VILLAGE AT REDWINE

DEVELOPMENT OF REGIONAL IMPACT TRANSPORTATION ANALYSIS

March 18, 2008 – REVISION #1

prepared for:

Madison Commercial Properties, LLC

Project Number 15280450

TRANSPORTATION ANALYSIS OF

VILLAGE AT REDWINE

DEVELOPMENT OF REGIONAL IMPACT
EAST POINT, GEORGIA

prepared for:

Madison Commercial Properties, LLC
2731 Eatonton Road
Madison, GA 30650

prepared by:

URS Corporation
400 Northpark Town Center
1000 Abernathy Road, NE
Atlanta, Georgia 30328

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EXECUTIVE SUMMARY

This study documents the traffic impact of the proposed Village at Redwine mixed-use development located on the north side of Redwine Road in East Point, Georgia.

A methodology document was developed prior to initiating this study. Based upon this document GRTA issued a *Letter of Understanding* dated November 21, 2007, which documents the methodology to be followed in the preparation of this study.

The study indicated the following:

1. Existing Conditions
    a. No existing LOS deficiencies were observed within the study area.

2. Background Conditions
    a. Two operational deficiencies were noted in the Background condition during the PM peak hour at Commerce Drive and Redwine Road and at Camp Creek Parkway and Commerce Drive. These background condition LOS deficiencies can be avoided by providing the following system improvements: (1) a third westbound third lane at Camp Creek Parkway and Commerce Drive and (2) a traffic signal at Commerce Drive and Redwine Road.

3. Background + Project Conditions
    a. Despite the addition of traffic associated with the Village at Redwine, no LOS deficiencies were observed within the study area in this scenario.

INTRODUCTION

URS Corporation was retained by Madison Commercial Properties, LLC to evaluate the traffic impact of the proposed Village at Redwine mixed-use development located on the north side of Redwine Road in East Point, Georgia.

A methodology document was developed prior to initiating this study. Based upon this document GRTA issued a *Letter of Understanding* dated November 21, 2007, which documents the methodology to be followed in the preparation of this study.

Project Description

The Village at Redwine is a proposed development in East Point, Georgia that will consist of residential, office, and retail uses. The residential uses in this site will be single-family homes (47 units), garden apartments (458 units), townhomes (108 units), and mid-rise apartments (375 units). A total of 988 residential units are planned. Approximately 34,000 square feet will be used for office space. To supplement these uses, 8,000 square feet of retail is proposed. The location of the proposed development is indicated on the aerial location map, shown in Figure 1.

Phasing and Build-Out Schedule

The site will be analyzed in one phase with a projected build-out of 2012.

Existing and Proposed Zoning and Land Use Category

The existing and proposed zoning by the City of East Point, Georgia for the site is "Medium Density Residential", which is consistent with the local comprehensive plan.

Level of Service (LOS) Standards

In accordance with GRTA's *Letter of Understanding*, if the existing LOS for an intersection is below the acceptable LOS for a particular time period (LOS D is acceptable), then the measured LOS for that intersection and time period is the standard by which the "background" and "background + project" traffic conditions will be designed.

Site Access

Full access to the site is proposed at three locations. The primary access point will be at the existing intersection of Redwine Road and Commerce Drive. Two other access points for the Garden Apartment Village and the Retail/Office/Mid-Rise Apartment areas are proposed along Redwine Road east and west of Commerce Drive. Figure 2 depicts the site plan for the Village at Redwine DRI.

Figure 1 – Location Map

Figure 2 – Site Plan

TRIP GENERATION

Trip generation is based on the 7th edition of ITE's Trip Generation manual. It is based on ITE Land Uses 210 – *Single Family Detached Housing, 710-General Office Building, 230 – Residential Condominium/Townhouse, 820 – Shopping Center, 220 – Apartments.* Raw trip generation for the development was adjusted to account for internal capture. The resulting trip generation is presented in Table 1. Please note that for the purposes of the trip generation analysis, the "Garden Apartments" were considered as *220 – Apartments*.

Internal capture is a characteristic of a multi-use development in which trips between the various land uses are made internally not utilizing the adjacent roadway network and thus reduce the overall impact to the adjacent roadway network. The daily internal capture reduction for development traffic as calculated by ITE methodology is slightly under 11.1%.

Table 1
Trip Generation

Daily Trip Generation

ITE Code	Land Type	# Units	Independent Variable	Trip Generation		Internal Capture		External Trips		Total Trips
				In	Out	In	Out	In	Out	
210	Single-Family Detached Housing	47	dwelling units	260	259	78	59	182	200	382
710	General Office Building	34000	sq. feet gross floor area	290	291	20	44	270	247	517
230	Residential Condominium/Townhouse	108	dwelling units	342	343	78	59	264	284	548
820	Shopping Center	8000	sq. feet gross leasable area	658	657	203	236	455	421	876
220	Apartments	833	dwelling units	2578	2579	78	59	2500	2520	5020
TOTAL				4128	4129	457	457	3671	3672	7343

AM Peak Hour Trip Generation

ITE Code	Land Type	# Units	Independent Variable	Trip Generation		Internal Capture		External Trips		Total Trips
				In	Out	In	Out	In	Out	
820	Shopping Center	8000	sq. feet gross leasable area	21	13	4	3	17	10	27
210	Single-Family Detached Housing	47	dwelling units	10	32	1	1	9	31	40
230	Residential Condominium/Townhouse	108	dwelling units	9	46	1	1	8	45	53
710	General Office Building	34000	sq. feet gross floor area	70	9	0	1	70	8	78
220	Apartments	833	dwelling units	82	330	1	1	81	329	410
TOTAL				192	430	7	7	185	423	608

PM Peak Hour Trip Generation

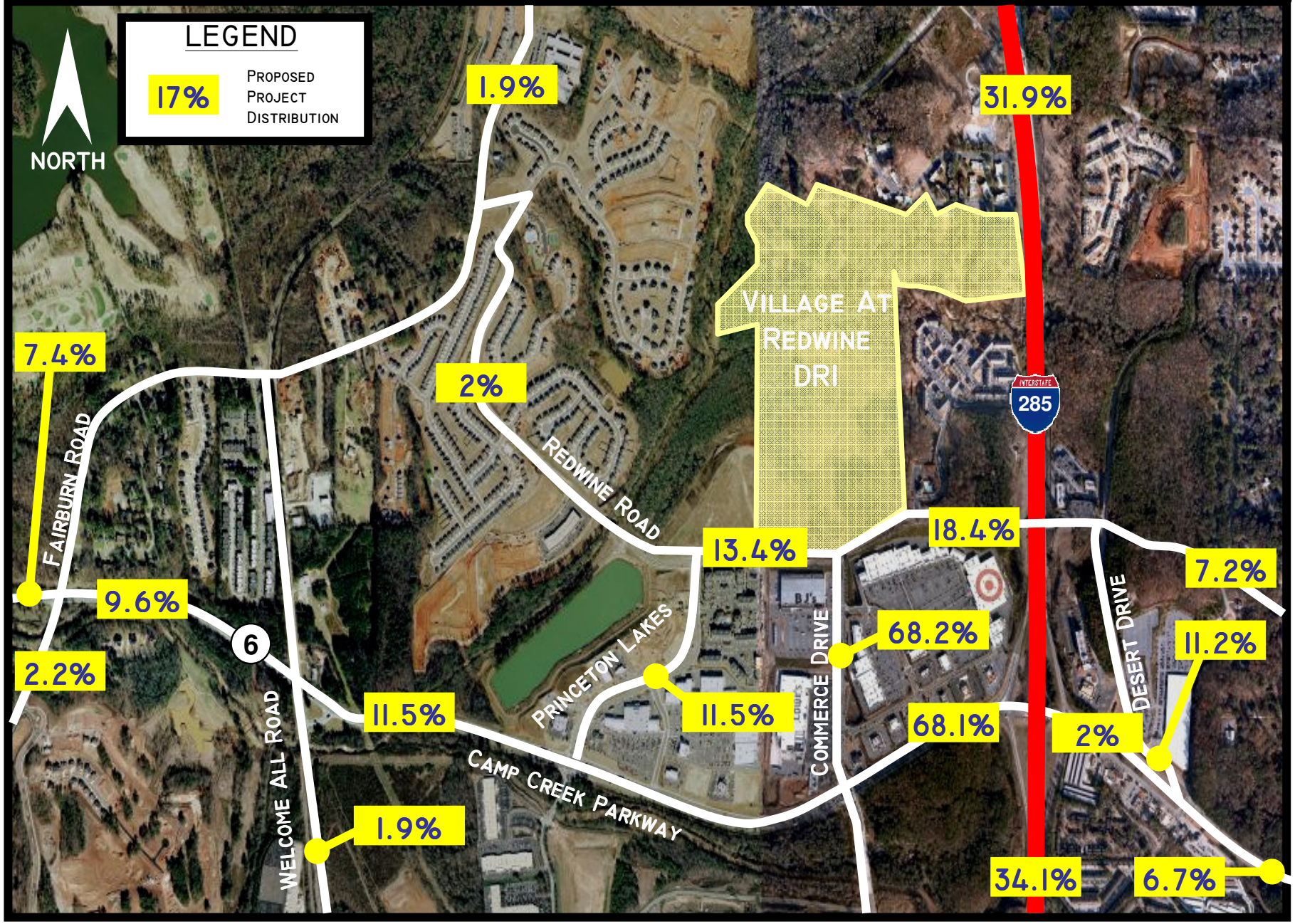
ITE Code	Land Type	# Units	Independent Variable	Trip Generation		Internal Capture		External Trips		Total Trips
				In	Out	In	Out	In	Out	
210	Single-Family Detached Housing	47	dwelling units	34	20	8	5	26	15	41
230	Residential Condominium/Townhouse	108	dwelling units	43	21	8	5	35	16	51
710	General Office Building	34000	sq. feet gross floor area	20	97	2	5	18	92	110
820	Shopping Center	8000	sq. feet gross leasable area	57	61	16	23	41	38	79
220	Apartments	833	dwelling units	309	167	9	5	300	162	462
TOTAL				463	366	43	43	420	323	743

TRIP DISTRIBUTION

For this development, trip distribution was based on a select zone analysis of the project location using a year 2010 model data set of the Atlanta Regional Commission (ARC) travel demand model. The projected trip distribution is shown in Figure 3.

Figure 3 – Project Distribution

Source: 2010 ARC Model



STUDY NETWORK DETERMINATION

According to GRTA procedures, the study network includes any link for which the project's gross traffic contributes more than 7% of the service capacity. The trip distribution and daily trip generation described in Table 1 were the basis for the calculations. The results, presented in Table 2, indicated the following roadway links meet the 7% criteria and are included in the analysis

- Camp Creek Parkway, from Commerce Drive to I-285
- Redwine Road, between Commerce Drive and Desert Drive
- Redwine Road, between Princeton Lakes and Commerce Drive
- Commerce Drive, between Redwine Road and SR 6

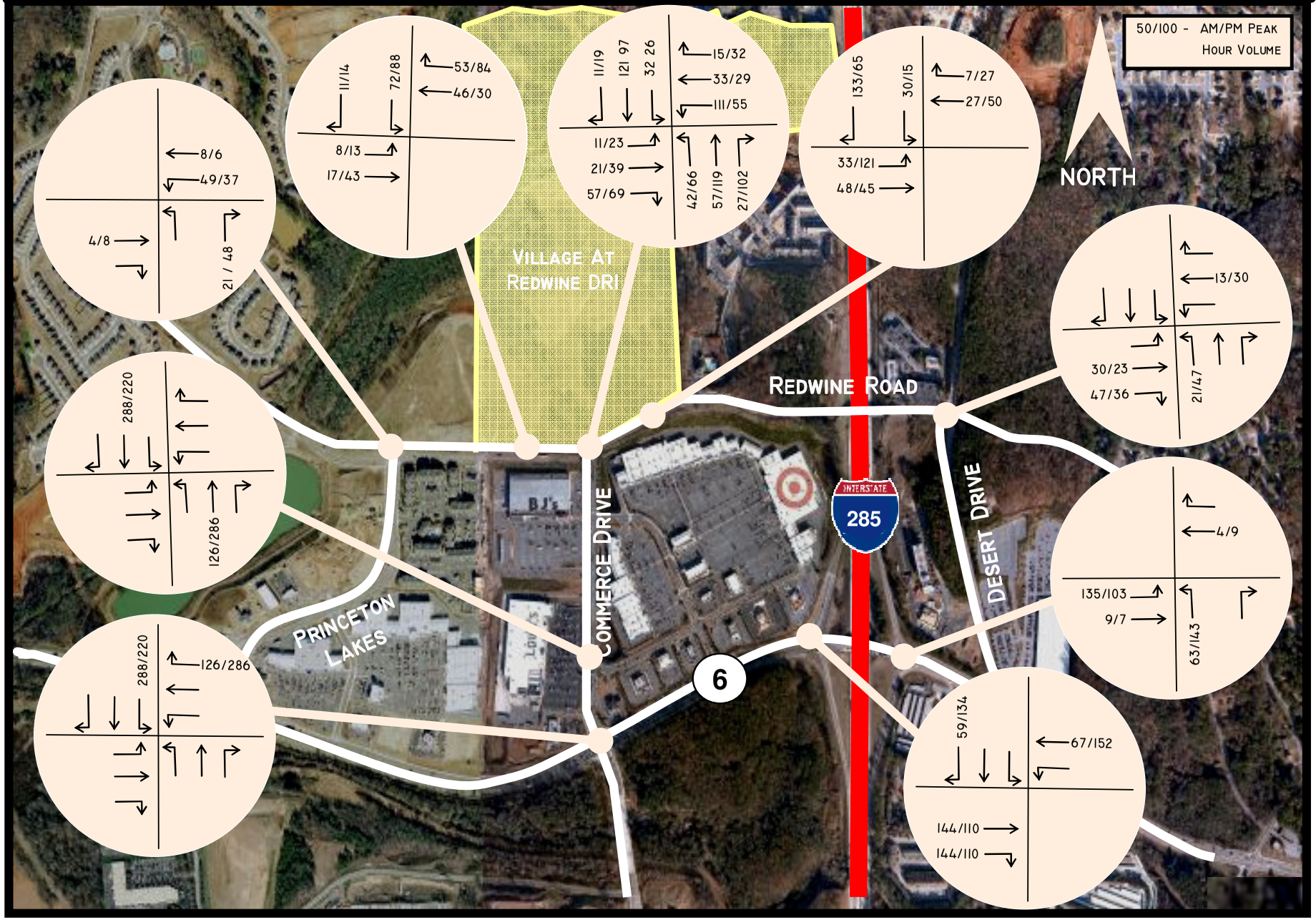
Table 2
Study Network Determination

Roadway	# of Lanes	Link Distance	# of Signals	Signals per Mile	LOS Standard (Urban)	Adjusted Facility Service Volumes	Project Traffic Distribution	Net Project Trips Assigned	% Service Volume Consumed	Presumptive Impact
Camp Creek Parkway, from Enon Road to Butner Road	4	1.66	2	1.20	D	35,000	5.9%	487	1.4%	No
Camp Creek Parkway, from Butner Road to Fairburn Road	4	1.32	1	0.76	D	35,000	7.4%	611	1.7%	No
Camp Creek Parkway, from Fairburn Road to Princeton Lakes	4	1.03	1	0.97	D	35,000	11.5%	950	2.7%	No
Camp Creek Parkway, from Princeton Lakes to Commerce Drive	4	0.54	1	1.85	D	35,000	0.0%	0	0.0%	No
Camp Creek Parkway, from Commerce to I-285	4	0.33	1	3.03	D	32,500	68.1%	5623	17.3%	**Yes**
Camp Creek Parkway, from I-285 to Desert Drive	4	0.27	1	3.70	D	32,500	2.0%	165	0.5%	No
Camp Creek Parkway, from Desert Drive to Washington Road	4	0.29	1	3.45	D	32,500	6.7%	553	1.7%	No
Camp Creek Parkway, Washington Road to Herschel Road	4	1.02	2	1.96	D	35,000	6.1%	504	1.4%	No
Redwine Road, west of Princeton lakes	2	Major City/County Road			D	14,600	2.0%	165	1.1%	No
Redwine Road, Commerce Drive to Princeton Lakes	2	Major City/County Road			D	14,600	13.4%	1106	7.6%	**Yes**
Redwine Road, between Commerce Drive and Desert Drive	2	Major City/County Road			D	14,600	18.4%	1519	10.4%	**Yes**
Redwine Road, between Desert Drive and Washington Road	2	Major City/County Road			D	14,600	7.2%	595	4.1%	No
Princeton Lakes, between Redwine Road and Camp Creek Parkway	2	Major City/County Road			D	14,600	11.5%	950	6.5%	No
Washington Road, Redwine Road to Lyle Road	2	Major City/County Road			D	14,600	7.2%	595	4.1%	No
Commerce Drive, between SR 6 and Redwine Road	4	Major City/County Road			D	31,700	68.2%	5631	17.8%	**Yes**
Fairburn Road, between Camp Creek Parkway and Redwine Road	2	Major City/County Road			D	14,600	0.0%	0	0.0%	No
Fairburn Road, north of Redwine Road	2	Major City/County Road			D	14,600	1.9%	157	1.1%	No
I-285, North of Camp Creek Parkway	8	Freeway			D	131,300	31.9%	2634	2.0%	No
I-285, South of Camp Creek Parkway	8	Freeway			D	131,300	34.1%	2816	2.1%	No

PEAK HOUR TRAFFIC ASSIGNMENT

Net peak hour traffic volumes generated by the Village at Redwine, presented in Table 1, were assigned to each intersection in the study network according to the appropriate trip distributions shown in Figure 3. During this assignment, consideration was given to the driver's destination on site and ease of access at each driveway. Site-generated volumes for the project are shown in Figure 4 for the weekday AM and PM peak hours.

Figure 4 – Project Trips



EXISTING CONDITIONS

Existing Facilities

An inventory of the roadway facilities providing access to the site was performed. The following is a brief description of each facility. A schematic diagram of the study network is provided in Figure 5 to more clearly depict the intersection geometries.

Camp Creek Parkway (SR 6)
Camp Creek Parkway, which is State Route (SR) 6 in the vicinity of the site, is an east-west, 6 lane divided highway. Within the study network, Camp Creek Parkway is signalized at the I-285 interchange and Commerce Drive. Medlock Bridge Road provides exclusive left-turn and right-turn lanes along its eastbound and westbound approaches. In 2005, Georgia Department of Transportation (DOT) reported an annual average daily traffic volume (AADT) of 43,630 vehicles per day (vpd) on Camp Creek Marketplace.

Redwine Road
Redwine Road is a 2 lane undivided east-west minor collector roadway that serves as the southern boundary of the proposed project.

Commerce Drive
Commerce Drive is a 4 lane divided north-south roadway that serves primarily as an access roadway to the Camp Creek Marketplace. With the proposed project, Commerce Drive would extend further north, past its current termini with Redwine Road, into the Village at Redwine.

Shelby Drive
Shelby Drive is an east-west roadway that serves is an internal access roadway in the Camp Creek Marketplace development. It has a signalized intersection with Commerce Drive.

Desert Drive
Desert Drive is a 2 lane undivided north-south roadway with an unsignalized intersection with Redwine Road.

Princeton Lakes Bouelvard
Princeton Lakes Boulevard is a 4 lane divided north-south roadway that serves primarily as an access roadway to the Princeton Lakes DRI.

I-285
I-285 is a limited access interstate freeway that serves as a beltway for the City of Atlanta. In the study area, I-285 has an interchange with Camp Creek Marketplace.

Figure 5 – Existing Configuration

Existing Traffic Analysis

Seven intersections were studied in the vicinity of the proposed development. They are as follows:

- Commerce Drive and Redwine Road (Main Access Point)
- Commerce Drive and Shelby Lane
- Commerce Drive and Camp Creek Parkway
- Camp Creek Parkway and I-285 Southbound Ramps
- Camp Creek Parkway and I-285 Northbound Ramps
- Redwine Road and Desert Drive
- Redwine Road and Princeton Lakes

Turning movement counts were performed on Tuesday, December 4, 2007 between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m. The four consecutive 15-minute interval volumes that summed to produce the highest volume at each intersection were then determined.

Per GRTA's *Letter of Understanding*, these raw volumes were then annualized to negate irregular traffic volumes using the following GDOT factors:

- I-285: Monthly Factor=1.05, Daily Factor=0.95 (Urban I-285 Atlanta factors)
- Redwine Road, Princeton Lakes Boulevard, Desert Drive, Commerce Drive, Shelby Lane: Monthly Factor=1.00, Daily Factor=0.91 (Urban Local Collector factors)
- Camp Creek Parkway: Monthly Factor=1.02, Daily Factor=0.94 (Urban Arterials in Atlanta factors)

The resulting volumes are provided in Figure 6. Existing traffic operations were analyzed at the intersections in accordance with Highway Capacity Manual (HCM) methodology. The results of this analysis are presented in Table 3 and indicate no instance of LOS below D.

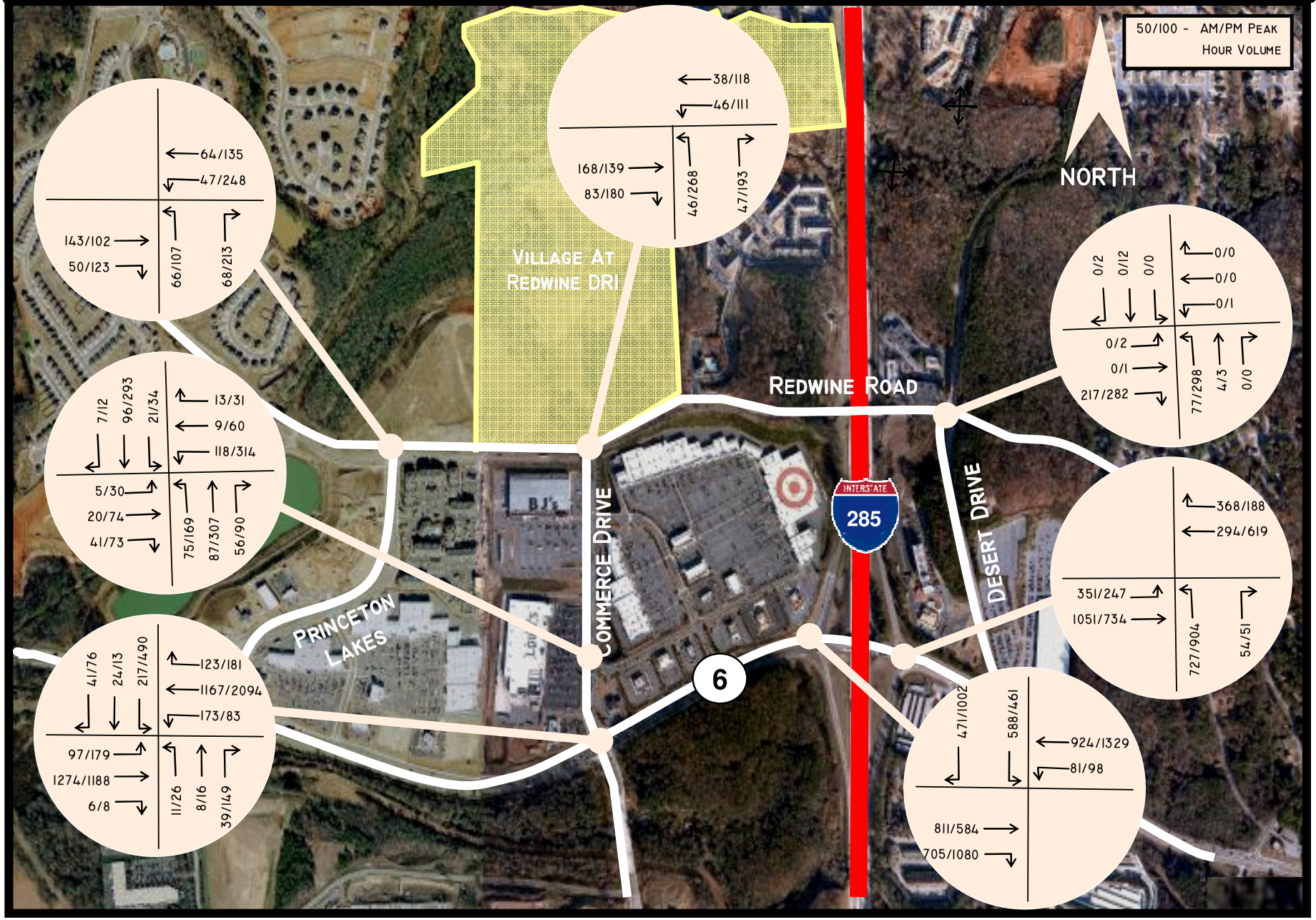
Table 3
Existing (2007) LOS

Intersection	AM		PM	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Camp Creek Parkway & Commerce Drive	C	23.6	D	48.1
Camp Creek Parkway & I-285 SB Ramps	B	11.2	A	9.7
Camp Creek Parkway & I-285 NB Ramps	C	27.8	C	28.5
Commerce Drive & Shelby Lane	A	7.8	B	11.7
Commerce Drive & Redwine Road (unsignalized) (1)	B	10.8	D	28.9
Redwine Road & Princeton Lakes (unsignalized) (2)	A	7.9	B	10.2
Redwine Road & Desert Drive (unsignalized) (2)	A	7.9	B	11.0

(1) This intersection was analyzed without a signal with stop control only on the northbound approach. The results refer only to the stopped northbound movement.

(2) These intersections are unsignalized with stop control on all approaches. Therefore, the analysis results refer to overall intersection conditions.

Figure 6 – 2007 Existing AM & PM Volumes (factored)



PLANNED GEOMETRIC IMPROVEMENTS

The 2030 Envision6 Regional Transportation Plan and the 2008-2013 Transportation Improvement Plan was reviewed for transportation enhancement projects within the study area. Although long-range SR 6 widening projects were included in the previous Regional Transportation Plan (Mobility 2030), the new Envision6 plan does not include these projects.

BACKGROUND CONDITIONS (2012)

The Villages at Redwine DRI is planned to be completed by 2012. Therefore, background traffic operations, or those that would exist without this development, are evaluated to project the need for system improvements. System improvements are those that are necessitated by background traffic conditions and are independent of traffic generated by the proposed development.

Future Year Traffic Volumes

Future year background traffic was developed by projecting existing traffic volumes to the year 2012 using a 2 percent growth rate recommended by GRTA in the *Letter of Understanding dated* November 21, 2007. In addition, per GRTA's *Letter of Understanding*, vested traffic from the Princeton Lakes, Camp Creek Business Center, and Lakeside Golf Course Redevelopment DRIs was to be included in the background traffic volumes. However, these developments opened on August 1, 2002, November 12, 2002, and July 19, 2004 respectively, thus the traffic associated with these developments is accounted for in the exiting 2007 traffic counts and would not need to be added in the background traffic preparation. The resulting projected background traffic volumes are presented in Figure 7.

Background traffic operations in 2012 were analyzed at the intersections in accordance with HCM methodology. Results of these analyses are presented in Table 4. In the PM condition, two intersection experience LOS failure: Camp Creek Parkway and Commerce Drive and Commerce Drive and Redwine Road. These background condition LOS deficiencies can be avoided by providing the following system improvements: (1) a third westbound third lane at Camp Creek Parkway and Commerce Drive and (2) a traffic signal at Commerce Drive and Redwine Road. Please note that such a signal would need to go through a signal warrant study process and be approved by the appropriate agencies. These system improvements are depicted in Figure 8.

Table 4
2012 Background LOS

Intersection	AM		PM		PM with improvements	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Camp Creek Parkway & Commerce Drive	C	28.6	E	73.4	C	31.8
Camp Creek Parkway & I-285 SB Ramps	B	13.9	C	34.0		
Camp Creek Parkway & I-285 NB Ramps	C	24.6	C	31.8		
Commerce Drive & Shelby Lane	A	7.8	B	14.1		
Commerce Drive & Redwine Road (1)	B	11.2	E	47.9	A	9.8
Redwine Road & Princeton Lakes (unsignalized) (2)	A	8.1	B	11.0		
Redwine Road & Desert Drive (unsignalized) (2)	A	8.1	B	12.0		

(1) This intersection was analyzed without a signal in the 'AM' and 'PM' 2012 Background scenarios with stop control only on the northbound approach. In this scenarios, the results refer only to the stopped northbound movement. In 'PM with Improvements' 2012 Background scenario, a traffic signal was assumed in the analysis and the results refer to the overall intersection conditions.

(2) These intersections are unsignalized with stop control on all approaches. Therefore, the analysis results refer to overall intersection conditions.

Figure 7 – 2012 Background AM & PM Volumes

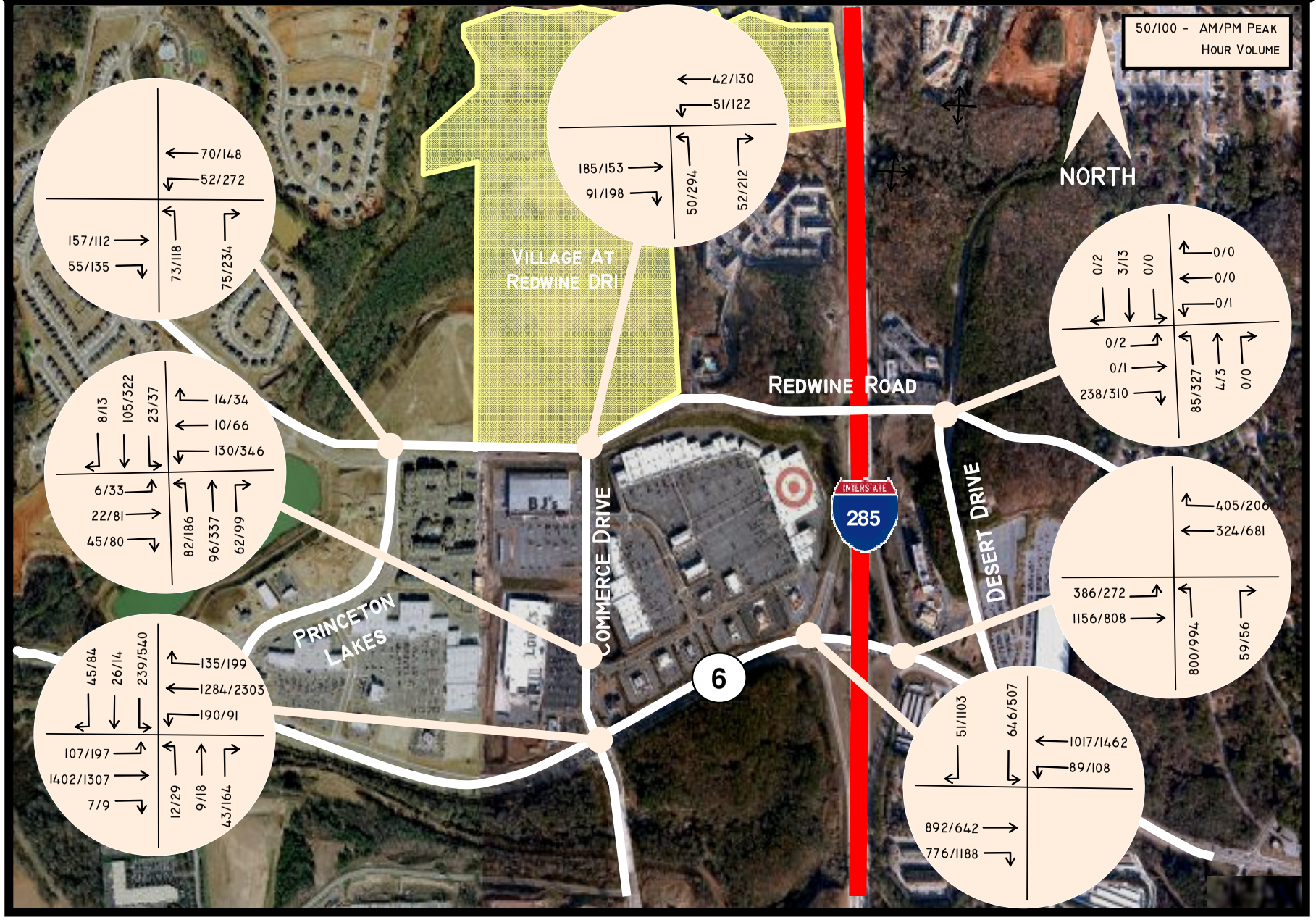


Figure 8 – Background With Improvements Configuration

BACKGROUND + PROJECT TRAFFIC CONDITIONS (2012)

Future traffic volumes were projected by adding the site-generated traffic volumes to background condition traffic volumes in 2012. Projected future volumes in 2012 are shown in Figure 9 for the weekday AM and PM peak hours. Site access requirements at the full-movement access opposite Commerce Drive will require a dedicated southbound left turn lane, a shared through-right turn lane, and the conversion of the existing northbound right turn lane into a shared northbound through-right turn lane. Two other access points into the development from Redwine Road will require dedicated southbound left and right turn lanes. These changes to the roadway network (in addition to the roadway improvements determined from the background scenario analysis) are depicted in Figure 10.

Projected future traffic volumes were used to analyze full build-out traffic conditions according to HCM methodology. Each site access was also analyzed. The results are presented in Table 5, and indicate that the project traffic will not degrade any intersections below acceptable LOS.

Table 5
2012 Background + Project LOS

Intersection	AM		PM	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Camp Creek Parkway & Commerce Drive	D	40.5	D	40.7
Camp Creek Parkway & I-285 SB Ramps	B	12.1	D	42.4
Camp Creek Parkway & I-285 NB Ramps	C	34.1	D	42.3
Commerce Drive & Shelby Lane	A	6.8	C	20.4
Commerce Drive & Redwine Road/Main Project Entrance	A	8.8	C	21.2
Redwine Road & Princeton Lakes (unsignalized) (1)	A	8.5	B	12.8
Redwine Road & Desert Drive (unsignalized) (1)	B	10.1	C	18.4
Redwine Road & Office/Retail/Mid Rise Apts Entrance (unsignalized) (2)	B	12.5	D	23.5
Redwine Road & Garden Apts Entrance (unsignalized) (2)	B	10.2	B	12.9

(1) These intersections are unsignalized with stop control on all approaches. Therefore, the analysis results refer to overall intersection conditions.

(2) These intersections are unsignalzied with stop control only on the southbound approach. Therefore, the analysis results refer only to the stopped southbound approach.

Figure 9 – 2012 Background + Project AM & PM Volumes

Figure 10 – Background + Project Lane Configuration

AREA OF INFLUENCE ANALYSIS

The purpose of the area of influence (AOI) analysis is to address the requirements of the *Procedures and Principles for GRTA Development of Regional Impact Review*, Section 3-102.D pertaining to criteria for non-expedited review.

Area of Influence Characteristics

The AOI is defined as six road miles from the project site. This area was determined using ESRI's ArcView GIS network analyst tool and ARC's base roadway network. The AOI is shown in Figure 11. This area covers approximately 50,045 acres, with 154,714 jobs, and a population of 177,083 in 66,041 households. Approximate AOI statistics are presented in Table 7.

Table 7
Area of Influence Overview

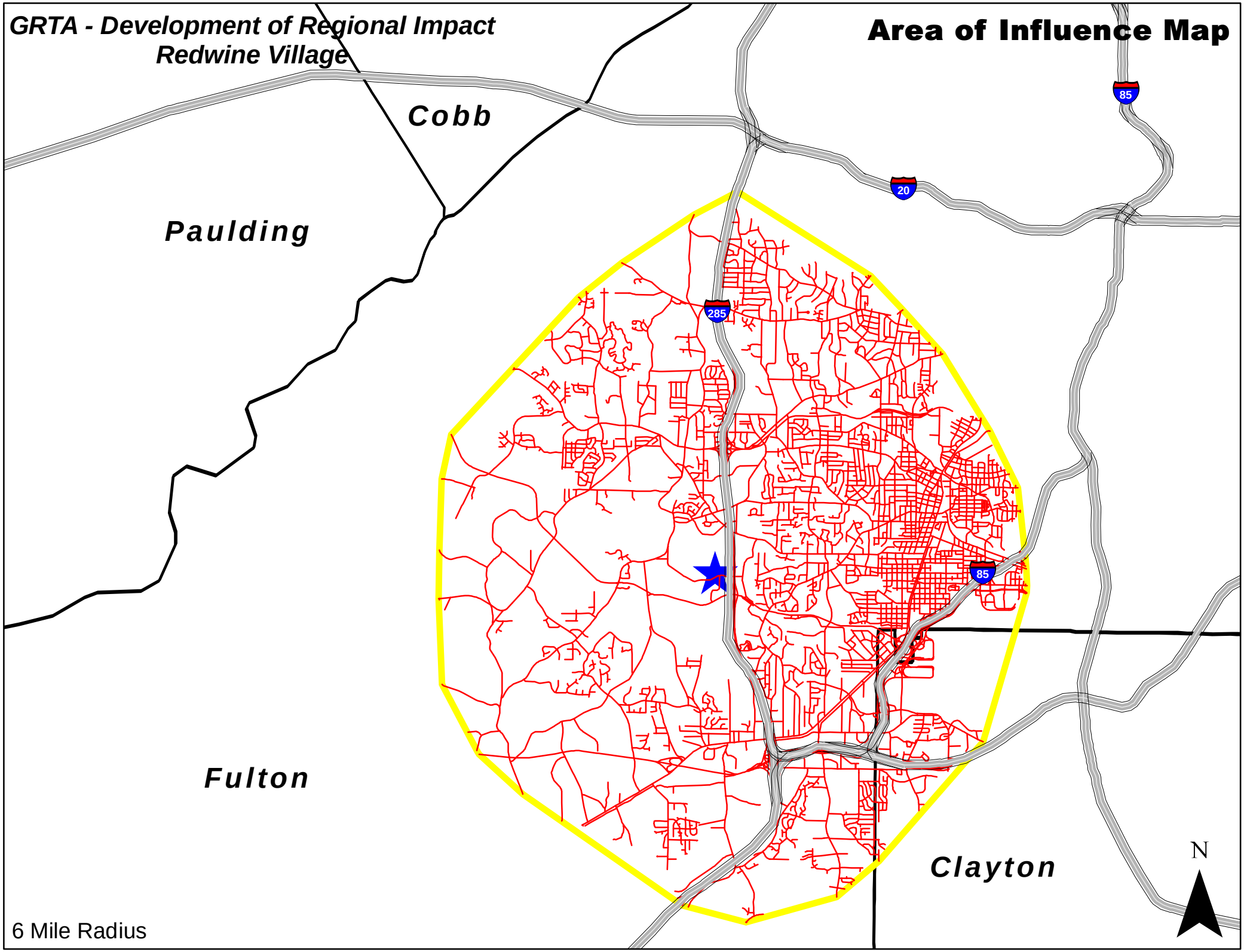
Data Item	Value	Data Source
Land Area	50,045 acres	Calculated from ARC GIST data
Employment	158,714	U.S. Census- ARC
Population	177,083	U.S. Census- ARC
Households	66,041	U.S. Census- ARC

Land Uses

According to ARC's 2000 Land Use/Land Cover data set, the most prevalent land use within the AOI is residential which accounts for approximately 40% of the land area. The breakdown of land uses in the AOI is presented in Table 8.

