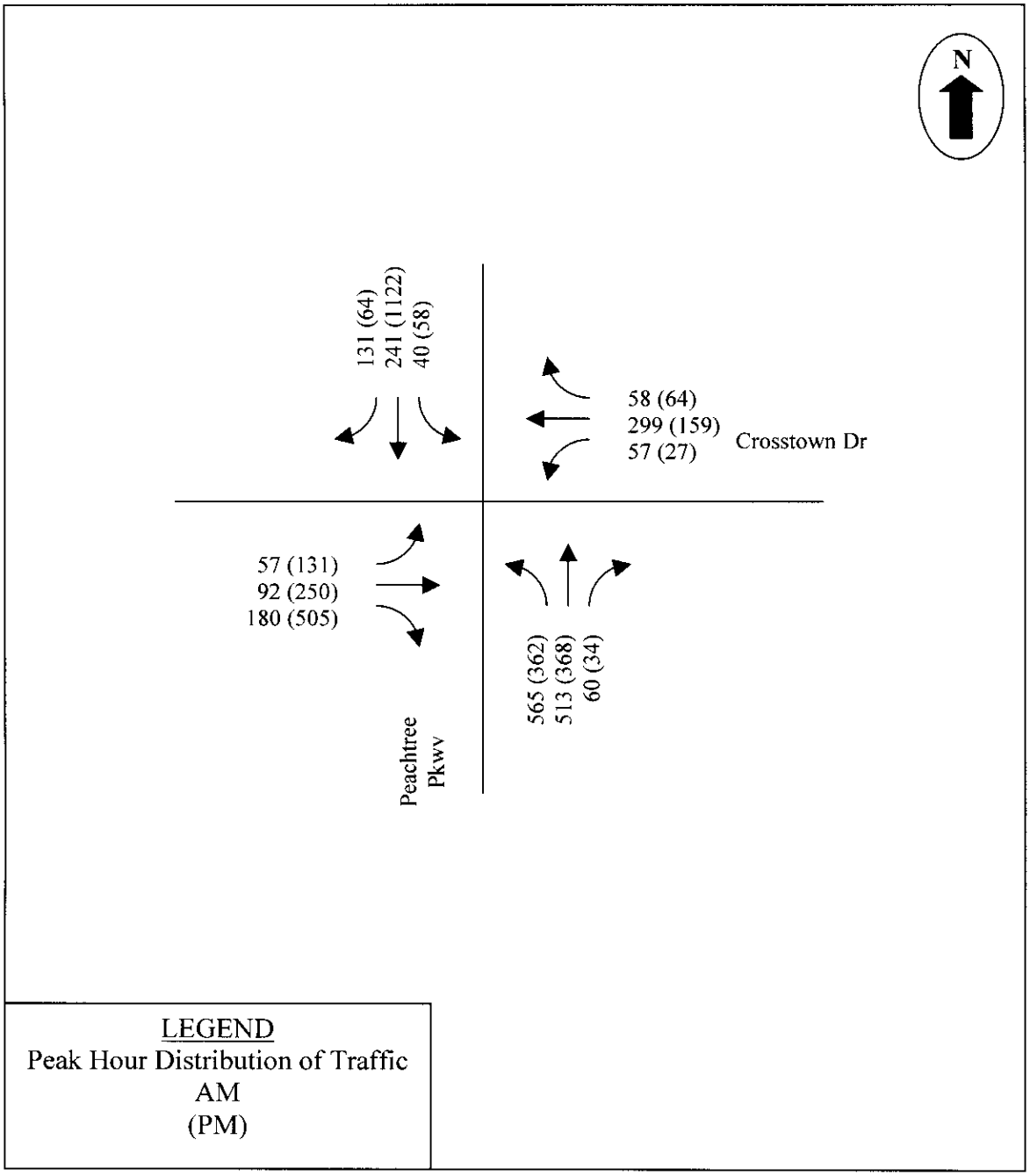


Figure 9 shows the projected 2027 volumes.

Figure 9 – Projected 2027 Volumes



8. ANALYSIS OF POSSIBLE SIGNALIZATION

While the Crosstown Drive/Peachtree Parkway intersection meets warrants for signalization, that in itself does not mean that the intersection would operate better with a signal. This section of the report will examine the operation of the intersection with a signal and determine if other improvements would be needed for satisfactory operation. Table 5 examines the LOS and delay with existing traffic and the installation of a signal.

Table 5 – 2007 LOS With Signal

Location	Approach	Time			
		AM		PM	
		LOS	Delay (Sec)	LOS	Delay (Sec.)
Crosstown Drive & Peachtree Parkway	Intersection	B	14.7	E	61.1
	Eastbound	B	17.6	F	101.9
	Westbound	C	20.7	B	18.9
	Northbound	B	11.0	D	53.0
	Southbound	B	16.4	D	45.4

Simply adding a signal will not solve this intersection's problems even with 2007 traffic. The intersection has failed during the PM peak, with the eastbound approach being particularly bad.

Table 6 looks at LOS and delay with 2012 traffic.

Table 6 – 2012 LOS With Signal

Location	Approach	Time			
		AM		PM	
		LOS	Delay (Sec)	LOS	Delay (Sec.)
Crosstown Drive & Peachtree Parkway	Intersection	B	18.0	F	86.0
	Eastbound	C	23.8	F	148.7
	Westbound	C	28.2	B	19.4
	Northbound	B	11.3	E	73.4
	Southbound	C	21.7	E	62.5

With 2012 traffic, intersection LOS has fallen from E to F during the PM peak, with the northbound, southbound and eastbound approaches having failed. Delay is extremely long for eastbound.

Table 7 examines the LOS and delay with 2017 traffic. The intersection is signalized, but no widening has been done.

Table 7 – 2017 LOS With Signal

Location	Approach	Time			
		AM		PM	
		LOS	Delay (Sec)	LOS	Delay (Sec.)
Crosstown Drive & Peachtree Parkway	Intersection	C	22.2	F	124.1
	Eastbound	C	26.8	F	208.5
	Westbound	C	31.8	B	19.5
	Northbound	B	15.4	F	94.2
	Southbound	C	27.8	F	103.3

With 2017 traffic, the LOS continues to decline and the delays are extremely long.

Table 8 looks at LOS and delay with 2027 traffic, a signal and no widening.

Table 8 – 2027 LOS With Signal

Location	Approach	Time			
		AM		PM	
		LOS	Delay (Sec)	LOS	Delay (Sec.)
Crosstown Drive & Peachtree Parkway	Intersection	E	59.9	F	225.6
	Eastbound	F	118.7	F	370.3
	Westbound	F	138.7	C	20.9
	Northbound	C	22.8	F	159.1
	Southbound	D	36.2	F	204.5

With 2027 traffic, the AM LOS has also failed and delay continues to worsen during both peak hours.

