

TRAFFIC IMPACT STUDY

**CONDITIONAL USE PERMIT (CUP) 840
AMAZON INC. OFF-SITE PARKING LOT
9208 ATLANTIC AVENUE
SOUTH GATE, CALIFORNIA**



LEAD AGENCY:

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TRAFFIC IMPACT STUDY

Amazon DAX7 Distribution Facility

9350 Rayo Avenue, South Gate, CA

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EXECUTIVE SUMMARY

The following summarizes the traffic study results, conclusions and recommendations:

- The proposed Project will be developed as a main distribution site at 9350 Rayo Avenue, and remote/overflow parking overflow parking lots on two separate sites. The site is an existing industrial parcel on the east side of the roadway, north of the railroad corridor. Employee parking will be provided at this site, along with circulation and loading areas for delivery vans and circulation and bays for delivery trucks.
- An overflow parking lot (Lot 1) would be provided at a site on the west side of Rayo Avenue, south of the railroad corridor. Delivery van and supplemental employee parking will be provided at this site – A total of 250 spaces will be provided for delivery vans and 120 spaces will be provided for employee vehicles.
- Access to the main site and Lot 1 would occur via driveway access points on Rayo Avenue.
- A second overflow parking lot (Lot 2) will be provided for additional delivery van parking, at a currently undetermined site to the south of the City of South Gate. This parking lot is being planned for a capacity of 262 spaces.
- The Project parking supply at the main site would include 232 off-street parking spaces (201 employee spaces and 31 manager spaces).
- The Project is anticipated to be completed and occupied by the end of the year 2020.

Trip Generation

- The trip generation of the project was calculated from data provided by Amazon on employee shift times and populations, delivery trip details by vans and personal contractor vehicles, and truck trip schedules.
- The Project trips would total 1,513 on a daily basis, including 19 vehicle trips during the a.m. peak hour (14 inbound trips and 5 outbound trips) and 7 vehicle trips during the p.m. peak hour (0 inbound trips and 7 outbound trips).

Significant Intersection Impacts and Mitigation

- Based on the applied significant traffic impact criteria, the proposed Project would not create significant traffic impacts at the study intersections under both existing and future baseline conditions.

CMP Impacts

- The CMP has a monitored intersection maximum threshold of 50 trips in peak hours, and a monitored freeway segment maximum threshold of 150 trips. When these standards are exceeded, additional analysis must be conducted to verify impacts and propose mitigation measures as necessary.
- The proposed Project would generate less than the 50 trip threshold at the two nearby Metro Congestion Management Program (CMP) monitoring intersections, including Atlantic Avenue/Firestone Boulevard.
- The CMP incremental impact standards are not exceeded at these intersections and at local freeway segments and therefore additional analysis is not necessary.
- Transportation Index (TI) calculations for Rayo Avenue were included in the impact analysis, to provide input to the City on a roadway pavement/base evaluation. The results of this analysis provide input to the necessary pavement/base profile for without-Project and with-Project conditions.

Parking Analysis

- The parking analysis reviewed the planned parking supply versus employee demand estimates and examined occupancy throughout the day including peak periods.
- The peak parking demand would result in 97 percent occupancy of site supply during the noon hour. This would be the highest peak in demand on a daily basis. There would not be parking demand overflow from the Project site and parking impacts would not occur.

Queuing Analysis

- Analysis was conducted, per City requirements defined during the scoping process at the westbound left-turn movement of the Rayo Avenue/Firestone Boulevard intersection and at the southbound left-turn movement of the main Project driveway intersection with Rayo Avenue.
- Based on the Firestone Boulevard intersection calculations, lengthening of the turn pocket is not recommended. Special treatments for the project driveway are also not recommended, based on the low estimate of queuing occurrences from the analysis.

1. INTRODUCTION

KOA has been retained to analyze the potential traffic impacts associated with the proposed Amazon DAX7 distribution facility. The scope and methodologies used for this traffic study were developed in accordance with current traffic study guidelines and policies of the City of South Gate.

1.1 PROJECT DESCRIPTION

The proposed main site for operations would be at 9350 Rayo Avenue, at an existing industrial parcel on the east side of the roadway, north of the railroad corridor. 232 off-street parking spaces are expected to be provided. The proposed use at this site is by-right and therefore no zoning changes would be required.