Table 8
Existing Land Uses within Area of Influence (1999)

Use	Acres	Percent of Area
Agriculture/ Forest	10,764	21.51%
Cemeteries	101	0.20%
Commercial	3,279	6.55%
Industrial	2,009	4.01%
Institutional	1,999	3.99%
Parks/ Recreational	2,366	4.73%
Residential (Low)	3,023	6.04%
Residential (Medium)	14,495	28.96%
Residential (High)	2,722	5.44%
Transportation/ Utilities/ Communications	3,786	7.57%
Wetlands	798	1.59%
Other	4,704	9.40%
Total	50,045	


GRTA - Development of Regional Impact
Redwine Village
Area of Influence Map
Cobb
Paulding
Fulton
Clayton
85
20
285
85
N
6 Mile Radius

The AOI falls within several jurisdictions including the Fulton County, DeKalb County, the City of Atlanta, and the City of East Point. A detailed breakdown is provided in Table 9.

Table 9
Jurisdictional Breakdown of the Area of Influence

Jurisdiction	Acres
Counties	
Fulton County	46,829
Clayton County	3,220
Cities	
City of Atlanta	12,768
City of College Park	6,221
City of East Point	8,450
City of Hapeville	223
City of Union City	31

Population

The year 2000 Census reported approximately 177,083 persons living within the AOI in 66,041 households. The average household size is 2.68 persons per household. Between the 1990 Census and the 2000 Census, population within the AOI increased by 6.7% during the ten-year period. This is an increase of approximately 0.7% per year.

Housing

Home values within the area of influence were obtained from census information within the ZIP codes of the AOI. The median home value within the AOI is $93,086. A summary of this information is presented in Table 10.

Table 10
Home Values in the Area of Influence

Home Value	Number of Homes	Percent of Homes
< $50,000	231	4.3%
$50,000 - $99,999	2,879	53.2%
$100,000 - $149,999	1,522	28.1%
$150,000 - $199,999	481	8.9%
$200,000 - $299,999	189	3.5%
$300,000 - $499,999	86	1.6%
$500,000 - $999,999	12	0.2%
> $1,000,000	13	0.2%

Source: U.S. Census Bureau

While the values in Table 10 reflected present home value, they do not necessarily correspond to the cost of living in these homes on a monthly basis to the present occupants. In addition to reporting home values, which would be the cost to a new resident to the area, the census reports what current residents are paying for housing expenses. These values range from owners with no mortgages to those with mortgage payments in excess of $2,000 a month. A summary of this data is presented in Table 11.

Table 11 Monthly Mortgage Costs in the Area of Influence		
Monthly Mortgage Payment	Number of Homes	Percent of Homes
No Mortgage	1,058	19.5%
< $300	33	0.6%
$300 - $499	164	3.0%
$500 - $699	513	9.5%
$700 - $999	1,537	28.4%
$1,000 - $1,499	1,547	28.6%
$1,500 - $1,999	371	6.9%
> $2,000	189	3.5%

Source: U.S. Census Bureau

According to census data, the approximate monthly cost for those residents who have a mortgage is $964 per month. For all housing, including those with no mortgage, the median monthly housing cost for owned-homes is $288.

Rental costs in the area were estimated based on census information for ZIP codes within the AOI. The median monthly rent within the AOI is $616, or $7,392 per year. A summary of rental unit costs is presented in Table 12.

Table 12 Rental Costs in the Area of Influence		
Monthly Rental Costs	Number of Units	Percent of Units
< $200*	496	8.1%
$200 - $299	209	3.4%
$300 - $499	937	15.3%
$500 - $749	3,117	51.0%
$750 - $999	1,118	18.3%
$1,000 - $1,499	198	3.2%
> $1,500	33	0.5%

** includes 130 units indicating no cash rent*

Source: U.S. Census Bureau

Employment Characteristics

Based on data obtained from the Georgia Department of Labor, the year 1999 employment totals 127,768 within the AOI. Existing employment is summarized by Standard Industrial Classification categories in Table 13.

Table 13 Year 2000 Employment within Area of Influence		
SIC Category	Employed within AOI	Percent
Agriculture	0	0
Mining	0	0
Construction	4,146	3%
Manufacturing	15,161	9%
Transportation and Public Utilities	54,402	35%
Wholesale Trade	14,853	10%
Retail	16,774	11%
Services	31,785	21%
Public Administration	21,593	11%
Total	158,714	100%

Source: Georgia Department of Labor

Income

Current income of the resident population was last reported in the 2000 Census in 1999 dollars. The average household incomes in the AOI averaged around $42,000 annually. Salary ranges within the AOI for the year 2000 were taken from U.S. Census data for census block groups that intersected the AOI. Ranges, based on available data, are presented in Table 14 and are based on available data.

Table 14 Year 2000 Average Salaries in AOI	
Household Salary Range	Percentage
< $10,000	12.2%
$10,000 - $19,999	14.0%
$20,000 - $39,000	29.8%
$40,000 - $59,999	19.1%
$60,000 - $74,999	9.0%
$75,000 - $124,999	12.0%
> $125,000	4.0%

Source: U.S. Bureau of Labor Statistics

ASSESSMENT OF DRI CRITERIA

Criteria 1 (Quality, Character, Convenience, and Flexibility of Transportation Options)

MARTA bus routes 82 Camp Creek / Barge Rd Park/ Ride, 84 East Point / Camp Creek and 88 Camp Creek / Welcome All pass in front of the development connecting College Park and East Point Rail Stations.

Criteria 2 (Vehicle Miles Traveled)

Village at Redwine is a mixed-use development that will provide housing, retail, and employment opportunities within close proximity of existing employment, housing, and retail opportunities, thereby providing the potential for reducing vehicle miles traveled.

Criteria 3 (Relationship between Location of Proposed DRI and Regional Mobility)

Village at Redwine is likely to improve regional mobility because it is in the proximity of Camp Creek Market Place.

Criteria 4 (Proximity to Public Transportation)

Village at Redwine is adjacent to the Camp Creek Market Place bus stop.

Criteria 5 (Location within Transportation Management Area)

Village at Redwine is not located within an established Transportation Management Area.

Criterion 6 (Vehicular Trip Reduction)

The mixed-use nature of the Village at Redwine development allows a reduction in vehicular trips made to the site. Trip generation is expected to be reduced by approximately 2% during the morning peak hour, and 18% during the evening peak hour due to internal capture. On a daily basis, vehicle trips are expected to be reduced by over 11%.

Criterion 7C (Land Use Balance)

Criterion 7c attempts to demonstrate the project is located in an AOI with employment opportunities which are such that at least 25% of the persons who are reasonably expected to live in the proposed DRI will have an opportunity to find employment appropriate to such persons' qualifications and experience within the AOI.

An evaluation was made based on present day AOI data. Table 15 presents a summary of the residential types, median costs, and average annual housing costs within the Village at Redwine development.

Table 15 Village at Redwine Housing Summary					
Housing Type	% units	# units	Approximate Price	Monthly Cost	Avg. Annual Housing Cost
Apartments	84%	833		$1,100	$13,200
Single Family Homes	5%	47	$275,000	$1,650*	$19,800
Town homes	11%	108	$175,000	$1,050*	$12,600

** 6.0% Interest Rate and 30 Year Loan*

Based on the Table 15, residents of the Village at Redwine development may be expected to pay between $12,600 and $19,800 a year for housing. A typical rule-of-thumb for housing affordability is that no more than thirty-percent of a household's gross income should be committed to monthly housing costs. Using this ratio, housing is available on-site for households who earn between $42,000 and $66,000 a year.

A regional average of 1.5 workers per household yields approximately 1482 potential residents seeking employment. A 25% minimum (371 resident-workers) would be required to find adequate employment within the AOI in order to meet the GRTA jobs-housing balance criteria. It is assumed that the occupations of the residents will be in direct proportion to those occupations of the resident workers in the county. Table 16 lists the distribution of the required 1488 jobs for the residents of Village at Redwine by occupation.

Table 16 Required Number of Jobs by Occupation		
Occupation	Percent	Required Number of Jobs
Construction	3%	44
Manufacturing	9%	133
Transportation and Public Utilities	35%	519
Wholesale Trade	10%	148
Retail	11%	163
Services	21%	311
Public Administration	11%	163
Total	100%	1,482

Table 17 shows the comparison of the existing number of jobs in the AOI to the required number of jobs for 25% of the residents of the Village at Redwine.

Table 17 Comparison of Jobs in AOI to 25% of Jobs Required by the Residents of the DRI					
Occupation	Mean Weekly Salary Range	Average Annual Salary	Jobs in AOI	Positions Earning Adequate Income to Qualify	25% of Jobs Required by the Residents of DRI
Construction	$1,077	$56,004	4,146	4,146	11
Manufacturing	$1,266	$65,832	15,161	15,161	33
Transportation and Public Utilities	$891	$46,332	54,402	54,402	130
Wholesale Trade	$1,461	$75,972	14,853	14,853	37
Retail	$551	$28,652	16,774		41
Services	$796	$41,392	31,785		78
Public Administration	$924	$48,048	21,593	21,593	41
Total			158,714	110,155	371

Source: U.S. Census Bureau, U.S Department of Labor Bureau of Labor Statistics

Based on the current employment in the area, there are 110,155 jobs in the AOI with salaries above the calculated minimum salary required for to afford the homes planned in Village at Redwine. This number exceeds the 371 threshold and therefore exceeds the 25% housing balance ratio.

Criterion 8 (Relationship between Proposed DRI and Existing Development and Infrastructure)

Village at Redwine is located in an area that is well-planned and has adequate public facilities and thus will not result in an unplanned and poorly served development.

CONCLUSIONS

Existing Conditions

Existing traffic conditions in the study area were evaluated to determine if there are currently operational deficiencies that need to be addressed. The study area includes the following:

- Commerce Drive and Redwine Road (Main Access Point)
- Commerce Drive and Shelby Lane
- Commerce Drive and Camp Creek Parkway
- Camp Creek Parkway and I-285 Southbound Ramps
- Camp Creek Parkway and I-285 Northbound Ramps
- Redwine Road and Desert Drive
- Redwine Road and Princeton Lakes

No existing LOS deficiencies were observed within the study area.

Background Conditions

Background conditions are those that would exist in 2012 without development of Village of Redwine. Background condition volumes were projected by applying historical growth factors to the existing traffic volumes. These rates were applied for five years to represent conditions in 2012 independent of the proposed development. Two operational deficiencies were noted in the Background condition during the PM peak hour at Commerce Drive and Redwine Road and at Camp Creek Parkway and Commerce Drive. These background condition LOS deficiencies can be avoided by providing the following *system improvements: (1) a third westbound third lane at Camp Creek Parkway and Commerce Drive and (2) a traffic signal at Commerce Drive and Redwine Road.* Please note that such a signal would need to go through a signal warrant study process and be approved by the appropriate agencies.

Background + Project Conditions

The development of Village of Redwine is projected to add 7,343 new trips per day. The traffic impact of the development was analyzed during the AM and PM peak hours and assumed the use of the operational improvements necessary to maintain acceptable system performance in the Background condition. Despite the addition of traffic associated with the Village at Redwine, *no LOS deficiencies were observed within the study area in this scenario*. Site access requirements at the full-movement access point opposite Commerce Drive will require a dedicated southbound left turn lane, a shared through-right turn lane, and the conversion of the existing northbound right turn lane into a shared northbound through-right turn lane. Two other access points into the development from Redwine Road will require dedicated southbound left and right turn lanes.

Table 18 provides a summary of the LOS for all scenarios.

Table 18
Summary of Existing, Background, and Background + Project LOS

Intersection	2007 Existing		2012 Background		2012 Background with Improvements	2012 Background + Project	
	AM	PM	AM	PM	PM	AM	PM
Camp Creek Parkway & Commerce Drive	C	D	C	E	C	D	D
Camp Creek Parkway & I-285 SB Ramps	B	A	B	C		B	D
Camp Creek Parkway & I-285 NB Ramps	C	C	C	C		C	D
Commerce Drive & Shelby Lane	A	B	A	B		A	C
Commerce Drive & Redwine Road/Main Project Entrance [1]	B	D	B	E	A	A	C
Redwine Road & Princeton Lakes (unsignalized) [2]	A	B	A	B		A	B
Redwine Road & Desert Drive (unsignalized) [2]	A	B	A	B		B	C
Redwine Road & Office/Retail/Mid Rise Apts Entrance (unsignalized) [3]						B	D
Redwine Road & Garden Apts Entrance (unsignalized) [3]						B	B

(1) This intersection was analyzed without a signal in the 2007 Existing and 2012 Background scenarios with stop control only on the northbound approach. In these scenarios, the results refer only to the stopped northbound movement. In 2012 Background with Improvements and 2012 Background + Project, a traffic signal was assumed in the analysis and the results refer to the overall intersection conditions.
(2) These intersections are unsignalized with stop control on all approaches. Therefore, the analysis results refer to overall intersection conditions.
(3) These intersections are unsignalzied with stop control only on the southbound approach. Therefore, the analysis results refer only to the stopped southbound approach.

Appendix

Turning Movement Counts

All Traffic Data Services, Inc.

1336 Farmer Road
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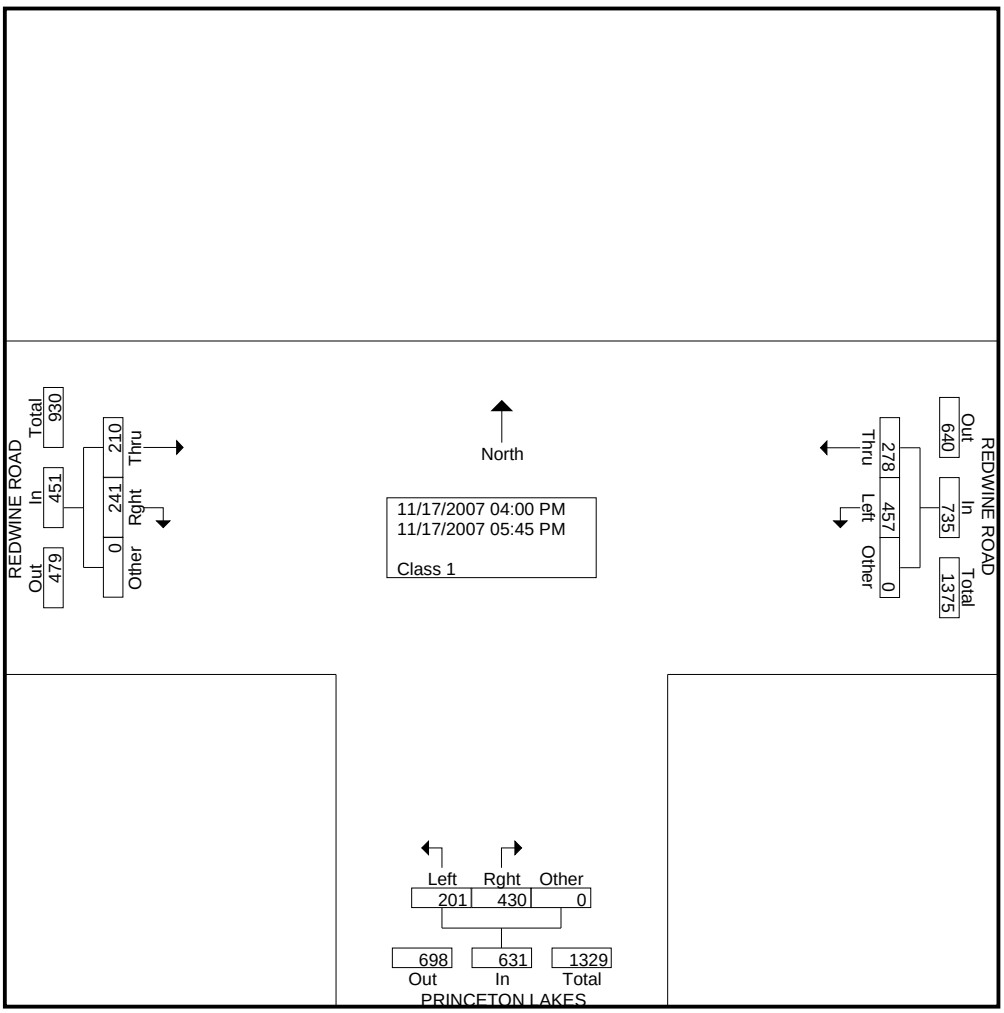
File Name : PrincetonLakes@RedwineRdPM
Site Code : 00000000
Start Date : 11/17/2007
Page No : 1

Groups Printed- Class 1

	REDWINE ROAD Westbound				PRINCETON LAKES Northbound				REDWINE ROAD Eastbound				
Start Time	Left	Thru	Other	App. Total	Left	Rght	Other	App. Total	Thru	Rght	Other	App. Total	Int. Total
04:00 PM	41	30	0	71	12	50	0	62	22	25	0	47	180
04:15 PM	44	35	0	79	14	40	0	54	32	26	0	58	191
04:30 PM	48	33	0	81	25	49	0	74	23	25	0	48	203
04:45 PM	52	32	0	84	32	57	0	89	21	30	0	51	224
Total	185	130	0	315	83	196	0	279	98	106	0	204	798
05:00 PM	61	27	0	88	33	52	0	85	25	29	0	54	227
05:15 PM	68	40	0	108	21	59	0	80	28	40	0	68	256
05:30 PM	70	37	0	107	34	67	0	101	34	29	0	63	271
05:45 PM	73	44	0	117	30	56	0	86	25	37	0	62	265
Total	272	148	0	420	118	234	0	352	112	135	0	247	1019
Grand Total	457	278	0	735	201	430	0	631	210	241	0	451	1817
Apprch %	62.2	37.8	0		31.9	68.1	0		46.6	53.4	0		
Total %	25.2	15.3	0	40.5	11.1	23.7	0	34.7	11.6	13.3	0	24.8	



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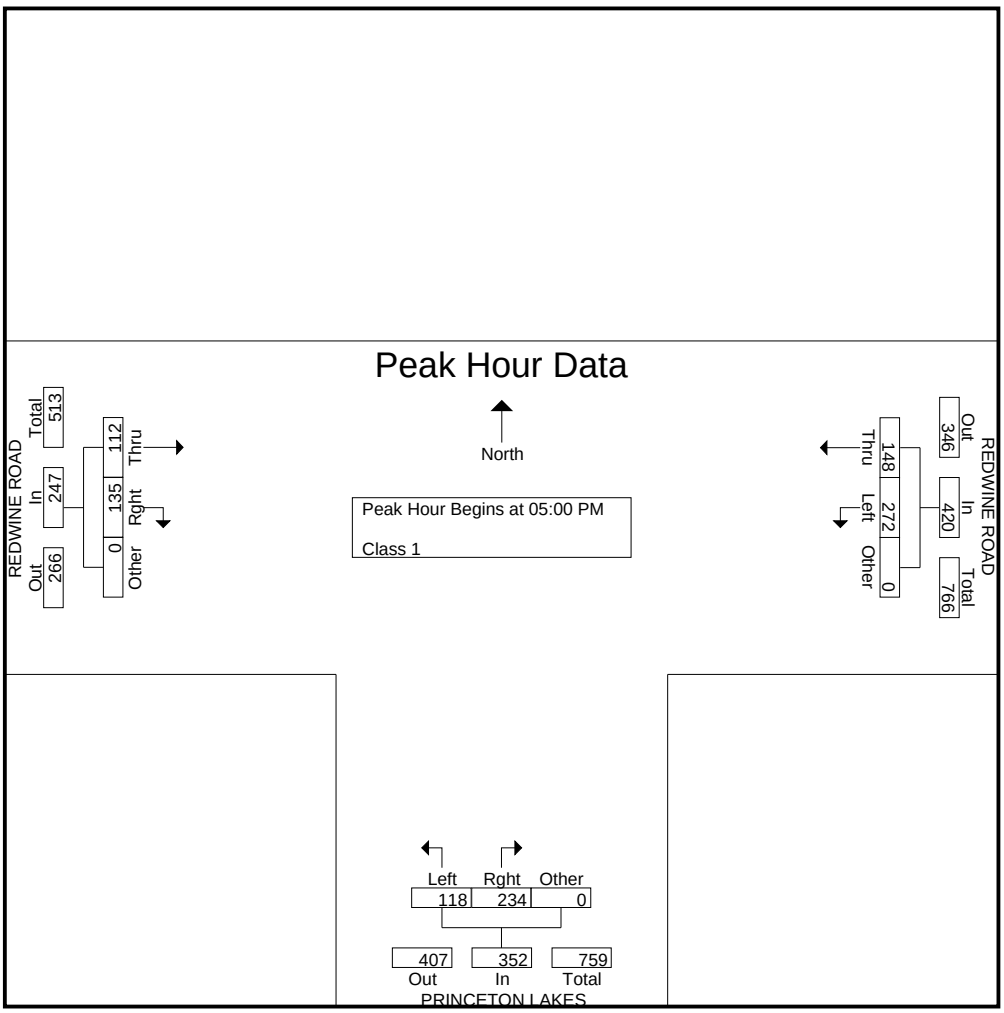
File Name : PrincetonLakes@RedwineRdPM
Site Code : 00000000
Start Date : 11/17/2007

	REDWINE ROAD Westbound				PRINCETON LAKES Northbound				REDWINE ROAD Eastbound				
Start Time	Left	Thru	Other	App. Total	Left	Rght	Other	App. Total	Thru	Rght	Other	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 05:00 PM													
05:00 PM	61	27	0	88	33	52	0	85	25	29	0	54	227
05:15 PM	68	40	0	108	21	59	0	80	28	**40**	0	**68**	256
05:30 PM	70	37	0	107	**34**	**67**	0	**101**	**34**	29	0	63	**271**
05:45 PM	**73**	**44**	0	**117**	30	56	0	86	25	37	0	62	265
Total Volume	272	148	0	420	118	234	0	352	112	135	0	247	1019
% App. Total	64.8	35.2	0		33.5	66.5	0		45.3	54.7	0		
PHF	.932	.841	.000	.897	.868	.873	.000	.871	.824	.844	.000	.908	.940



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File Name : PrincetonLakes@RedwineRdAM
Site Code : 00000000
Start Date : 12/4/2007
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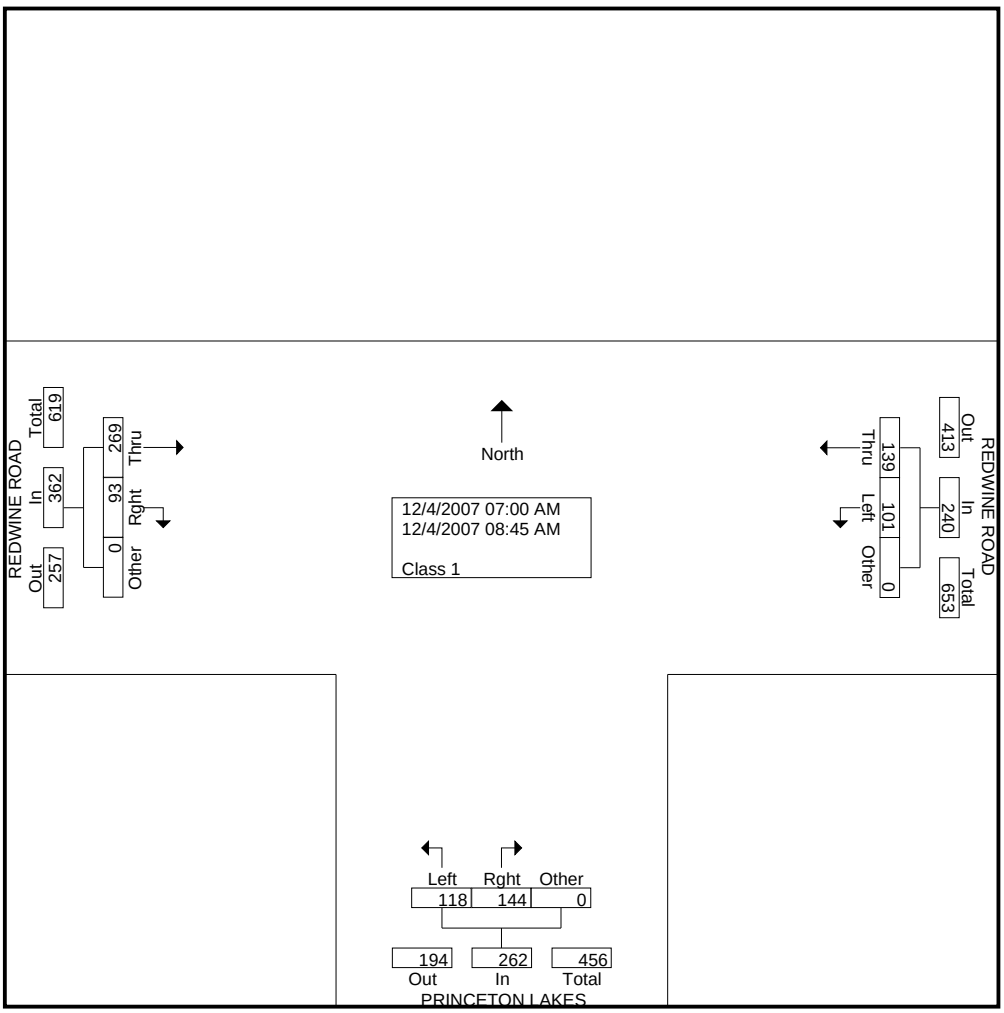
Groups Printed- Class 1

	REDWINE ROAD Westbound				PRINCETON LAKES Northbound				REDWINE ROAD Eastbound				
Start Time	Left	Thru	Other	App. Total	Left	Rght	Other	App. Total	Thru	Rght	Other	App. Total	Int. Total
07:00 AM	10	11	0	21	8	12	0	20	31	11	0	42	83
07:15 AM	13	19	0	32	10	17	0	27	34	3	0	37	96
07:30 AM	12	11	0	23	20	20	0	40	44	14	0	58	121
07:45 AM	10	25	0	35	16	17	0	33	38	13	0	51	119
Total	45	66	0	111	54	66	0	120	147	41	0	188	419
08:00 AM	11	16	0	27	18	17	0	35	36	8	0	44	106
08:15 AM	19	18	0	37	19	21	0	40	39	20	0	59	136
08:30 AM	16	19	0	35	14	17	0	31	21	14	0	35	101
08:45 AM	10	20	0	30	13	23	0	36	26	10	0	36	102
Total	56	73	0	129	64	78	0	142	122	52	0	174	445
Grand Total	101	139	0	240	118	144	0	262	269	93	0	362	864
Apprch %	42.1	57.9	0		45	55	0		74.3	25.7	0		
Total %	11.7	16.1	0	27.8	13.7	16.7	0	30.3	31.1	10.8	0	41.9	



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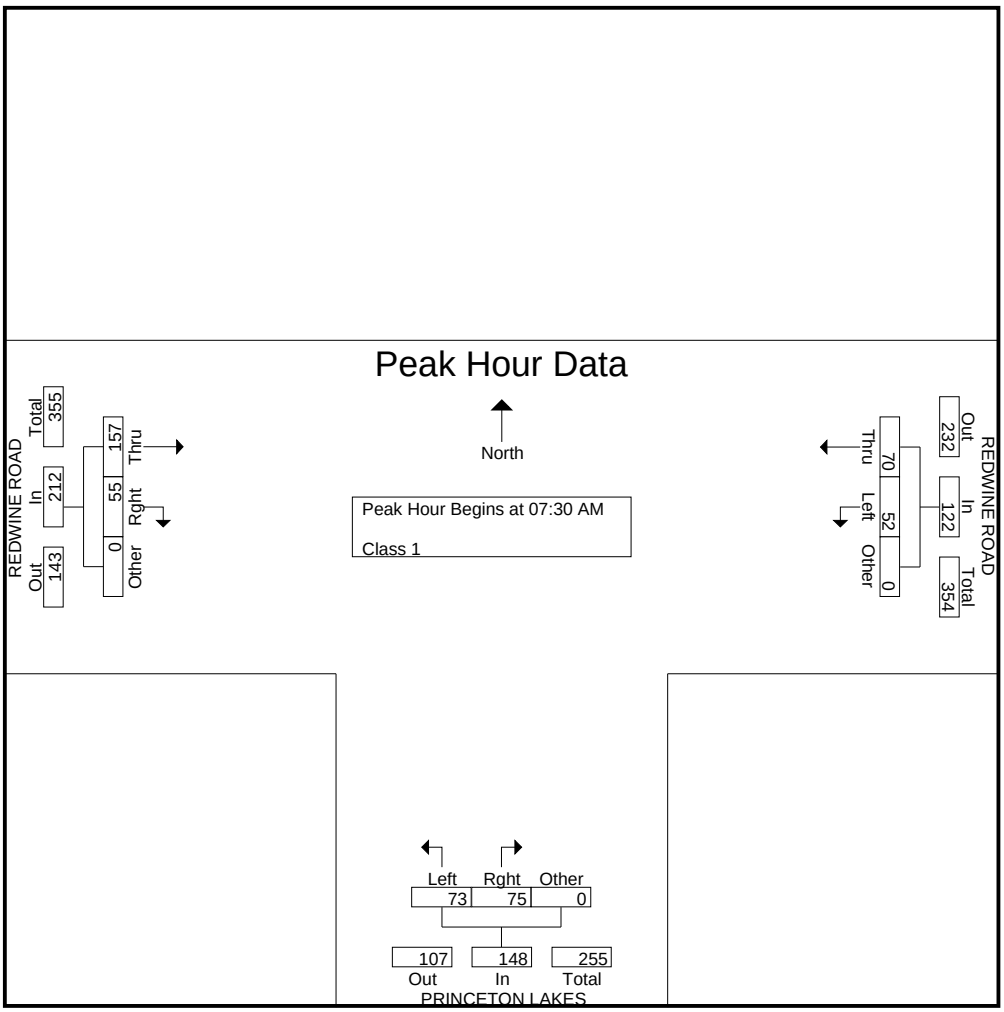
Site Code : 00000000
Start Date : 12/4/2007

	REDWINE ROAD Westbound				PRINCETON LAKES Northbound				REDWINE ROAD Eastbound				
Start Time	Left	Thru	Other	App. Total	Left	Rght	Other	App. Total	Thru	Rght	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	12	11	0	23	**20**	20	0	**40**	**44**	14	0	58	121
07:45 AM	10	**25**	0	35	16	17	0	33	38	13	0	51	119
08:00 AM	11	16	0	27	18	17	0	35	36	8	0	44	106
08:15 AM	**19**	18	0	**37**	19	**21**	0	40	39	**20**	0	**59**	**136**
Total Volume	52	70	0	122	73	75	0	148	157	55	0	212	482
% App. Total	42.6	57.4	0		49.3	50.7	0		74.1	25.9	0		
PHF	.684	.700	.000	.824	.913	.893	.000	.925	.892	.688	.000	.898	.886



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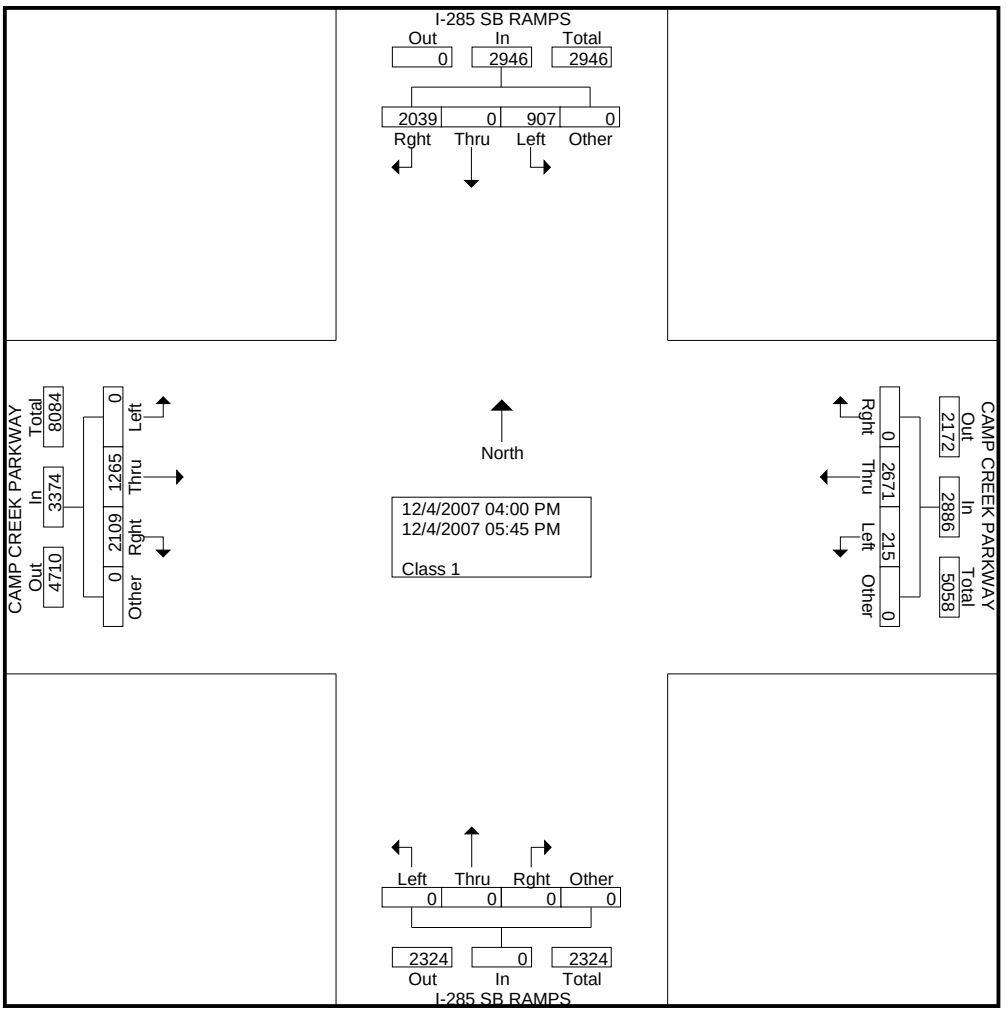
File Name : I-285SBRamp@CampCrPkwyPM
Site Code : 00000000
Start Date : 12/4/2007
Page No : 1

Groups Printed- Class 1

	I-285 SB RAMPS Southbound					CAMP CREEK PARKWAY Westbound					I-285 SB RAMPS Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
04:00 PM	138	0	228	0	366	34	276	0	0	310	0	0	0	0	0	0	156	233	0	389	1065
04:15 PM	104	0	276	0	380	29	321	0	0	350	0	0	0	0	0	0	155	272	0	427	1157
04:30 PM	103	0	273	0	376	22	354	0	0	376	0	0	0	0	0	0	168	242	0	410	1162
04:45 PM	116	0	257	0	373	23	397	0	0	420	0	0	0	0	0	0	143	244	0	387	1180
Total	461	0	1034	0	1495	108	1348	0	0	1456	0	0	0	0	0	0	622	991	0	1613	4564
05:00 PM	126	0	264	0	390	26	332	0	0	358	0	0	0	0	0	0	132	209	0	341	1089
05:15 PM	112	0	237	0	349	22	336	0	0	358	0	0	0	0	0	0	176	260	0	436	1143
05:30 PM	108	0	247	0	355	27	321	0	0	348	0	0	0	0	0	0	158	370	0	528	1231
05:45 PM	100	0	257	0	357	32	334	0	0	366	0	0	0	0	0	0	177	279	0	456	1179
Total	446	0	1005	0	1451	107	1323	0	0	1430	0	0	0	0	0	0	643	1118	0	1761	4642
Grand Total	907	0	2039	0	2946	215	2671	0	0	2886	0	0	0	0	0	0	1265	2109	0	3374	9206
Apprch %	30.8	0	69.2	0		7.4	92.6	0	0		0	0	0	0		0	37.5	62.5	0		
Total %	9.9	0	22.1	0	32	2.3	29	0	0	31.3	0	0	0	0	0	0	13.7	22.9	0	36.7	



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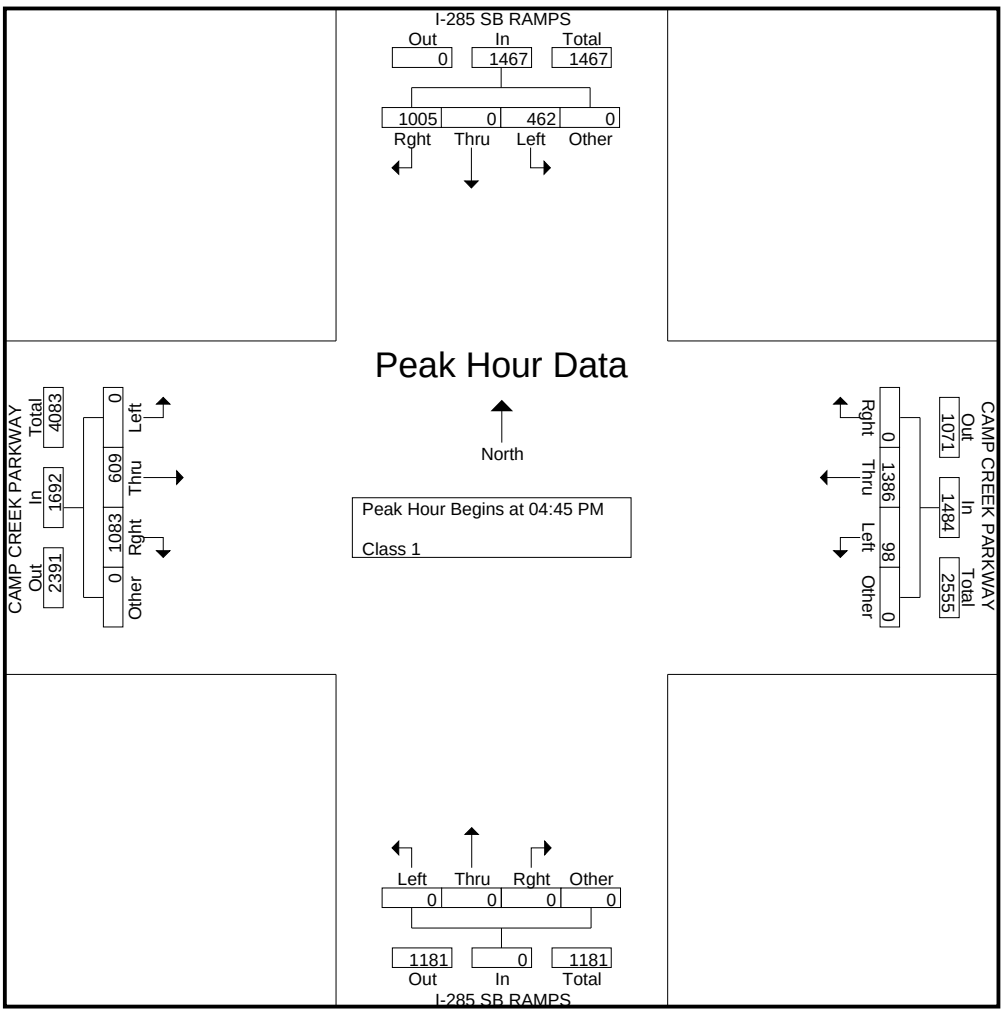
File Name : I-285SBRamp@CampCrPkwyPM
Site Code : 00000000
Start Date : 12/4/2007
Page No : 2