9. GEOMETRIC IMPROVEMENTS

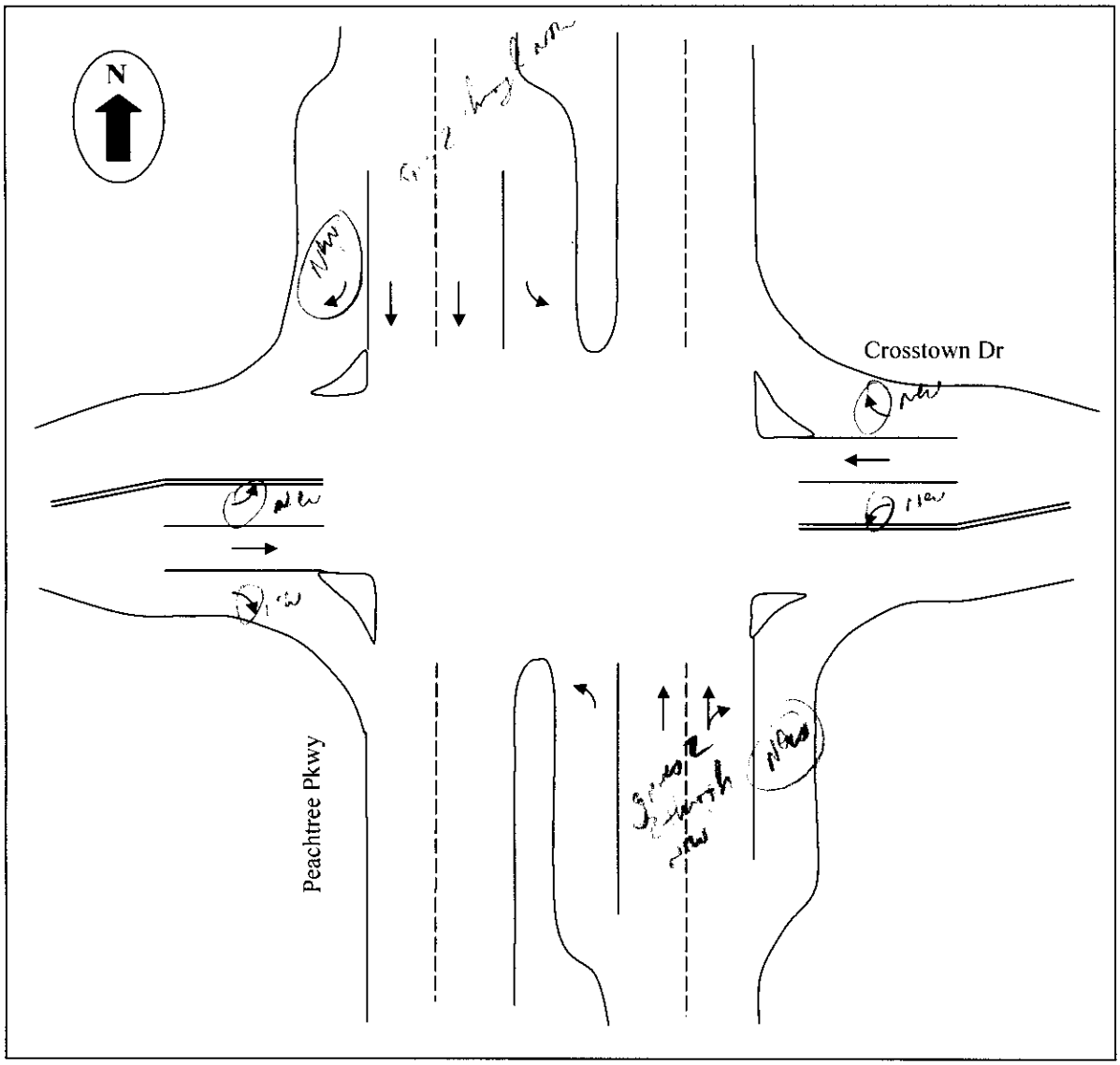
The previous sections document that as traffic through the intersection of Crosstown Drive and Peachtree Parkway increases, delay will increase and LOS will deteriorate, even if a signal is installed. It can reasonably be expected that conditions would be worse if the all-way stop is retained. That indicates that the capacity of the intersection will be exceeded, and widening will be needed to bring delay and LOS back to acceptable levels.

Looking at the turning movement traffic counts, it is apparent that three of the four approaches have heavy turning volumes in one direction or another. Following is an assessment of each approach:

- The eastbound approach on Crosstown Drive has a single lane for left, through and right turns. A single car waiting to turn left can cause great delay and backup. It is proposed to widen this approach to provide a left turn lane, a through lane and a right turn lane.
- The westbound approach on Crosstown Drive is identical to the eastbound approach. It has a single lane for left, through and right turns. A single car waiting to turn left can cause great delay and backup. It is proposed to widen this approach to provide a left turn lane, a through lane and a right turn lane.
- The northbound approach on Peachtree Parkway has extremely heavy left turns during the AM peak hour. There is a left turn lane, a through lane and a combined through/right turn lane. It is proposed to widen this approach to provide a left turn lane two through lanes and a right turn lane.
- The southbound approach on Peachtree Parkway has heavy through traffic, relatively left turns and fairly heavy right turns. It has a left turn lane, a through lane and a combined through/right turn lane. It is proposed to widen this approach to provide a left turn lane two through lanes and a right turn lane.

Figure 10 illustrates the proposed widening.

Figure 10 – Proposed Widening



LOS and delay were then calculated for the intersection with the signal, the widening in place and with 2027 traffic to determine if the improvements would provide good operational characteristics into the future. Table 9 shows the findings.

Table 9 – 2027 LOS With Signal and Widening

Location	Approach	Time			
		AM		PM	
		LOS	Delay (Sec)	LOS	Delay (Sec.)
Crosstown Drive & Peachtree Parkway	Intersection	C	25.7	D	50.6
	Eastbound	B	15.4	D	38.8
	Westbound	D	40.5	E	79.0
	Northbound	C	21.8	D	50.5
	Southbound	C	29.7	D	53.4

As Table 9 illustrates, the installation of a traffic signal and widening will provide acceptable LOS and reasonably low delay at the Crosstown Drive/Peachtree Parkway intersection through 2027.

10. RECOMMENDATIONS

Based upon the findings of this study, it is recommended that the intersection of Crosstown Drive and Peachtree Parkway be signalized, and that widening be done to provide for the addition of right turn lanes on the northbound and southbound approaches, and left turn and right turn lanes on the eastbound and westbound approaches.

It is further recommended that pedestrian facilities, including handicap ramps and other Americans with Disabilities Act (ADA) requirements be included with the signal installation.

Since there are no golf cart paths at this intersection, it is recommended that no special golf cart crossings be created; rather, any golf carts that may occasionally wish to cross can use the pedestrian crossing.

APPENDIX A – CAPACITY ANALYSIS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.93			0.98		1.00	0.98		1.00	0.95	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1440			1529		1490	2934		1490	2823	
Flt Permitted		0.92			0.94		0.43	1.00		0.51	1.00	
Satd. Flow (perm)		1340			1444		672	2934		797	2823	
Volume (vph)	38	62	121	38	201	39	379	344	40	27	162	88
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	41	67	132	41	218	42	412	374	43	29	176	96
Lane Group Flow (vph)	0	240	0	0	301	0	412	417	0	29	272	0
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		14.3			14.3		26.4	21.0		12.4	11.0	
Effective Green, g (s)		14.3			14.3		26.4	21.0		12.4	11.0	
Actuated g/C Ratio		0.29			0.29		0.54	0.43		0.25	0.23	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		393			424		556	1265		223	638	
v/s Ratio Prot							c0.17	0.14		0.00	0.10	
v/s Ratio Perm		0.18			c0.21		c0.23			0.03		
v/c Ratio		0.61			0.71		0.74	0.33		0.13	0.43	
Uniform Delay, d1		14.8			15.3		7.4	9.2		13.8	16.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.8			5.4		5.3	0.2		0.3	0.5	
Delay (s)		17.6			20.7		12.6	9.3		14.1	16.6	
Level of Service		B			C		B	A		B	B	
Approach Delay (s)		17.6			20.7			11.0			16.4	
Approach LOS		B			C			B			B	

Intersection Summary

HCM Average Control Delay	14.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	48.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.8%	ICU Level of Service	D