	I-285 SB RAMPS Southbound					CAMP CREEK PARKWAY Westbound					I-285 SB RAMPS Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	116	0	257	0	373	23	**397**	0	0	**420**	0	0	0	0	0	0	143	244	0	387	1180
05:00 PM	**126**	0	**264**	0	**390**	26	332	0	0	358	0	0	0	0	0	0	132	209	0	341	1089
05:15 PM	112	0	237	0	349	22	336	0	0	358	0	0	0	0	0	0	**176**	260	0	436	1143
05:30 PM	108	0	247	0	355	**27**	321	0	0	348	0	0	0	0	0	0	158	**370**	0	**528**	**1231**
Total Volume	462	0	1005	0	1467	98	1386	0	0	1484	0	0	0	0	0	0	609	1083	0	1692	4643
% App. Total	31.5	0	68.5	0		6.6	93.4	0	0		0	0	0	0		0	36	64	0		
PHF	.917	.000	.952	.000	.940	.907	.873	.000	.000	.883	.000	.000	.000	.000	.000	.000	.865	.732	.000	.801	.943



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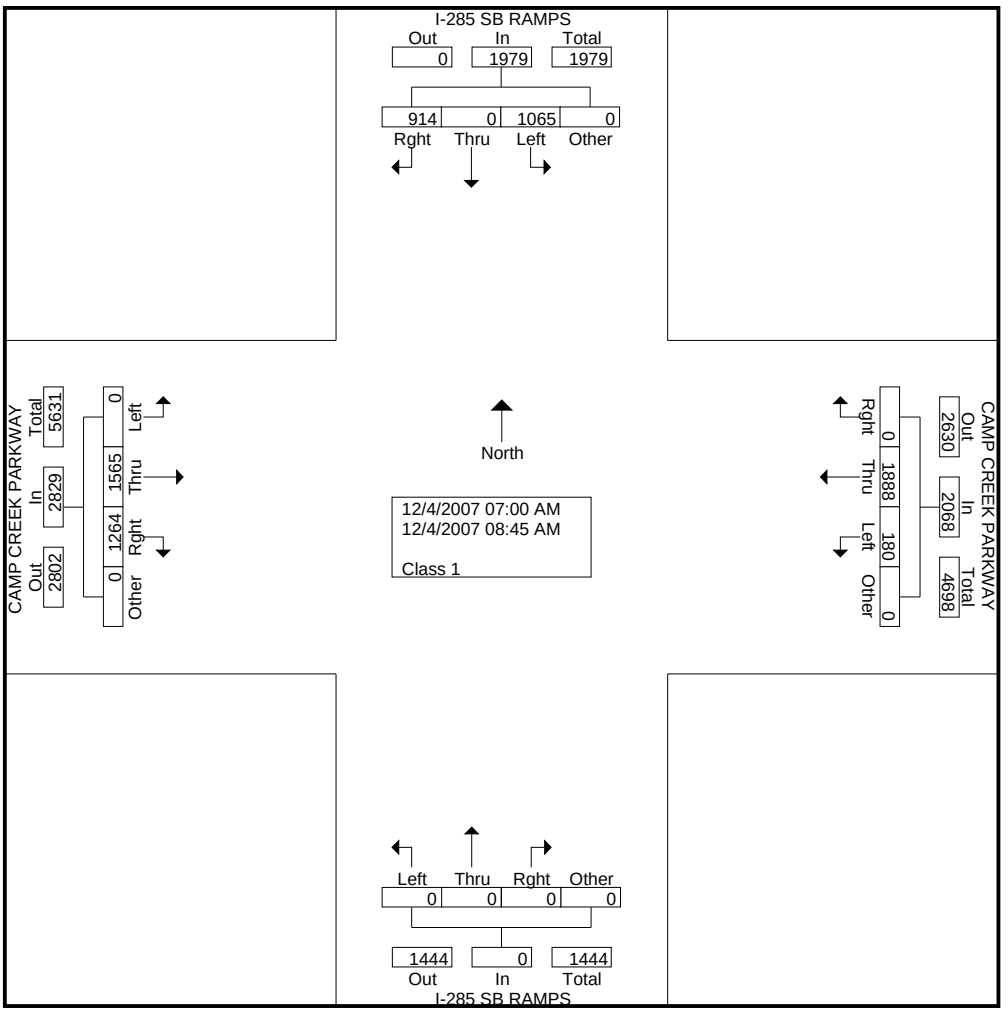
Groups Printed- Class 1

	I-285 SB RAMPS Southbound					CAMP CREEK PARKWAY Westbound					I-285 SB RAMPS Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
07:00 AM	140	0	101	0	241	13	232	0	0	245	0	0	0	0	0	0	230	114	0	344	830
07:15 AM	160	0	102	0	262	14	221	0	0	235	0	0	0	0	0	0	232	180	0	412	909
07:30 AM	145	0	126	0	271	24	254	0	0	278	0	0	0	0	0	0	200	179	0	379	928
07:45 AM	147	0	136	0	283	18	268	0	0	286	0	0	0	0	0	0	211	166	0	377	946
Total	592	0	465	0	1057	69	975	0	0	1044	0	0	0	0	0	0	873	639	0	1512	3613
08:00 AM	137	0	108	0	245	25	221	0	0	246	0	0	0	0	0	0	203	182	0	385	876
08:15 AM	114	0	119	0	233	24	276	0	0	300	0	0	0	0	0	0	165	165	0	330	863
08:30 AM	107	0	114	0	221	30	221	0	0	251	0	0	0	0	0	0	176	155	0	331	803
08:45 AM	115	0	108	0	223	32	195	0	0	227	0	0	0	0	0	0	148	123	0	271	721
Total	473	0	449	0	922	111	913	0	0	1024	0	0	0	0	0	0	692	625	0	1317	3263
Grand Total	1065	0	914	0	1979	180	1888	0	0	2068	0	0	0	0	0	0	1565	1264	0	2829	6876
Apprch %	53.8	0	46.2	0		8.7	91.3	0	0		0	0	0	0		0	55.3	44.7	0		
Total %	15.5	0	13.3	0	28.8	2.6	27.5	0	0	30.1	0	0	0	0	0	0	22.8	18.4	0	41.1	



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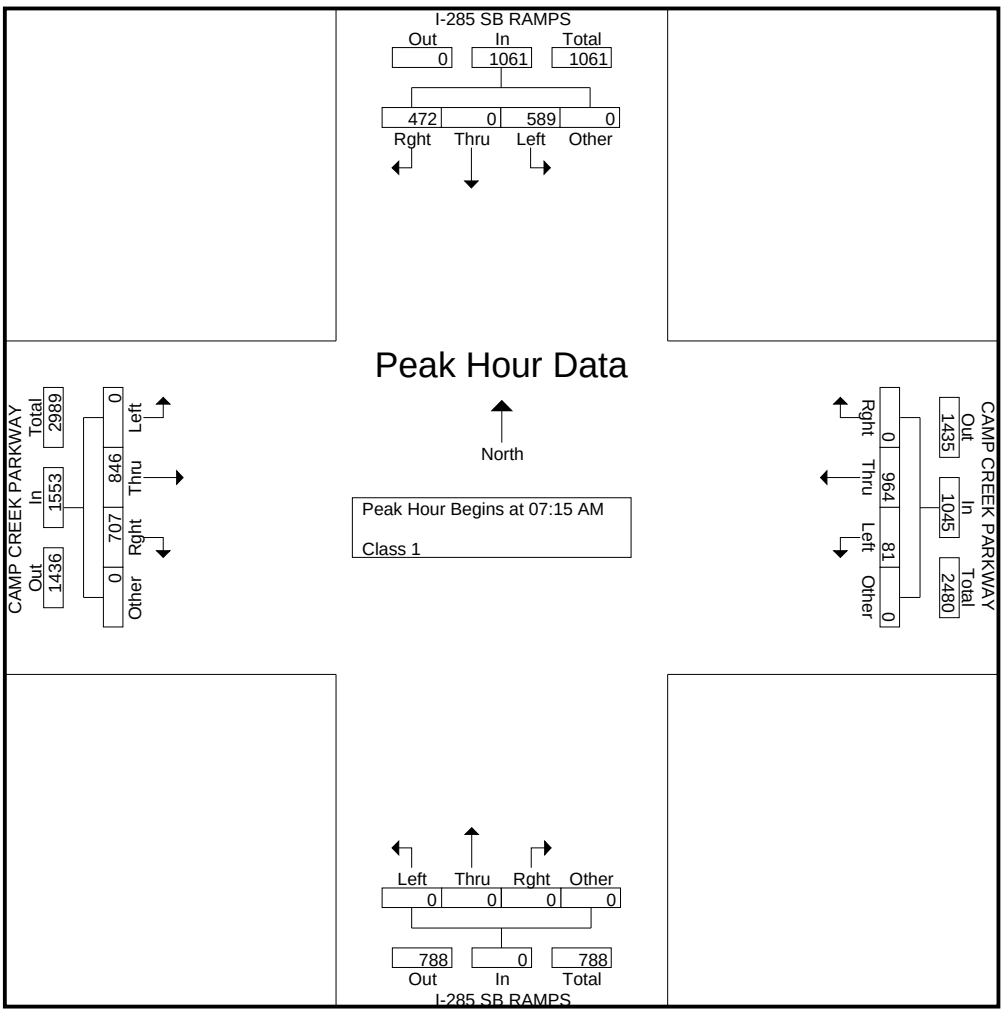
	I-285 SB RAMPS Southbound					CAMP CREEK PARKWAY Westbound					I-285 SB RAMPS Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	**160**	0	102	0	262	14	221	0	0	235	0	0	0	0	0	0	**232**	180	0	**412**	909
07:30 AM	145	0	126	0	271	24	254	0	0	278	0	0	0	0	0	0	200	179	0	379	928
07:45 AM	147	0	**136**	0	**283**	18	**268**	0	0	**286**	0	0	0	0	0	0	211	166	0	377	**946**
08:00 AM	137	0	108	0	245	**25**	221	0	0	246	0	0	0	0	0	0	203	**182**	0	385	876
Total Volume	589	0	472	0	1061	81	964	0	0	1045	0	0	0	0	0	0	846	707	0	1553	3659
% App. Total	55.5	0	44.5	0		7.8	92.2	0	0		0	0	0	0		0	54.5	45.5	0		
PHF	.920	.000	.868	.000	.937	.810	.899	.000	.000	.913	.000	.000	.000	.000	.000	.000	.912	.971	.000	.942	.967



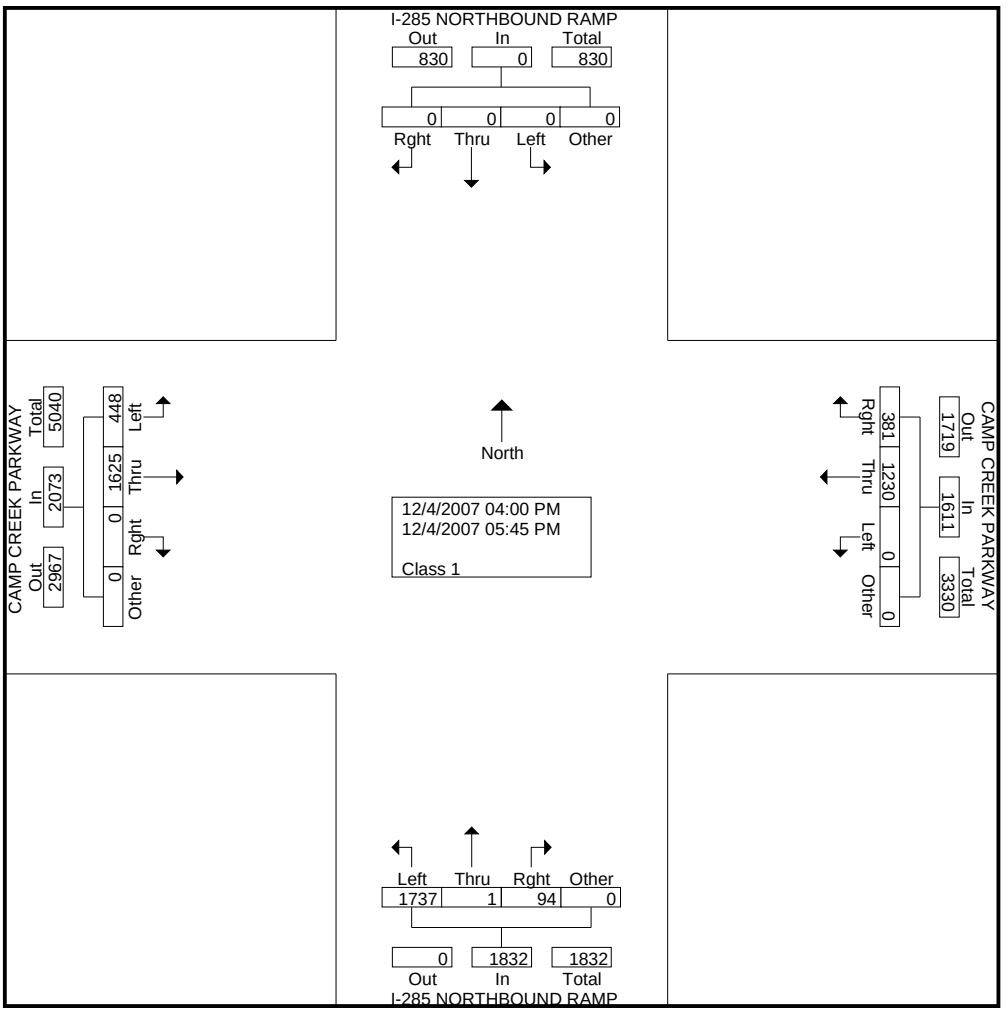
All Traffic Data Services, Inc.

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

File Name : I-285NBRamp@CampCrPkwyPM
Site Code : 00000000
Start Date : 12/4/2007

Groups Printed- Class 1

	I-285 NORTHBOUND RAMP Southbound					CAMP CREEK PARKWAY Westbound					I-285 NORTHBOUND RAMP Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	156	72	0	228	151	0	11	0	162	59	207	0	0	266	656
04:15 PM	0	0	0	0	0	0	163	44	0	207	208	0	11	0	219	58	192	0	0	250	676
04:30 PM	0	0	0	0	0	0	169	49	0	218	243	1	11	0	255	72	192	0	0	264	737
04:45 PM	0	0	0	0	0	0	199	48	0	247	220	0	10	0	230	61	189	0	0	250	727
Total	0	0	0	0	0	0	687	213	0	900	822	1	43	0	866	250	780	0	0	1030	2796
05:00 PM	0	0	0	0	0	0	138	32	0	170	227	0	20	0	247	49	163	0	0	212	629
05:15 PM	0	0	0	0	0	0	140	59	0	199	216	0	10	0	226	66	222	0	0	288	713
05:30 PM	0	0	0	0	0	0	136	39	0	175	227	0	10	0	237	35	235	0	0	270	682
05:45 PM	0	0	0	0	0	0	129	38	0	167	245	0	11	0	256	48	225	0	0	273	696
Total	0	0	0	0	0	0	543	168	0	711	915	0	51	0	966	198	845	0	0	1043	2720
Grand Total	0	0	0	0	0	0	1230	381	0	1611	1737	1	94	0	1832	448	1625	0	0	2073	5516
Apprch %	0	0	0	0		0	76.4	23.6	0		94.8	0.1	5.1	0		21.6	78.4	0	0		
Total %	0	0	0	0	0	0	22.3	6.9	0	29.2	31.5	0	1.7	0	33.2	8.1	29.5	0	0	37.6	

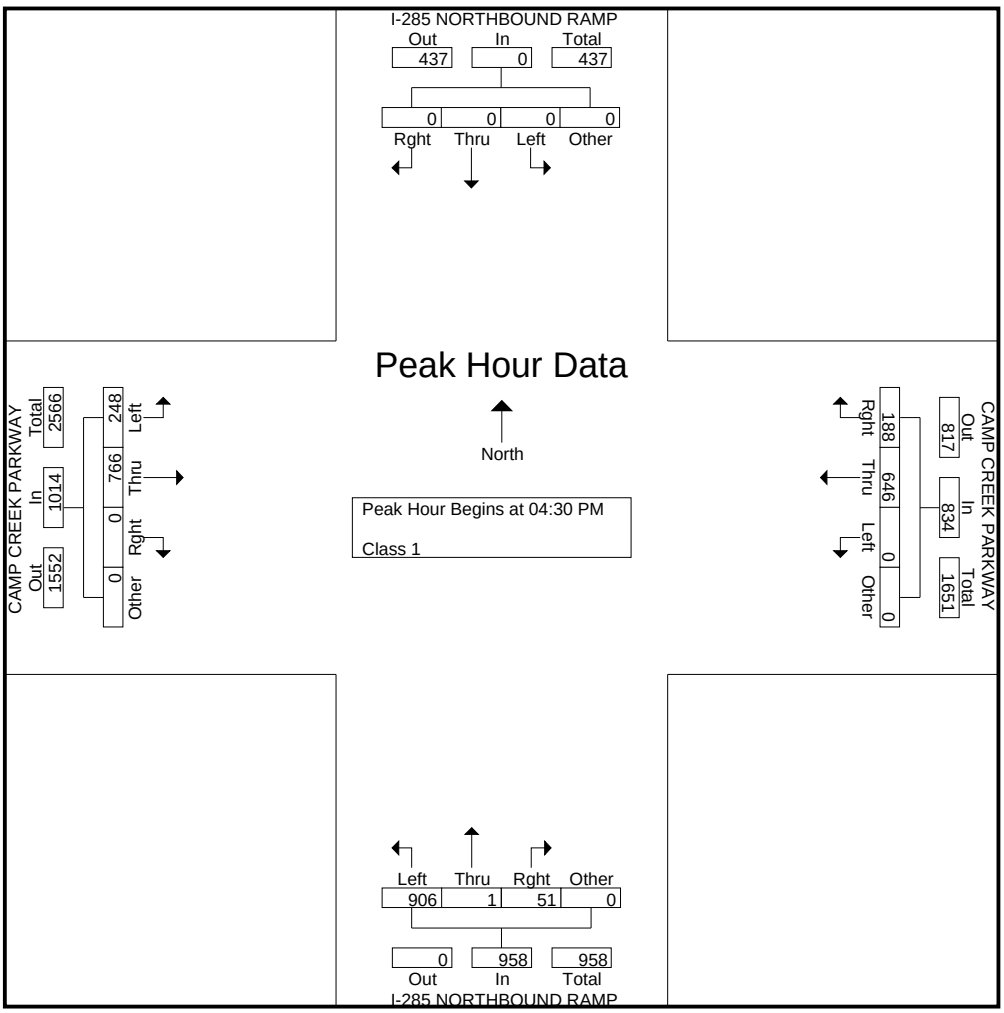


All Traffic Data Services, Inc.

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

File Name : I-285NBRamp@CampCrPkwyPM
Site Code : 00000000
Start Date : 12/4/2007
Page No : 2

	I-285 NORTHBOUND RAMP Southbound					CAMP CREEK PARKWAY Westbound					I-285 NORTHBOUND RAMP Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	0	169	49	0	218	**243**	**1**	11	0	**255**	**72**	192	0	0	264	**737**
04:45 PM	0	0	0	0	0	0	**199**	48	0	**247**	220	0	10	0	230	61	189	0	0	250	727
05:00 PM	0	0	0	0	0	0	138	32	0	170	227	0	**20**	0	247	49	163	0	0	212	629
05:15 PM	0	0	0	0	0	0	140	**59**	0	199	216	0	10	0	226	66	**222**	0	0	**288**	713
Total Volume	0	0	0	0	0	0	646	188	0	834	906	1	51	0	958	248	766	0	0	1014	2806
% App. Total	0	0	0	0		0	77.5	22.5	0		94.6	0.1	5.3	0		24.5	75.5	0	0		
PHF	.000	.000	.000	.000	.000	.000	.812	.797	.000	.844	.932	.250	.638	.000	.939	.861	.863	.000	.000	.880	.952



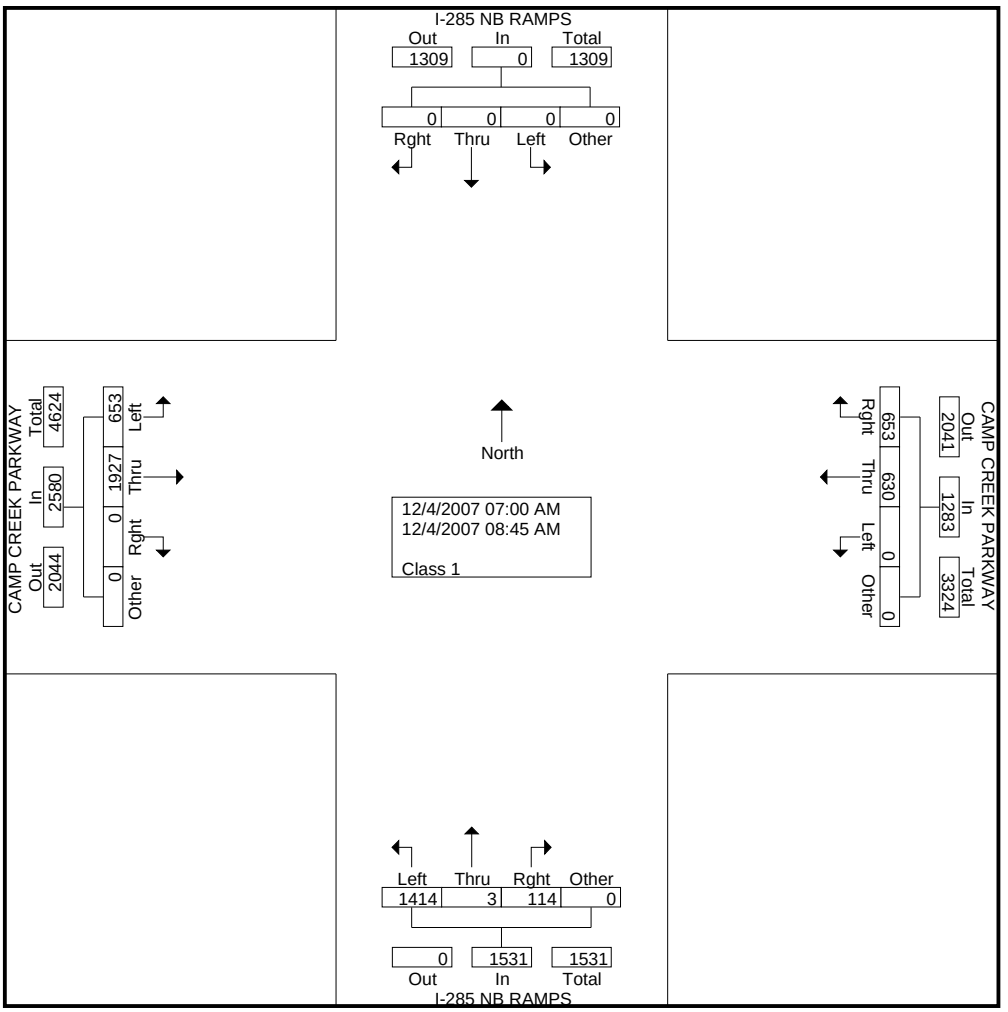
All Traffic Data Services, Inc.

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

File Name : I-285NBRamp@CampCrPkwyAM
Site Code : 00000000
Start Date : 12/4/2007
Page No : 1

Groups Printed- Class 1

	I-285 NB RAMPS Southbound					CAMP CREEK PARKWAY Westbound					I-285 NB RAMPS Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	56	79	0	135	185	2	13	0	200	75	295	0	0	370	705
07:15 AM	0	0	0	0	0	0	81	99	0	180	154	0	11	0	165	85	306	0	0	391	736
07:30 AM	0	0	0	0	0	0	85	96	0	181	186	0	22	0	208	94	243	0	0	337	726
07:45 AM	0	0	0	0	0	0	85	95	0	180	204	0	8	0	212	98	252	0	0	350	742
Total	0	0	0	0	0	0	307	369	0	676	729	2	54	0	785	352	1096	0	0	1448	2909
08:00 AM	0	0	0	0	0	0	78	85	0	163	184	1	13	0	198	93	223	0	0	316	677
08:15 AM	0	0	0	0	0	0	85	79	0	164	186	0	10	0	196	61	217	0	0	278	638
08:30 AM	0	0	0	0	0	0	94	69	0	163	161	0	17	0	178	74	209	0	0	283	624
08:45 AM	0	0	0	0	0	0	66	51	0	117	154	0	20	0	174	73	182	0	0	255	546
Total	0	0	0	0	0	0	323	284	0	607	685	1	60	0	746	301	831	0	0	1132	2485
Grand Total	0	0	0	0	0	0	630	653	0	1283	1414	3	114	0	1531	653	1927	0	0	2580	5394
Apprch %	0	0	0	0		0	49.1	50.9	0		92.4	0.2	7.4	0		25.3	74.7	0	0		
Total %	0	0	0	0	0	0	11.7	12.1	0	23.8	26.2	0.1	2.1	0	28.4	12.1	35.7	0	0	47.8	

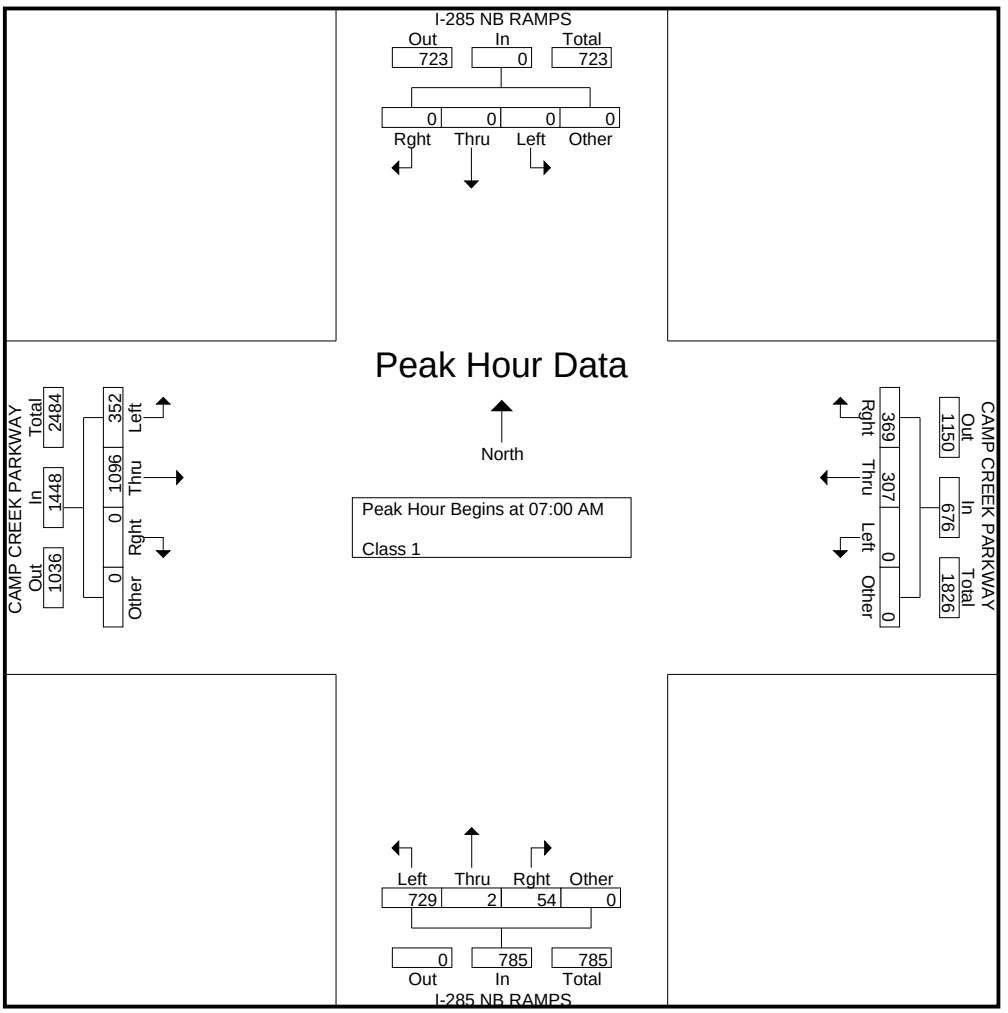


All Traffic Data Services, Inc.

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

File Name : I-285NBRamp@CampCrPkwyAM
Site Code : 00000000
Start Date : 12/4/2007

	I-285 NB RAMPS Southbound					CAMP CREEK PARKWAY Westbound					I-285 NB RAMPS Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	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 07:00 AM																					
07:00 AM	0	0	0	0	0	0	56	79	0	135	185	**2**	13	0	200	75	295	0	0	370	705
07:15 AM	0	0	0	0	0	0	81	**99**	0	180	154	0	11	0	165	85	**306**	0	0	**391**	736
07:30 AM	0	0	0	0	0	0	**85**	96	0	**181**	186	0	**22**	0	208	94	243	0	0	337	726
07:45 AM	0	0	0	0	0	0	85	95	0	180	**204**	0	8	0	**212**	**98**	252	0	0	350	**742**
Total Volume	0	0	0	0	0	0	307	369	0	676	729	2	54	0	785	352	1096	0	0	1448	2909
% App. Total	0	0	0	0		0	45.4	54.6	0		92.9	0.3	6.9	0		24.3	75.7	0	0		
PHF	.000	.000	.000	.000	.000	.000	.903	.932	.000	.934	.893	.250	.614	.000	.926	.898	.895	.000	.000	.926	.980



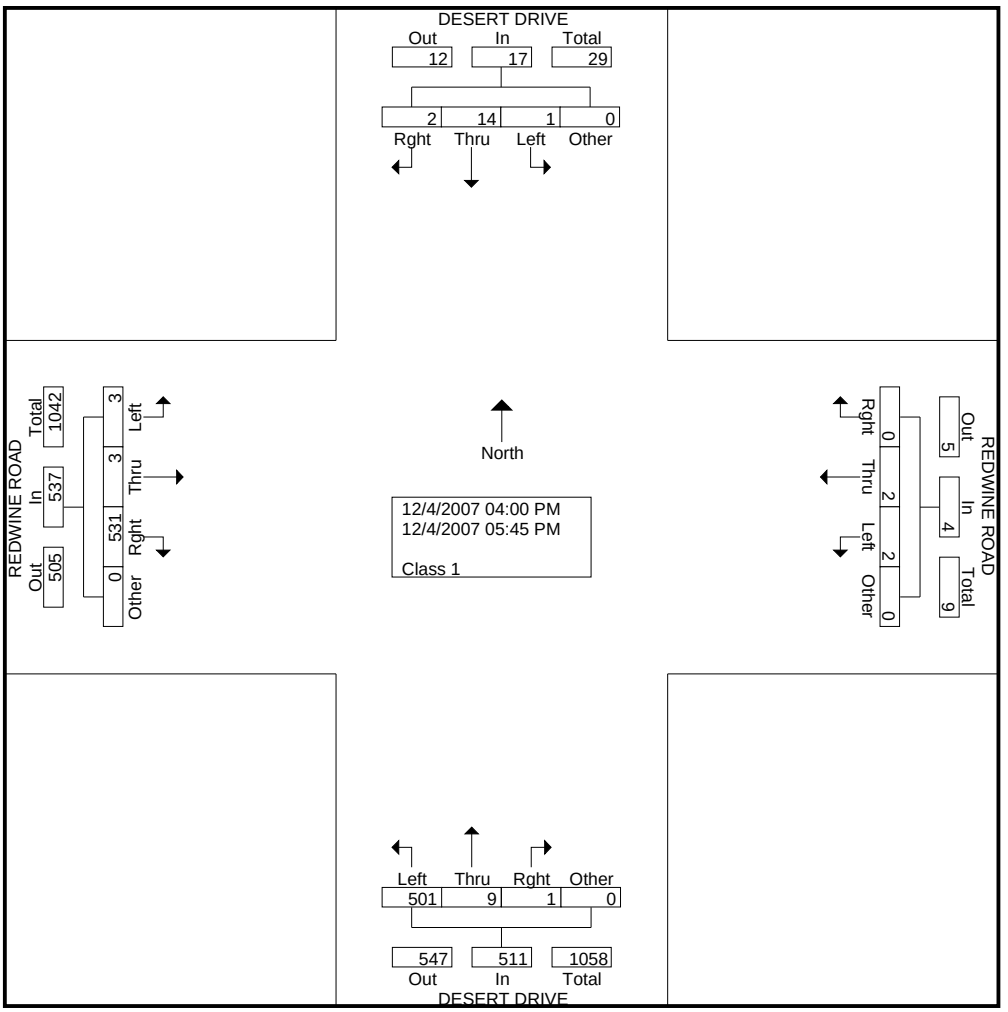
All Traffic Data Services, Inc.

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

File Name : DesertDr@RedwineRdPM
Site Code : 00000000
Start Date : 12/4/2007

Groups Printed- Class 1

	DESERT DRIVE Southbound					REDWINE ROAD Westbound					DESERT DRIVE Northbound					REDWINE ROAD Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	0	0	1	41	1	0	0	42	0	1	46	0	47	90
04:15 PM	0	1	0	0	1	0	1	0	0	1	44	4	1	0	49	0	0	48	0	48	99
04:30 PM	0	0	0	0	0	0	0	0	0	0	47	1	0	0	48	1	0	68	0	69	117
04:45 PM	1	0	0	0	1	0	1	0	0	1	42	0	0	0	42	0	1	59	0	60	104
Total	1	1	0	0	2	1	2	0	0	3	174	6	1	0	181	1	2	221	0	224	410
05:00 PM	0	3	0	0	3	0	0	0	0	0	73	0	0	0	73	0	0	75	0	75	151
05:15 PM	0	6	0	0	6	0	0	0	0	0	91	0	0	0	91	1	0	80	0	81	178
05:30 PM	0	2	1	0	3	1	0	0	0	1	84	1	0	0	85	1	1	93	0	95	184
05:45 PM	0	2	1	0	3	0	0	0	0	0	79	2	0	0	81	0	0	62	0	62	146
Total	0	13	2	0	15	1	0	0	0	1	327	3	0	0	330	2	1	310	0	313	659
Grand Total	1	14	2	0	17	2	2	0	0	4	501	9	1	0	511	3	3	531	0	537	1069
Apprch %	5.9	82.4	11.8	0		50	50	0	0		98	1.8	0.2	0		0.6	0.6	98.9	0		
Total %	0.1	1.3	0.2	0	1.6	0.2	0.2	0	0	0.4	46.9	0.8	0.1	0	47.8	0.3	0.3	49.7	0	50.2	

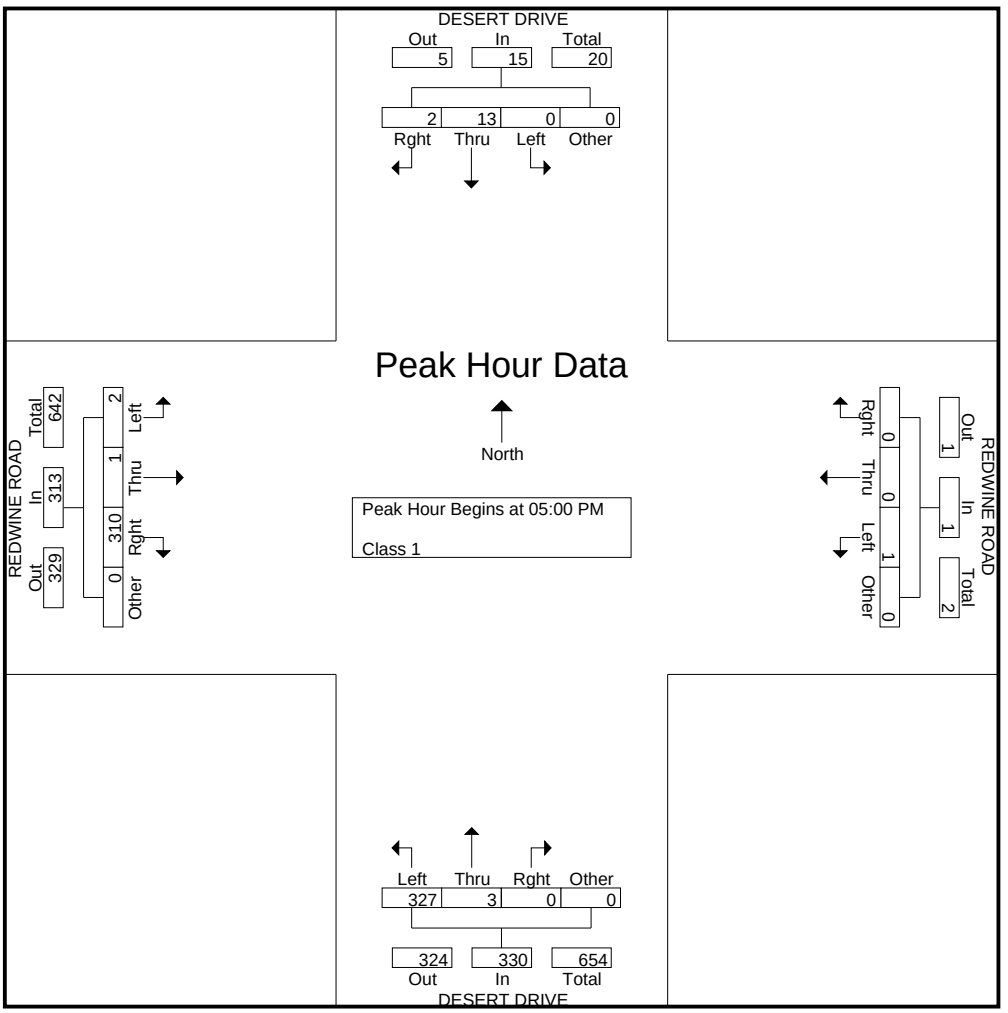


All Traffic Data Services, Inc.

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

File Name : DesertDr@RedwineRdPM
Site Code : 00000000
Start Date : 12/4/2007
Page No : 2

	DESERT DRIVE Southbound					REDWINE ROAD Westbound					DESERT DRIVE Northbound					REDWINE ROAD Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	3	0	0	3	0	0	0	0	0	73	0	0	0	73	0	0	75	0	75	151
05:15 PM	0	**6**	0	0	**6**	0	0	0	0	0	**91**	0	0	0	**91**	**1**	0	80	0	81	178
05:30 PM	0	2	**1**	0	3	**1**	0	0	0	**1**	84	1	0	0	85	1	**1**	**93**	0	**95**	**184**
05:45 PM	0	2	1	0	3	0	0	0	0	0	79	**2**	0	0	81	0	0	62	0	62	146
Total Volume	0	13	2	0	15	1	0	0	0	1	327	3	0	0	330	2	1	310	0	313	659
% App. Total	0	86.7	13.3	0		100	0	0	0		99.1	0.9	0	0		0.6	0.3	99	0		
PHF	.000	.542	.500	.000	.625	.250	.000	.000	.000	.250	.898	.375	.000	.000	.907	.500	.250	.833	.000	.824	.895



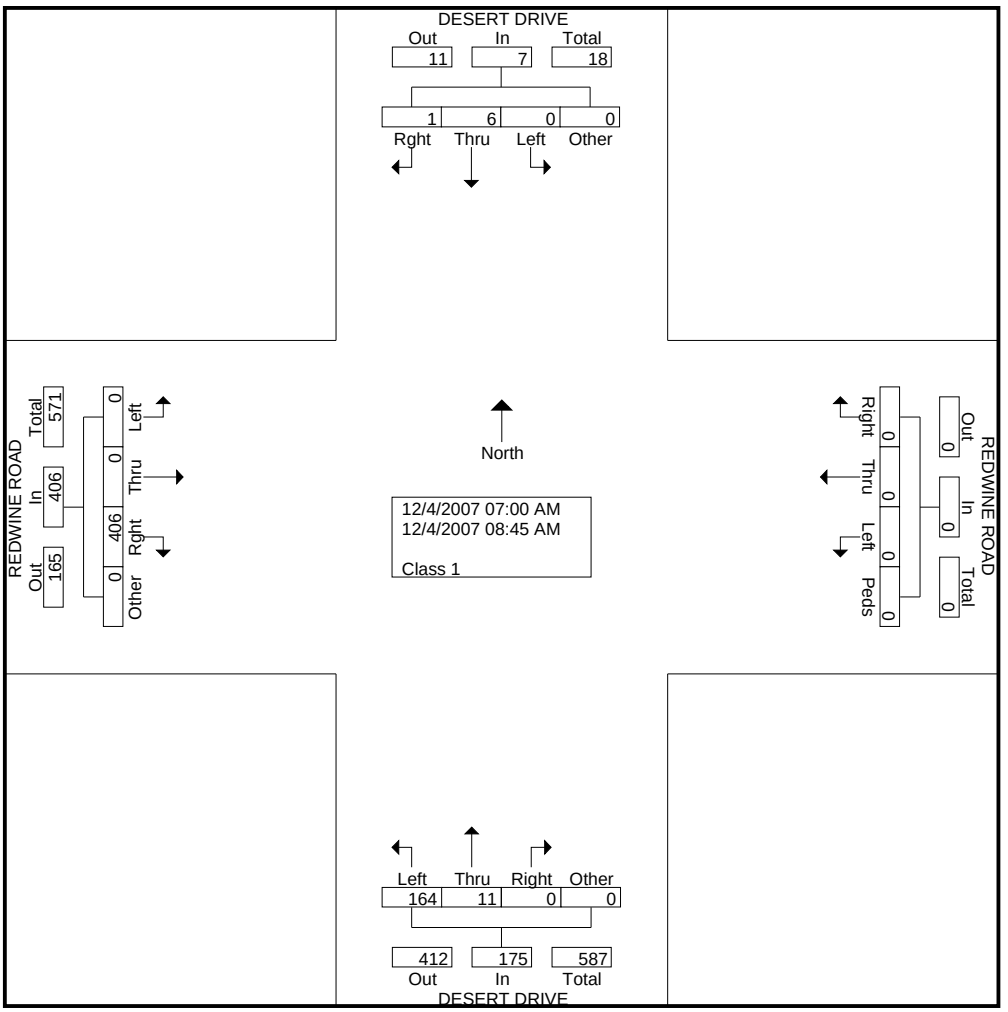
All Traffic Data Services, Inc.

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

File Name : DesertDr@RedwineRdAM
Site Code : 00000000
Start Date : 12/4/2007
Page No : 1

Groups Printed- Class 1

	DESERT DRIVE Southbound					REDWINE ROAD Westbound					DESERT DRIVE Northbound					REDWINE ROAD Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	11	0	0	38	0	38	49
07:15 AM	0	1	0	0	1	0	0	0	0	0	15	0	0	0	15	0	0	58	0	58	74
07:30 AM	0	0	0	0	0	0	0	0	0	0	21	0	0	0	21	0	0	60	0	60	81
07:45 AM	0	0	0	0	0	0	0	0	0	0	27	2	0	0	29	0	0	67	0	67	96
Total	0	1	0	0	1	0	0	0	0	0	74	2	0	0	76	0	0	223	0	223	300
08:00 AM	0	1	0	0	1	0	0	0	0	0	18	0	0	0	18	0	0	51	0	51	70
08:15 AM	0	2	0	0	2	0	0	0	0	0	19	2	0	0	21	0	0	60	0	60	83
08:30 AM	0	0	1	0	1	0	0	0	0	0	31	4	0	0	35	0	0	37	0	37	73
08:45 AM	0	2	0	0	2	0	0	0	0	0	22	3	0	0	25	0	0	35	0	35	62
Total	0	5	1	0	6	0	0	0	0	0	90	9	0	0	99	0	0	183	0	183	288
Grand Total	0	6	1	0	7	0	0	0	0	0	164	11	0	0	175	0	0	406	0	406	588
Apprch %	0	85.7	14.3	0		0	0	0	0		93.7	6.3	0	0		0	0	100	0		
Total %	0	1	0.2	0	1.2	0	0	0	0	0	27.9	1.9	0	0	29.8	0	0	69	0	69	

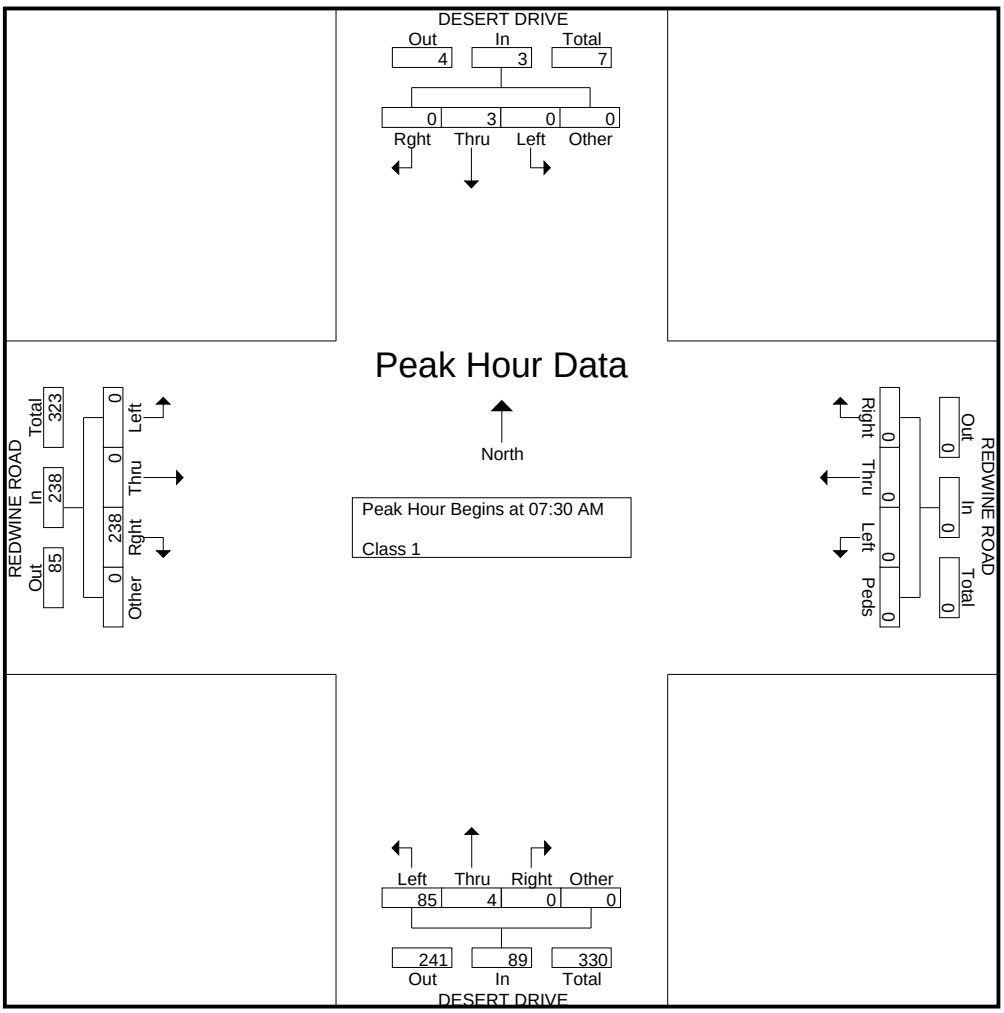


All Traffic Data Services, Inc.

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

File Name : DesertDr@RedwineRdAM
Site Code : 00000000
Start Date : 12/4/2007

	DESERT DRIVE Southbound					REDWINE ROAD Westbound					DESERT DRIVE Northbound					REDWINE ROAD Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Other	App. Total	Left	Thru	Rght	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	0	0	0	0	0	0	0	0	0	0	21	0	0	0	21	0	0	60	0	60	81
07:45 AM	0	0	0	0	0	0	0	0	0	0	**27**	**2**	0	0	**29**	0	0	**67**	0	**67**	**96**
08:00 AM	0	1	0	0	1	0	0	0	0	0	18	0	0	0	18	0	0	51	0	51	70
08:15 AM	0	**2**	0	0	**2**	0	0	0	0	0	19	2	0	0	21	0	0	60	0	60	83
Total Volume	0	3	0	0	3	0	0	0	0	0	85	4	0	0	89	0	0	238	0	238	330
% App. Total	0	100	0	0		0	0	0	0		95.5	4.5	0	0		0	0	100	0		
PHF	.000	.375	.000	.000	.375	.000	.000	.000	.000	.000	.787	.500	.000	.000	.767	.000	.000	.888	.000	.888	.859



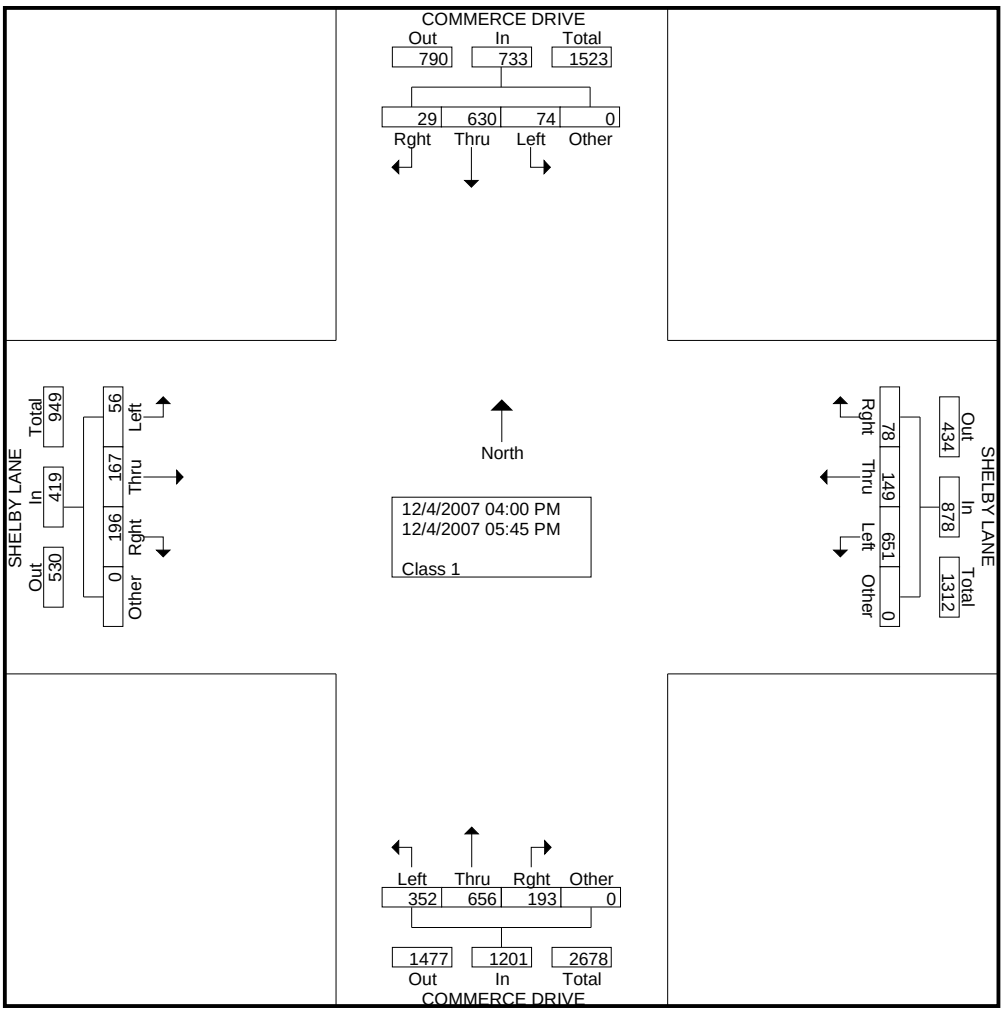
All Traffic Data Services, Inc.

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

File Name : CommerceDr@ShelbyLnPM
Site Code : 00000000
Start Date : 12/4/2007
Page No : 1

Groups Printed- Class 1

	COMMERCE DRIVE Southbound					SHELBY LANE Westbound					COMMERCE DRIVE Northbound					SHELBY LANE Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
04:00 PM	13	71	2	0	86	73	21	12	0	106	34	65	24	0	123	5	21	35	0	61	376
04:15 PM	8	74	3	0	85	77	23	11	0	111	35	80	31	0	146	6	18	31	0	55	397
04:30 PM	11	87	4	0	102	86	20	15	0	121	60	91	15	0	166	6	25	20	0	51	440
04:45 PM	5	76	7	0	88	69	19	6	0	94	37	83	24	0	144	6	22	30	0	58	384
Total	37	308	16	0	361	305	83	44	0	432	166	319	94	0	579	23	86	116	0	225	1597
05:00 PM	14	69	3	0	86	76	15	8	0	99	34	83	28	0	145	8	30	18	0	56	386
05:15 PM	5	89	2	0	96	95	25	7	0	127	37	81	18	0	136	4	18	16	0	38	397
05:30 PM	3	76	1	0	80	106	13	12	0	131	48	83	24	0	155	8	10	26	0	44	410
05:45 PM	15	88	7	0	110	69	13	7	0	89	67	90	29	0	186	13	23	20	0	56	441
Total	37	322	13	0	372	346	66	34	0	446	186	337	99	0	622	33	81	80	0	194	1634
Grand Total	74	630	29	0	733	651	149	78	0	878	352	656	193	0	1201	56	167	196	0	419	3231
Apprch %	10.1	85.9	4	0		74.1	17	8.9	0		29.3	54.6	16.1	0		13.4	39.9	46.8	0		
Total %	2.3	19.5	0.9	0	22.7	20.1	4.6	2.4	0	27.2	10.9	20.3	6	0	37.2	1.7	5.2	6.1	0	13	

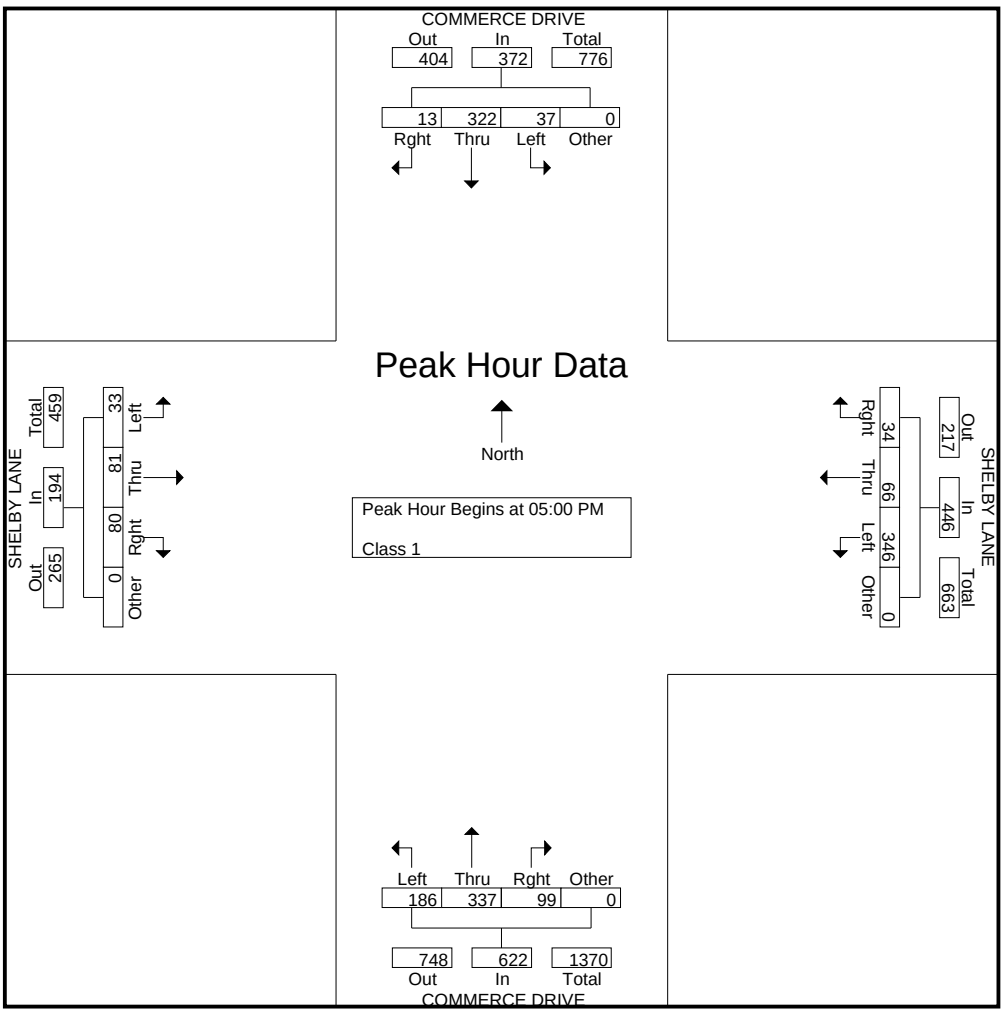


All Traffic Data Services, Inc.

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

File Name : CommerceDr@ShelbyLnPM
Site Code : 00000000
Start Date : 12/4/2007
Page No : 2

	COMMERCE DRIVE Southbound					SHELBY LANE Westbound					COMMERCE DRIVE Northbound					SHELBY LANE Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	14	69	3	0	86	76	15	8	0	99	34	83	28	0	145	8	**30**	18	0	**56**	386
05:15 PM	5	**89**	2	0	96	95	**25**	7	0	127	37	81	18	0	136	4	18	16	0	38	397
05:30 PM	3	76	1	0	80	**106**	13	**12**	0	**131**	48	83	24	0	155	8	10	**26**	0	44	410
05:45 PM	**15**	88	**7**	0	**110**	69	13	7	0	89	**67**	**90**	**29**	0	**186**	**13**	23	20	0	56	**441**
Total Volume	37	322	13	0	372	346	66	34	0	446	186	337	99	0	622	33	81	80	0	194	1634
% App. Total	9.9	86.6	3.5	0		77.6	14.8	7.6	0		29.9	54.2	15.9	0		17	41.8	41.2	0		
PHF	.617	.904	.464	.000	.845	.816	.660	.708	.000	.851	.694	.936	.853	.000	.836	.635	.675	.769	.000	.866	.926



All Traffic Data Services, Inc.

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

File Name : CommerceDr@ShelbyLnAM
Site Code : 00000000
Start Date : 12/4/2007
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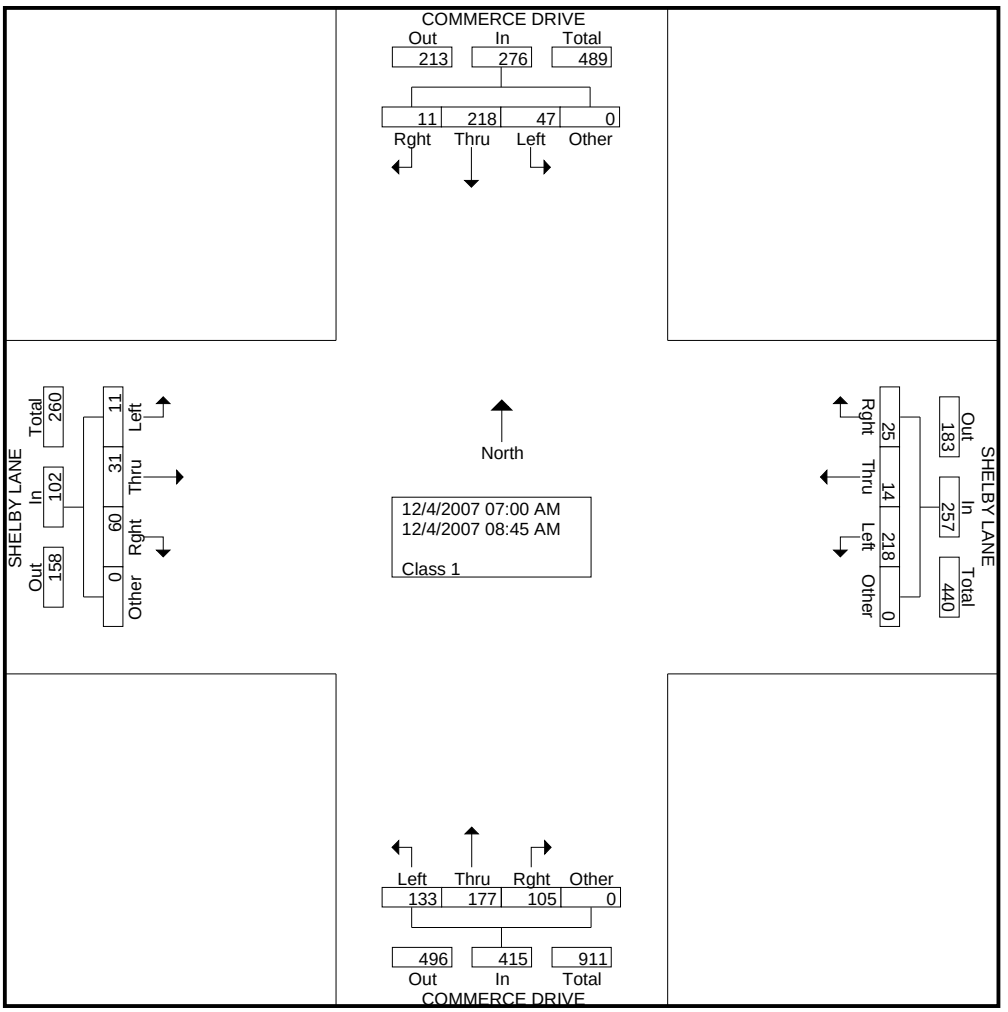
Groups Printed- Class 1

	COMMERCE DRIVE Southbound					SHELBY LANE Westbound					COMMERCE DRIVE Northbound					SHELBY LANE Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
07:00 AM	6	29	0	0	35	19	1	1	0	21	11	24	6	0	41	2	2	3	0	7	104
07:15 AM	4	31	1	0	36	20	0	3	0	23	7	18	6	0	31	0	3	4	0	7	97
07:30 AM	9	30	1	0	40	21	2	4	0	27	10	19	14	0	43	0	2	3	0	5	115
07:45 AM	5	23	1	0	29	28	1	3	0	32	23	20	17	0	60	3	2	5	0	10	131
Total	24	113	3	0	140	88	4	11	0	103	51	81	43	0	175	5	9	15	0	29	447
08:00 AM	6	25	3	0	34	35	3	1	0	39	18	21	14	0	53	0	4	13	0	17	143
08:15 AM	7	25	1	0	33	33	2	4	0	39	12	23	11	0	46	1	5	11	0	17	135
08:30 AM	5	24	2	0	31	32	3	4	0	39	26	17	12	0	55	2	8	13	0	23	148
08:45 AM	5	31	2	0	38	30	2	5	0	37	26	35	25	0	86	3	5	8	0	16	177
Total	23	105	8	0	136	130	10	14	0	154	82	96	62	0	240	6	22	45	0	73	603
Grand Total	47	218	11	0	276	218	14	25	0	257	133	177	105	0	415	11	31	60	0	102	1050
Apprch %	17	79	4	0		84.8	5.4	9.7	0		32	42.7	25.3	0		10.8	30.4	58.8	0		
Total %	4.5	20.8	1	0	26.3	20.8	1.3	2.4	0	24.5	12.7	16.9	10	0	39.5	1	3	5.7	0	9.7	



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File Name : CommerceDr@ShelbyLnAM
Site Code : 00000000
Start Date : 12/4/2007
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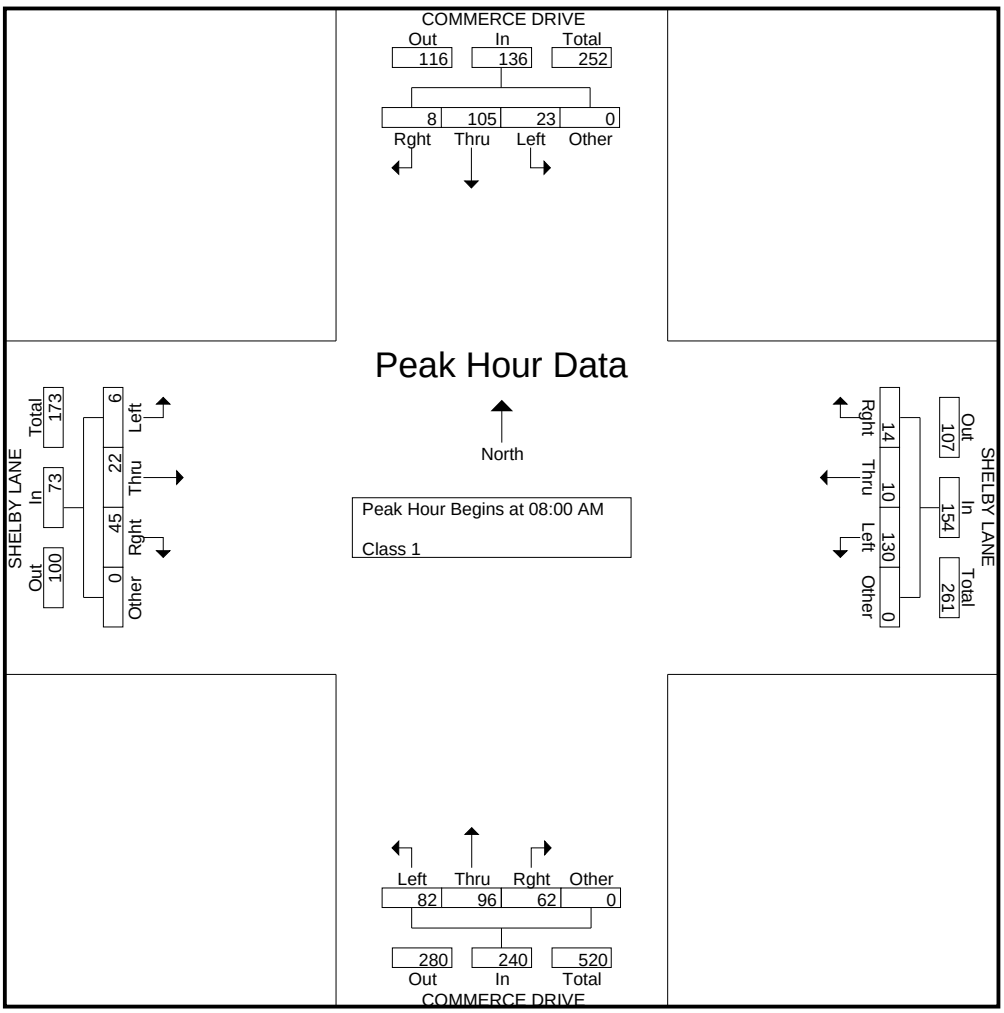
	COMMERCE DRIVE Southbound					SHELBY LANE Westbound					COMMERCE DRIVE Northbound					SHELBY LANE Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	6	25	**3**	0	34	**35**	**3**	1	0	**39**	18	21	14	0	53	0	4	**13**	0	17	143
08:15 AM	**7**	25	1	0	33	33	2	4	0	39	12	23	11	0	46	1	5	11	0	17	135
08:30 AM	5	24	2	0	31	32	3	4	0	39	**26**	17	12	0	55	2	**8**	13	0	**23**	148
08:45 AM	5	**31**	2	0	**38**	30	2	**5**	0	37	26	**35**	**25**	0	**86**	**3**	5	8	0	16	**177**
Total Volume	23	105	8	0	136	130	10	14	0	154	82	96	62	0	240	6	22	45	0	73	603
% App. Total	16.9	77.2	5.9	0		84.4	6.5	9.1	0		34.2	40	25.8	0		8.2	30.1	61.6	0		
PHF	.821	.847	.667	.000	.895	.929	.833	.700	.000	.987	.788	.686	.620	.000	.698	.500	.688	.865	.000	.793	.852



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

File Name : CommerceDr@RedwineRdPM
Site Code : 00000000
Start Date : 12/4/2007
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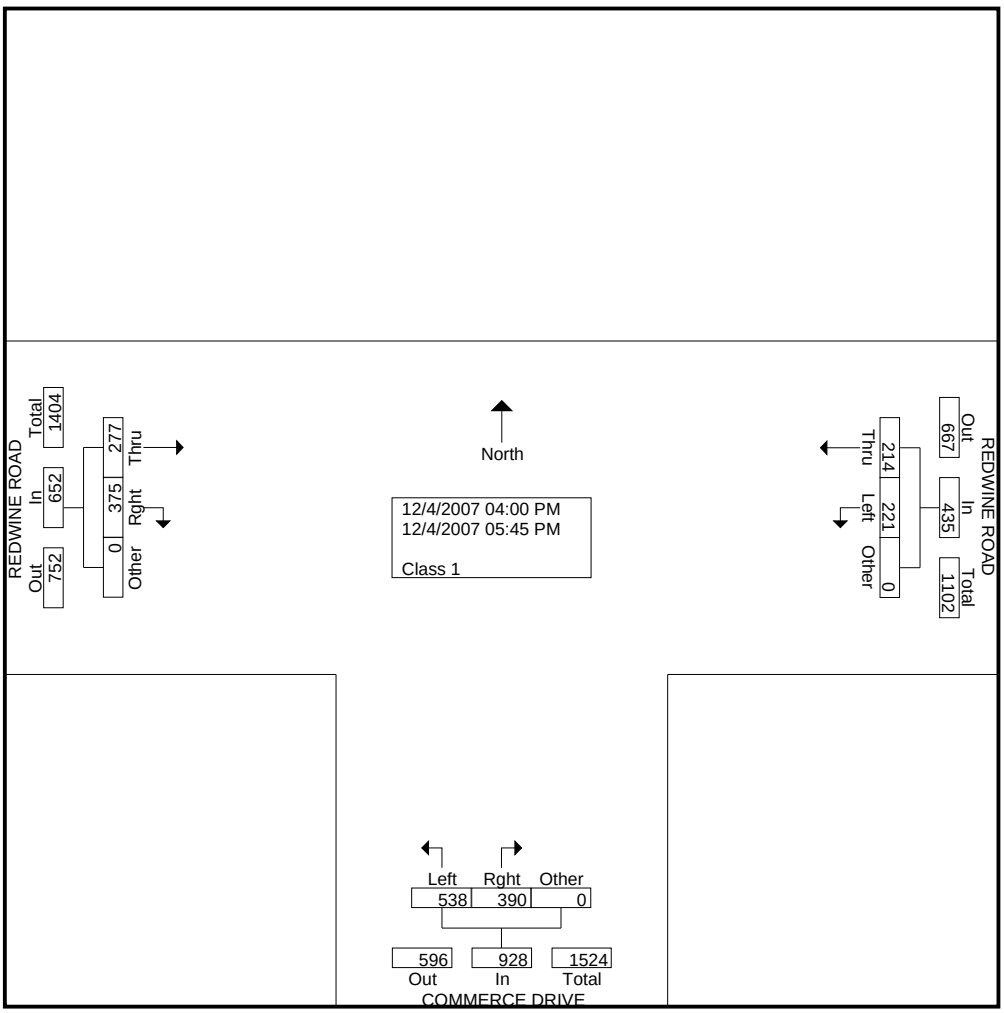
Groups Printed- Class 1

	REDWINE ROAD Westbound				COMMERCE DRIVE Northbound				REDWINE ROAD Eastbound				
Start Time	Left	Thru	Other	App. Total	Left	Rght	Other	App. Total	Thru	Rght	Other	App. Total	Int. Total
04:00 PM	18	12	0	30	63	44	0	107	35	38	0	73	210
04:15 PM	31	21	0	52	58	51	0	109	28	50	0	78	239
04:30 PM	18	25	0	43	65	43	0	108	24	45	0	69	220
04:45 PM	32	26	0	58	58	40	0	98	37	44	0	81	237
Total	99	84	0	183	244	178	0	422	124	177	0	301	906
05:00 PM	23	21	0	44	67	53	0	120	38	43	0	81	245
05:15 PM	35	44	0	79	69	51	0	120	37	50	0	87	286
05:30 PM	36	37	0	73	80	54	0	134	41	56	0	97	304
05:45 PM	28	28	0	56	78	54	0	132	37	49	0	86	274
Total	122	130	0	252	294	212	0	506	153	198	0	351	1109
Grand Total	221	214	0	435	538	390	0	928	277	375	0	652	2015
Apprch %	50.8	49.2	0		58	42	0		42.5	57.5	0		
Total %	11	10.6	0	21.6	26.7	19.4	0	46.1	13.7	18.6	0	32.4	



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File Name : CommerceDr@RedwineRdPM
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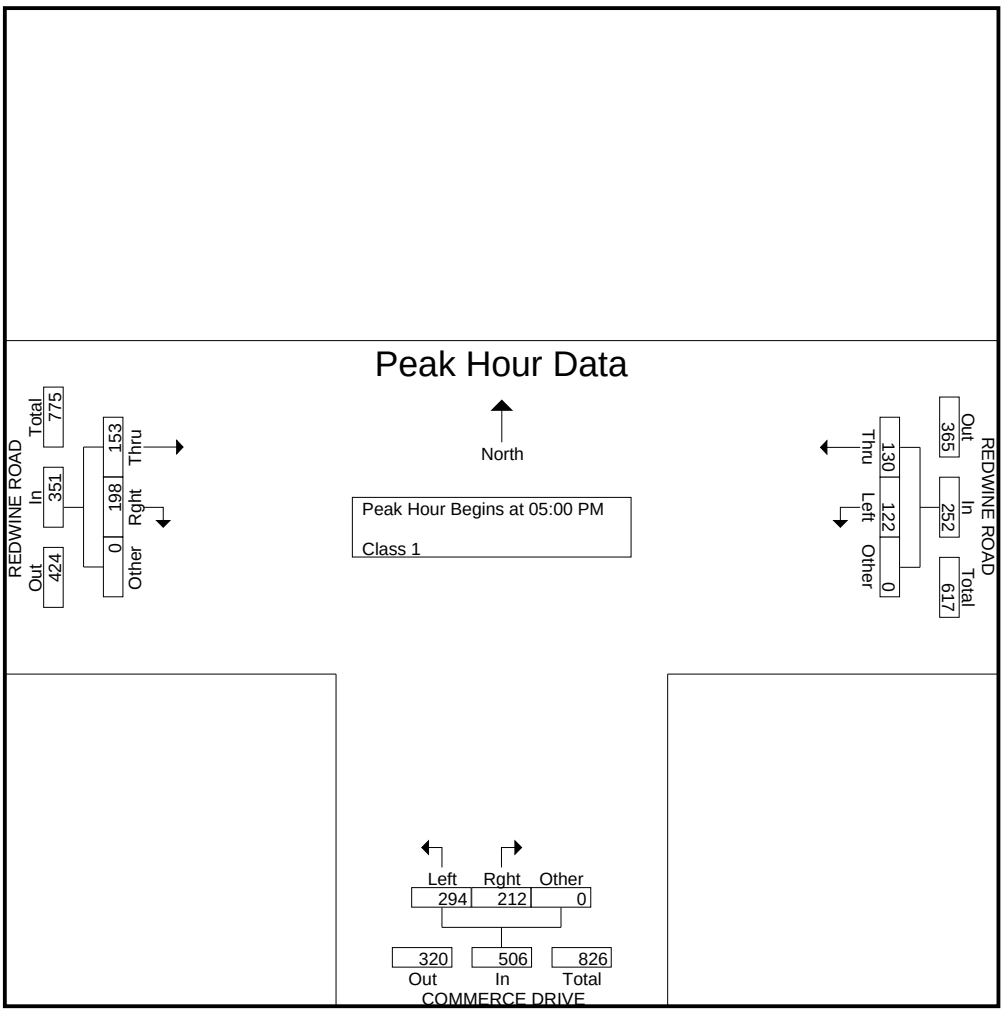
	REDWINE ROAD Westbound				COMMERCE DRIVE Northbound				REDWINE ROAD Eastbound				
Start Time	Left	Thru	Other	App. Total	Left	Rght	Other	App. Total	Thru	Rght	Other	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 05:00 PM													
05:00 PM	23	21	0	44	67	53	0	120	38	43	0	81	245
05:15 PM	35	**44**	0	**79**	69	51	0	120	37	50	0	87	286
05:30 PM	**36**	37	0	73	**80**	**54**	0	**134**	**41**	**56**	0	**97**	**304**
05:45 PM	28	28	0	56	78	54	0	132	37	49	0	86	274
Total Volume	122	130	0	252	294	212	0	506	153	198	0	351	1109
% App. Total	48.4	51.6	0		58.1	41.9	0		43.6	56.4	0		
PHF	.847	.739	.000	.797	.919	.981	.000	.944	.933	.884	.000	.905	.912



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File Name : CommerceDr@RedwineRdAM
Site Code : 00000000
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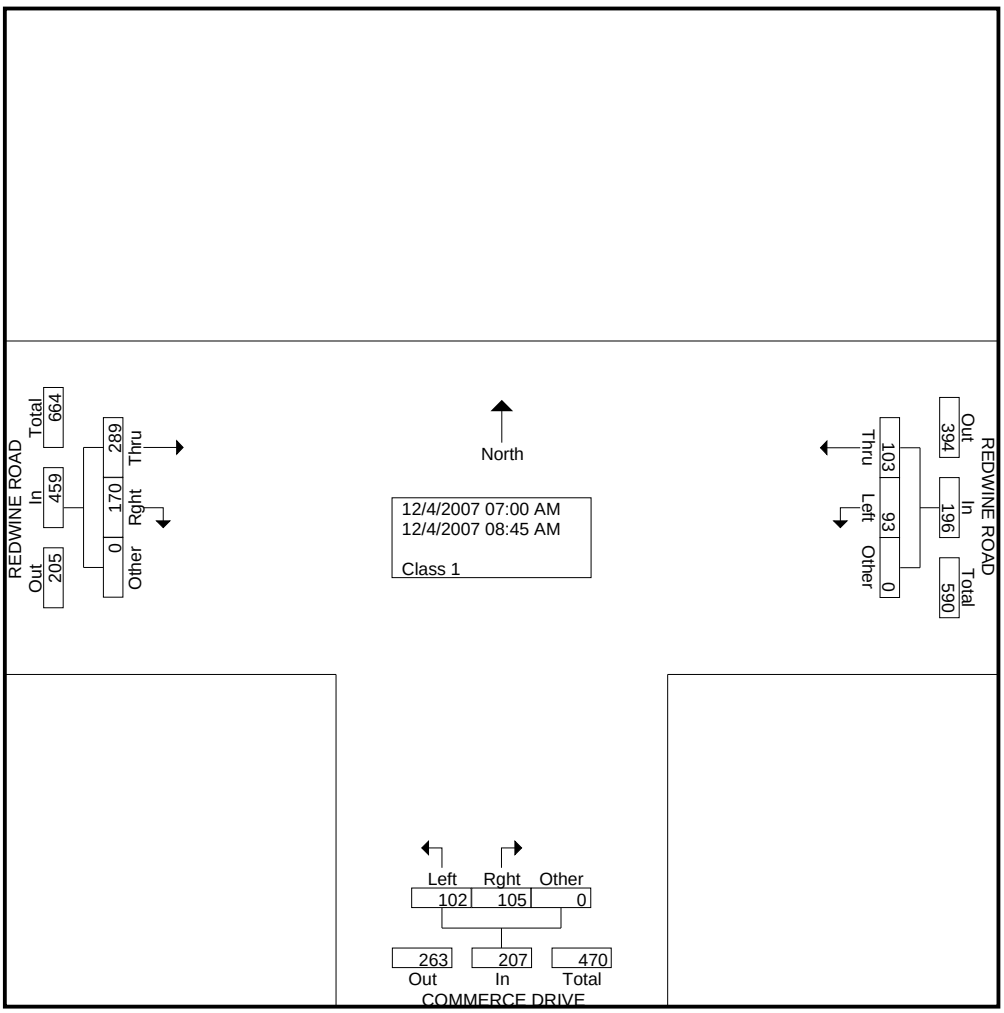
Groups Printed- Class 1