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.92			0.97		1.00	0.99		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1438			1506		1490	2942		1490	2956	
Flt Permitted		0.92			0.92		0.12	1.00		0.57	1.00	
Satd. Flow (perm)		1336			1392		183	2942		898	2956	
Volume (vph)	88	168	339	18	107	43	243	247	23	39	753	43
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	96	183	368	20	116	47	264	268	25	42	818	47
Lane Group Flow (vph)	0	647	0	0	183	0	264	293	0	42	865	0
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		44.0			44.0		49.3	42.9		34.7	32.3	
Effective Green, g (s)		44.0			44.0		49.3	42.9		34.7	32.3	
Actuated g/C Ratio		0.43			0.43		0.49	0.42		0.34	0.32	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		580			605		257	1246		322	943	
v/s Ratio Prot							c0.13	0.10		0.00	0.29	
v/s Ratio Perm		c0.48			0.13		c0.37			0.04		
v/c Ratio		1.12			0.30		1.03	0.24		0.13	0.92	
Uniform Delay, d1		28.6			18.7		27.6	18.7		22.5	33.2	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		73.3			0.3		63.4	0.1		0.2	13.3	
Delay (s)		101.9			18.9		90.9	18.8		22.7	46.6	
Level of Service		F			B		F	B		C	D	
Approach Delay (s)		101.9			18.9			53.0			45.4	
Approach LOS		F			B			D			D	

Intersection Summary

HCM Average Control Delay	61.1	HCM Level of Service	E
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	101.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	115.8%	ICU Level of Service	G

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.93			0.98		1.00	0.98		1.00	0.95	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1440			1528		1490	2934		1490	2823	
Flt Permitted		0.90			0.94		0.42	1.00		0.49	1.00	
Satd. Flow (perm)		1308			1443		651	2934		765	2823	
Volume (vph)	38	62	121	38	201	39	379	344	40	27	162	88
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Adj. Flow (vph)	45	74	145	45	240	47	453	411	48	32	194	105
Lane Group Flow (vph)	0	264	0	0	332	0	453	459	0	32	299	0
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		18.4			18.4		35.4	30.2		14.4	13.2	
Effective Green, g (s)		18.4			18.4		35.4	30.2		14.4	13.2	
Actuated g/C Ratio		0.30			0.30		0.57	0.49		0.23	0.21	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		389			430		620	1434		192	603	
v/s Ratio Prot							c0.22	0.16		0.00	0.11	
v/s Ratio Perm		0.20			c0.23		c0.20			0.04		
v/c Ratio		0.68			0.77		0.73	0.32		0.17	0.50	
Uniform Delay, d1		19.1			19.8		8.5	9.6		18.6	21.4	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		4.7			8.4		4.4	0.1		0.4	0.6	
Delay (s)		23.8			28.2		12.9	9.7		19.0	22.0	
Level of Service		C			C		B	A		B	C	
Approach Delay (s)		23.8			28.2			11.3			21.7	
Approach LOS		C			C			B			C	

Intersection Summary

HCM Average Control Delay	18.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	61.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.0%	ICU Level of Service	E

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.92			0.97		1.00	0.99		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1437			1507		1490	2942		1490	2956	
Flt Permitted		0.92			0.91		0.11	1.00		0.56	1.00	
Satd. Flow (perm)		1331			1385		171	2942		873	2956	
Volume (vph)	88	168	339	18	107	43	243	247	23	39	753	43
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%	110%
Adj. Flow (vph)	105	201	405	22	128	51	291	295	28	47	900	51
Lane Group Flow (vph)	0	711	0	0	201	0	291	323	0	47	951	0
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		44.0			44.0		49.6	43.2		35.0	32.6	
Effective Green, g (s)		44.0			44.0		49.6	43.2		35.0	32.6	
Actuated g/C Ratio		0.43			0.43		0.49	0.43		0.34	0.32	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		576			600		252	1251		315	948	
v/s Ratio Prot							c0.15	0.11		0.00	0.32	
v/s Ratio Perm		c0.53			0.15		c0.41			0.05		
v/c Ratio		1.23			0.34		1.15	0.26		0.15	1.00	
Uniform Delay, d1		28.8			19.1		28.7	18.9		22.5	34.5	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		119.9			0.3		105.0	0.1		0.2	30.0	
Delay (s)		148.7			19.4		133.7	19.0		22.8	64.5	
Level of Service		F			B		F	B		C	E	
Approach Delay (s)		148.7			19.4			73.4			62.5	
Approach LOS		F			B			E			E	

Intersection Summary

HCM Average Control Delay	86.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	101.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	126.1%	ICU Level of Service	H

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.93			0.98		1.00	0.98		1.00	0.95	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1440			1529		1490	2934		1490	2823	
Flt Permitted		0.76			0.86		0.28	1.00		0.42	1.00	
Satd. Flow (perm)		1103			1318		438	2934		653	2823	
Volume (vph)	38	62	121	38	201	39	379	344	40	27	162	88
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%
Adj. Flow (vph)	62	100	196	62	326	63	614	557	65	44	262	143
Lane Group Flow (vph)	0	358	0	0	451	0	614	622	0	44	405	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0			23.0		49.1	42.8		17.4	15.1	
Effective Green, g (s)		23.0			23.0		49.1	42.8		17.4	15.1	
Actuated g/C Ratio		0.29			0.29		0.61	0.53		0.22	0.19	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		317			378		662	1568		166	532	
v/s Ratio Prot							c0.35	0.21		0.01	0.14	
v/s Ratio Perm		0.32			c0.34		c0.22			0.05		
v/c Ratio		1.13			1.19		0.93	0.40		0.27	0.76	
Uniform Delay, d1		28.6			28.6		15.3	11.0		26.3	30.8	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		90.2			110.1		19.1	0.2		0.9	6.4	
Delay (s)		118.7			138.7		34.5	11.2		27.2	37.1	
Level of Service		F			F		C	B		C	D	
Approach Delay (s)		118.7			138.7			22.8			36.2	
Approach LOS		F			F			C			D	

Intersection Summary

HCM Average Control Delay	59.9	HCM Level of Service	E
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	80.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	121.3%	ICU Level of Service	H

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.92			0.97		1.00	0.99		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1437			1506		1490	2943		1490	2956	
Flt Permitted		0.87			0.85		0.11	1.00		0.50	1.00	
Satd. Flow (perm)		1267			1293		175	2943		782	2956	
Volume (vph)	88	168	339	18	107	43	243	247	23	39	753	43
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%
Adj. Flow (vph)	143	272	549	29	173	70	394	400	37	63	1220	70
Lane Group Flow (vph)	0	964	0	0	272	0	394	437	0	63	1290	0
Turn Type	pm+pt			Perm			pm+pt			pm+pt		
Protected Phases	7	4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		44.0			44.0		48.8	41.6		35.0	31.8	
Effective Green, g (s)		44.0			44.0		48.8	41.6		35.0	31.8	
Actuated g/C Ratio		0.44			0.44		0.48	0.41		0.35	0.32	
Clearance Time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		553			564		254	1215		294	933	
v/s Ratio Prot							c0.20	0.15		0.01	0.44	
v/s Ratio Perm		c0.76			0.21		c0.55			0.07		
v/c Ratio		1.74			0.48		1.55	0.36		0.21	1.38	
Uniform Delay, d1		28.4			20.3		46.1	20.4		22.4	34.5	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		341.9			0.7		266.6	0.2		0.4	178.9	
Delay (s)		370.3			20.9		312.7	20.6		22.8	213.4	
Level of Service		F			C		F	C		C	F	
Approach Delay (s)		370.3			20.9			159.1			204.5	
Approach LOS		F			C			F			F	