	REDWINE ROAD Westbound				COMMERCE DRIVE Northbound				REDWINE ROAD Eastbound				
Start Time	Left	Thru	Other	App. Total	Left	Rght	Other	App. Total	Thru	Rght	Other	App. Total	Int. Total
07:00 AM	9	21	0	30	5	6	0	11	26	13	0	39	80
07:15 AM	11	14	0	25	11	11	0	22	47	20	0	67	114
07:30 AM	12	10	0	22	14	11	0	25	46	25	0	71	118
07:45 AM	13	13	0	26	12	16	0	28	53	18	0	71	125
Total	45	58	0	103	42	44	0	86	172	76	0	248	437
08:00 AM	15	5	0	20	13	14	0	27	39	28	0	67	114
08:15 AM	8	12	0	20	19	13	0	32	40	21	0	61	113
08:30 AM	9	17	0	26	13	20	0	33	22	17	0	39	98
08:45 AM	16	11	0	27	15	14	0	29	16	28	0	44	100
Total	48	45	0	93	60	61	0	121	117	94	0	211	425
Grand Total	93	103	0	196	102	105	0	207	289	170	0	459	862
Apprch %	47.4	52.6	0		49.3	50.7	0		63	37	0		
Total %	10.8	11.9	0	22.7	11.8	12.2	0	24	33.5	19.7	0	53.2	



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1336 Farmer Road
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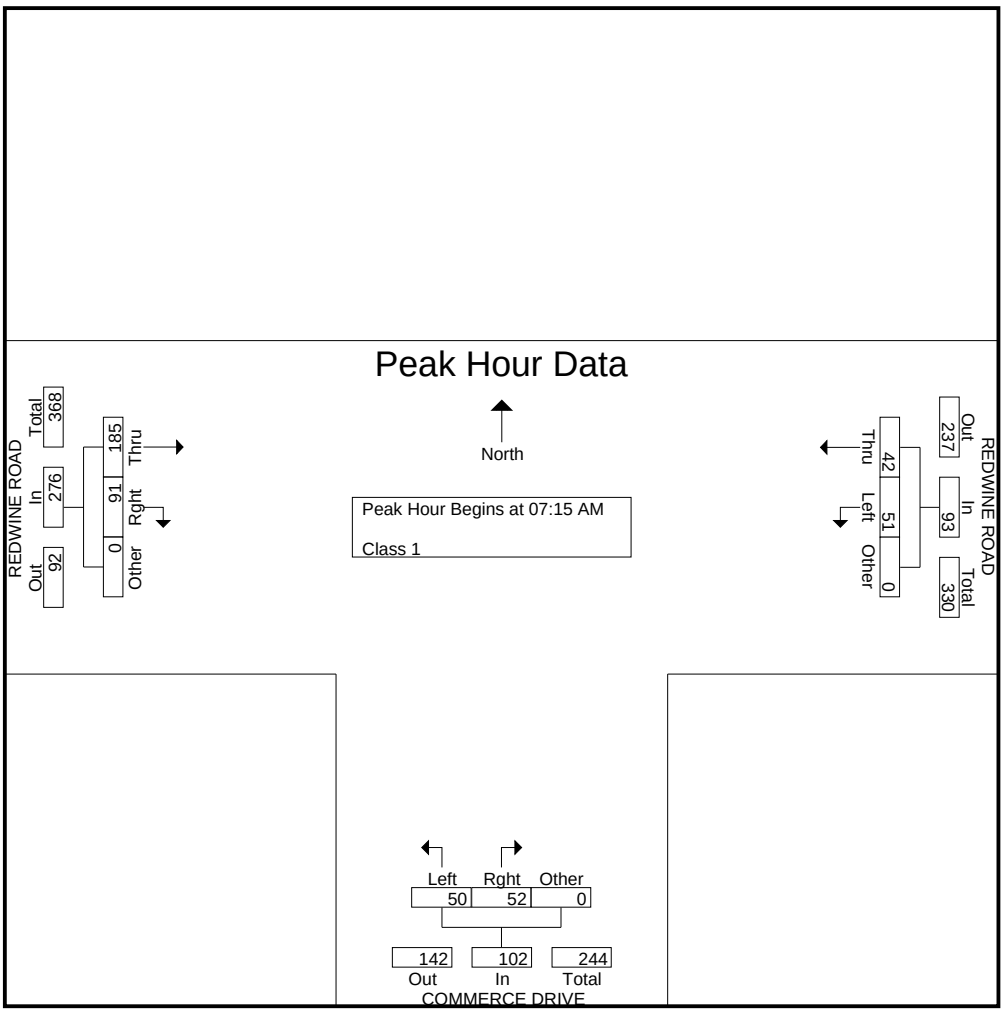
File Name : CommerceDr@RedwineRdAM
Site Code : 00000000
Start Date : 12/4/2007

	REDWINE ROAD Westbound				COMMERCE DRIVE Northbound				REDWINE ROAD Eastbound				
Start Time	Left	Thru	Other	App. Total	Left	Rght	Other	App. Total	Thru	Rght	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 07:15 AM													
07:15 AM	11	**14**	0	25	11	11	0	22	47	20	0	67	114
07:30 AM	12	10	0	22	**14**	11	0	25	46	25	0	**71**	118
07:45 AM	13	13	0	**26**	12	**16**	0	**28**	**53**	18	0	71	**125**
08:00 AM	**15**	5	0	20	13	14	0	27	39	**28**	0	67	114
Total Volume	51	42	0	93	50	52	0	102	185	91	0	276	471
% App. Total	54.8	45.2	0		49	51	0		67	33	0		
PHF	.850	.750	.000	.894	.893	.813	.000	.911	.873	.813	.000	.972	.942



All Traffic Data Services, Inc.

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

File Name : CommerceDr@CampCrPkwyPM
Site Code : 03
Start Date : 12/4/2007
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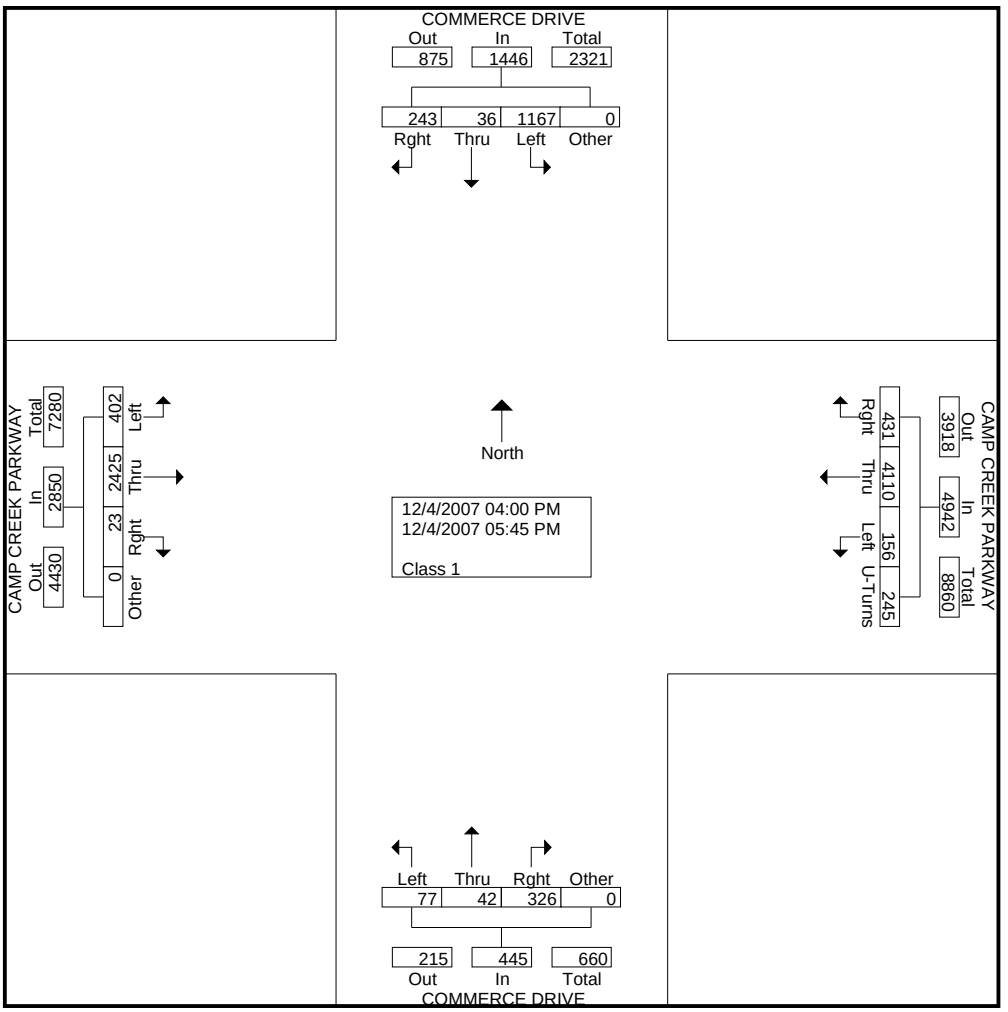
Groups Printed- Class 1

	COMMERCE DRIVE Southbound					CAMP CREEK PARKWAY Westbound					COMMERCE DRIVE Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	U-Turns	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
04:00 PM	163	4	35	0	202	19	454	37	28	538	4	7	57	0	68	50	222	1	0	273	1081
04:15 PM	119	0	15	0	134	18	542	41	31	632	6	6	33	0	45	56	396	3	0	455	1266
04:30 PM	140	3	15	0	158	25	523	55	37	640	2	3	31	0	36	54	365	1	0	420	1254
04:45 PM	140	6	27	0	173	25	587	56	28	696	7	4	31	0	42	38	246	5	0	289	1200
Total	562	13	92	0	667	87	2106	189	124	2506	19	20	152	0	191	198	1229	10	0	1437	4801
05:00 PM	140	5	27	0	172	23	532	47	21	623	14	5	69	0	88	49	232	0	0	281	1164
05:15 PM	149	3	52	0	204	21	500	51	34	606	13	4	43	0	60	53	310	2	0	365	1235
05:30 PM	173	11	49	0	233	11	476	67	28	582	17	7	36	0	60	60	342	4	0	406	1281
05:45 PM	143	4	23	0	170	14	496	77	38	625	14	6	26	0	46	42	312	7	0	361	1202
Total	605	23	151	0	779	69	2004	242	121	2436	58	22	174	0	254	204	1196	13	0	1413	4882
Grand Total	1167	36	243	0	1446	156	4110	431	245	4942	77	42	326	0	445	402	2425	23	0	2850	9683
Apprch %	80.7	2.5	16.8	0		3.2	83.2	8.7	5		17.3	9.4	73.3	0		14.1	85.1	0.8	0		
Total %	12.1	0.4	2.5	0	14.9	1.6	42.4	4.5	2.5	51	0.8	0.4	3.4	0	4.6	4.2	25	0.2	0	29.4	



All Traffic Data Services, Inc.

1336 Farmer Road
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File Name : CommerceDr@CampCrPkwyPM
Site Code : 03
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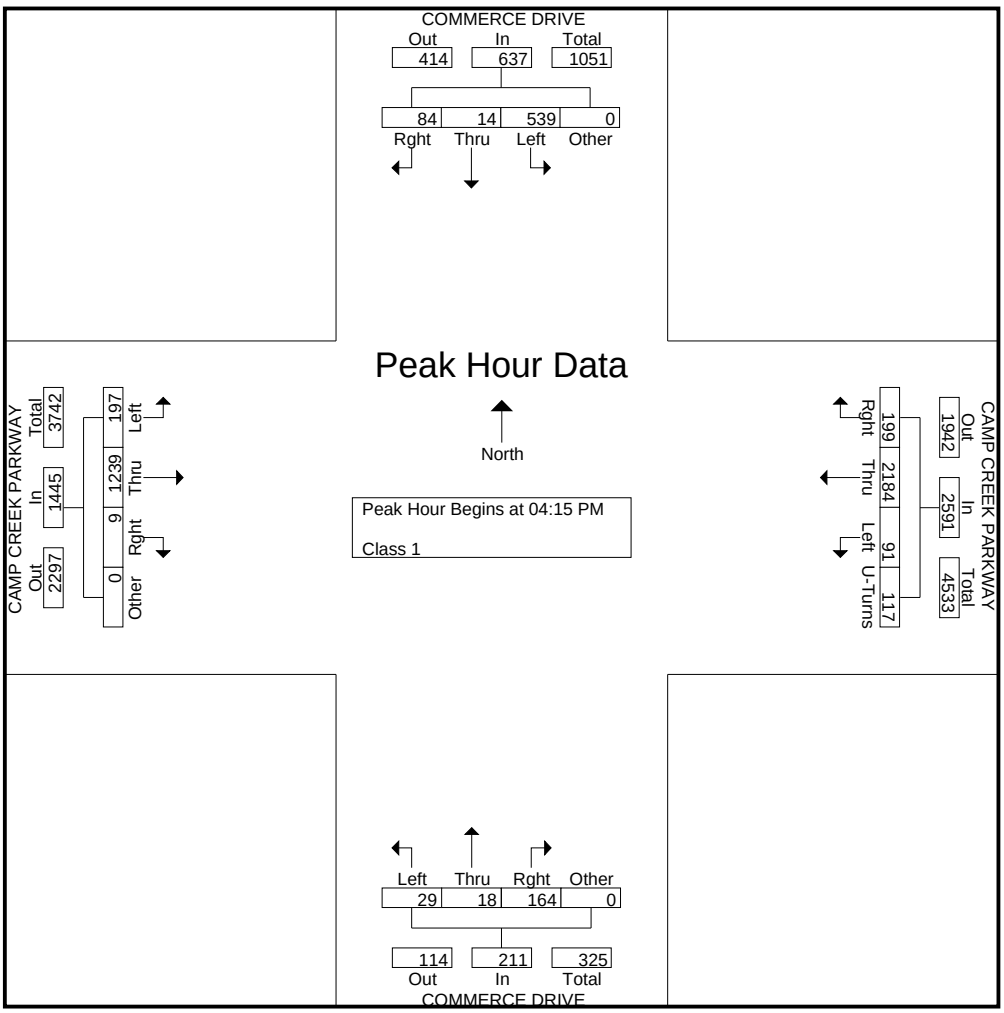
	COMMERCE DRIVE Southbound					CAMP CREEK PARKWAY Westbound					COMMERCE DRIVE Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	U-Turns	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	119	0	15	0	134	18	542	41	31	632	6	**6**	33	0	45	**56**	**396**	3	0	**455**	**1266**
04:30 PM	**140**	3	15	0	158	**25**	523	55	**37**	640	2	3	31	0	36	54	365	1	0	420	1254
04:45 PM	140	**6**	**27**	0	**173**	25	**587**	**56**	28	**696**	7	4	31	0	42	38	246	**5**	0	289	1200
05:00 PM	140	5	27	0	172	23	532	47	21	623	**14**	5	**69**	0	**88**	49	232	0	0	281	1164
Total Volume	539	14	84	0	637	91	2184	199	117	2591	29	18	164	0	211	197	1239	9	0	1445	4884
% App. Total	84.6	2.2	13.2	0		3.5	84.3	7.7	4.5		13.7	8.5	77.7	0		13.6	85.7	0.6	0		
PHF	.963	.583	.778	.000	.921	.910	.930	.888	.791	.931	.518	.750	.594	.000	.599	.879	.782	.450	.000	.794	.964



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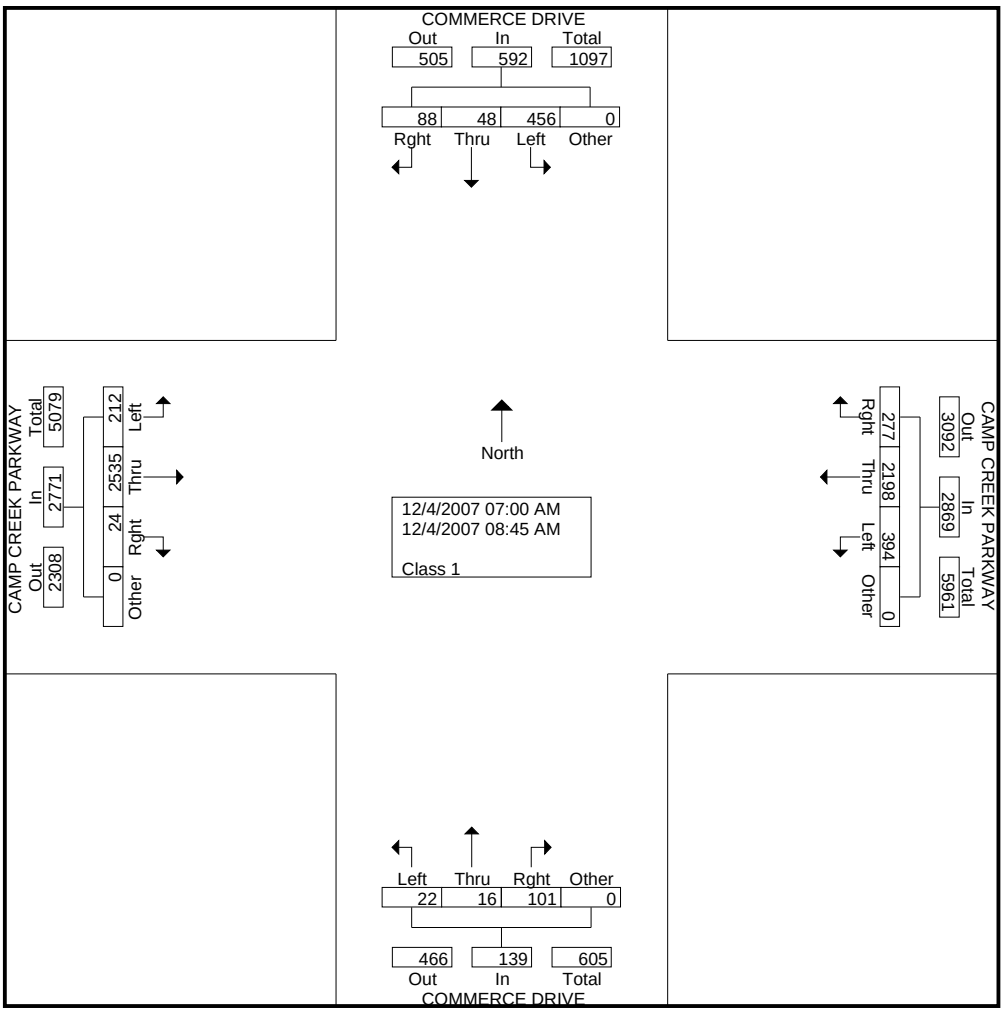
	COMMERCE DRIVE Southbound					CAMP CREEK PARKWAY Westbound					COMMERCE DRIVE Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
07:00 AM	47	4	11	0	62	46	280	21	0	347	3	1	9	0	13	15	300	4	0	319	741
07:15 AM	49	7	11	0	67	52	256	23	0	331	4	0	8	0	12	13	387	5	0	405	815
07:30 AM	47	8	8	0	63	53	300	34	0	387	4	2	16	0	22	24	334	1	0	359	831
07:45 AM	49	7	10	0	66	50	320	30	0	400	4	1	2	0	7	32	343	1	0	376	849
Total	192	26	40	0	258	201	1156	108	0	1465	15	4	35	0	54	84	1364	11	0	1459	3236
08:00 AM	69	4	20	0	93	41	276	31	0	348	1	5	11	0	17	22	354	4	0	380	838
08:15 AM	74	7	7	0	88	46	321	40	0	407	3	1	14	0	18	29	298	1	0	328	841
08:30 AM	57	6	12	0	75	66	245	40	0	351	2	2	16	0	20	30	296	3	0	329	775
08:45 AM	64	5	9	0	78	40	200	58	0	298	1	4	25	0	30	47	223	5	0	275	681
Total	264	22	48	0	334	193	1042	169	0	1404	7	12	66	0	85	128	1171	13	0	1312	3135
Grand Total	456	48	88	0	592	394	2198	277	0	2869	22	16	101	0	139	212	2535	24	0	2771	6371
Apprch %	77	8.1	14.9	0		13.7	76.6	9.7	0		15.8	11.5	72.7	0		7.7	91.5	0.9	0		
Total %	7.2	0.8	1.4	0	9.3	6.2	34.5	4.3	0	45	0.3	0.3	1.6	0	2.2	3.3	39.8	0.4	0	43.5	



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File Name : CommerceDr@CampCrPkwyAM
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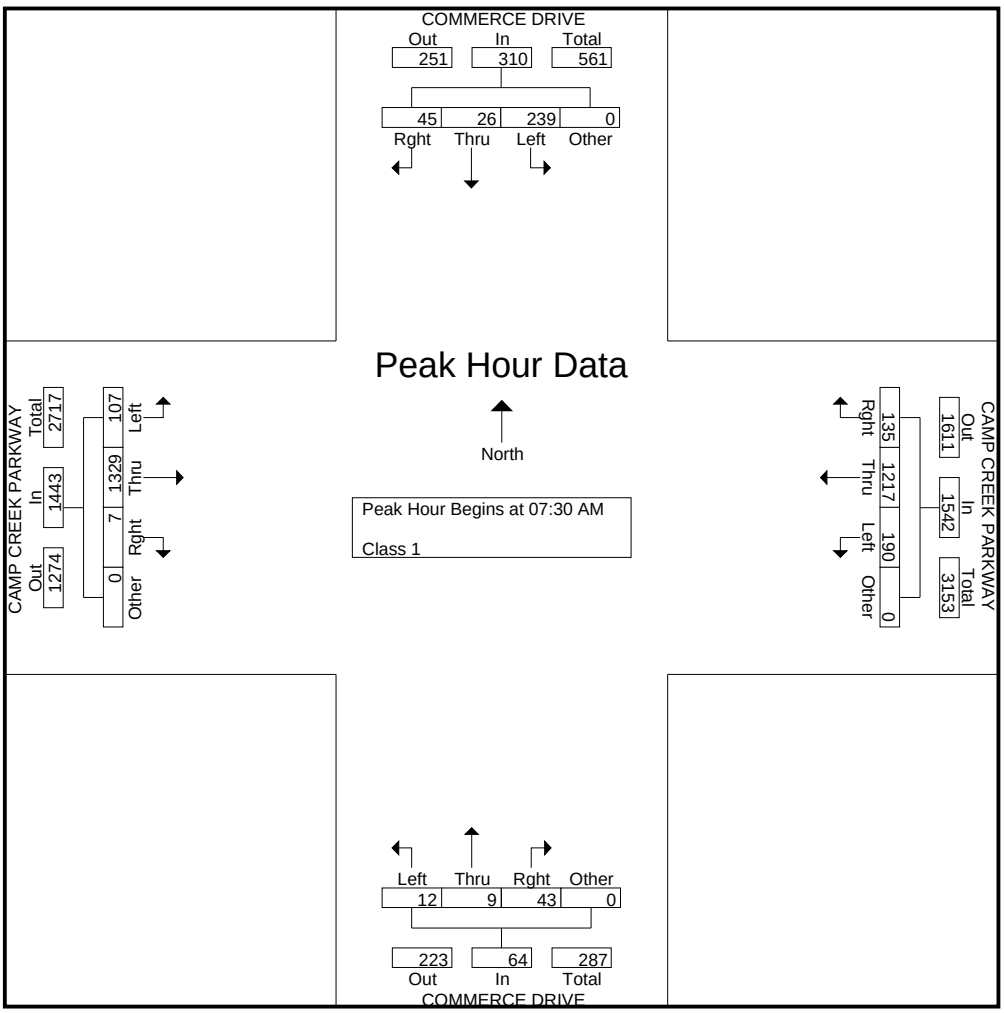
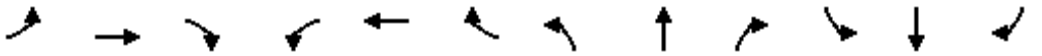
	COMMERCE DRIVE Southbound					CAMP CREEK PARKWAY Westbound					COMMERCE DRIVE Northbound					CAMP CREEK PARKWAY Eastbound					
Start Time	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Left	Thru	Rght	Other	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	47	**8**	8	0	63	**53**	300	34	0	387	**4**	2	**16**	0	**22**	24	334	1	0	359	831
07:45 AM	49	7	10	0	66	50	320	30	0	400	4	1	2	0	7	**32**	343	1	0	376	**849**
08:00 AM	69	4	**20**	0	**93**	41	276	31	0	348	1	**5**	11	0	17	22	**354**	**4**	0	**380**	838
08:15 AM	**74**	7	7	0	88	46	**321**	**40**	0	**407**	3	1	14	0	18	29	298	1	0	328	841
Total Volume	239	26	45	0	310	190	1217	135	0	1542	12	9	43	0	64	107	1329	7	0	1443	3359
% App. Total	77.1	8.4	14.5	0		12.3	78.9	8.8	0		18.8	14.1	67.2	0		7.4	92.1	0.5	0		
PHF	.807	.813	.563	.000	.833	.896	.948	.844	.000	.947	.750	.450	.672	.000	.727	.836	.939	.438	.000	.949	.989

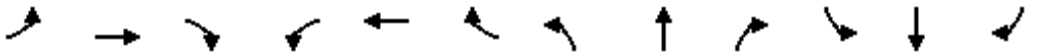


Existing Year Synchro Analysis



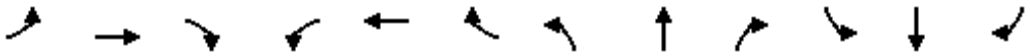
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	0.97	1.00	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)	3433	3539	1583	3433	3539	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.74	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	1374	1863	1583	3433	1863	1583
Volume (vph)	97	1274	6	173	1167	123	11	8	39	217	24	41
Peak-hour factor, PHF	0.84	0.94	0.44	0.90	0.95	0.84	0.75	0.45	0.67	0.56	0.81	0.81
Adj. Flow (vph)	115	1355	14	192	1228	146	15	18	58	388	30	51
Lane Group Flow (vph)	115	1355	14	192	1228	146	15	18	58	388	30	51
Turn Type	Prot		Perm	Prot		Perm	Perm		Free	Prot		Free
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases			4			8	2		Free			Free
Actuated Green, G (s)	7.8	77.3	77.3	11.8	81.3	81.3	7.1	7.1	140.0	19.8	32.9	140.0
Effective Green, g (s)	9.8	79.3	79.3	13.8	83.3	83.3	9.1	9.1	140.0	21.8	34.9	140.0
Actuated g/C Ratio	0.07	0.57	0.57	0.10	0.59	0.59	0.06	0.06	1.00	0.16	0.25	1.00
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	240	2005	897	338	2106	942	89	121	1583	535	464	1583
v/s Ratio Prot	0.03	c0.38		c0.06	0.35			0.01		c0.11	0.02	
v/s Ratio Perm			0.01			0.09	c0.01		0.04			0.03
v/c Ratio	0.48	0.68	0.02	0.57	0.58	0.15	0.17	0.15	0.04	0.73	0.06	0.03
Uniform Delay, d1	62.6	21.3	13.3	60.3	17.6	12.6	61.9	61.8	0.0	56.2	40.1	0.0
Progression Factor	1.00	1.00	1.00	0.84	0.35	0.01	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	1.8	0.0	2.1	1.1	0.3	0.9	0.6	0.0	4.9	0.1	0.0
Delay (s)	64.2	23.2	13.3	52.5	7.4	0.4	62.8	62.4	0.0	61.1	40.2	0.0
Level of Service	E	C	B	D	A	A	E	E	A	E	D	A
Approach Delay (s)		26.3			12.2			22.7			53.1	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM Average Control Delay	23.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1583	1770	3539					3433		2787
Flt Permitted		1.00	1.00	0.26	1.00					0.95		1.00
Satd. Flow (perm)		3539	1583	477	3539					3433		2787
Volume (vph)	0	811	705	81	924	0	0	0	0	588	0	471
Peak-hour factor, PHF	0.25	0.91	0.97	0.81	0.90	0.25	0.25	0.25	0.25	0.92	0.25	0.87
Adj. Flow (vph)	0	891	727	100	1027	0	0	0	0	639	0	541
Lane Group Flow (vph)	0	891	727	100	1027	0	0	0	0	639	0	541
Turn Type			Free	pm+pt						custom		Free
Protected Phases		4		3	8							
Permitted Phases			Free	8						6		Free
Actuated Green, G (s)		86.2	140.0	97.7	97.7					30.3		140.0
Effective Green, g (s)		88.2	140.0	99.7	99.7					32.3		140.0
Actuated g/C Ratio		0.63	1.00	0.71	0.71					0.23		1.00
Clearance Time (s)		6.0		6.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		2230	1583	409	2520					792		2787
v/s Ratio Prot		0.25		0.01	0.29							
v/s Ratio Perm			c0.46	0.16						c0.19		0.19
v/c Ratio		0.40	0.46	0.24	0.41					0.81		0.19
Uniform Delay, d1		12.8	0.0	7.6	8.2					50.9		0.0
Progression Factor		0.49	1.00	0.24	0.02					1.00		1.00
Incremental Delay, d2		0.4	0.7	0.3	0.4					6.0		0.2
Delay (s)		6.7	0.7	2.1	0.6					56.9		0.2
Level of Service		A	A	A	A					E		A
Approach Delay (s)		4.0			0.7			0.0			30.9	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	A
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.97		1.00			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	1770	3539			3539	1583	3433		1583			
Flt Permitted	0.49	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	920	3539			3539	1583	3433		1583			
Volume (vph)	351	1051	0	0	294	368	727	0	54	0	0	0
Peak-hour factor, PHF	0.90	0.90	0.25	0.25	0.90	0.93	0.89	0.25	0.61	0.25	0.25	0.25
Adj. Flow (vph)	390	1168	0	0	327	396	817	0	89	0	0	0
Lane Group Flow (vph)	390	1168	0	0	327	396	817	0	89	0	0	0
Turn Type	pm+pt					Perm	custom		custom			
Protected Phases	7	4			8							
Permitted Phases	4					8	2		2			
Actuated Green, G (s)	89.4	89.4			46.4	46.4	38.6		38.6			
Effective Green, g (s)	91.4	91.4			48.4	48.4	40.6		40.6			
Actuated g/C Ratio	0.65	0.65			0.35	0.35	0.29		0.29			
Clearance Time (s)	6.0	6.0			6.0	6.0	6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	837	2310			1223	547	996		459			
v/s Ratio Prot	0.13	c0.33			0.09							
v/s Ratio Perm	0.17					c0.25	c0.24		0.06			
v/c Ratio	0.47	0.51			0.27	0.72	0.82		0.19			
Uniform Delay, d1	16.9	12.6			33.0	40.0	46.3		37.4			
Progression Factor	0.55	0.56			1.00	1.00	1.00		1.00			
Incremental Delay, d2	0.4	0.7			0.5	8.1	5.5		0.2			
Delay (s)	9.8	7.8			33.6	48.1	51.8		37.6			
Level of Service	A	A			C	D	D		D			
Approach Delay (s)		8.3			41.5			50.4			0.0	
Approach LOS		A			D			D			A	

Intersection Summary			
HCM Average Control Delay	27.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		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	0.95		1.00	0.95	
Frt		0.93		1.00	0.91		1.00	0.94		1.00	0.99	
Flt Protected		0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1714		1770	1686		1770	3318		1770	3496	
Flt Permitted		0.97		0.87	1.00		0.67	1.00		0.62	1.00	
Satd. Flow (perm)		1667		1622	1686		1256	3318		1149	3496	
Volume (vph)	5	20	41	118	9	13	75	87	56	21	96	7
Peak-hour factor, PHF	0.50	0.69	0.86	0.93	0.83	0.70	0.79	0.69	0.62	0.82	0.85	0.67
Adj. Flow (vph)	10	29	48	127	11	19	95	126	90	26	113	10
Lane Group Flow (vph)	0	87	0	127	30	0	95	216	0	26	123	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		9.0		9.0	9.0		25.1	25.1		25.1	25.1	
Effective Green, g (s)		11.0		11.0	11.0		27.1	27.1		27.1	27.1	
Actuated g/C Ratio		0.24		0.24	0.24		0.59	0.59		0.59	0.59	
Clearance Time (s)		6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		398		387	402		738	1950		675	2055	
v/s Ratio Prot					0.02			0.07			0.04	
v/s Ratio Perm		0.05		c0.08			c0.08			0.02		
v/c Ratio		0.22		0.33	0.07		0.13	0.11		0.04	0.06	
Uniform Delay, d1		14.1		14.5	13.6		4.2	4.2		4.0	4.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3		0.5	0.1		0.1	0.0		0.0	0.0	
Delay (s)		14.4		15.0	13.7		4.3	4.2		4.0	4.1	
Level of Service		B		B	B		A	A		A	A	
Approach Delay (s)		14.4			14.7			4.2			4.1	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	7.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	46.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	168	83	46	38	46	47
Peak Hour Factor	0.87	0.81	0.85	0.75	0.89	0.81
Hourly flow rate (veh/h)	193	102	54	51	52	58
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
vC, conflicting volume			296		403	244
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			96		91	93
cM capacity (veh/h)			1266		577	794

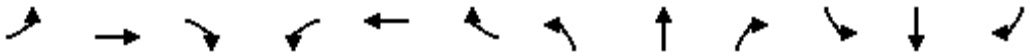
Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	296	105	52	58
Volume Left	0	54	52	0
Volume Right	102	0	0	58
cSH	1700	1266	577	794
Volume to Capacity	0.17	0.04	0.09	0.07
Queue Length (ft)	0	3	7	6
Control Delay (s)	0.0	4.3	11.8	9.9
Lane LOS		A	B	A
Approach Delay (s)	0.0	4.3	10.8	
Approach LOS			B	

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	35.4%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (veh/h)	143	50	47	64	66	68
Peak Hour Factor	0.89	0.69	0.68	0.70	0.91	0.89
Hourly flow rate (veh/h)	161	72	69	91	73	76

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total (vph)	161	72	69	91	73	76
Volume Left (vph)	0	0	69	0	73	0
Volume Right (vph)	0	72	0	0	0	76
Hadj (s)	0.0	-0.6	0.2	0.0	0.2	-0.6
Departure Headway (s)	4.9	3.2	5.2	5.0	5.5	4.7
Degree Utilization, x	0.22	0.06	0.10	0.13	0.11	0.10
Capacity (veh/h)	718	1121	664	690	622	722
Control Delay (s)	9.2	6.4	7.6	7.6	8.0	7.0
Approach Delay (s)	8.4		7.6		7.5	
Approach LOS	A		A		A	

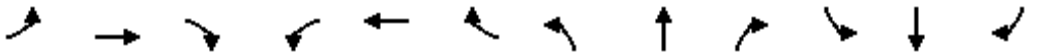
Intersection Summary			
Delay	7.9		
HCM Level of Service	A		
Intersection Capacity Utilization	26.3%	ICU Level of Service	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (veh/h)	0	0	217	0	0	0	77	4	0	0	3	0
Peak Hour Factor	0.25	0.25	0.89	0.25	0.25	0.25	0.79	0.50	0.25	0.25	0.38	0.25
Hourly flow rate (veh/h)	0	0	244	0	0	0	97	8	0	0	8	0

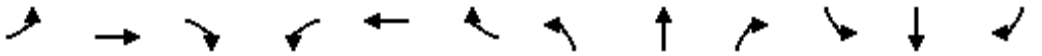
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	244	0	105	8
Volume Left (vph)	0	0	97	0
Volume Right (vph)	244	0	0	0
Hadj (s)	-0.6	0.0	0.2	0.0
Departure Headway (s)	3.6	4.4	4.6	4.5
Degree Utilization, x	0.24	0.00	0.13	0.01
Capacity (veh/h)	974	801	748	746
Control Delay (s)	7.8	7.4	8.3	7.5
Approach Delay (s)	7.8	0.0	8.3	7.5
Approach LOS	A	A	A	A

Intersection Summary				
Delay			7.9	
HCM Level of Service			A	
Intersection Capacity Utilization			34.3%	ICU Level of Service
				A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	0.97	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	0.97	1.00	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)	3433	3539	1583	3433	3539	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.74	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	1384	1863	1583	3433	1863	1583
Volume (vph)	179	1188	8	83	2094	181	26	16	149	490	13	76
Peak-hour factor, PHF	0.88	0.78	0.45	0.91	0.93	0.88	0.52	0.75	0.59	0.96	0.58	0.78
Adj. Flow (vph)	203	1523	18	91	2252	206	50	21	253	510	22	97
Lane Group Flow (vph)	203	1523	18	91	2252	206	50	21	253	510	22	97
Turn Type	Prot		Perm	Prot		Perm	Perm		Free	Prot		Free
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases			4			8	2		Free			Free
Actuated Green, G (s)	5.0	83.7	83.7	6.0	84.7	84.7	10.3	10.3	140.0	16.0	32.3	140.0
Effective Green, g (s)	7.0	85.7	85.7	8.0	86.7	86.7	12.3	12.3	140.0	18.0	34.3	140.0
Actuated g/C Ratio	0.05	0.61	0.61	0.06	0.62	0.62	0.09	0.09	1.00	0.13	0.24	1.00
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	172	2166	969	196	2192	980	122	164	1583	441	456	1583
v/s Ratio Prot	c0.06	0.43		0.03	c0.64			0.01		c0.15	0.01	
v/s Ratio Perm			0.01			0.13	c0.04		0.16			0.06
v/c Ratio	1.18	0.70	0.02	0.46	1.03	0.21	0.41	0.13	0.16	1.16	0.05	0.06
Uniform Delay, d1	66.5	18.5	10.7	63.9	26.6	11.7	60.4	58.9	0.0	61.0	40.4	0.0
Progression Factor	1.00	1.00	1.00	0.82	0.58	0.26	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	125.4	1.9	0.0	1.5	25.5	0.4	2.2	0.4	0.2	93.2	0.0	0.1
Delay (s)	191.9	20.4	10.7	54.0	41.1	3.5	62.7	59.3	0.2	154.2	40.4	0.1
Level of Service	F	C	B	D	D	A	E	E	A	F	D	A
Approach Delay (s)		40.3			38.5			13.7			126.5	
Approach LOS		D			D			B			F	

Intersection Summary			
HCM Average Control Delay	48.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	99.3%	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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1583	1770	3539					3433		2787
Flt Permitted		1.00	1.00	0.35	1.00					0.95		1.00
Satd. Flow (perm)		3539	1583	645	3539					3433		2787
Volume (vph)	0	584	1080	98	1329	0	0	0	0	461	0	1002
Peak-hour factor, PHF	0.25	0.86	0.73	0.91	0.87	0.25	0.25	0.25	0.25	0.92	0.25	0.95
Adj. Flow (vph)	0	679	1479	108	1528	0	0	0	0	501	0	1055
Lane Group Flow (vph)	0	679	1479	108	1528	0	0	0	0	501	0	1055
Turn Type			Free	pm+pt						custom		Free
Protected Phases		4		3	8							
Permitted Phases			Free	8						6		Free
Actuated Green, G (s)		91.0	140.0	103.1	103.1					24.9		140.0
Effective Green, g (s)		93.0	140.0	105.1	105.1					26.9		140.0
Actuated g/C Ratio		0.66	1.00	0.75	0.75					0.19		1.00
Clearance Time (s)		6.0		6.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		2351	1583	549	2657					660		2787
v/s Ratio Prot		0.19		0.01	0.43							
v/s Ratio Perm			c0.93	0.14						0.15		0.38
v/c Ratio		0.29	0.93	0.20	0.58					0.76		0.38
Uniform Delay, d1		9.8	0.0	5.2	7.7					53.5		0.0
Progression Factor		0.84	1.00	0.31	0.27					1.00		1.00
Incremental Delay, d2		0.2	8.2	0.1	0.7					5.0		0.4
Delay (s)		8.4	8.2	1.7	2.8					58.5		0.4
Level of Service		A	A	A	A					E		A
Approach Delay (s)		8.3			2.7			0.0			19.1	
Approach LOS		A			A			A			B	

Intersection Summary			
HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.97		1.00			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	1770	3539			3539	1583	3433		1583			
Flt Permitted	0.24	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	442	3539			3539	1583	3433		1583			
Volume (vph)	247	734	0	0	619	188	904	0	51	0	0	0
Peak-hour factor, PHF	0.86	0.86	0.25	0.25	0.81	0.80	0.93	0.25	0.64	0.25	0.25	0.25
Adj. Flow (vph)	287	853	0	0	764	235	972	0	80	0	0	0
Lane Group Flow (vph)	287	853	0	0	764	235	972	0	80	0	0	0
Turn Type	pm+pt					Perm	custom		custom			
Protected Phases	7	4			8							
Permitted Phases	4					8	2		2			
Actuated Green, G (s)	83.4	83.4			59.5	59.5	44.6		44.6			
Effective Green, g (s)	85.4	85.4			61.5	61.5	46.6		46.6			
Actuated g/C Ratio	0.61	0.61			0.44	0.44	0.33		0.33			
Clearance Time (s)	6.0	6.0			6.0	6.0	6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	458	2159			1555	695	1143		527			
v/s Ratio Prot	c0.09	0.24			0.22							
v/s Ratio Perm	c0.29					0.15	c0.28		0.05			
v/c Ratio	0.63	0.40			0.49	0.34	0.85		0.15			
Uniform Delay, d1	15.9	14.0			28.1	25.8	43.5		32.8			
Progression Factor	1.06	0.45			1.00	1.00	1.00		1.00			
Incremental Delay, d2	2.5	0.5			1.1	1.3	6.2		0.1			
Delay (s)	19.3	6.8			29.2	27.2	49.7		32.9			
Level of Service	B	A			C	C	D		C			
Approach Delay (s)		10.0			28.7			48.4			0.0	
Approach LOS		A			C			D			A	

Intersection Summary			
HCM Average Control Delay	28.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.8%	ICU Level of Service	C
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		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	0.95		1.00	0.95	
Frt		0.95		1.00	0.95		1.00	0.96		1.00	0.99	
Flt Protected		0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1751		1770	1772		1770	3409		1770	3500	
Flt Permitted		0.93		0.63	1.00		0.54	1.00		0.49	1.00	
Satd. Flow (perm)		1644		1173	1772		1012	3409		916	3500	
Volume (vph)	30	74	73	315	60	31	169	307	90	34	293	12
Peak-hour factor, PHF	0.64	0.68	0.77	0.82	0.66	0.71	0.69	0.94	0.85	0.62	0.91	0.46
Adj. Flow (vph)	47	109	95	384	91	44	245	327	106	55	322	26
Lane Group Flow (vph)	0	251	0	384	135	0	245	433	0	55	348	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		19.7		19.7	19.7		15.8	15.8		15.8	15.8	
Effective Green, g (s)		21.7		21.7	21.7		17.8	17.8		17.8	17.8	
Actuated g/C Ratio		0.46		0.46	0.46		0.37	0.37		0.37	0.37	
Clearance Time (s)		6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		751		536	810		379	1277		343	1312	
v/s Ratio Prot					0.08			0.13			0.10	
v/s Ratio Perm		0.15		c0.33			c0.24			0.06		
v/c Ratio		0.33		0.72	0.17		0.65	0.34		0.16	0.27	
Uniform Delay, d1		8.3		10.4	7.6		12.3	10.6		9.9	10.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3		4.5	0.1		3.8	0.2		0.2	0.1	
Delay (s)		8.5		15.0	7.7		16.0	10.8		10.1	10.4	
Level of Service		A		B	A		B	B		B	B	
Approach Delay (s)		8.5			13.1			12.7			10.4	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	47.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	139	180	111	118	268	193
Peak Hour Factor	0.93	0.88	0.85	0.74	0.92	0.98
Hourly flow rate (veh/h)	149	205	131	159	291	197
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
vC, conflicting volume			354		672	252
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			89		22	75
cM capacity (veh/h)			1205		375	787

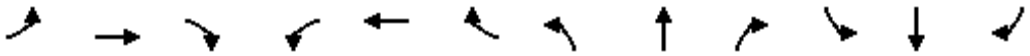
Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	354	290	291	197
Volume Left	0	131	291	0
Volume Right	205	0	0	197
cSH	1700	1205	375	787
Volume to Capacity	0.21	0.11	0.78	0.25
Queue Length (ft)	0	9	161	25
Control Delay (s)	0.0	4.3	41.0	11.1
Lane LOS		A	E	B
Approach Delay (s)	0.0	4.3	28.9	
Approach LOS			D	

Intersection Summary			
Average Delay	13.6		
Intersection Capacity Utilization	62.2%	ICU Level of Service	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (veh/h)	102	123	248	135	107	213
Peak Hour Factor	0.82	0.84	0.87	0.87	0.93	0.84
Hourly flow rate (veh/h)	124	146	285	155	115	254

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total (vph)	124	146	285	155	115	254
Volume Left (vph)	0	0	285	0	115	0
Volume Right (vph)	0	146	0	0	0	254
Hadj (s)	0.0	-0.6	0.2	0.0	0.2	-0.6
Departure Headway (s)	5.8	3.2	5.9	5.7	6.2	5.4
Degree Utilization, x	0.20	0.13	0.46	0.24	0.20	0.38
Capacity (veh/h)	588	1121	596	612	556	638
Control Delay (s)	10.3	6.7	12.7	9.3	9.5	10.4
Approach Delay (s)	8.3		11.5		10.1	
Approach LOS	A		B		B	

Intersection Summary			
Delay	10.2		
HCM Level of Service	B		
Intersection Capacity Utilization	38.7%	ICU Level of Service	A

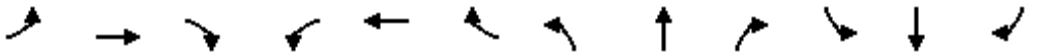


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (veh/h)	2	1	282	1	0	0	298	3	0	0	12	2
Peak Hour Factor	0.50	0.25	0.83	0.25	0.25	0.25	0.90	0.38	0.25	0.25	0.54	0.50
Hourly flow rate (veh/h)	4	4	340	4	0	0	331	8	0	0	22	4

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	348	4	339	26
Volume Left (vph)	4	4	331	0
Volume Right (vph)	340	0	0	4
Hadj (s)	-0.5	0.2	0.2	-0.1
Departure Headway (s)	4.3	5.4	4.9	5.0
Degree Utilization, x	0.41	0.01	0.46	0.04
Capacity (veh/h)	797	603	702	654
Control Delay (s)	10.2	8.5	12.1	8.2
Approach Delay (s)	10.2	8.5	12.1	8.2
Approach LOS	B	A	B	A

Intersection Summary				
Delay		11.0		
HCM Level of Service		B		
Intersection Capacity Utilization		54.9%	ICU Level of Service	A

Background Synchro Analysis

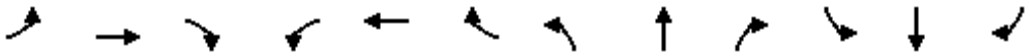


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	0.97	1.00	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)	3433	3539	1583	3433	3539	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.74	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	1372	1863	1583	3433	1863	1583
Volume (vph)	107	1402	7	190	1284	135	12	9	43	239	26	45
Peak-hour factor, PHF	0.84	0.94	0.44	0.90	0.95	0.84	0.75	0.45	0.67	0.56	0.81	0.81
Adj. Flow (vph)	127	1491	16	211	1352	161	16	20	64	427	32	56
Lane Group Flow (vph)	127	1491	16	211	1352	161	16	20	64	427	32	56
Turn Type	Prot		Perm	Prot		Perm	Perm		Free	Prot		Free
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases			4			8	2		Free			Free
Actuated Green, G (s)	8.0	79.3	79.3	10.0	81.3	81.3	7.3	7.3	140.0	19.4	32.7	140.0
Effective Green, g (s)	10.0	81.3	81.3	12.0	83.3	83.3	9.3	9.3	140.0	21.4	34.7	140.0
Actuated g/C Ratio	0.07	0.58	0.58	0.09	0.60	0.60	0.07	0.07	1.00	0.15	0.25	1.00
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	245	2055	919	294	2106	942	91	124	1583	525	462	1583
v/s Ratio Prot	0.04	c0.42		0.06	c0.38			0.01		c0.12	0.02	
v/s Ratio Perm			0.01			0.10	c0.01		0.04			0.04
v/c Ratio	0.52	0.73	0.02	0.72	0.64	0.17	0.18	0.16	0.04	0.81	0.07	0.04
Uniform Delay, d1	62.7	21.3	12.4	62.3	18.6	12.8	61.7	61.7	0.0	57.4	40.3	0.0
Progression Factor	1.00	1.00	1.00	1.19	0.67	0.88	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.9	2.3	0.0	7.7	1.4	0.4	0.9	0.6	0.0	9.4	0.1	0.0
Delay (s)	64.5	23.5	12.5	81.8	13.9	11.6	62.7	62.3	0.0	66.7	40.4	0.0
Level of Service	E	C	B	F	B	B	E	E	A	E	D	A
Approach Delay (s)		26.6			22.0			22.5			57.8	
Approach LOS		C			C			C			E	

Intersection Summary			
HCM Average Control Delay	28.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.1%	ICU Level of Service	C
c Critical Lane Group			

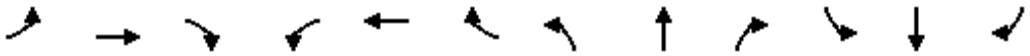
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1583	1770	3539					3433		2787
Flt Permitted		1.00	1.00	0.20	1.00					0.95		1.00
Satd. Flow (perm)		3539	1583	382	3539					3433		2787
Volume (vph)	0	892	776	89	1017	0	0	0	0	646	0	518
Peak-hour factor, PHF	0.25	0.91	0.97	0.81	0.90	0.25	0.25	0.25	0.25	0.92	0.25	0.87
Adj. Flow (vph)	0	980	800	110	1130	0	0	0	0	702	0	595
Lane Group Flow (vph)	0	980	800	110	1130	0	0	0	0	702	0	595
Turn Type			Free	pm+pt						custom		Free
Protected Phases		4		3	8							
Permitted Phases			Free	8						6		Free
Actuated Green, G (s)		70.8	140.0	94.8	94.8					33.2		140.0
Effective Green, g (s)		72.8	140.0	96.8	96.8					35.2		140.0
Actuated g/C Ratio		0.52	1.00	0.69	0.69					0.25		1.00
Clearance Time (s)		6.0		6.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		1840	1583	462	2447					863		2787
v/s Ratio Prot		0.28		0.03	0.32							
v/s Ratio Perm			c0.51	0.13						c0.20		0.21
v/c Ratio		0.53	0.51	0.24	0.46					0.81		0.21
Uniform Delay, d1		22.3	0.0	19.6	9.8					49.3		0.0
Progression Factor		0.67	1.00	0.32	0.36					1.00		1.00
Incremental Delay, d2		0.8	0.8	0.2	0.5					5.9		0.2
Delay (s)		15.8	0.8	6.5	4.0					55.2		0.2
Level of Service		B	A	A	A					E		A
Approach Delay (s)		9.0			4.2			0.0			30.0	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.97		1.00			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	1770	3539			3539	1583	3433		1583			
Flt Permitted	0.47	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	874	3539			3539	1583	3433		1583			
Volume (vph)	386	1156	0	0	324	405	800	0	59	0	0	0
Peak-hour factor, PHF	0.90	0.90	0.25	0.25	0.90	0.93	0.89	0.25	0.61	0.25	0.25	0.25
Adj. Flow (vph)	429	1284	0	0	360	435	899	0	97	0	0	0
Lane Group Flow (vph)	429	1284	0	0	360	435	899	0	97	0	0	0
Turn Type	pm+pt					Perm	custom		custom			
Protected Phases	7	4			8							
Permitted Phases	4					8	2		2			
Actuated Green, G (s)	86.0	86.0			63.7	63.7	42.0		42.0			
Effective Green, g (s)	88.0	88.0			65.7	65.7	44.0		44.0			
Actuated g/C Ratio	0.63	0.63			0.47	0.47	0.31		0.31			
Clearance Time (s)	6.0	6.0			6.0	6.0	6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	666	2225			1661	743	1079		498			
v/s Ratio Prot	c0.08	0.36			0.10							
v/s Ratio Perm	c0.32					0.27	c0.26		0.06			
v/c Ratio	0.64	0.58			0.22	0.59	0.83		0.19			
Uniform Delay, d1	13.2	15.2			21.9	27.2	44.6		35.1			
Progression Factor	0.89	0.48			1.00	1.00	1.00		1.00			
Incremental Delay, d2	1.8	0.9			0.3	3.4	5.6		0.2			
Delay (s)	13.6	8.2			22.2	30.5	50.2		35.3			
Level of Service	B	A			C	C	D		D			
Approach Delay (s)		9.5			26.8			48.8			0.0	
Approach LOS		A			C			D			A	

Intersection Summary			
HCM Average Control Delay	24.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.4%	ICU Level of Service	B
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		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	0.95		1.00	0.95	
Frt		0.93		1.00	0.91		1.00	0.94		1.00	0.99	
Flt Protected		0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1716		1770	1688		1770	3317		1770	3492	
Flt Permitted		0.96		0.85	1.00		0.67	1.00		0.60	1.00	
Satd. Flow (perm)		1663		1578	1688		1240	3317		1124	3492	
Volume (vph)	6	22	45	130	10	14	82	96	62	23	105	8
Peak-hour factor, PHF	0.50	0.69	0.86	0.93	0.83	0.70	0.79	0.69	0.62	0.82	0.85	0.67
Adj. Flow (vph)	12	32	52	140	12	20	104	139	100	28	124	12
Lane Group Flow (vph)	0	96	0	140	32	0	104	239	0	28	136	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		9.1		9.1	9.1		24.7	24.7		24.7	24.7	
Effective Green, g (s)		11.1		11.1	11.1		26.7	26.7		26.7	26.7	
Actuated g/C Ratio		0.24		0.24	0.24		0.58	0.58		0.58	0.58	
Clearance Time (s)		6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		403		382	409		723	1934		655	2036	
v/s Ratio Prot					0.02			0.07			0.04	
v/s Ratio Perm		0.06		c0.09			c0.08			0.02		
v/c Ratio		0.24		0.37	0.08		0.14	0.12		0.04	0.07	
Uniform Delay, d1		14.0		14.4	13.4		4.3	4.3		4.1	4.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3		0.6	0.1		0.1	0.0		0.0	0.0	
Delay (s)		14.3		15.0	13.5		4.4	4.3		4.1	4.2	
Level of Service		B		B	B		A	A		A	A	
Approach Delay (s)		14.3			14.7			4.4			4.1	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	7.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.21		
Actuated Cycle Length (s)	45.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.8%	ICU Level of Service	A
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	185	91	51	42	50	52
Peak Hour Factor	0.87	0.81	0.85	0.75	0.89	0.81
Hourly flow rate (veh/h)	213	112	60	56	56	64
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
vC, conflicting volume			325		445	269
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			95		90	92
cM capacity (veh/h)			1235		543	770

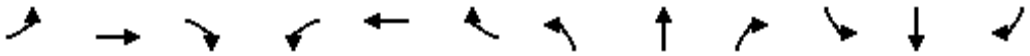
Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	325	116	56	64
Volume Left	0	60	56	0
Volume Right	112	0	0	64
cSH	1700	1235	543	770
Volume to Capacity	0.19	0.05	0.10	0.08
Queue Length (ft)	0	4	9	7
Control Delay (s)	0.0	4.4	12.4	10.1
Lane LOS		A	B	B
Approach Delay (s)	0.0	4.4	11.2	
Approach LOS			B	

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	37.6%	ICU Level of Service	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (veh/h)	157	55	52	70	73	75
Peak Hour Factor	0.89	0.69	0.68	0.70	0.91	0.89
Hourly flow rate (veh/h)	176	80	76	100	80	84

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total (vph)	176	80	76	100	80	84
Volume Left (vph)	0	0	76	0	80	0
Volume Right (vph)	0	80	0	0	0	84
Hadj (s)	0.0	-0.6	0.2	0.0	0.2	-0.6
Departure Headway (s)	4.9	3.2	5.3	5.1	5.6	4.8
Degree Utilization, x	0.24	0.07	0.11	0.14	0.12	0.11
Capacity (veh/h)	699	1121	655	680	612	709
Control Delay (s)	9.5	6.4	7.8	7.7	8.2	7.2
Approach Delay (s)	8.6		7.8		7.7	
Approach LOS	A		A		A	

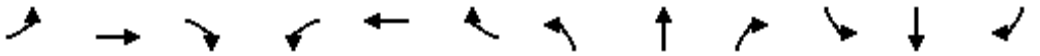
Intersection Summary			
Delay	8.1		
HCM Level of Service	A		
Intersection Capacity Utilization	28.0%	ICU Level of Service	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (veh/h)	0	0	238	0	0	0	85	4	0	0	3	0
Peak Hour Factor	0.25	0.25	0.89	0.25	0.25	0.25	0.79	0.50	0.25	0.25	0.38	0.25
Hourly flow rate (veh/h)	0	0	267	0	0	0	108	8	0	0	8	0

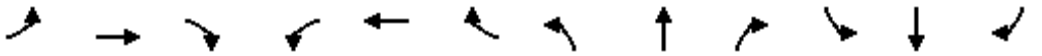
Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	267	0	116	8
Volume Left (vph)	0	0	108	0
Volume Right (vph)	267	0	0	0
Hadj (s)	-0.6	0.0	0.2	0.0
Departure Headway (s)	3.6	4.4	4.6	4.6
Degree Utilization, x	0.27	0.00	0.15	0.01
Capacity (veh/h)	967	791	738	734
Control Delay (s)	8.0	7.4	8.4	7.6
Approach Delay (s)	8.0	0.0	8.4	7.6
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.1			
HCM Level of Service	A			
Intersection Capacity Utilization	36.3%	ICU Level of Service	A	



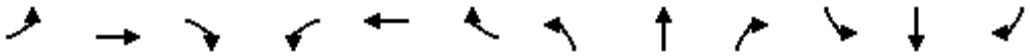
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	1.00	1.00	0.97	1.00	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)	3433	3539	1583	3433	3539	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.74	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	1381	1863	1583	3433	1863	1583
Volume (vph)	197	1307	9	91	2303	199	29	18	164	540	14	84
Peak-hour factor, PHF	0.88	0.78	0.45	0.91	0.93	0.88	0.52	0.75	0.59	0.96	0.58	0.78
Adj. Flow (vph)	224	1676	20	100	2476	226	56	24	278	562	24	108
Lane Group Flow (vph)	224	1676	20	100	2476	226	56	24	278	562	24	108
Turn Type	Prot		Perm	Prot		Perm	Perm		Free	Prot		Free
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases			4			8	2		Free			Free
Actuated Green, G (s)	6.0	84.1	84.1	4.0	82.1	82.1	10.9	10.9	140.0	17.0	33.9	140.0
Effective Green, g (s)	8.0	86.1	86.1	6.0	84.1	84.1	12.9	12.9	140.0	19.0	35.9	140.0
Actuated g/C Ratio	0.06	0.61	0.61	0.04	0.60	0.60	0.09	0.09	1.00	0.14	0.26	1.00
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	196	2176	974	147	2126	951	127	172	1583	466	478	1583
v/s Ratio Prot	c0.07	0.47		0.03	c0.70			0.01		c0.16	0.01	
v/s Ratio Perm			0.01			0.14	c0.04		c0.18			0.07
v/c Ratio	1.14	0.77	0.02	0.68	1.16	0.24	0.44	0.14	0.18	1.21	0.05	0.07
Uniform Delay, d1	66.0	19.7	10.5	66.1	28.0	13.0	60.1	58.4	0.0	60.5	39.2	0.0
Progression Factor	1.00	1.00	1.00	0.91	0.60	0.25	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	108.0	2.7	0.0	10.4	78.8	0.5	2.4	0.4	0.2	111.5	0.0	0.1
Delay (s)	174.0	22.4	10.5	70.8	95.5	3.7	62.6	58.8	0.2	172.0	39.3	0.1
Level of Service	F	C	B	E	F	A	E	E	A	F	D	A
Approach Delay (s)		40.0			87.2			13.9			140.7	
Approach LOS		D			F			B			F	

Intersection Summary			
HCM Average Control Delay	73.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	107.6%	ICU Level of Service	F
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1583	1770	3539					3433		2787
Flt Permitted		1.00	1.00	0.31	1.00					0.95		1.00
Satd. Flow (perm)		3539	1583	586	3539					3433		2787
Volume (vph)	0	642	1188	108	1462	0	0	0	0	507	0	1103
Peak-hour factor, PHF	0.25	0.86	0.73	0.91	0.87	0.25	0.25	0.25	0.25	0.92	0.25	0.95
Adj. Flow (vph)	0	747	1627	119	1680	0	0	0	0	551	0	1161
Lane Group Flow (vph)	0	747	1627	119	1680	0	0	0	0	551	0	1161
Turn Type			Free	pm+pt						custom		Free
Protected Phases		4		3	8							
Permitted Phases			Free	8						6		Free
Actuated Green, G (s)		88.9	140.0	101.0	101.0					27.0		140.0
Effective Green, g (s)		90.9	140.0	103.0	103.0					29.0		140.0
Actuated g/C Ratio		0.65	1.00	0.74	0.74					0.21		1.00
Clearance Time (s)		6.0		6.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		2298	1583	500	2604					711		2787
v/s Ratio Prot		0.21		0.01	0.47							
v/s Ratio Perm			c1.03	0.16						0.16		0.42
v/c Ratio		0.33	1.03	0.24	0.65					0.77		0.42
Uniform Delay, d1		10.9	70.0	6.1	9.3					52.4		0.0
Progression Factor		1.11	1.00	0.26	0.20					1.00		1.00
Incremental Delay, d2		0.2	24.7	0.2	0.8					5.3		0.5
Delay (s)		12.4	94.7	1.8	2.7					57.7		0.5
Level of Service		B	F	A	A					E		A
Approach Delay (s)		68.8			2.6			0.0			18.9	
Approach LOS		E			A			A			B	

Intersection Summary			
HCM Average Control Delay	34.0	HCM Level of Service	C
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	B
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.97		1.00			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	1770	3539			3539	1583	3433		1583			
Flt Permitted	0.17	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	325	3539			3539	1583	3433		1583			
Volume (vph)	272	808	0	0	681	206	994	0	56	0	0	0
Peak-hour factor, PHF	0.86	0.86	0.25	0.25	0.81	0.80	0.93	0.25	0.64	0.25	0.25	0.25
Adj. Flow (vph)	316	940	0	0	841	258	1069	0	88	0	0	0
Lane Group Flow (vph)	316	940	0	0	841	258	1069	0	88	0	0	0
Turn Type	pm+pt					Perm	custom		custom			
Protected Phases	7	4			8							
Permitted Phases	4					8	2		2			
Actuated Green, G (s)	80.3	80.3			52.3	52.3	47.7		47.7			
Effective Green, g (s)	82.3	82.3			54.3	54.3	49.7		49.7			
Actuated g/C Ratio	0.59	0.59			0.39	0.39	0.36		0.36			
Clearance Time (s)	6.0	6.0			6.0	6.0	6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	439	2080			1373	614	1219		562			
v/s Ratio Prot	c0.12	0.27			0.24							
v/s Ratio Perm	c0.30					0.16	c0.31		0.06			
v/c Ratio	0.72	0.45			0.61	0.42	0.88		0.16			
Uniform Delay, d1	20.1	16.2			34.4	31.3	42.3		30.8			
Progression Factor	0.97	0.55			1.00	1.00	1.00		1.00			
Incremental Delay, d2	5.1	0.7			2.0	2.1	7.4		0.1			
Delay (s)	24.6	9.5			36.5	33.4	49.6		31.0			
Level of Service	C	A			D	C	D		C			
Approach Delay (s)		13.3			35.7			48.2			0.0	
Approach LOS		B			D			D			A	

Intersection Summary			
HCM Average Control Delay	31.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.3%	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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		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	0.95		1.00	0.95	
Frt		0.95		1.00	0.95		1.00	0.96		1.00	0.99	
Flt Protected		0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1751		1770	1772		1770	3410		1770	3500	
Flt Permitted		0.93		0.60	1.00		0.52	1.00		0.45	1.00	
Satd. Flow (perm)		1637		1120	1772		976	3410		839	3500	
Volume (vph)	33	81	80	346	66	34	186	337	99	37	322	13
Peak-hour factor, PHF	0.64	0.68	0.77	0.82	0.66	0.71	0.69	0.94	0.85	0.62	0.91	0.46
Adj. Flow (vph)	52	119	104	422	100	48	270	359	116	60	354	28
Lane Group Flow (vph)	0	275	0	422	148	0	270	475	0	60	382	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		22.2		22.2	22.2		17.2	17.2		17.2	17.2	
Effective Green, g (s)		24.2		24.2	24.2		19.2	19.2		19.2	19.2	
Actuated g/C Ratio		0.47		0.47	0.47		0.37	0.37		0.37	0.37	
Clearance Time (s)		6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		771		527	834		365	1274		313	1307	
v/s Ratio Prot					0.08			0.14			0.11	
v/s Ratio Perm		0.17		c0.38			c0.28			0.07		
v/c Ratio		0.36		0.80	0.18		0.74	0.37		0.19	0.29	
Uniform Delay, d1		8.6		11.6	7.9		13.9	11.7		10.9	11.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3		8.5	0.1		7.7	0.2		0.3	0.1	
Delay (s)		8.9		20.1	8.0		21.6	11.9		11.2	11.4	
Level of Service		A		C	A		C	B		B	B	
Approach Delay (s)		8.9			16.9			15.4			11.4	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	14.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	51.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	C
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	153	198	122	130	294	212
Peak Hour Factor	0.93	0.88	0.85	0.74	0.92	0.98
Hourly flow rate (veh/h)	165	225	144	176	320	216
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
vC, conflicting volume			390		740	277
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			88		5	72
cM capacity (veh/h)			1169		337	762

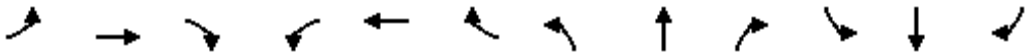
Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	390	319	320	216
Volume Left	0	144	320	0
Volume Right	225	0	0	216
cSH	1700	1169	337	762
Volume to Capacity	0.23	0.12	0.95	0.28
Queue Length (ft)	0	10	248	29
Control Delay (s)	0.0	4.5	72.5	11.6
Lane LOS		A	F	B
Approach Delay (s)	0.0	4.5	47.9	
Approach LOS			E	

Intersection Summary			
Average Delay	21.8		
Intersection Capacity Utilization	67.3%	ICU Level of Service	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (veh/h)	112	135	272	148	118	234
Peak Hour Factor	0.82	0.84	0.87	0.87	0.93	0.84
Hourly flow rate (veh/h)	137	161	313	170	127	279

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total (vph)	137	161	313	170	127	279
Volume Left (vph)	0	0	313	0	127	0
Volume Right (vph)	0	161	0	0	0	279
Hadj (s)	0.0	-0.6	0.2	0.0	0.2	-0.6
Departure Headway (s)	6.0	3.2	6.0	5.8	6.3	5.5
Degree Utilization, x	0.23	0.14	0.52	0.27	0.22	0.43
Capacity (veh/h)	573	1121	574	598	544	623
Control Delay (s)	10.7	6.7	14.2	9.8	9.9	11.4
Approach Delay (s)	8.6		12.6		11.0	
Approach LOS	A		B		B	

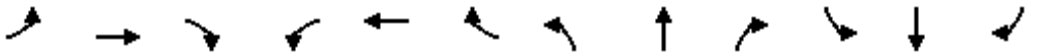
Intersection Summary			
Delay	11.0		
HCM Level of Service	B		
Intersection Capacity Utilization	41.5%	ICU Level of Service	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (veh/h)	2	1	310	1	0	0	327	3	0	0	13	2
Peak Hour Factor	0.50	0.25	0.83	0.25	0.25	0.25	0.90	0.38	0.25	0.25	0.54	0.50
Hourly flow rate (veh/h)	4	4	373	4	0	0	363	8	0	0	24	4

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	381	4	371	28
Volume Left (vph)	4	4	363	0
Volume Right (vph)	373	0	0	4
Hadj (s)	-0.6	0.2	0.2	-0.1
Departure Headway (s)	4.4	5.6	5.0	5.2
Degree Utilization, x	0.46	0.01	0.52	0.04
Capacity (veh/h)	780	582	680	631
Control Delay (s)	11.0	8.6	13.3	8.4
Approach Delay (s)	11.0	8.6	13.3	8.4
Approach LOS	B	A	B	A

Intersection Summary			
Delay	12.0		
HCM Level of Service	B		
Intersection Capacity Utilization	58.9%	ICU Level of Service	A



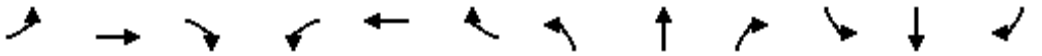
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	1.00	1.00	1.00	0.97	1.00	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)	3433	3539	1583	3433	5085	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.74	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	5085	1583	1381	1863	1583	3433	1863	1583
Volume (vph)	197	1307	9	91	2303	199	29	18	164	540	14	84
Peak-hour factor, PHF	0.88	0.78	0.45	0.91	0.93	0.88	0.52	0.75	0.59	0.96	0.58	0.78
Adj. Flow (vph)	224	1676	20	100	2476	226	56	24	278	562	24	108
Lane Group Flow (vph)	224	1676	20	100	2476	226	56	24	278	562	24	108
Turn Type	Prot		Perm	Prot		Perm	Perm		Free	Prot		Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases			4			8	2		Free			6
Actuated Green, G (s)	8.0	79.1	79.1	4.0	75.1	75.1	10.9	10.9	140.0	22.0	38.9	38.9
Effective Green, g (s)	10.0	81.1	81.1	6.0	77.1	77.1	12.9	12.9	140.0	24.0	40.9	40.9
Actuated g/C Ratio	0.07	0.58	0.58	0.04	0.55	0.55	0.09	0.09	1.00	0.17	0.29	0.29
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
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
Lane Grp Cap (vph)	245	2050	917	147	2800	872	127	172	1583	589	544	462
v/s Ratio Prot	0.07	c0.47		0.03	c0.49			0.01		c0.16	0.01	
v/s Ratio Perm			0.01			0.14	c0.04		0.18			0.07
v/c Ratio	0.91	0.82	0.02	0.68	0.88	0.26	0.44	0.14	0.18	0.95	0.04	0.23
Uniform Delay, d1	64.6	23.5	12.5	66.1	27.5	16.5	60.1	58.4	0.0	57.5	35.5	37.6
Progression Factor	1.00	1.00	1.00	0.83	0.63	0.32	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	35.1	3.8	0.0	10.4	3.9	0.6	2.4	0.4	0.2	25.9	0.0	0.3
Delay (s)	99.7	27.3	12.6	65.0	21.1	5.9	62.6	58.8	0.2	83.4	35.6	37.9
Level of Service	F	C	B	E	C	A	E	E	A	F	D	D
Approach Delay (s)		35.6			21.4			13.9			74.7	
Approach LOS		D			C			B			E	

Intersection Summary			
HCM Average Control Delay	32.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	86.9%	ICU Level of Service	D
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	1.00			1.00	1.00	1.00
Frt	0.92			1.00	1.00	0.85
Flt Protected	1.00			0.98	0.95	1.00
Satd. Flow (prot)	1718			1822	1770	1583
Flt Permitted	1.00			0.66	0.95	1.00
Satd. Flow (perm)	1718			1233	1770	1583
Volume (vph)	153	198	122	130	294	212
Peak-hour factor, PHF	0.93	0.88	0.85	0.74	0.92	0.98
Adj. Flow (vph)	165	225	144	176	320	216
Lane Group Flow (vph)	390	0	0	320	320	216
Turn Type			Perm			Perm
Protected Phases	4			8	2	
Permitted Phases			8			2
Actuated Green, G (s)	16.8			16.8	12.3	12.3
Effective Green, g (s)	18.8			18.8	14.3	14.3
Actuated g/C Ratio	0.46			0.46	0.35	0.35
Clearance Time (s)	6.0			6.0	6.0	6.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	786			564	616	551
v/s Ratio Prot	0.23				c0.18	
v/s Ratio Perm				c0.26		0.14
v/c Ratio	0.50			0.57	0.52	0.39
Uniform Delay, d1	7.8			8.2	10.7	10.1
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.5			1.3	0.7	0.5
Delay (s)	8.3			9.5	11.4	10.6
Level of Service	A			A	B	B
Approach Delay (s)	8.3			9.5	11.1	
Approach LOS	A			A	B	

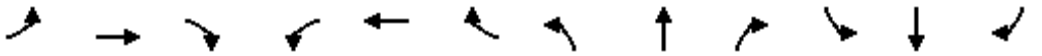
Intersection Summary			
HCM Average Control Delay	9.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	41.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.3%	ICU Level of Service	B
c Critical Lane Group			

Background + Project Synchro Analysis



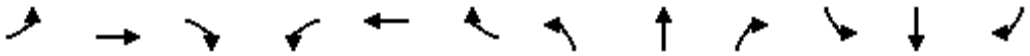
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	1.00	1.00	1.00	0.97	1.00	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)	3433	3539	1583	3433	5085	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.74	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	5085	1583	1372	1863	1583	3433	1863	1583
Volume (vph)	107	1402	7	190	1284	261	12	9	43	527	26	45
Peak-hour factor, PHF	0.84	0.94	0.44	0.90	0.95	0.84	0.75	0.45	0.67	0.56	0.81	0.81
Adj. Flow (vph)	127	1491	16	211	1352	311	16	20	64	941	32	56
Lane Group Flow (vph)	127	1491	16	211	1352	311	16	20	64	941	32	56
Turn Type	Prot		Perm	Prot		Perm	Perm		Free	Prot		Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases			4			8	2		Free			6
Actuated Green, G (s)	7.9	66.8	66.8	7.0	65.9	65.9	7.2	7.2	140.0	35.0	48.2	48.2
Effective Green, g (s)	9.9	68.8	68.8	9.0	67.9	67.9	9.2	9.2	140.0	37.0	50.2	50.2
Actuated g/C Ratio	0.07	0.49	0.49	0.06	0.49	0.49	0.07	0.07	1.00	0.26	0.36	0.36
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
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
Lane Grp Cap (vph)	243	1739	778	221	2466	768	90	122	1583	907	668	568
v/s Ratio Prot	0.04	c0.42		c0.06	0.27			0.01		c0.27	0.02	
v/s Ratio Perm			0.01			0.20	c0.01		0.04			0.04
v/c Ratio	0.52	0.86	0.02	0.95	0.55	0.40	0.18	0.16	0.04	1.04	0.05	0.10
Uniform Delay, d1	62.8	31.3	18.3	65.3	25.3	23.1	61.8	61.8	0.0	51.5	29.3	29.9
Progression Factor	1.00	1.00	1.00	0.69	0.36	0.02	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.0	5.7	0.0	45.6	0.8	1.5	0.9	0.6	0.0	40.0	0.0	0.1
Delay (s)	64.8	37.0	18.3	90.8	9.8	2.0	62.8	62.4	0.0	91.5	29.3	29.9
Level of Service	E	D	B	F	A	A	E	E	A	F	C	C
Approach Delay (s)		39.0			17.7			22.6			86.2	
Approach LOS		D			B			C			F	