Intersection Summary

HCM Average Control Delay	225.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.62		
Actuated Cycle Length (s)	100.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	166.0%	ICU Level of Service	H

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1490	1569	1333	1490	1569	1333	1490	2980	1333	1490	2980	1333
Flt Permitted	0.29	1.00	1.00	0.69	1.00	1.00	0.41	1.00	1.00	0.44	1.00	1.00
Satd. Flow (perm)	448	1569	1333	1086	1569	1333	637	2980	1333	695	2980	1333
Volume (vph)	38	62	121	38	201	39	379	344	40	27	162	88
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%
Adj. Flow (vph)	62	100	196	62	326	63	614	557	65	44	262	143
Lane Group Flow (vph)	62	100	196	62	326	63	614	557	65	44	262	143
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	22.0	19.1	47.3	22.0	19.1	22.0	45.8	38.9	41.8	16.5	13.6	16.5
Effective Green, g (s)	22.0	19.1	47.3	22.0	19.1	22.0	45.8	38.9	41.8	16.5	13.6	16.5
Actuated g/C Ratio	0.28	0.24	0.59	0.28	0.24	0.28	0.57	0.49	0.52	0.21	0.17	0.21
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	161	376	857	314	376	434	667	1453	765	173	508	342
v/s Ratio Prot	0.01	0.06	0.08	0.01	c0.21	0.01	c0.33	0.19	0.00	0.01	0.09	c0.02
v/s Ratio Perm	0.09		0.07	0.05		0.04	c0.20		0.05	0.04		0.09
v/c Ratio	0.39	0.27	0.23	0.20	0.87	0.15	0.92	0.38	0.08	0.25	0.52	0.42
Uniform Delay, d1	22.4	24.7	7.7	21.8	29.1	21.8	12.9	12.9	9.5	25.9	30.1	27.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	0.4	0.1	0.3	18.5	0.2	18.1	0.2	0.0	0.8	0.9	0.8
Delay (s)	24.0	25.0	7.8	22.2	47.6	22.0	31.0	13.1	9.5	26.6	31.0	28.3
Level of Service	C	C	A	C	D	C	C	B	A	C	C	C
Approach Delay (s)		15.4			40.5			21.8			29.7	
Approach LOS		B			D			C			C	

Intersection Summary

HCM Average Control Delay	25.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	79.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.7%	ICU Level of Service	D

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1490	1569	1333	1490	1569	1333	1490	2980	1333	1490	2980	1333
Flt Permitted	0.25	1.00	1.00	0.59	1.00	1.00	0.07	1.00	1.00	0.52	1.00	1.00
Satd. Flow (perm)	395	1569	1333	929	1569	1333	108	2980	1333	810	2980	1333
Volume (vph)	88	168	339	18	107	43	243	247	23	39	753	43
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%	149%
Adj. Flow (vph)	143	272	549	29	173	70	394	400	37	63	1220	70
Lane Group Flow (vph)	143	272	549	29	173	70	394	400	37	63	1220	70
Turn Type	pm+pt		pm+ov	Perm		pm+ov	pm+pt		Perm	pm+pt		pm+ov
Protected Phases	7	4	5		8	1	5	2		1	6	7
Permitted Phases	4		4	8		8	2		2	6		6
Actuated Green, G (s)	34.0	34.0	63.0	15.7	15.7	18.9	86.9	79.7	79.7	57.1	53.9	68.2
Effective Green, g (s)	34.0	34.0	63.0	15.7	15.7	18.9	86.9	79.7	79.7	57.1	53.9	68.2
Actuated g/C Ratio	0.26	0.26	0.49	0.12	0.12	0.15	0.67	0.62	0.62	0.44	0.42	0.53
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	226	414	693	113	191	237	384	1843	824	376	1246	747
v/s Ratio Prot	0.07	0.17	c0.18		0.11	0.01	c0.23	0.13		0.00	0.41	0.01
v/s Ratio Perm	0.10		0.23	0.03		0.05	c0.46		0.03	0.07		0.04
v/c Ratio	0.63	0.66	0.79	0.26	0.91	0.30	1.03	0.22	0.04	0.17	0.98	0.09
Uniform Delay, d1	39.3	42.3	27.5	51.3	55.9	49.1	41.8	10.8	9.7	20.9	36.9	15.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.7	3.7	6.2	1.2	39.4	0.7	52.7	0.1	0.0	0.2	20.4	0.1
Delay (s)	45.0	46.0	33.7	52.5	95.3	49.8	94.5	10.9	9.7	21.1	57.3	15.1
Level of Service	D	D	C	D	F	D	F	B	A	C	E	B
Approach Delay (s)		38.8			79.0			50.5			53.4	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM Average Control Delay	50.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	128.9	Sum of lost time (s)	4.0
Intersection Capacity Utilization	99.6%	ICU Level of Service	E

c Critical Lane Group

APPENDIX B – TRAFFIC COUNTS

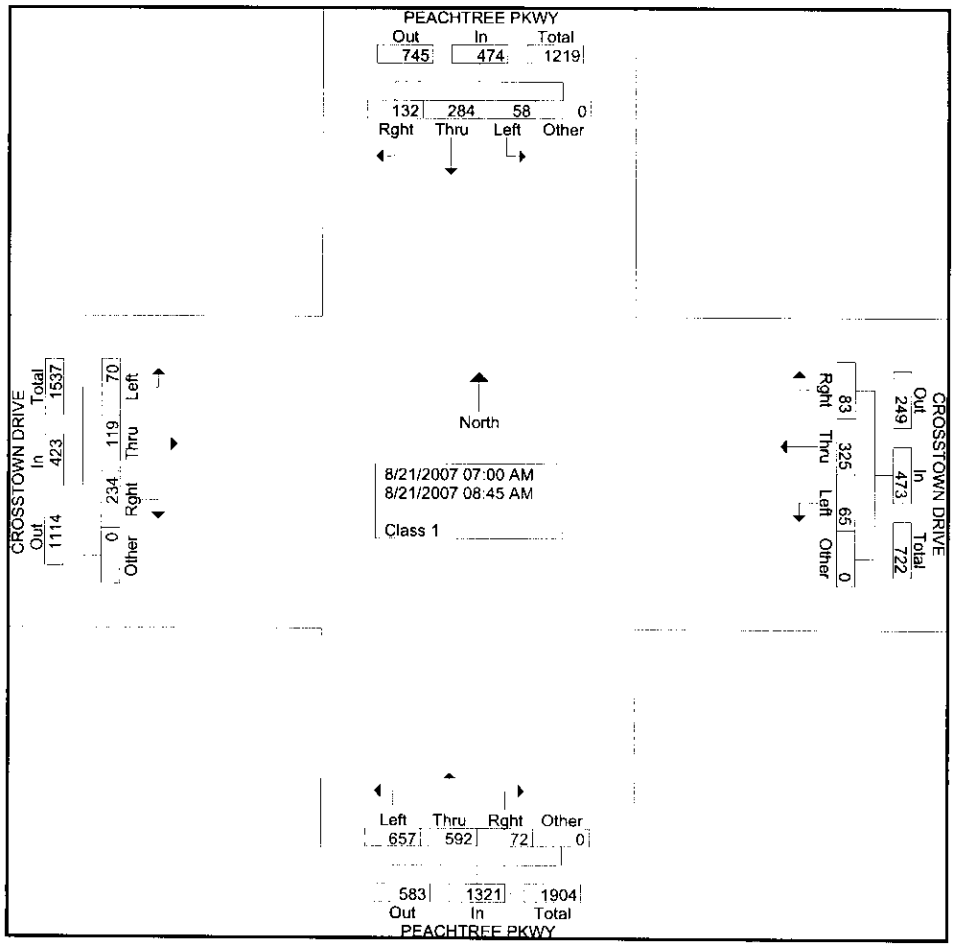
All Traffic Data Services, Inc.