Intersection Summary			
HCM Average Control Delay	40.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.8%	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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1583	1770	3539					3433		2787
Flt Permitted		1.00	1.00	0.17	1.00					0.95		1.00
Satd. Flow (perm)		3539	1583	313	3539					3433		2787
Volume (vph)	0	1036	920	89	1084	0	0	0	0	646	0	577
Peak-hour factor, PHF	0.25	0.91	0.97	0.81	0.90	0.25	0.25	0.25	0.25	0.92	0.25	0.87
Adj. Flow (vph)	0	1138	948	110	1204	0	0	0	0	702	0	663
Lane Group Flow (vph)	0	1138	948	110	1204	0	0	0	0	702	0	663
Turn Type			Free	pm+pt						custom		Free
Protected Phases		4		3	8							
Permitted Phases			Free	8						6		Free
Actuated Green, G (s)		81.0	140.0	94.7	94.7					33.3		140.0
Effective Green, g (s)		83.0	140.0	96.7	96.7					35.3		140.0
Actuated g/C Ratio		0.59	1.00	0.69	0.69					0.25		1.00
Clearance Time (s)		6.0		6.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		2098	1583	317	2444					866		2787
v/s Ratio Prot		0.32		0.02	0.34							
v/s Ratio Perm			c0.60	0.22						c0.20		0.24
v/c Ratio		0.54	0.60	0.35	0.49					0.81		0.24
Uniform Delay, d1		17.1	0.0	10.9	10.1					49.2		0.0
Progression Factor		0.46	1.00	1.62	0.49					1.00		1.00
Incremental Delay, d2		0.4	0.7	0.5	0.5					5.8		0.2
Delay (s)		8.2	0.7	18.2	5.5					55.0		0.2
Level of Service		A	A	B	A					E		A
Approach Delay (s)		4.8			6.6			0.0			28.4	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	B
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.97		1.00			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	1770	3539			3539	1583	3433		1583			
Flt Permitted	0.41	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	762	3539			3539	1583	3433		1583			
Volume (vph)	521	1165	0	0	328	405	863	0	59	0	0	0
Peak-hour factor, PHF	0.90	0.90	0.25	0.25	0.90	0.93	0.89	0.25	0.61	0.25	0.25	0.25
Adj. Flow (vph)	579	1294	0	0	364	435	970	0	97	0	0	0
Lane Group Flow (vph)	579	1294	0	0	364	435	970	0	97	0	0	0
Turn Type	pm+pt					Perm	custom		custom			
Protected Phases	7	4			8							
Permitted Phases	4					8	2		2			
Actuated Green, G (s)	84.2	84.2			42.4	42.4	43.8		43.8			
Effective Green, g (s)	86.2	86.2			44.4	44.4	45.8		45.8			
Actuated g/C Ratio	0.62	0.62			0.32	0.32	0.33		0.33			
Clearance Time (s)	6.0	6.0			6.0	6.0	6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	741	2179			1122	502	1123		518			
v/s Ratio Prot	c0.21	0.37			0.10							
v/s Ratio Perm	0.27					c0.27	c0.28		0.06			
v/c Ratio	0.78	0.59			0.32	0.87	0.86		0.19			
Uniform Delay, d1	16.5	16.3			36.4	45.0	44.2		33.8			
Progression Factor	1.34	0.80			1.00	1.00	1.00		1.00			
Incremental Delay, d2	4.5	1.0			0.8	17.9	7.1		0.2			
Delay (s)	26.6	14.0			37.2	62.9	51.2		33.9			
Level of Service	C	B			D	E	D		C			
Approach Delay (s)		17.9			51.2			49.7			0.0	
Approach LOS		B			D			D			A	

Intersection Summary			
HCM Average Control Delay	34.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.8%	ICU Level of Service	C
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		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	0.95		1.00	0.95	
Frt		0.93		1.00	0.91		1.00	0.96		1.00	1.00	
Flt Protected		0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1716		1770	1688		1770	3413		1770	3526	
Flt Permitted		0.96		0.83	1.00		0.48	1.00		0.51	1.00	
Satd. Flow (perm)		1663		1542	1688		894	3413		942	3526	
Volume (vph)	6	22	45	130	10	14	82	222	62	23	394	8
Peak-hour factor, PHF	0.50	0.69	0.86	0.93	0.83	0.70	0.79	0.69	0.62	0.82	0.85	0.67
Adj. Flow (vph)	12	32	52	140	12	20	104	322	100	28	464	12
Lane Group Flow (vph)	0	96	0	140	32	0	104	422	0	28	476	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		9.1		9.1	9.1		28.0	28.0		28.0	28.0	
Effective Green, g (s)		11.1		11.1	11.1		30.0	30.0		30.0	30.0	
Actuated g/C Ratio		0.23		0.23	0.23		0.61	0.61		0.61	0.61	
Clearance Time (s)		6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		376		349	382		546	2085		576	2154	
v/s Ratio Prot					0.02			0.12			c0.14	
v/s Ratio Perm		0.06		c0.09			0.12			0.03		
v/c Ratio		0.26		0.40	0.08		0.19	0.20		0.05	0.22	
Uniform Delay, d1		15.6		16.2	15.0		4.2	4.2		3.8	4.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.4		0.8	0.1		0.2	0.0		0.0	0.1	
Delay (s)		16.0		16.9	15.1		4.4	4.3		3.9	4.3	
Level of Service		B		B	B		A	A		A	A	
Approach Delay (s)		16.0			16.6			4.3			4.3	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.27		
Actuated Cycle Length (s)	49.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
c Critical Lane Group			

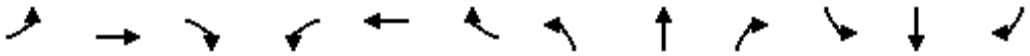
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.94			0.99		1.00	0.91		1.00	0.98	
Flt Protected		1.00			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1754			1794		1770	1692		1770	1817	
Flt Permitted		1.00			0.97		0.66	1.00		0.66	1.00	
Satd. Flow (perm)		1754			1794		1223	1692		1221	1817	
Volume (vph)	11	206	148	162	75	15	92	57	79	32	121	24
Peak-hour factor, PHF	0.92	0.87	0.81	0.85	0.75	0.92	0.89	0.92	0.81	0.92	0.92	0.92
Adj. Flow (vph)	12	237	183	191	100	16	103	62	98	35	132	26
Lane Group Flow (vph)	0	432	0	0	307	0	103	160	0	35	158	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4	4		8	8		2			6		
Actuated Green, G (s)		22.8			22.8		9.5	9.5		9.5	9.5	
Effective Green, g (s)		24.8			24.8		11.5	11.5		11.5	11.5	
Actuated g/C Ratio		0.56			0.56		0.26	0.26		0.26	0.26	
Clearance Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		982			1004		317	439		317	472	
v/s Ratio Prot		c0.25			0.17			c0.09			0.09	
v/s Ratio Perm							0.08			0.03		
v/c Ratio		0.44			0.31		0.32	0.36		0.11	0.33	
Uniform Delay, d1		5.7			5.2		13.3	13.4		12.5	13.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3			0.2		0.6	0.5		0.2	0.4	
Delay (s)		6.0			5.4		13.9	13.9		12.7	13.7	
Level of Service		A			A		B	B		B	B	
Approach Delay (s)		6.0			5.4			13.9			13.5	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM Average Control Delay	8.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	44.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	B
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (veh/h)	161	55	101	78	73	96
Peak Hour Factor	0.89	0.69	0.68	0.70	0.91	0.89
Hourly flow rate (veh/h)	181	80	149	111	80	108

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total (vph)	181	80	149	111	80	108
Volume Left (vph)	0	0	149	0	80	0
Volume Right (vph)	0	80	0	0	0	108
Hadj (s)	0.0	-0.6	0.2	0.0	0.2	-0.6
Departure Headway (s)	5.1	3.2	5.4	5.2	5.8	5.0
Degree Utilization, x	0.26	0.07	0.22	0.16	0.13	0.15
Capacity (veh/h)	674	1121	646	669	587	676
Control Delay (s)	9.9	6.4	8.7	8.0	8.5	7.7
Approach Delay (s)	8.8		8.4		8.0	
Approach LOS	A		A		A	

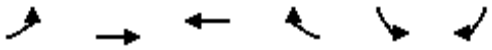
Intersection Summary			
Delay	8.5		
HCM Level of Service	A		
Intersection Capacity Utilization	32.2%	ICU Level of Service	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (veh/h)	0	30	286	0	13	0	106	4	0	0	3	0
Peak Hour Factor	0.25	0.25	0.89	0.25	0.25	0.25	0.79	0.50	0.25	0.25	0.38	0.25
Hourly flow rate (veh/h)	0	120	321	0	52	0	134	8	0	0	8	0

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	441	52	142	8
Volume Left (vph)	0	0	134	0
Volume Right (vph)	321	0	0	0
Hadj (s)	-0.4	0.0	0.2	0.0
Departure Headway (s)	3.9	4.7	5.1	5.1
Degree Utilization, x	0.48	0.07	0.20	0.01
Capacity (veh/h)	890	716	653	630
Control Delay (s)	10.6	8.1	9.4	8.2
Approach Delay (s)	10.6	8.1	9.4	8.2
Approach LOS	B	A	A	A

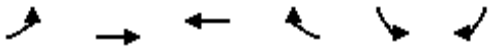
Intersection Summary			
Delay	10.1		
HCM Level of Service	B		
Intersection Capacity Utilization	47.3%	ICU Level of Service	A



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	8	249	168	53	72	11
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	9	271	183	58	78	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
vC, conflicting volume	240				499	211
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				85	99
cM capacity (veh/h)	1326				527	829

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	279	240	78	12
Volume Left	9	0	78	0
Volume Right	0	58	0	12
cSH	1326	1700	527	829
Volume to Capacity	0.01	0.14	0.15	0.01
Queue Length (ft)	0	0	13	1
Control Delay (s)	0.3	0.0	13.0	9.4
Lane LOS	A		B	A
Approach Delay (s)	0.3	0.0	12.5	
Approach LOS			B	

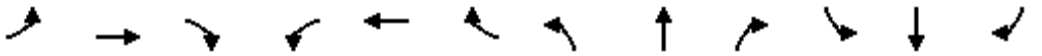
Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	27.7%	ICU Level of Service	A



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	33	285	120	7	30	133
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	36	310	130	8	33	145
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
vC, conflicting volume	138				516	134
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				94	84
cM capacity (veh/h)	1446				506	915

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	346	138	33	145
Volume Left	36	0	33	0
Volume Right	0	8	0	145
cSH	1446	1700	506	915
Volume to Capacity	0.02	0.08	0.06	0.16
Queue Length (ft)	2	0	5	14
Control Delay (s)	1.0	0.0	12.6	9.7
Lane LOS	A		B	A
Approach Delay (s)	1.0	0.0	10.2	
Approach LOS			B	

Intersection Summary			
Average Delay	3.3		
Intersection Capacity Utilization	38.9%	ICU Level of Service	A

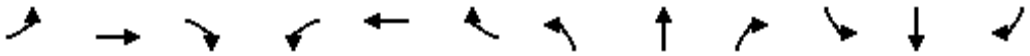


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91	1.00	1.00	1.00	1.00	0.97	1.00	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)	3433	3539	1583	3433	5085	1583	1770	1863	1583	3433	1863	1583
Flt Permitted	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 (perm)	3433	3539	1583	3433	5085	1583	1770	1863	1583	3433	1863	1583
Volume (vph)	197	1307	9	91	2303	485	29	18	164	760	14	84
Peak-hour factor, PHF	0.88	0.78	0.45	0.91	0.93	0.88	0.52	0.75	0.59	0.96	0.58	0.78
Adj. Flow (vph)	224	1676	20	100	2476	551	56	24	278	792	24	108
Lane Group Flow (vph)	224	1676	20	100	2476	551	56	24	278	792	24	108
Turn Type	Prot		Perm	Prot		Perm	Prot		Free	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			Free			6
Actuated Green, G (s)	6.0	75.5	75.5	4.0	73.5	73.5	22.1	8.5	140.0	28.0	14.4	14.4
Effective Green, g (s)	8.0	77.5	77.5	6.0	75.5	75.5	24.1	10.5	140.0	30.0	16.4	16.4
Actuated g/C Ratio	0.06	0.55	0.55	0.04	0.54	0.54	0.17	0.08	1.00	0.21	0.12	0.12
Clearance Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0		6.0	6.0	6.0
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
Lane Grp Cap (vph)	196	1959	876	147	2742	854	305	140	1583	736	218	185
v/s Ratio Prot	c0.07	0.47		0.03	c0.49		0.03	0.01		c0.23	0.01	
v/s Ratio Perm			0.01			0.35			c0.18			0.07
v/c Ratio	1.14	0.86	0.02	0.68	0.90	0.65	0.18	0.17	0.18	1.08	0.11	0.58
Uniform Delay, d1	66.0	26.5	14.1	66.1	29.0	22.8	49.5	60.7	0.0	55.0	55.3	58.6
Progression Factor	1.00	1.00	1.00	0.82	0.60	0.27	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	108.0	5.0	0.0	9.8	4.4	3.0	0.3	0.6	0.2	55.6	0.2	4.6
Delay (s)	174.0	31.6	14.2	64.0	21.7	9.1	49.8	61.3	0.2	110.6	55.5	63.2
Level of Service	F	C	B	E	C	A	D	E	A	F	E	E
Approach Delay (s)		48.0			20.9			12.1			103.6	
Approach LOS		D			C			B			F	

Intersection Summary			
HCM Average Control Delay	40.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	93.5%	ICU Level of Service	E
c Critical Lane Group			

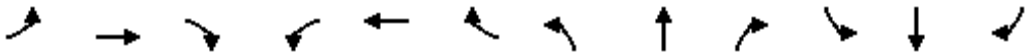
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.97		0.88
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1583	1770	3539					3433		2787
Flt Permitted		1.00	1.00	0.27	1.00					0.95		1.00
Satd. Flow (perm)		3539	1583	499	3539					3433		2787
Volume (vph)	0	752	1296	108	1614	0	0	0	0	507	0	1237
Peak-hour factor, PHF	0.25	0.86	0.73	0.91	0.87	0.25	0.25	0.25	0.25	0.92	0.25	0.95
Adj. Flow (vph)	0	874	1775	119	1855	0	0	0	0	551	0	1302
Lane Group Flow (vph)	0	874	1775	119	1855	0	0	0	0	551	0	1302
Turn Type			Free	pm+pt						custom		Free
Protected Phases		4		3	8							
Permitted Phases			Free	8						6		Free
Actuated Green, G (s)		89.5	140.0	101.1	101.1					26.9		140.0
Effective Green, g (s)		91.5	140.0	103.1	103.1					28.9		140.0
Actuated g/C Ratio		0.65	1.00	0.74	0.74					0.21		1.00
Clearance Time (s)		6.0		6.0	6.0					6.0		
Vehicle Extension (s)		3.0		3.0	3.0					3.0		
Lane Grp Cap (vph)		2313	1583	436	2606					709		2787
v/s Ratio Prot		0.25		0.01	0.52							
v/s Ratio Perm			c1.12	0.19						0.16		0.47
v/c Ratio		0.38	1.12	0.27	0.71					0.78		0.47
Uniform Delay, d1		11.2	70.0	6.4	10.2					52.5		0.0
Progression Factor		0.99	1.00	0.09	0.04					1.00		1.00
Incremental Delay, d2		0.2	59.5	0.2	0.8					5.4		0.6
Delay (s)		11.2	129.5	0.8	1.2					57.9		0.6
Level of Service		B	F	A	A					E		A
Approach Delay (s)		90.5			1.2			0.0			17.6	
Approach LOS		F			A			A			B	

Intersection Summary				
HCM Average Control Delay	42.4	HCM Level of Service	D	
HCM Volume to Capacity ratio	1.12			
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	0.0	
Intersection Capacity Utilization	73.7%	ICU Level of Service	C	
c Critical Lane Group				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0		4.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	0.97		1.00			
Frt	1.00	1.00			1.00	0.85	1.00		0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (prot)	1770	3539			3539	1583	3433		1583			
Flt Permitted	0.09	1.00			1.00	1.00	0.95		1.00			
Satd. Flow (perm)	174	3539			3539	1583	3433		1583			
Volume (vph)	375	815	0	0	690	206	1137	0	56	0	0	0
Peak-hour factor, PHF	0.86	0.86	0.25	0.25	0.81	0.80	0.93	0.25	0.64	0.25	0.25	0.25
Adj. Flow (vph)	436	948	0	0	852	258	1223	0	88	0	0	0
Lane Group Flow (vph)	436	948	0	0	852	258	1223	0	88	0	0	0
Turn Type	pm+pt					Perm	custom		custom			
Protected Phases	7	4			8							
Permitted Phases	4					8	2		2			
Actuated Green, G (s)	76.2	76.2			39.5	39.5	51.8		51.8			
Effective Green, g (s)	78.2	78.2			41.5	41.5	53.8		53.8			
Actuated g/C Ratio	0.56	0.56			0.30	0.30	0.38		0.38			
Clearance Time (s)	6.0	6.0			6.0	6.0	6.0		6.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0		3.0			
Lane Grp Cap (vph)	470	1977			1049	469	1319		608			
v/s Ratio Prot	c0.22	0.27			0.24							
v/s Ratio Perm	c0.30					0.16	c0.36		0.06			
v/c Ratio	0.93	0.48			0.81	0.55	0.93		0.14			
Uniform Delay, d1	41.5	18.6			45.6	41.4	41.2		28.1			
Progression Factor	0.84	0.68			1.00	1.00	1.00		1.00			
Incremental Delay, d2	22.6	0.7			6.9	4.6	11.3		0.1			
Delay (s)	57.5	13.4			52.5	46.0	52.5		28.2			
Level of Service	E	B			D	D	D		C			
Approach Delay (s)		27.3			51.0			50.9			0.0	
Approach LOS		C			D			D			A	

Intersection Summary			
HCM Average Control Delay	42.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	140.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.6%	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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		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	0.95		1.00	0.95	
Frt		0.95		1.00	0.95		1.00	0.98		1.00	0.99	
Flt Protected		0.99		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1751		1770	1772		1770	3460		1770	3515	
Flt Permitted		0.92		0.57	1.00		0.36	1.00		0.28	1.00	
Satd. Flow (perm)		1633		1067	1772		671	3460		515	3515	
Volume (vph)	33	81	80	346	66	34	186	624	99	37	543	13
Peak-hour factor, PHF	0.64	0.68	0.77	0.82	0.66	0.71	0.69	0.94	0.85	0.62	0.91	0.46
Adj. Flow (vph)	52	119	104	422	100	48	270	664	116	60	597	28
Lane Group Flow (vph)	0	275	0	422	148	0	270	780	0	60	625	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		23.0		23.0	23.0		23.6	23.6		23.6	23.6	
Effective Green, g (s)		25.0		25.0	25.0		25.6	25.6		25.6	25.6	
Actuated g/C Ratio		0.43		0.43	0.43		0.44	0.44		0.44	0.44	
Clearance Time (s)		6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		697		455	756		293	1512		225	1536	
v/s Ratio Prot					0.08			0.23			0.18	
v/s Ratio Perm		0.17		c0.40			c0.40			0.12		
v/c Ratio		0.39		0.93	0.20		0.92	0.52		0.27	0.41	
Uniform Delay, d1		11.6		15.9	10.5		15.6	12.0		10.5	11.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.4		25.0	0.1		32.7	0.3		0.6	0.2	
Delay (s)		12.0		40.9	10.6		48.2	12.3		11.2	11.5	
Level of Service		B		D	B		D	B		B	B	
Approach Delay (s)		12.0			33.1			21.5			11.4	
Approach LOS		B			C			C			B	

Intersection Summary			
HCM Average Control Delay	20.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	58.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	84.5%	ICU Level of Service	D
c Critical Lane Group			

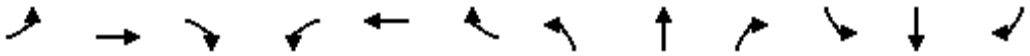
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.92			0.99		1.00	0.89		1.00	0.97	
Flt Protected		1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1718			1803		1770	1664		1770	1816	
Flt Permitted		0.97			0.58		0.68	1.00		0.31	1.00	
Satd. Flow (perm)		1669			1062		1260	1664		587	1816	
Volume (vph)	23	192	257	177	159	32	360	119	314	26	97	19
Peak-hour factor, PHF	0.92	0.93	0.88	0.85	0.74	0.92	0.92	0.92	0.98	0.92	0.92	0.92
Adj. Flow (vph)	25	206	292	208	215	35	391	129	320	28	105	21
Lane Group Flow (vph)	0	523	0	0	458	0	391	449	0	28	126	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		24.9			24.9		18.3	18.3		18.3	18.3	
Effective Green, g (s)		26.9			26.9		20.3	20.3		20.3	20.3	
Actuated g/C Ratio		0.49			0.49		0.37	0.37		0.37	0.37	
Clearance Time (s)		6.0			6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		813			518		463	612		216	668	
v/s Ratio Prot								0.27			0.07	
v/s Ratio Perm		0.31			c0.43		c0.31			0.05		
v/c Ratio		0.64			0.88		0.84	0.73		0.13	0.19	
Uniform Delay, d1		10.6			12.7		16.0	15.1		11.6	11.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.8			16.3		13.2	4.5		0.3	0.1	
Delay (s)		12.3			29.1		29.2	19.7		11.9	12.0	
Level of Service		B			C		C	B		B	B	
Approach Delay (s)		12.3			29.1			24.1			12.0	
Approach LOS		B			C			C			B	

Intersection Summary			
HCM Average Control Delay	21.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	55.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	98.3%	ICU Level of Service	E
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Volume (veh/h)	120	135	309	154	118	283
Peak Hour Factor	0.82	0.84	0.87	0.87	0.93	0.84
Hourly flow rate (veh/h)	146	161	355	177	127	337

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2
Volume Total (vph)	146	161	355	177	127	337
Volume Left (vph)	0	0	355	0	127	0
Volume Right (vph)	0	161	0	0	0	337
Hadj (s)	0.0	-0.6	0.2	0.0	0.2	-0.6
Departure Headway (s)	6.2	3.2	6.2	6.0	6.5	5.7
Degree Utilization, x	0.25	0.14	0.61	0.30	0.23	0.53
Capacity (veh/h)	551	1121	559	578	531	608
Control Delay (s)	11.3	6.7	17.3	10.3	10.2	13.9
Approach Delay (s)	8.9		15.0		12.9	
Approach LOS	A		C		B	

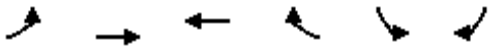
Intersection Summary			
Delay	12.8		
HCM Level of Service	B		
Intersection Capacity Utilization	44.4%	ICU Level of Service	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (veh/h)	2	24	346	1	30	0	374	3	0	0	13	2
Peak Hour Factor	0.50	0.25	0.83	0.25	0.25	0.25	0.90	0.38	0.25	0.25	0.54	0.50
Hourly flow rate (veh/h)	4	96	417	4	120	0	416	8	0	0	24	4

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	517	124	423	28
Volume Left (vph)	4	4	416	0
Volume Right (vph)	417	0	0	4
Hadj (s)	-0.4	0.0	0.2	-0.1
Departure Headway (s)	5.0	6.0	5.8	6.2
Degree Utilization, x	0.71	0.21	0.68	0.05
Capacity (veh/h)	517	546	598	498
Control Delay (s)	19.4	10.5	20.0	9.6
Approach Delay (s)	19.4	10.5	20.0	9.6
Approach LOS	C	B	C	A

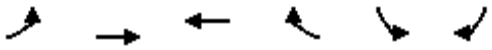
Intersection Summary				
Delay	18.4			
HCM Level of Service	C			
Intersection Capacity Utilization	69.7%	ICU Level of Service	B	



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	13	390	450	84	88	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	14	424	489	91	96	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
vC, conflicting volume	580				987	535
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				65	97
cM capacity (veh/h)	994				270	545

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	438	580	96	15
Volume Left	14	0	96	0
Volume Right	0	91	0	15
cSH	994	1700	270	545
Volume to Capacity	0.01	0.34	0.35	0.03
Queue Length (ft)	1	0	38	2
Control Delay (s)	0.4	0.0	25.4	11.8
Lane LOS	A		D	B
Approach Delay (s)	0.4	0.0	23.5	
Approach LOS			C	

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	43.3%	ICU Level of Service	A



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	121	410	302	27	15	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (veh/h)	132	446	328	29	16	71
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh)						
vC, conflicting volume	358				1052	343
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	89				93	90
cM capacity (veh/h)	1201				224	700

Direction, Lane #	EB 1	WB 1	SB 1	SB 2
Volume Total	577	358	16	71
Volume Left	132	0	16	0
Volume Right	0	29	0	71
cSH	1201	1700	224	700
Volume to Capacity	0.11	0.21	0.07	0.10
Queue Length (ft)	9	0	6	8
Control Delay (s)	2.9	0.0	22.4	10.7
Lane LOS	A		C	B
Approach Delay (s)	2.9	0.0	12.9	
Approach LOS			B	

Intersection Summary			
Average Delay	2.7		
Intersection Capacity Utilization	63.1%	ICU Level of Service	B

DP-4. **Profile of Selected Housing Characteristics: 2000**
Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data
Geographic Area: **30296 5-Digit ZCTA**

NOTE: Data based on a sample except in P3, P4, H3, and H4. For information on confidentiality protection, sampling error, nonsampling error, definitions, and count corrections see http://factfinder.census.gov/home/en/datanotes/expsf3.htm.

Subject	Number	Percent
Total housing units	**7,490**	**100.0**
UNITS IN STRUCTURE		
1-unit, detached	6,134	81.9
1-unit, attached	84	1.1
2 units	42	0.6
3 or 4 units	155	2.1
5 to 9 units	320	4.3
10 to 19 units	116	1.5
20 or more units	87	1.2
Mobile home	552	7.4
Boat, RV, van, etc.	0	0.0
YEAR STRUCTURE BUILT		
1999 to March 2000	151	2.0
1995 to 1998	793	10.6
1990 to 1994	612	8.2
1980 to 1989	2,084	27.8
1970 to 1979	2,853	38.1
1960 to 1969	813	10.9
1940 to 1959	140	1.9
1939 or earlier	44	0.6
ROOMS		
1 room	8	0.1
2 rooms	187	2.5
3 rooms	524	7.0
4 rooms	523	7.0
5 rooms	1,130	15.1
6 rooms	1,658	22.1
7 rooms	1,520	20.3
8 rooms	1,164	15.5
9 or more rooms	776	10.4
Median (rooms)	6.3	(X)
Occupied Housing Units	**7,250**	**100.0**
YEAR HOUSEHOLDER MOVED INTO UNIT		
1999 to March 2000	1,015	14.0
1995 to 1998	2,415	33.3
1990 to 1994	1,377	19.0
1980 to 1989	1,493	20.6
1970 to 1979	640	8.8
1969 or earlier	310	4.3
VEHICLES AVAILABLE		
None	163	2.2
1	2,272	31.3
2	2,880	39.7
3 or more	1,935	26.7

Subject	Number	Percent
HOUSE HEATING FUEL		
Utility gas	5,598	77.2
Bottled, tank, or LP gas	93	1.3
Electricity	1,510	20.8
Fuel oil, kerosene, etc.	18	0.2
Coal or coke	0	0.0
Wood	0	0.0
Solar energy	0	0.0
Other fuel	24	0.3
No fuel used	7	0.1
SELECTED CHARACTERISTICS		
Lacking complete plumbing facilities	25	0.3
Lacking complete kitchen facilities	27	0.4
No telephone service	66	0.9
OCCUPANTS PER ROOM		
Occupied housing units	**7,250**	**100.0**
1.00 or less	6,903	95.2
1.01 to 1.50	253	3.5
1.51 or more	94	1.3
Specified owner-occupied units	**5,332**	**100.0**
VALUE		
Less than $50,000	39	0.7
$50,000 to $99,999	2,264	42.5
$100,000 to $149,999	2,258	42.3
$150,000 to $199,999	579	10.9
$200,000 to $299,999	121	2.3
$300,000 to $499,999	38	0.7
$500,000 to $999,999	8	0.2
$1,000,000 or more	25	0.5
Median (dollars)	106,800	(X)
MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS		
With a mortgage	4,643	87.1
Less than $300	20	0.4
$300 to $499	71	1.3
$500 to $699	346	6.5
$700 to $999	1,840	34.5
$1,000 to $1,499	1,792	33.6
$1,500 to $1,999	448	8.4
$2,000 or more	126	2.4
Median (dollars)	1,009	(X)
Not mortgaged	689	12.9
Median (dollars)	262	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	1,784	33.5
15 to 19 percent	948	17.8
20 to 24 percent	688	12.9
25 to 29 percent	612	11.5
30 to 34 percent	316	5.9
35 percent or more	930	17.4
Not computed	54	1.0
Specified renter-occupied units	**1,247**	**100.0**
GROSS RENT		
Less than $200	0	0.0
$200 to $299	17	1.4
$300 to $499	132	10.6
$500 to $749	528	42.3

Subject	Number	Percent
$750 to $999	380	30.5
$1,000 to $1,499	103	8.3
$1,500 or more	11	0.9
No cash rent	76	6.1
Median (dollars)	721	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	267	21.4
15 to 19 percent	187	15.0
20 to 24 percent	187	15.0
25 to 29 percent	174	14.0
30 to 34 percent	78	6.3
35 percent or more	278	22.3
Not computed	76	6.1

(X) Not applicable.
Source: U.S. Census Bureau, Census 2000 Summary File 3, Matrices H1, H7, H20, H23, H24, H30, H34, H38, H40, H43, H44, H48, H51, H62, H63, H69, H74, H76, H90, H91, and H94

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DP-4. **Profile of Selected Housing Characteristics: 2000**
Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data
Geographic Area: **30311 5-Digit ZCTA**

NOTE: Data based on a sample except in P3, P4, H3, and H4. For information on confidentiality protection, sampling error, nonsampling error, definitions, and count corrections see http://factfinder.census.gov/home/en/datanotes/expsf3.htm.

Subject	Number	Percent
Total housing units	**15,115**	**100.0**
UNITS IN STRUCTURE		
1-unit, detached	7,140	47.2
1-unit, attached	350	2.3
2 units	251	1.7
3 or 4 units	1,523	10.1
5 to 9 units	2,115	14.0
10 to 19 units	1,577	10.4
20 or more units	2,082	13.8
Mobile home	77	0.5
Boat, RV, van, etc.	0	0.0
YEAR STRUCTURE BUILT		
1999 to March 2000	64	0.4
1995 to 1998	265	1.8
1990 to 1994	492	3.3
1980 to 1989	847	5.6
1970 to 1979	3,513	23.2
1960 to 1969	4,601	30.4
1940 to 1959	4,629	30.6
1939 or earlier	704	4.7
ROOMS		
1 room	283	1.9
2 rooms	1,045	6.9
3 rooms	2,245	14.9
4 rooms	3,175	21.0
5 rooms	2,535	16.8
6 rooms	2,135	14.1
7 rooms	1,651	10.9
8 rooms	1,103	7.3
9 or more rooms	943	6.2
Median (rooms)	4.8	(X)
Occupied Housing Units	**13,772**	**100.0**
YEAR HOUSEHOLDER MOVED INTO UNIT		
1999 to March 2000	2,662	19.3
1995 to 1998	3,767	27.4
1990 to 1994	1,672	12.1
1980 to 1989	1,737	12.6
1970 to 1979	2,350	17.1
1969 or earlier	1,584	11.5
VEHICLES AVAILABLE		
None	3,587	26.0
1	5,470	39.7
2	3,334	24.2
3 or more	1,381	10.0

Subject	Number	Percent
HOUSE HEATING FUEL		
Utility gas	8,706	63.2
Bottled, tank, or LP gas	225	1.6
Electricity	4,736	34.4
Fuel oil, kerosene, etc.	37	0.3
Coal or coke	0	0.0
Wood	18	0.1
Solar energy	5	0.0
Other fuel	0	0.0
No fuel used	45	0.3
SELECTED CHARACTERISTICS		
Lacking complete plumbing facilities	130	0.9
Lacking complete kitchen facilities	64	0.5
No telephone service	320	2.3
OCCUPANTS PER ROOM		
Occupied housing units	**13,772**	**100.0**
1.00 or less	12,587	91.4
1.01 to 1.50	730	5.3
1.51 or more	455	3.3
Specified owner-occupied units	**5,899**	**100.0**
VALUE		
Less than $50,000	342	5.8
$50,000 to $99,999	3,030	51.4
$100,000 to $149,999	1,378	23.4
$150,000 to $199,999	722	12.2
$200,000 to $299,999	301	5.1
$300,000 to $499,999	111	1.9
$500,000 to $999,999	0	0.0
$1,000,000 or more	15	0.3
Median (dollars)	94,400	(X)
MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS		
With a mortgage	4,244	71.9
Less than $300	32	0.5
$300 to $499	326	5.5
$500 to $699	538	9.1
$700 to $999	1,263	21.4
$1,000 to $1,499	1,399	23.7
$1,500 to $1,999	469	8.0
$2,000 or more	217	3.7
Median (dollars)	992	(X)
Not mortgaged	1,655	28.1
Median (dollars)	330	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	2,073	35.1
15 to 19 percent	780	13.2
20 to 24 percent	729	12.4
25 to 29 percent	524	8.9
30 to 34 percent	354	6.0
35 percent or more	1,376	23.3
Not computed	63	1.1
Specified renter-occupied units	**7,342**	**100.0**
GROSS RENT		
Less than $200	772	10.5
$200 to $299	324	4.4
$300 to $499	1,722	23.5
$500 to $749	3,344	45.5

Subject	Number	Percent
$750 to $999	706	9.6
$1,000 to $1,499	211	2.9
$1,500 or more	29	0.4
No cash rent	234	3.2
Median (dollars)	540	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	1,251	17.0
15 to 19 percent	783	10.7
20 to 24 percent	593	8.1
25 to 29 percent	788	10.7
30 to 34 percent	457	6.2
35 percent or more	2,946	40.1
Not computed	524	7.1

(X) Not applicable.
Source: U.S. Census Bureau, Census 2000 Summary File 3, Matrices H1, H7, H20, H23, H24, H30, H34, H38, H40, H43, H44, H48, H51, H62, H63, H69, H74, H76, H90, H91, and H94

DP-4. **Profile of Selected Housing Characteristics: 2000**
Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data
Geographic Area: **30331 5-Digit ZCTA**

NOTE: Data based on a sample except in P3, P4, H3, and H4. For information on confidentiality protection, sampling error, nonsampling error, definitions, and count corrections see http://factfinder.census.gov/home/en/datanotes/expsf3.htm.

Subject	Number	Percent
Total housing units	**17,144**	**100.0**
UNITS IN STRUCTURE		
1-unit, detached	10,305	60.1
1-unit, attached	274	1.6
2 units	219	1.3
3 or 4 units	1,143	6.7
5 to 9 units	2,177	12.7
10 to 19 units	1,385	8.1
20 or more units	1,586	9.3
Mobile home	36	0.2
Boat, RV, van, etc.	19	0.1
YEAR STRUCTURE BUILT		
1999 to March 2000	174	1.0
1995 to 1998	1,025	6.0
1990 to 1994	1,612	9.4
1980 to 1989	1,993	11.6
1970 to 1979	4,294	25.0
1960 to 1969	5,345	31.2
1940 to 1959	2,259	13.2
1939 or earlier	442	2.6
ROOMS		
1 room	274	1.6
2 rooms	1,009	5.9
3 rooms	1,663	9.7
4 rooms	2,503	14.6
5 rooms	3,452	20.1
6 rooms	2,781	16.2
7 rooms	2,094	12.2
8 rooms	1,520	8.9
9 or more rooms	1,848	10.8
Median (rooms)	5.4	(X)
Occupied Housing Units	**16,221**	**100.0**
YEAR HOUSEHOLDER MOVED INTO UNIT		
1999 to March 2000	2,891	17.8
1995 to 1998	4,558	28.1
1990 to 1994	2,511	15.5
1980 to 1989	2,247	13.9
1970 to 1979	2,378	14.7
1969 or earlier	1,636	10.1
VEHICLES AVAILABLE		
None	3,059	18.9
1	5,857	36.1
2	4,716	29.1
3 or more	2,589	16.0

Subject	Number	Percent
HOUSE HEATING FUEL		
Utility gas	11,197	69.0
Bottled, tank, or LP gas	254	1.6
Electricity	4,636	28.6
Fuel oil, kerosene, etc.	73	0.5
Coal or coke	0	0.0
Wood	20	0.1
Solar energy	16	0.1
Other fuel	0	0.0
No fuel used	25	0.2
SELECTED CHARACTERISTICS		
Lacking complete plumbing facilities	139	0.9
Lacking complete kitchen facilities	76	0.5
No telephone service	302	1.9
OCCUPANTS PER ROOM		
Occupied housing units	**16,221**	**100.0**
1.00 or less	14,954	92.2
1.01 to 1.50	815	5.0
1.51 or more	452	2.8
Specified owner-occupied units	**8,452**	**100.0**
VALUE		
Less than $50,000	330	3.9
$50,000 to $99,999	3,997	47.3
$100,000 to $149,999	1,998	23.6
$150,000 to $199,999	1,058	12.5
$200,000 to $299,999	590	7.0
$300,000 to $499,999	390	4.6
$500,000 to $999,999	47	0.6
$1,000,000 or more	42	0.5
Median (dollars)	98,800	(X)
MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS		
With a mortgage	6,843	81.0
Less than $300	62	0.7
$300 to $499	232	2.7
$500 to $699	776	9.2
$700 to $999	1,857	22.0
$1,000 to $1,499	2,250	26.6
$1,500 to $1,999	896	10.6
$2,000 or more	770	9.1
Median (dollars)	1,093	(X)
Not mortgaged	1,609	19.0
Median (dollars)	319	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	2,666	31.5
15 to 19 percent	1,303	15.4
20 to 24 percent	1,097	13.0
25 to 29 percent	859	10.2
30 to 34 percent	501	5.9
35 percent or more	1,932	22.9
Not computed	94	1.1
Specified renter-occupied units	**7,267**	**100.0**
GROSS RENT		
Less than $200	718	9.9
$200 to $299	387	5.3
$300 to $499	1,389	19.1
$500 to $749	3,525	48.5

Subject	Number	Percent
$750 to $999	841	11.6
$1,000 to $1,499	146	2.0
$1,500 or more	70	1.0
No cash rent	191	2.6
Median (dollars)	558	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	1,166	16.0
15 to 19 percent	1,046	14.4
20 to 24 percent	880	12.1
25 to 29 percent	818	11.3
30 to 34 percent	646	8.9
35 percent or more	2,264	31.2
Not computed	447	6.2

(X) Not applicable.
Source: U.S. Census Bureau, Census 2000 Summary File 3, Matrices H1, H7, H20, H23, H24, H30, H34, H38, H40, H43, H44, H48, H51, H62, H63, H69, H74, H76, H90, H91, and H94

DP-4. **Profile of Selected Housing Characteristics: 2000**
Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data
Geographic Area: **30337 5-Digit ZCTA**

NOTE: Data based on a sample except in P3, P4, H3, and H4. For information on confidentiality protection, sampling error, nonsampling error, definitions, and count corrections see http://factfinder.census.gov/home/en/datanotes/expsf3.htm.