1336 Farmer Road
Conyers, Ga. 30012
404-374-1283

File Name : PTreePkwy@CrosstwnDrAM
Site Code : 00000000
Start Date : 8/21/2007
Page No : 1

Groups Printed- Class 1

	PEACHTREE PKWY Southbound					CROSSTOWN DRIVE Westbound					PEACHTREE PKWY Northbound					CROSSTOWN DRIVE Eastbound					
Start Time	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Int. Total
07:00 AM	7	24	13	0	44	6	24	6	0	36	9	54	68	0	131	25	8	5	0	38	249
07:15 AM	13	31	7	0	51	13	38	13	0	64	13	56	66	0	135	21	14	6	0	41	291
07:30 AM	23	43	11	0	77	13	52	13	0	78	18	68	86	0	172	27	19	10	0	56	383
07:45 AM	32	41	4	0	77	13	77	10	0	100	10	111	112	0	233	25	16	9	0	50	460
Total	75	139	35	0	249	45	191	42	0	278	50	289	332	0	671	98	57	30	0	185	1383
08:00 AM	18	39	5	0	62	8	38	10	0	56	5	89	99	0	193	29	11	8	0	48	359
08:15 AM	15	39	7	0	61	5	34	5	0	44	7	76	82	0	165	40	16	11	0	67	337
08:30 AM	10	33	6	0	49	11	33	3	0	47	8	53	71	0	132	29	21	12	0	62	290
08:45 AM	14	34	5	0	53	14	29	5	0	48	2	85	73	0	160	38	14	9	0	61	322
Total	57	145	23	0	225	38	134	23	0	195	22	303	325	0	650	136	62	40	0	238	1308
Grand Total	132	284	58	0	474	83	325	65	0	473	72	592	657	0	1321	234	119	70	0	423	2691
Apprch %	27.8	59.9	12.2	0		17.5	68.7	13.7	0		5.5	44.8	49.7	0		55.3	28.1	16.5	0		
Total %	4.9	10.6	2.2	0	17.6	3.1	12.1	2.4	0	17.6	2.7	22	24.4	0	49.1	8.7	4.4	2.6	0	15.7	

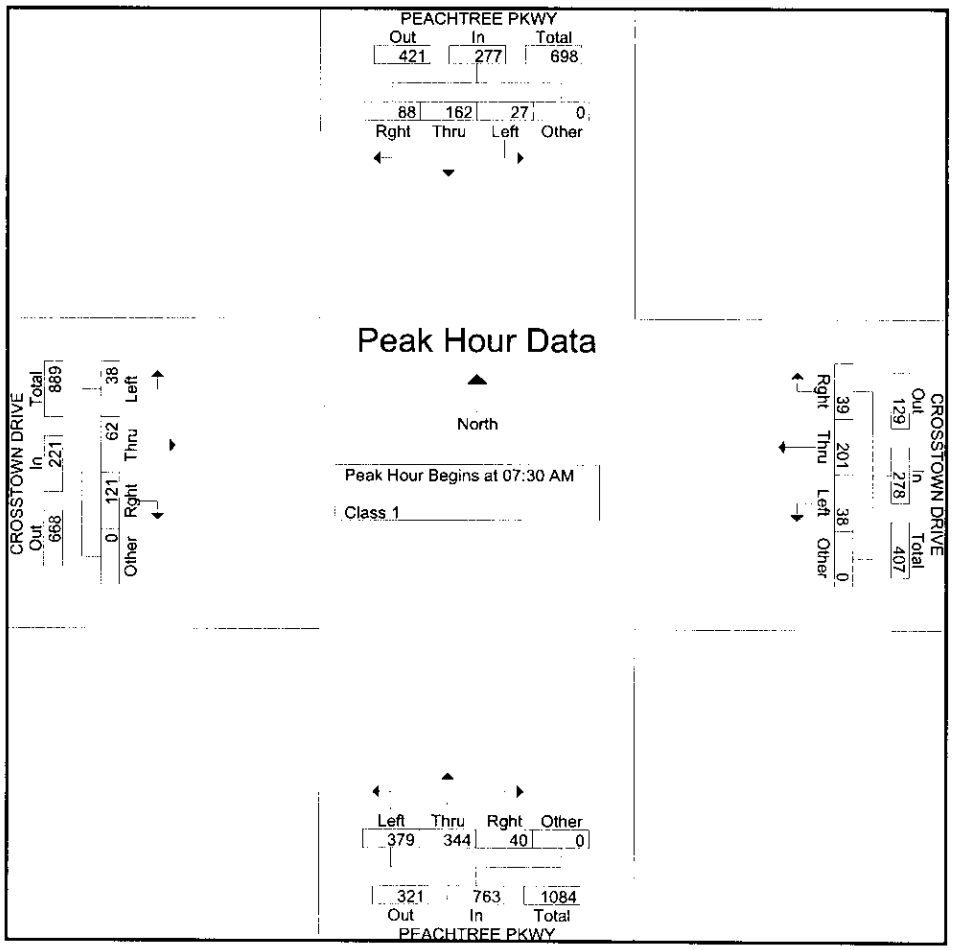


All Traffic Data Services, Inc.

1336 Farmer Road
Conyers, Ga. 30012
404-374-1283

File Name : PTreePkwy@CrosstwnDrAM
Site Code : 00000000
Start Date : 8/21/2007
Page No : 2

	PEACHTREE PKWY Southbound					CROSSTOWN DRIVE Westbound					PEACHTREE PKWY Northbound					CROSSTOWN DRIVE Eastbound					
Start Time	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	23	**43**	**11**	0	**77**	**13**	52	**13**	0	78	**18**	68	86	0	172	27	**19**	10	0	56	383
07:45 AM	**32**	**41**	**4**	0	**77**	13	**77**	10	0	**100**	10	**111**	**112**	0	**233**	25	16	9	0	50	**460**
08:00 AM	18	39	5	0	62	8	38	10	0	56	5	89	99	0	193	29	11	8	0	48	359
08:15 AM	15	39	7	0	61	5	34	5	0	44	7	76	82	0	165	**40**	16	**11**	0	**67**	337
Total Volume	88	162	27	0	277	39	201	38	0	278	40	344	379	0	763	121	62	38	0	221	1539
% App. Total	31.8	58.5	9.7	0		14	72.3	13.7	0		5.2	45.1	49.7	0		54.8	28.1	17.2	0		
PHF	.688	.942	.614	.000	.899	.750	.653	.731	.000	.695	.556	.775	.846	.000	.819	.756	.816	.864	.000	.825	.836



All Traffic Data Services, Inc.