Subject	Number	Percent
Total housing units	**6,751**	**100.0**
UNITS IN STRUCTURE		
1-unit, detached	2,073	30.7
1-unit, attached	86	1.3
2 units	362	5.4
3 or 4 units	937	13.9
5 to 9 units	1,208	17.9
10 to 19 units	1,077	16.0
20 or more units	992	14.7
Mobile home	16	0.2
Boat, RV, van, etc.	0	0.0
YEAR STRUCTURE BUILT		
1999 to March 2000	5	0.1
1995 to 1998	91	1.3
1990 to 1994	168	2.5
1980 to 1989	830	12.3
1970 to 1979	2,065	30.6
1960 to 1969	1,710	25.3
1940 to 1959	1,379	20.4
1939 or earlier	503	7.5
ROOMS		
1 room	238	3.5
2 rooms	540	8.0
3 rooms	943	14.0
4 rooms	1,644	24.4
5 rooms	1,534	22.7
6 rooms	829	12.3
7 rooms	488	7.2
8 rooms	301	4.5
9 or more rooms	234	3.5
Median (rooms)	4.5	(X)
Occupied Housing Units	**6,369**	**100.0**
YEAR HOUSEHOLDER MOVED INTO UNIT		
1999 to March 2000	2,159	33.9
1995 to 1998	2,309	36.3
1990 to 1994	647	10.2
1980 to 1989	553	8.7
1970 to 1979	461	7.2
1969 or earlier	240	3.8
VEHICLES AVAILABLE		
None	1,356	21.3
1	3,006	47.2
2	1,457	22.9
3 or more	550	8.6

Subject	Number	Percent
HOUSE HEATING FUEL		
Utility gas	3,553	55.8
Bottled, tank, or LP gas	35	0.5
Electricity	2,765	43.4
Fuel oil, kerosene, etc.	5	0.1
Coal or coke	0	0.0
Wood	11	0.2
Solar energy	0	0.0
Other fuel	0	0.0
No fuel used	0	0.0
SELECTED CHARACTERISTICS		
Lacking complete plumbing facilities	35	0.5
Lacking complete kitchen facilities	25	0.4
No telephone service	177	2.8
OCCUPANTS PER ROOM		
Occupied housing units	**6,369**	**100.0**
1.00 or less	5,736	90.1
1.01 to 1.50	370	5.8
1.51 or more	263	4.1
Specified owner-occupied units	**1,431**	**100.0**
VALUE		
Less than $50,000	89	6.2
$50,000 to $99,999	657	45.9
$100,000 to $149,999	445	31.1
$150,000 to $199,999	159	11.1
$200,000 to $299,999	64	4.5
$300,000 to $499,999	17	1.2
$500,000 to $999,999	0	0.0
$1,000,000 or more	0	0.0
Median (dollars)	97,700	(X)
MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS		
With a mortgage	1,073	75.0
Less than $300	31	2.2
$300 to $499	53	3.7
$500 to $699	145	10.1
$700 to $999	377	26.3
$1,000 to $1,499	359	25.1
$1,500 to $1,999	93	6.5
$2,000 or more	15	1.0
Median (dollars)	951	(X)
Not mortgaged	358	25.0
Median (dollars)	286	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	583	40.7
15 to 19 percent	165	11.5
20 to 24 percent	198	13.8
25 to 29 percent	86	6.0
30 to 34 percent	139	9.7
35 percent or more	191	13.3
Not computed	69	4.8
Specified renter-occupied units	**4,825**	**100.0**
GROSS RENT		
Less than $200	162	3.4
$200 to $299	124	2.6
$300 to $499	839	17.4
$500 to $749	2,625	54.4

Subject	Number	Percent
$750 to $999	815	16.9
$1,000 to $1,499	217	4.5
$1,500 or more	0	0.0
No cash rent	43	0.9
Median (dollars)	619	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	728	15.1
15 to 19 percent	694	14.4
20 to 24 percent	533	11.0
25 to 29 percent	527	10.9
30 to 34 percent	505	10.5
35 percent or more	1,594	33.0
Not computed	244	5.1

(X) Not applicable.
Source: U.S. Census Bureau, Census 2000 Summary File 3, Matrices H1, H7, H20, H23, H24, H30, H34, H38, H40, H43, H44, H48, H51, H62, H63, H69, H74, H76, H90, H91, and H94

DP-4. **Profile of Selected Housing Characteristics: 2000**
Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data
Geographic Area: **30344 5-Digit ZCTA**

NOTE: Data based on a sample except in P3, P4, H3, and H4. For information on confidentiality protection, sampling error, nonsampling error, definitions, and count corrections see http://factfinder.census.gov/home/en/datanotes/expsf3.htm.

Subject	Number	Percent
Total housing units	**14,174**	**100.0**
UNITS IN STRUCTURE		
1-unit, detached	7,980	56.3
1-unit, attached	366	2.6
2 units	969	6.8
3 or 4 units	1,208	8.5
5 to 9 units	1,728	12.2
10 to 19 units	969	6.8
20 or more units	847	6.0
Mobile home	107	0.8
Boat, RV, van, etc.	0	0.0
YEAR STRUCTURE BUILT		
1999 to March 2000	121	0.9
1995 to 1998	162	1.1
1990 to 1994	273	1.9
1980 to 1989	903	6.4
1970 to 1979	2,633	18.6
1960 to 1969	4,227	29.8
1940 to 1959	4,799	33.9
1939 or earlier	1,056	7.5
ROOMS		
1 room	224	1.6
2 rooms	976	6.9
3 rooms	1,660	11.7
4 rooms	2,751	19.4
5 rooms	2,928	20.7
6 rooms	2,700	19.0
7 rooms	1,504	10.6
8 rooms	772	5.4
9 or more rooms	659	4.6
Median (rooms)	5.0	(X)
Occupied Housing Units	**13,211**	**100.0**
YEAR HOUSEHOLDER MOVED INTO UNIT		
1999 to March 2000	3,241	24.5
1995 to 1998	4,052	30.7
1990 to 1994	1,962	14.9
1980 to 1989	1,691	12.8
1970 to 1979	1,251	9.5
1969 or earlier	1,014	7.7
VEHICLES AVAILABLE		
None	2,653	20.1
1	5,782	43.8
2	3,396	25.7
3 or more	1,380	10.4

Subject	Number	Percent
HOUSE HEATING FUEL		
Utility gas	9,933	75.2
Bottled, tank, or LP gas	262	2.0
Electricity	2,933	22.2
Fuel oil, kerosene, etc.	39	0.3
Coal or coke	0	0.0
Wood	0	0.0
Solar energy	0	0.0
Other fuel	19	0.1
No fuel used	25	0.2
SELECTED CHARACTERISTICS		
Lacking complete plumbing facilities	71	0.5
Lacking complete kitchen facilities	51	0.4
No telephone service	311	2.4
OCCUPANTS PER ROOM		
Occupied housing units	**13,211**	**100.0**
1.00 or less	11,599	87.8
1.01 to 1.50	970	7.3
1.51 or more	642	4.9
Specified owner-occupied units	**5,939**	**100.0**
VALUE		
Less than $50,000	407	6.9
$50,000 to $99,999	3,742	63.0
$100,000 to $149,999	1,341	22.6
$150,000 to $199,999	355	6.0
$200,000 to $299,999	66	1.1
$300,000 to $499,999	8	0.1
$500,000 to $999,999	13	0.2
$1,000,000 or more	7	0.1
Median (dollars)	86,200	(X)
MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS		
With a mortgage	4,529	76.3
Less than $300	42	0.7
$300 to $499	133	2.2
$500 to $699	686	11.6
$700 to $999	1,878	31.6
$1,000 to $1,499	1,568	26.4
$1,500 to $1,999	168	2.8
$2,000 or more	54	0.9
Median (dollars)	916	(X)
Not mortgaged	1,410	23.7
Median (dollars)	275	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	1,896	31.9
15 to 19 percent	784	13.2
20 to 24 percent	881	14.8
25 to 29 percent	686	11.6
30 to 34 percent	376	6.3
35 percent or more	1,279	21.5
Not computed	37	0.6
Specified renter-occupied units	**6,840**	**100.0**
GROSS RENT		
Less than $200	377	5.5
$200 to $299	273	4.0
$300 to $499	1,211	17.7
$500 to $749	3,380	49.4

Subject	Number	Percent
$750 to $999	1,193	17.4
$1,000 to $1,499	260	3.8
$1,500 or more	42	0.6
No cash rent	104	1.5
Median (dollars)	604	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	1,032	15.1
15 to 19 percent	959	14.0
20 to 24 percent	776	11.3
25 to 29 percent	836	12.2
30 to 34 percent	653	9.5
35 percent or more	2,285	33.4
Not computed	299	4.4

(X) Not applicable.
Source: U.S. Census Bureau, Census 2000 Summary File 3, Matrices H1, H7, H20, H23, H24, H30, H34, H38, H40, H43, H44, H48, H51, H62, H63, H69, H74, H76, H90, H91, and H94

DP-4. **Profile of Selected Housing Characteristics: 2000**
Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data
Geographic Area: **30349 5-Digit ZCTA**

NOTE: Data based on a sample except in P3, P4, H3, and H4. For information on confidentiality protection, sampling error, nonsampling error, definitions, and count corrections see http://factfinder.census.gov/home/en/datanotes/expsf3.htm.

Subject	Number	Percent
Total housing units	**22,213**	**100.0**
UNITS IN STRUCTURE		
1-unit, detached	10,063	45.3
1-unit, attached	973	4.4
2 units	422	1.9
3 or 4 units	1,575	7.1
5 to 9 units	3,803	17.1
10 to 19 units	2,960	13.3
20 or more units	2,215	10.0
Mobile home	191	0.9
Boat, RV, van, etc.	11	0.0
YEAR STRUCTURE BUILT		
1999 to March 2000	625	2.8
1995 to 1998	959	4.3
1990 to 1994	2,101	9.5
1980 to 1989	5,845	26.3
1970 to 1979	7,291	32.8
1960 to 1969	4,129	18.6
1940 to 1959	1,126	5.1
1939 or earlier	137	0.6
ROOMS		
1 room	453	2.0
2 rooms	1,753	7.9
3 rooms	2,764	12.4
4 rooms	3,554	16.0
5 rooms	4,591	20.7
6 rooms	3,322	15.0
7 rooms	2,562	11.5
8 rooms	1,832	8.2
9 or more rooms	1,382	6.2
Median (rooms)	5.1	(X)
Occupied Housing Units	**21,017**	**100.0**
YEAR HOUSEHOLDER MOVED INTO UNIT		
1999 to March 2000	6,311	30.0
1995 to 1998	6,683	31.8
1990 to 1994	3,061	14.6
1980 to 1989	2,872	13.7
1970 to 1979	1,487	7.1
1969 or earlier	603	2.9
VEHICLES AVAILABLE		
None	1,987	9.5
1	9,371	44.6
2	6,389	30.4
3 or more	3,270	15.6

Subject	Number	Percent
HOUSE HEATING FUEL		
Utility gas	11,801	56.1
Bottled, tank, or LP gas	348	1.7
Electricity	8,762	41.7
Fuel oil, kerosene, etc.	17	0.1
Coal or coke	0	0.0
Wood	48	0.2
Solar energy	0	0.0
Other fuel	0	0.0
No fuel used	41	0.2
SELECTED CHARACTERISTICS		
Lacking complete plumbing facilities	99	0.5
Lacking complete kitchen facilities	62	0.3
No telephone service	322	1.5
OCCUPANTS PER ROOM		
Occupied housing units	**21,017**	**100.0**
1.00 or less	19,456	92.6
1.01 to 1.50	912	4.3
1.51 or more	649	3.1
Specified owner-occupied units	**8,608**	**100.0**
VALUE		
Less than $50,000	205	2.4
$50,000 to $99,999	4,761	55.3
$100,000 to $149,999	2,977	34.6
$150,000 to $199,999	431	5.0
$200,000 to $299,999	177	2.1
$300,000 to $499,999	40	0.5
$500,000 to $999,999	17	0.2
$1,000,000 or more	0	0.0
Median (dollars)	96,100	(X)
MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS		
With a mortgage	7,491	87.0
Less than $300	17	0.2
$300 to $499	180	2.1
$500 to $699	722	8.4
$700 to $999	2,898	33.7
$1,000 to $1,499	3,066	35.6
$1,500 to $1,999	464	5.4
$2,000 or more	144	1.7
Median (dollars)	993	(X)
Not mortgaged	1,117	13.0
Median (dollars)	261	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	2,428	28.2
15 to 19 percent	1,484	17.2
20 to 24 percent	1,333	15.5
25 to 29 percent	947	11.0
30 to 34 percent	527	6.1
35 percent or more	1,809	21.0
Not computed	80	0.9
Specified renter-occupied units	**11,547**	**100.0**
GROSS RENT		
Less than $200	223	1.9
$200 to $299	107	0.9
$300 to $499	627	5.4
$500 to $749	6,616	57.3

Subject	Number	Percent
$750 to $999	3,382	29.3
$1,000 to $1,499	367	3.2
$1,500 or more	53	0.5
No cash rent	172	1.5
Median (dollars)	690	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	1,679	14.5
15 to 19 percent	1,794	15.5
20 to 24 percent	1,929	16.7
25 to 29 percent	1,480	12.8
30 to 34 percent	1,082	9.4
35 percent or more	3,206	27.8
Not computed	377	3.3

(X) Not applicable.
Source: U.S. Census Bureau, Census 2000 Summary File 3, Matrices H1, H7, H20, H23, H24, H30, H34, H38, H40, H43, H44, H48, H51, H62, H63, H69, H74, H76, H90, H91, and H94

U.S. Census Bureau
American FactFinder

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DP-4. **Profile of Selected Housing Characteristics: 2000**
Data Set: Census 2000 Summary File 3 (SF 3) - Sample Data
Geographic Area: **30354 5-Digit ZCTA**

NOTE: Data based on a sample except in P3, P4, H3, and H4. For information on confidentiality protection, sampling error, nonsampling error, definitions, and count corrections see http://factfinder.census.gov/home/en/datanotes/expsf3.htm.

Subject	Number	Percent
Total housing units	**6,593**	**100.0**
UNITS IN STRUCTURE		
1-unit, detached	3,346	50.8
1-unit, attached	287	4.4
2 units	282	4.3
3 or 4 units	377	5.7
5 to 9 units	1,128	17.1
10 to 19 units	634	9.6
20 or more units	496	7.5
Mobile home	35	0.5
Boat, RV, van, etc.	8	0.1
YEAR STRUCTURE BUILT		
1999 to March 2000	111	1.7
1995 to 1998	259	3.9
1990 to 1994	152	2.3
1980 to 1989	539	8.2
1970 to 1979	1,442	21.9
1960 to 1969	1,782	27.0
1940 to 1959	1,979	30.0
1939 or earlier	329	5.0
ROOMS		
1 room	57	0.9
2 rooms	380	5.8
3 rooms	724	11.0
4 rooms	1,652	25.1
5 rooms	1,779	27.0
6 rooms	1,086	16.5
7 rooms	504	7.6
8 rooms	218	3.3
9 or more rooms	193	2.9
Median (rooms)	4.8	(X)
Occupied Housing Units	**6,163**	**100.0**
YEAR HOUSEHOLDER MOVED INTO UNIT		
1999 to March 2000	1,530	24.8
1995 to 1998	2,134	34.6
1990 to 1994	745	12.1
1980 to 1989	679	11.0
1970 to 1979	657	10.7
1969 or earlier	418	6.8
VEHICLES AVAILABLE		
None	1,394	22.6
1	2,767	44.9
2	1,419	23.0
3 or more	583	9.5

Subject	Number	Percent
HOUSE HEATING FUEL		
Utility gas	3,938	63.9
Bottled, tank, or LP gas	95	1.5
Electricity	2,097	34.0
Fuel oil, kerosene, etc.	8	0.1
Coal or coke	0	0.0
Wood	18	0.3
Solar energy	0	0.0
Other fuel	0	0.0
No fuel used	7	0.1
SELECTED CHARACTERISTICS		
Lacking complete plumbing facilities	48	0.8
Lacking complete kitchen facilities	28	0.5
No telephone service	207	3.4
OCCUPANTS PER ROOM		
Occupied housing units	**6,163**	**100.0**
1.00 or less	5,427	88.1
1.01 to 1.50	421	6.8
1.51 or more	315	5.1
Specified owner-occupied units	**2,228**	**100.0**
VALUE		
Less than $50,000	202	9.1
$50,000 to $99,999	1,702	76.4
$100,000 to $149,999	255	11.4
$150,000 to $199,999	62	2.8
$200,000 to $299,999	7	0.3
$300,000 to $499,999	0	0.0
$500,000 to $999,999	0	0.0
$1,000,000 or more	0	0.0
Median (dollars)	71,600	(X)
MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS		
With a mortgage	1,662	74.6
Less than $300	26	1.2
$300 to $499	150	6.7
$500 to $699	381	17.1
$700 to $999	649	29.1
$1,000 to $1,499	395	17.7
$1,500 to $1,999	61	2.7
$2,000 or more	0	0.0
Median (dollars)	792	(X)
Not mortgaged	566	25.4
Median (dollars)	240	(X)
SELECTED MONTHLY OWNER COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	673	30.2
15 to 19 percent	402	18.0
20 to 24 percent	233	10.5
25 to 29 percent	260	11.7
30 to 34 percent	198	8.9
35 percent or more	426	19.1
Not computed	36	1.6
Specified renter-occupied units	**3,683**	**100.0**
GROSS RENT		
Less than $200	304	8.3
$200 to $299	232	6.3
$300 to $499	641	17.4
$500 to $749	1,802	48.9

Subject	Number	Percent
$750 to $999	507	13.8
$1,000 to $1,499	79	2.1
$1,500 or more	25	0.7
No cash rent	93	2.5
Median (dollars)	582	(X)
GROSS RENT AS A PERCENTAGE OF HOUSEHOLD INCOME IN 1999		
Less than 15 percent	695	18.9
15 to 19 percent	420	11.4
20 to 24 percent	454	12.3
25 to 29 percent	228	6.2
30 to 34 percent	441	12.0
35 percent or more	1,232	33.5
Not computed	213	5.8

(X) Not applicable.
Source: U.S. Census Bureau, Census 2000 Summary File 3, Matrices H1, H7, H20, H23, H24, H30, H34, H38, H40, H43, H44, H48, H51, H62, H63, H69, H74, H76, H90, H91, and H94

GEORGIA
Employment & Wages
2006 Averages

Georgia Department of Labor
Michael L. Thurmond, Commissioner

Fulton County

Yearly Average, 2006

	Average Number of Establishments	Average Monthly Employment	Average Weekly Wages
Goods Producing	**2,894**	**61,019**	**$ 1,192**
Agriculture, forestry, & fishing	31	171	1,441
Mining	8	180	1,484
Construction	1,932	24,323	1,077
Manufacturing	923	36,345	1,266
Food manufacturing	92	10,441	1,597
Beverage & tobacco mfg	12	837	914
Textile mills	11	704	1,738
Textile product mills	34	723	643
Apparel manufacturing	21	628	1,741
Leather & allied product mfg	*	*	*
Wood product manufacturing	25	826	938
Paper manufacturing	33	1,403	1,020
Printing and related activities	181	3,908	913
Petroleum and coal products mfg	*	*	*
Chemical manufacturing	73	2,379	1,066
Plastics & rubber products mfg	35	2,307	849
Nonmetallic mineral product mfg	58	2,455	1,066
Primary metal manufacturing	5	60	626
Fabricated metal product mfg	78	1,760	766
Machinery manufacturing	32	396	1,036
Computer & electronic product mfg	44	1,588	1,273
Electrical equipment/appliance	22	889	2,126
Transportation equipment	35	2,495	2,097
Furniture and related product mfg	42	1,327	753
Miscellaneous mfg industries	86	1,003	763
Service Producing	**34,961**	**611,395**	**1,087**
Wholesale trade	3,204	45,777	1,461
Retail trade	3,801	62,382	551
Transportation and Warehousing	772	41,979	891
Utilities	47	3,145	1,695
Information	1,060	50,038	1,635
Finance and insurance	3,004	53,093	1,823
Real estate and rental and leasing	2,400	21,892	1,150
Professional, scientific/tech svcs	7,373	74,346	1,595
Management: companies/enterprises	305	16,311	1,914
Administrative and Waste svcs	2,595	67,418	715
Educational services	482	12,618	772
Health care and social services	3,050	60,496	942
Arts, entertainment and recreation	511	10,984	835
Accommodation and food services	2,685	69,605	417
Other services (except government)	3,675	21,312	640
Unclassified - industry not assigned	1,013	980	1,319
Total - Private Sector	38,868	673,393	1,097
Total - Government	507	101,108	924
Federal government	171	21,632	1,281
State government	81	29,013	869
Local government	255	50,464	803
All Industries	**39,375**	**774,501**	**1,074**

Note: * Industry group does not meet criteria for disclosure

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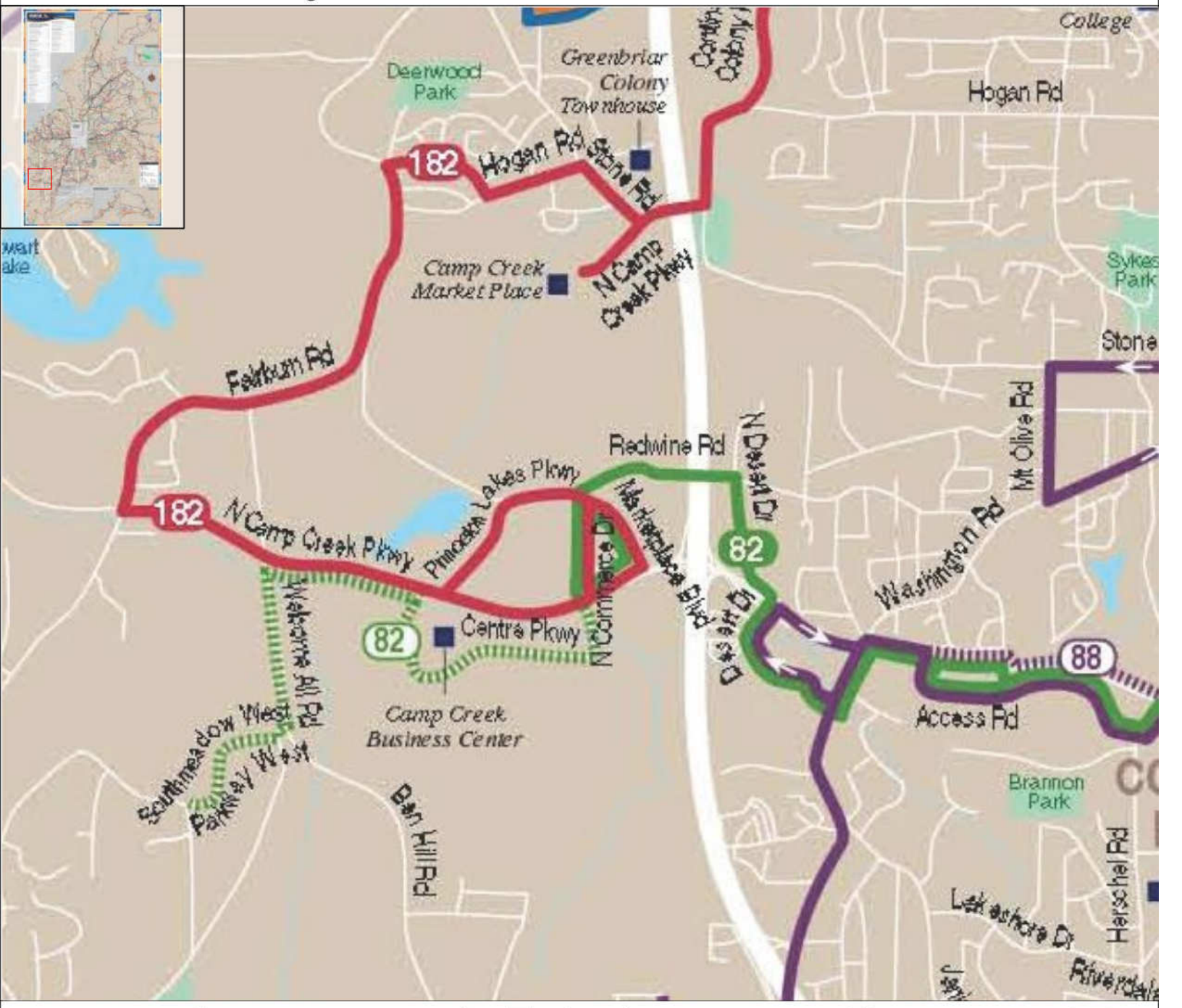
Map Viewer



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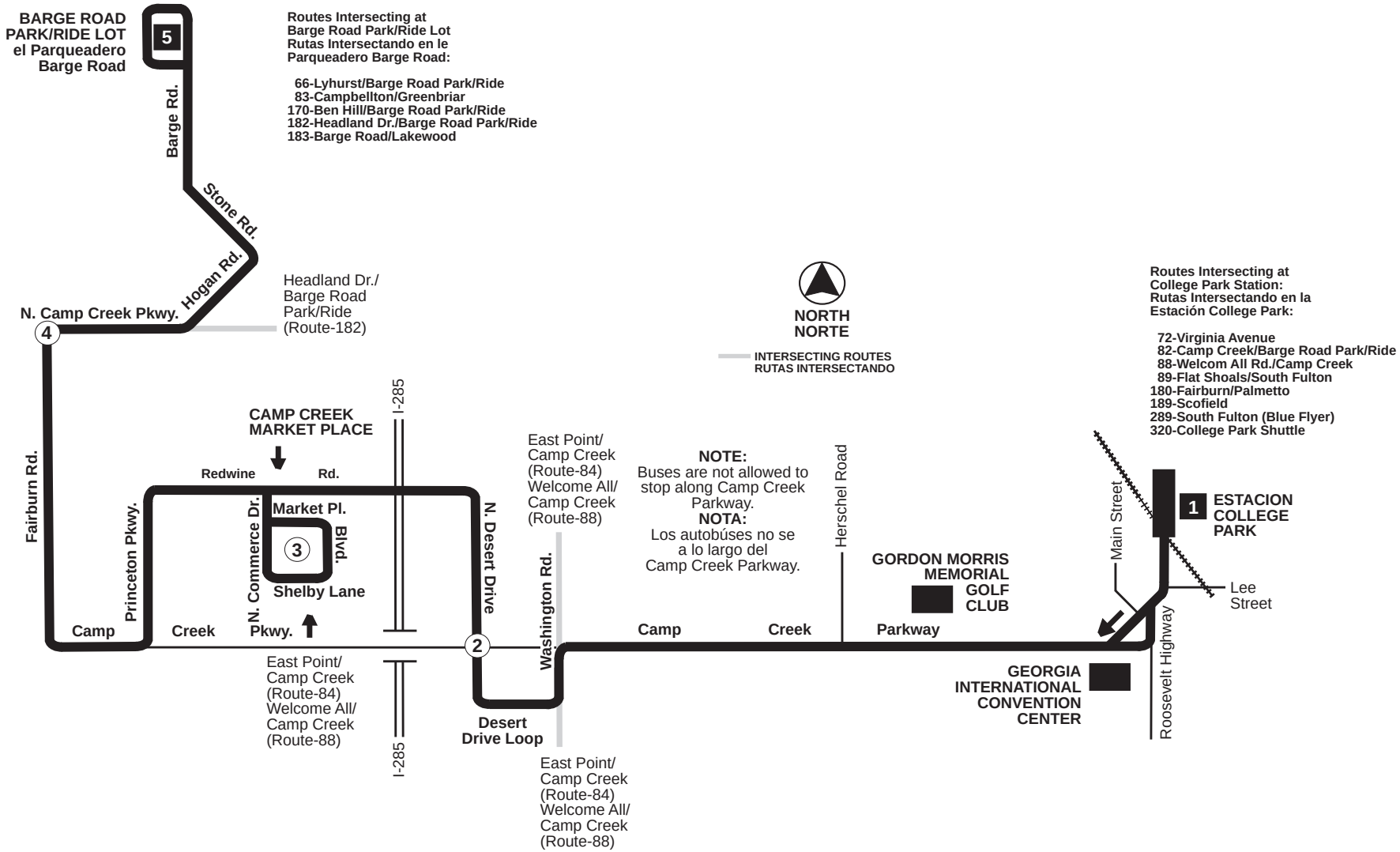
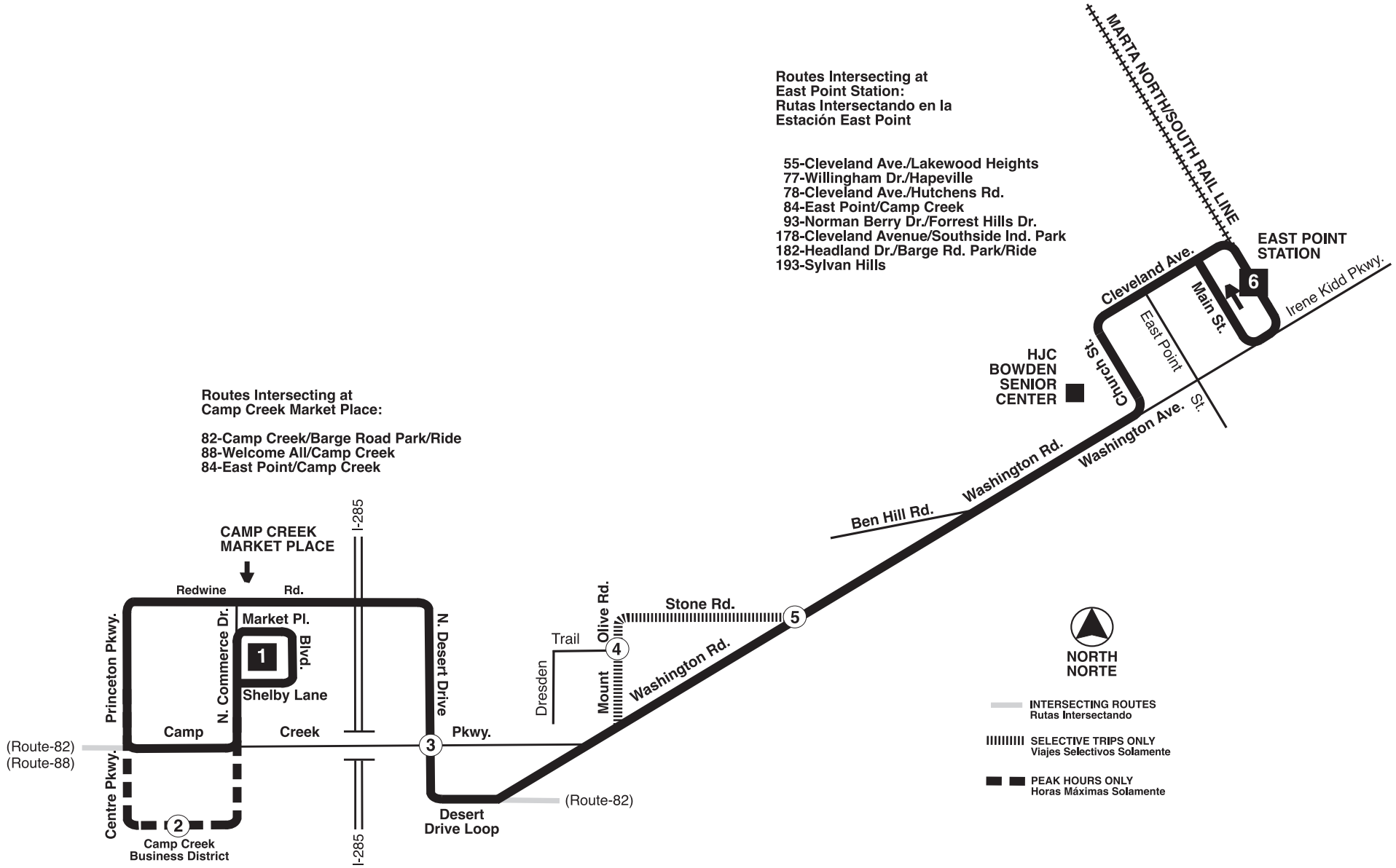
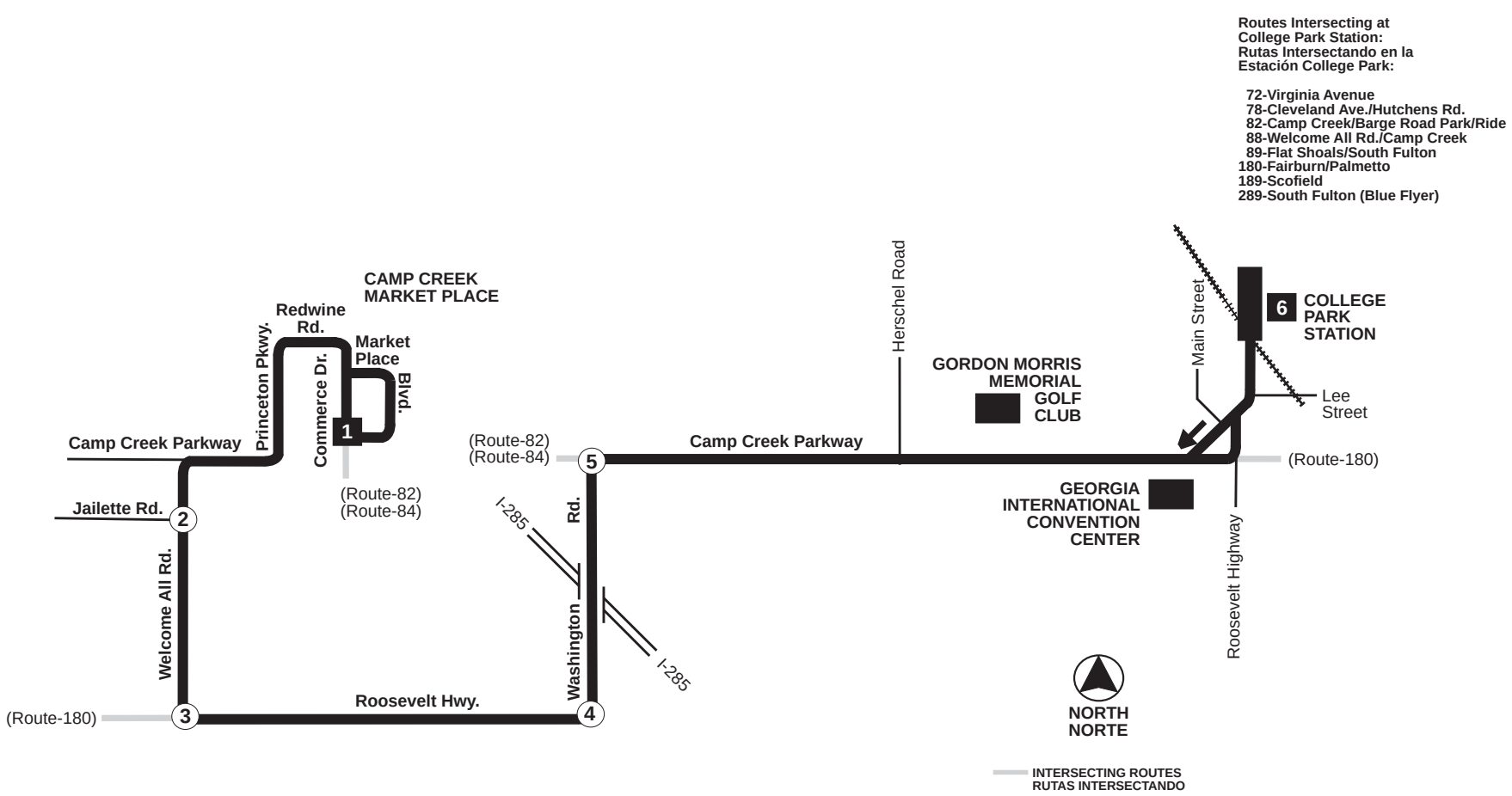

BARGE ROAD PARK/RIDE LOT el Parqueadero Barge Road
5
Barge Rd.
Stone Rd.
Hogan Rd.
Routes Intersecting at Barge Road Park/Ride Lot Rutas Intersectando en le Parqueadero Barge Road:
66-Lyhurst/Barge Road Park/Ride
83-Campbellton/Greenbriar
170-Ben Hill/Barge Road Park/Ride
182-Headland Dr./Barge Road Park/Ride
183-Barge Road/Lakewood
N. Camp Creek Pkwy.
4
Headland Dr./ Barge Road Park/Ride (Route-182)
NORTH NORTE
INTERSECTING ROUTES RUTAS INTERSECTANDO
Routes Intersecting at College Park Station: Rutas Intersectando en la Estación College Park:
72-Virginia Avenue
82-Camp Creek/Barge Road Park/Ride
88-Welcom All Rd./Camp Creek
89-Flat Shoals/South Fulton
180-Fairburn/Palmetto
189-Scofield
289-South Fulton (Blue Flyer)
320-College Park Shuttle
CAMP CREEK MARKET PLACE
I-285
Redwine Rd.
Market Pl.
Blvd.
3
Shelby Lane
N. Commerce Dr.
Fairburn Rd.
Princeton Pkwy.
Camp Creek Pkwy.
East Point/ Camp Creek (Route-84) Welcome All/ Camp Creek (Route-88)
N. Desert Drive
NOTE:
Buses are not allowed to stop along Camp Creek Parkway.
NOTA:
Los autobúses no se a lo largo del Camp Creek Parkway.
Herschel Road
GORDON MORRIS MEMORIAL GOLF CLUB
Main Street
1
ESTACION COLLEGE PARK
Lee Street
Camp Creek Parkway
2
Washington Rd.
East Point/ Camp Creek (Route-84) Welcome All/ Camp Creek (Route-88)
Desert Drive Loop
East Point/ Camp Creek (Route-84) Welcome All/ Camp Creek (Route-88)
GEORGIA INTERNATIONAL CONVENTION CENTER
Roosevelt Highway
I-285


Routes Intersecting at
East Point Station:
Rutas Intersectando en la
Estación East Point
55-Cleveland Ave./Lakewood Heights
77-Willingham Dr./Hapeville
78-Cleveland Ave./Hutchens Rd.
84-East Point/Camp Creek
93-Norman Berry Dr./Forrest Hills Dr.
178-Cleveland Avenue/Southside Ind. Park
182-Headland Dr./Barge Rd. Park/Ride
193-Sylvan Hills
MARTA NORTH/SOUTH RAIL LINE
EAST POINT STATION
6
Cleveland Ave.
Main St.
East Point St.
Irene Kidd Pkwy.
HJC BOWDEN SENIOR CENTER
Church St.
Washington Ave.
Washington Rd.
Ben Hill Rd.
Routes Intersecting at
Camp Creek Market Place:
82-Camp Creek/Barge Road Park/Ride
88-Welcome All/Camp Creek
84-East Point/Camp Creek
CAMP CREEK MARKET PLACE
I-285
Redwine Rd.
Market Pl.
Blvd.
1
Shelby Lane
Princeton Pkwy.
N. Commerce Dr.
N. Desert Drive
Camp Creek Pkwy.
(Route-82)
(Route-88)
2
Camp Creek Business District
3
Desert Drive Loop
(Route-82)
Dresden Trail
Olive Rd.
Mount
4
Stone Rd.
5
Washington Rd.
NORTH
NORTE
INTERSECTING ROUTES
Rutas Intersectando
SELECTIVE TRIPS ONLY
Viajes Selectivos Solamente
PEAK HOURS ONLY
Horas Máximas Solamente


Routes Intersecting at
College Park Station:
Rutas Intersectando en la
Estación College Park:
72-Virginia Avenue
78-Cleveland Ave./Hutchens Rd.
82-Camp Creek/Barge Road Park/Ride
88-Welcome All Rd./Camp Creek
89-Flat Shoals/South Fulton
180-Fairburn/Palmetto
189-Scofield
289-South Fulton (Blue Flyer)
CAMP CREEK
MARKET PLACE
Redwine
Rd.
Market
Place
Blvd.
Princeton Pkwy.
Commerce Dr.
1
Camp Creek Parkway
Jailette Rd.
2
Welcome All Rd.
(Route-82)
(Route-84)
(Route-180)
3
Roosevelt Hwy.
4
Washington
Rd.
I-285
I-285
(Route-82)
(Route-84)
5
Camp Creek Parkway
Herschel Road
GORDON MORRIS
MEMORIAL
GOLF
CLUB
GEORGIA
INTERNATIONAL
CONVENTION
CENTER
Main Street
6
COLLEGE
PARK
STATION
Lee
Street
(Route-180)
Roosevelt Highway
NORTH
NORTE
INTERSECTING ROUTES
RUTAS INTERSECTANDO