1336 Farmer Road
Conyers, Ga. 30012
404-374-1283

File Name : PTreePkwy@CrosstwnDrPM
Site Code : 00000000
Start Date : 8/21/2007
Page No : 1

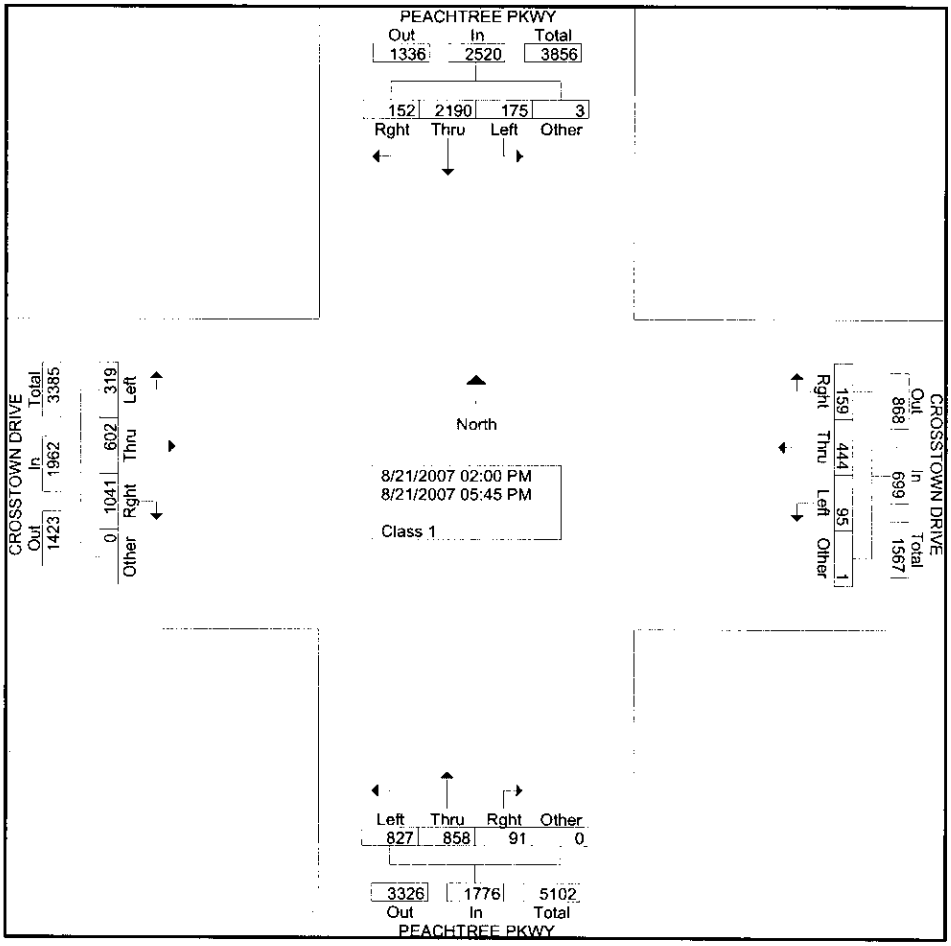
Groups Printed- Class 1

	PEACHTREE PKWY Southbound					CROSSTOWN DRIVE Westbound					PEACHTREE PKWY Northbound					CROSSTOWN DRIVE Eastbound					
Start Time	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Int. Total
02:00 PM	3	97	11	0	111	6	31	4	0	41	0	38	41	0	79	56	47	18	0	121	352
02:15 PM	9	100	13	0	122	8	18	4	0	30	7	44	38	0	89	59	39	19	0	117	358
02:30 PM	10	89	12	0	111	6	17	8	0	31	9	38	52	0	99	53	25	23	0	101	342
02:45 PM	10	100	7	0	117	14	30	6	0	50	5	44	59	0	108	37	29	18	0	84	359
Total	32	386	43	0	461	34	96	22	0	152	21	164	190	0	375	205	140	78	0	423	1411
03:00 PM	8	123	5	0	136	12	20	6	0	38	5	37	37	0	79	41	29	16	0	86	339
03:15 PM	8	110	7	0	125	10	50	5	0	65	1	43	51	0	95	47	17	10	0	74	359
03:30 PM	11	102	9	0	122	12	37	6	0	55	5	54	31	0	90	38	32	22	0	92	359
03:45 PM	9	156	10	0	175	20	33	11	1	65	10	53	32	0	95	35	49	20	0	104	439
Total	36	491	31	0	558	54	140	28	1	223	21	187	151	0	359	161	127	68	0	356	1496
04:00 PM	12	234	12	0	258	11	30	6	0	47	6	58	57	0	121	86	46	21	0	153	579
04:15 PM	5	211	7	0	223	10	31	3	0	44	7	61	66	0	134	89	37	17	0	143	544
04:30 PM	10	165	10	0	185	10	22	4	0	36	4	56	48	0	108	71	40	19	0	130	459
04:45 PM	16	143	10	3	172	12	24	5	0	41	6	72	72	0	150	93	45	31	0	169	532
Total	43	753	39	3	838	43	107	18	0	168	23	247	243	0	513	339	168	88	0	595	2114
05:00 PM	33	189	19	0	241	6	30	4	0	40	4	48	62	0	114	78	48	18	0	144	539
05:15 PM	1	134	26	0	161	9	28	6	0	43	7	64	51	0	122	91	33	33	0	157	483
05:30 PM	3	121	8	0	132	4	16	7	0	27	6	66	72	0	144	75	40	16	0	131	434
05:45 PM	4	116	9	0	129	9	27	10	0	46	9	82	58	0	149	92	46	18	0	156	480
Total	41	560	62	0	663	28	101	27	0	156	26	260	243	0	529	336	167	85	0	588	1936
Grand Total	152	2190	175	3	2520	159	444	95	1	699	91	858	827	0	1776	1041	602	319	0	1962	6957
Apprch %	6	86.9	6.9	0.1		22.7	63.5	13.6	0.1		5.1	48.3	46.6	0		53.1	30.7	16.3	0		
Total %	2.2	31.5	2.5	0	36.2	2.3	6.4	1.4	0	10	1.3	12.3	11.9	0	25.5	15	8.7	4.6	0	28.2	

All Traffic Data Services, Inc.

1336 Farmer Road
Conyers, Ga. 30012
404-374-1283

File Name : PTreePkwy@CrosstwnDrPM
Site Code : 00000000
Start Date : 8/21/2007
Page No : 2

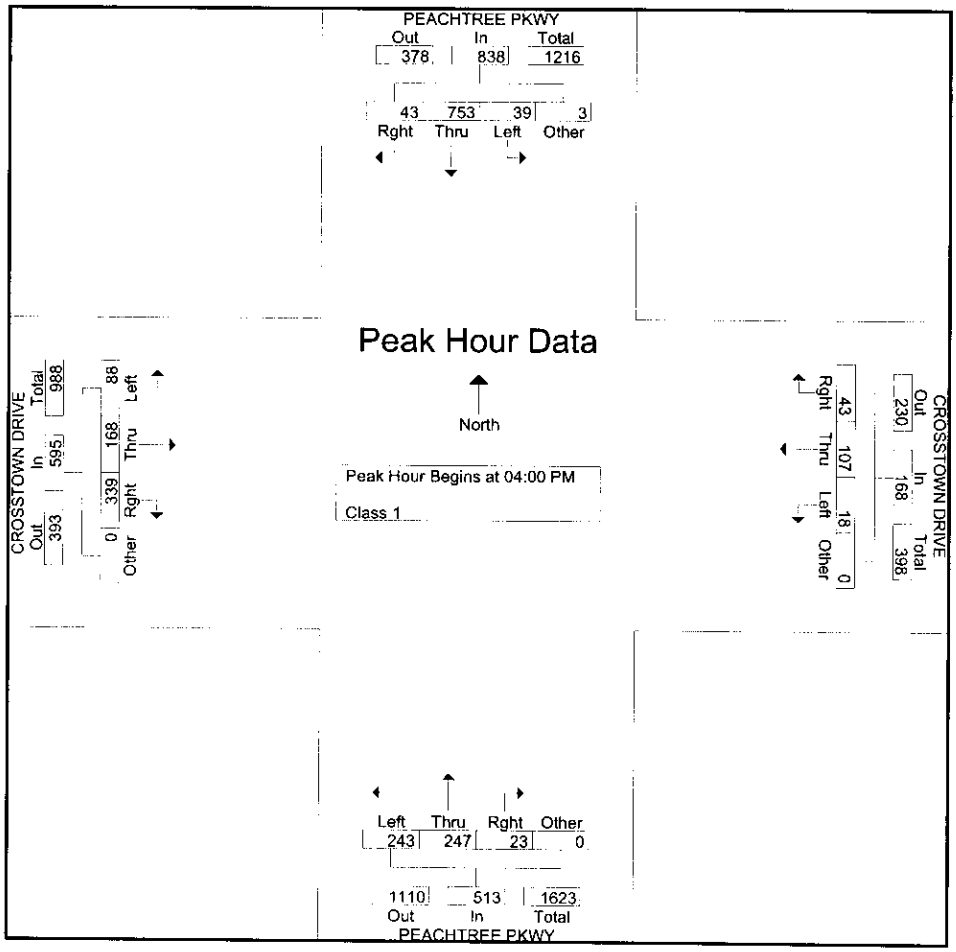


All Traffic Data Services, Inc.

1336 Farmer Road
Conyers, Ga. 30012
404-374-1283

File Name : PTreePkwy@CrosstwnDrPM
Site Code : 00000000
Start Date : 8/21/2007
Page No : 3

	PEACHTREE PKWY Southbound					CROSSTOWN DRIVE Westbound					PEACHTREE PKWY Northbound					CROSSTOWN DRIVE Eastbound					
Start Time	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Rght	Thru	Left	Other	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	12	**234**	**12**	0	**258**	11	30	**6**	0	**47**	6	58	57	0	121	86	**46**	21	0	153	**579**
04:15 PM	5	211	7	0	223	10	**31**	3	0	44	**7**	61	66	0	134	89	37	17	0	143	544
04:30 PM	10	165	10	0	185	10	22	4	0	36	**4**	56	48	0	108	71	40	19	0	130	459
04:45 PM	**16**	143	10	**3**	172	**12**	24	5	0	41	6	**72**	**72**	0	**150**	**93**	45	**31**	0	**169**	532
Total Volume	43	753	39	3	838	43	107	18	0	168	23	247	243	0	513	339	168	88	0	595	2114
% App. Total	5.1	89.9	4.7	0.4		25.6	63.7	10.7	0		4.5	48.1	47.4	0		57	28.2	14.8	0		
PHF	.672	.804	.813	.250	.812	.896	.863	.750	.000	.894	.821	.858	.844	.000	.855	.911	.913	.710	.000	.880	.913



All Traffic Data Services, Inc.
1336 Farmer Road
Conyers, GA. 30012
ph. (404)-374-1283

Site Code: 1
Station ID: 1
PEACHTREE PARKWAY
NORTH OF CROSSTOWN ROAD

Start Time	28-Aug-07 Tue	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		4	121		
12:15		3	100		
12:30		2	110		
12:45		4	130	13	461
01:00		2	156		
01:15		4	100		
01:30		0	147		
01:45		3	125	9	528
02:00		2	106		
02:15		2	116		
02:30		3	109		
02:45		1	114	8	445
03:00		0	135		
03:15		0	116		
03:30		2	119		
03:45		1	166	3	536
04:00		4	253		
04:15		2	222		
04:30		7	174		
04:45		1	166	14	815
05:00		11	198		
05:15		22	142		
05:30		38	143		
05:45		41	131	112	614
06:00		62	118		
06:15		79	103		
06:30		74	164		
06:45		74	191	289	576
07:00		53	139		
07:15		48	138		
07:30		73	100		
07:45		74	61	248	438
08:00		57	90		
08:15		57	40		
08:30		36	29		
08:45		49	40	199	199
09:00		50	39		
09:15		56	28		
09:30		53	20		
09:45		42	25	201	112
10:00		78	11		
10:15		85	17		
10:30		66	12		
10:45		91	14	320	54
11:00		130	12		
11:15		158	3		
11:30		129	2		
11:45		134	4	551	21
Total		1967	4799		
Percent		29.1%	70.9%		

All Traffic Data Services, Inc.
1336 Farmer Road
Conyers, GA. 30012
ph. (404)-374-1283

Site Code: 1
Station ID: 1
PEACHTREE PARKWAY
NORTH OF CROSSTOWN ROAD

Start Time	29-Aug-07 Wed	SB Morning	SB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		4	128		
12:15		5	106		
12:30		0	116		
12:45		0	138	9	488
01:00		4	165		
01:15		1	106		
01:30		0	156		
01:45		1	132	6	559
02:00		1	112		
02:15		2	123		
02:30		2	115		
02:45		0	121	5	471
03:00		0	143		
03:15		0	123		
03:30		6	126		
03:45		2	176	8	568
04:00		4	268		
04:15		4	235		
04:30		7	184		
04:45		4	176	19	863
05:00		14	209		
05:15		23	150		
05:30		40	151		
05:45		43	139	120	649
06:00		66	125		
06:15		84	109		
06:30		78	174		
06:45		78	202	306	610
07:00		56	147		
07:15		51	146		
07:30		77	106		
07:45		78	65	262	464
08:00		60	95		
08:15		60	42		
08:30		38	31		
08:45		52	42	210	210
09:00		53	41		
09:15		59	30		
09:30		56	21		
09:45		44	26	212	118
10:00		83	12		
10:15		90	18		
10:30		70	13		
10:45		96	15	339	58
11:00		138	13		
11:15		167	5		
11:30		137	6		
11:45		142	4	584	28
Total		2080	5086		
Percent		29.0%	71.0%		
Grand Total		4047	9885		
Percent		29.0%	71.0%		
ADT		Not Calculated			

All Traffic Data Services, Inc.
1336 Farmer Road
Conyers, GA. 30012
ph. (404)-374-1283

Site Code: 2
Station ID: 2
PEACHTREE PARKWAY
SOUTH OF CROSSTOWN DRIVE

Start Time	21-Aug-07 Tue	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		4	103		
12:15		6	101		
12:30		4	104		
12:45		4	116	18	424
01:00		3	121		
01:15		2	113		
01:30		2	116		
01:45		5	111	12	461
02:00		1	85		
02:15		1	85		
02:30		5	95		
02:45		1	99	8	364
03:00		2	76		
03:15		7	86		
03:30		3	94		
03:45		10	91	22	347
04:00		6	117		
04:15		2	124		
04:30		9	105		
04:45		17	145	34	491
05:00		20	120		
05:15		26	116		
05:30		31	132		
05:45		48	145	125	513
06:00		51	118		
06:15		63	150		
06:30		95	113		
06:45		135	122	344	503
07:00		135	90		
07:15		127	94		
07:30		170	74		
07:45		222	74	654	332
08:00		180	55		
08:15		153	61		
08:30		126	65		
08:45		153	61	612	242
09:00		120	49		
09:15		109	36		
09:30		109	35		
09:45		139	31	477	151
10:00		107	27		
10:15		97	22		
10:30		92	13		
10:45		95	13	391	75
11:00		97	15		
11:15		103	13		
11:30		121	8		
11:45		103	11	424	47
Total		3121	3950		
Percent		44.1%	55.9%		

All Traffic Data Services, Inc.
1336 Farmer Road
Conyers, GA. 30012
ph. (404)-374-1283

Site Code: 2
Station ID: 2
PEACHTREE PARKWAY
SOUTH OF CROSSTOWN DRIVE

Start Time	22-Aug-07 Wed	NB Morning	NB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		4	108		
12:15		6	106		
12:30		4	109		
12:45		4	122	18	445
01:00		3	127		
01:15		2	118		
01:30		2	122		
01:45		5	116	12	483
02:00		1	89		
02:15		1	89		
02:30		5	100		
02:45		1	104	8	382
03:00		2	80		
03:15		7	90		
03:30		3	99		
03:45		10	95	22	364
04:00		6	123		
04:15		2	130		
04:30		9	110		
04:45		18	152	35	515
05:00		21	126		
05:15		27	122		
05:30		33	138		
05:45		50	152	131	538
06:00		53	124		
06:15		66	157		
06:30		100	118		
06:45		141	128	360	527
07:00		142	94		
07:15		133	99		
07:30		178	78		
07:45		233	78	686	349
08:00		189	58		
08:15		160	64		
08:30		132	68		
08:45		160	64	641	254
09:00		126	51		
09:15		114	38		
09:30		114	37		
09:45		146	32	500	158
10:00		112	28		
10:15		102	23		
10:30		96	14		
10:45		100	14	410	79
11:00		102	16		
11:15		108	14		
11:30		127	8		
11:45		108	12	445	50
Total		3268	4144		
Percent		44.1%	55.9%		
Grand Total		6389	8094		
Percent		44.1%	55.9%		
ADT		Not Calculated			

All Traffic Data Services, Inc.
1336 Farmer Road
Conyers, GA. 30012
ph. (404)-374-1283

Site Code: 3
Station ID: 3
CROSSTOWN DRIVE
WEST OF PEACHTREE PARKWAY

Start Time	21-Aug-07 Tue	EB Morning	EB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		13	123		
12:15		27	119		
12:30		8	108		
12:45		9	108	57	458
01:00		5	97		
01:15		8	108		
01:30		8	104		
01:45		4	104	25	413
02:00		1	122		
02:15		4	115		
02:30		3	94		
02:45		2	92	10	423
03:00		4	84		
03:15		1	73		
03:30		0	85		
03:45		2	100	7	342
04:00		1	145		
04:15		6	135		
04:30		3	124		
04:45		3	157	13	561
05:00		8	136		
05:15		6	150		
05:30		8	124		
05:45		12	147	34	557
06:00		22	145		
06:15		18	152		
06:30		37	136		
06:45		41	128	118	561
07:00		38	110		
07:15		39	106		
07:30		53	96		
07:45		47	108	177	420
08:00		47	108		
08:15		63	90		
08:30		58	81		
08:45		58	100	226	379
09:00		58	91		
09:15		51	72		
09:30		57	67		
09:45		58	56	224	286
10:00		73	44		
10:15		59	30		
10:30		83	26		
10:45		84	36	299	136
11:00		81	33		
11:15		101	38		
11:30		106	17		
11:45		134	17	422	105
Total		1612	4641		
Percent		25.8%	74.2%		

All Traffic Data Services, Inc.
1336 Farmer Road
Conyers, GA. 30012
ph. (404)-374-1283

Site Code: 3
Station ID: 3
CROSSTOWN DRIVE
WEST OF PEACHTREE PARKWAY

Start Time	22-Aug-07 Wed	Morning	EB Afternoon	Hour Totals Morning	Afternoon
12:00		14	130		
12:15		29	126		
12:30		9	114		
12:45		10	114	62	484
01:00		5	103		
01:15		8	114		
01:30		8	110		
01:45		4	110	25	437
02:00		1	129		
02:15		4	122		
02:30		3	100		
02:45		2	98	10	449
03:00		4	89		
03:15		1	77		
03:30		0	90		
03:45		2	106	7	362
04:00		1	154		
04:15		6	143		
04:30		3	132		
04:45		3	166	13	595
05:00		8	144		
05:15		6	159		
05:30		8	132		
05:45		13	156	35	591
06:00		23	154		
06:15		19	161		
06:30		39	144		
06:45		44	136	125	595
07:00		40	117		
07:15		41	112		
07:30		56	102		
07:45		50	114	187	445
08:00		50	114		
08:15		67	95		
08:30		62	86		
08:45		61	106	240	401
09:00		62	96		
09:15		54	76		
09:30		60	71		
09:45		62	59	238	302
10:00		77	47		
10:15		63	32		
10:30		88	28		
10:45		89	38	317	145
11:00		86	35		
11:15		107	40		
11:30		112	18		
11:45		142	18	447	111
Total		1706	4917		
Percent		25.8%	74.2%		
Grand Total		3318	9558		
Percent		25.8%	74.2%		
ADT		Not Calculated			

All Traffic Data Services, Inc.
1336 Farmer Road
Conyers, GA. 30012
ph. (404)-374-1283

Site Code: 4
Station ID: 4
CROSSTOWN DRIVE EAST
OF PEACHTREE PKWY

Start Time	21-Aug-07 Tue	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		4	46		
12:15		5	35		
12:30		3	40		
12:45		4	42	16	163
01:00		2	53		
01:15		3	41		
01:30		2	42		
01:45		2	39	9	175
02:00		2	37		
02:15		0	33		
02:30		1	34		
02:45		1	53	4	157
03:00		2	39		
03:15		1	69		
03:30		2	58		
03:45		3	69	8	235
04:00		4	51		
04:15		1	53		
04:30		2	39		
04:45		4	43	11	186
05:00		17	42		
05:15		6	46		
05:30		12	25		
05:45		17	49	52	162
06:00		19	51		
06:15		15	63		
06:30		31	54		
06:45		49	49	114	217
07:00		38	40		
07:15		70	35		
07:30		82	40		
07:45		103	38	293	153
08:00		63	31		
08:15		46	30		
08:30		49	24		
08:45		51	22	209	107
09:00		53	27		
09:15		34	30		
09:30		35	20		
09:45		34	15	156	92
10:00		34	9		
10:15		33	9		
10:30		38	8		
10:45		33	5	138	31
11:00		42	14		
11:15		46	8		
11:30		36	3		
11:45		44	4	168	29
Total		1178	1707		
Percent		40.8%	59.2%		

All Traffic Data Services, Inc.
1336 Farmer Road
Conyers, GA. 30012
ph. (404)-374-1283

Site Code: 4
Station ID: 4
CROSSTOWN DRIVE EAST
OF PEACHTREE PKWY

Start Time	22-Aug-07 Wed	WB Morning	WB Afternoon	Hour Totals Morning	Hour Totals Afternoon
12:00		6	44		
12:15		2	33		
12:30		1	38		
12:45		2	40	11	155
01:00		1	50		
01:15		1	39		
01:30		2	40		
01:45		0	37	4	166
02:00		0	35		
02:15		0	31		
02:30		0	32		
02:45		1	50	1	148
03:00		1	37		
03:15		1	65		
03:30		2	55		
03:45		3	65	7	222
04:00		4	48		
04:15		4	50		
04:30		2	37		
04:45		4	41	14	176
05:00		16	40		
05:15		6	44		
05:30		11	24		
05:45		16	46	49	154
06:00		18	48		
06:15		14	60		
06:30		29	51		
06:45		46	46	107	205
07:00		36	38		
07:15		66	33		
07:30		78	38		
07:45		98	36	278	145
08:00		60	29		
08:15		44	28		
08:30		46	23		
08:45		48	21	198	101
09:00		50	26		
09:15		32	28		
09:30		33	19		
09:45		32	14	147	87
10:00		32	9		
10:15		31	9		
10:30		36	8		
10:45		31	5	130	31
11:00		40	13		
11:15		44	8		
11:30		34	3		
11:45		42	4	160	28
Total		1106	1618		
Percent		40.6%	59.4%		
Grand Total		2284	3325		
Percent		40.7%	59.3%		
ADT		Not Calculated			