The following is the project description as defined by Amazon:

Amazon Logistics ("AMZL") is a service that fulfills customer orders. AMZL specializes in "last mile" delivery of customer orders from delivery stations. Packages are shipped to AMZL delivery stations from Amazon fulfillment and sortation centers. Packages arrive from line haul trucks, are sorted based on zip codes and loaded into delivery vans operated by delivery service partners ("DSP") or personal vehicles operated by individuals ("Amazon FLEX"). Delivery stations operate 24/7, with most of the sortation activity done early in the morning when the line haul trucks arrive with customer packages.

At the proposed South Gate, CA facility known as "DAX7", AMZL anticipates approximately 25 line haul trucks delivering packages to the Delivery Station each day, primarily between the hours of 10:00 PM to 8:00 AM. Associates sort the packages by routes primarily between 1:00 AM and 12:00 PM with approximately 163 Amazon associates entering and departing between those times.

The same shift of associates places the packages onto movable racks between 9:00 AM to 12:00 PM and drivers loads the packages into the delivery vans primarily between 10:00 AM to 12:00 PM. Approximately 330 delivery associates will enter and depart the delivery station between those times. Additionally, there will be approximately 33 full time managers supervising delivery operations, arriving between 6:00 AM and 9:00 AM and departing between 5:00 PM and 10:00 PM.

It is anticipated that two offsite parking lots will be used for delivery van parking to support delivery operations at DAX7. The first parking lot is located at 9208 Atlantic Avenue, South Gate, CA and is directly across Rayo Avenue from DAX7. This parking lot will be known as DAX7 P_1. The second offsite parking lot is located to the south of South Gate and will be located approximately 2.5 miles from DAX7. This parking lot will be known as DAX7 P_2.

It is understood that DAX7 P_1 is currently going through a landlord led Conditional Use Permit Process ("CUP") which is estimated to take four to six months to complete. As AMZL would like to begin operations as soon as possible, AMZL proposes using the DAX7 P_2 offsite parking lot in Lynwood, CA until the CUP process is complete at DAX7 P_1. At CUP completion, DAX7 P_1 will become the primary supporting parking lot housing Delivery Service Provider ("DSP") vans and personal vehicles.

The first "wave" of 55 DSP drivers arrive at a delivery station at approximately 10:00 AM. DSP drivers drive to the delivery station staging and loading areas. Once at the delivery station with their delivery van, DSP drivers load their delivery van and depart to deliver packages directly to customers throughout the community. Each delivery wave takes about 30 minutes to load and depart. As a wave of DSP drivers prepare to depart, a new wave of DSP drivers queue and prepare to load their delivery van. The last wave of DSP

drivers departs the delivery station around 12:00 PM.

After DSP drivers complete their routes, they return to the delivery station with any packages that may have been non-deliverable which is estimated to be around three percent of the entire DSP fleet dispatched during the day. After proper checkout and release, the DSP drivers return the delivery van to the DAX7 P_2 location (Later at DAX7 P_1), and leave using a personal vehicle or public transport.

AMZL also uses Amazon FLEX to deliver packages. Amazon FLEX is a new innovation from Amazon that allows individuals to be use their own vehicles to deliver packages to customers. Amazon FLEX works in concert with an advanced logistics systems and technology that Amazon has been building since day one. AMZL anticipates approximately 120 traditional passenger vehicles entering the facility, staggered between 6:00 PM and 8:00 PM. FLEX loading waves similarly take 20 minutes to complete.

After departure of the last wave of delivery vehicles, delivery station associates prepare the delivery station for the next day's packages.

The Project is anticipated to be operational by the end of the year 2020. The proposed Project main site plan is provided on Figure 1A. The future Lot 1 site plan is provided on Figure 1B.

1.2 PROJECT STUDY AREA

The project study area, as defined through consultation with City staff, includes the following 10 study intersections:

1. Atlantic Avenue/Patata Street
2. Hildreth Avenue/Firestone Boulevard
3. Atlantic Avenue/Firestone Boulevard
4. Rayo Avenue/Firestone Boulevard
5. Garfield Avenue/Firestone Boulevard
6. Atlantic Avenue/ Southern Avenue
7. Hildreth Avenue/ Tweedy Boulevard
8. Pinehurst Avenue/Tweedy Boulevard
9. Atlantic Avenue/ Tweedy Boulevard
10. Atlantic Avenue/ Michigan Avenue

Figure 2 illustrates the locations of the study intersections.

FIGURE 1A

Amazon DAX 7 South Gate Distribution Facility

Project Main Site Plan

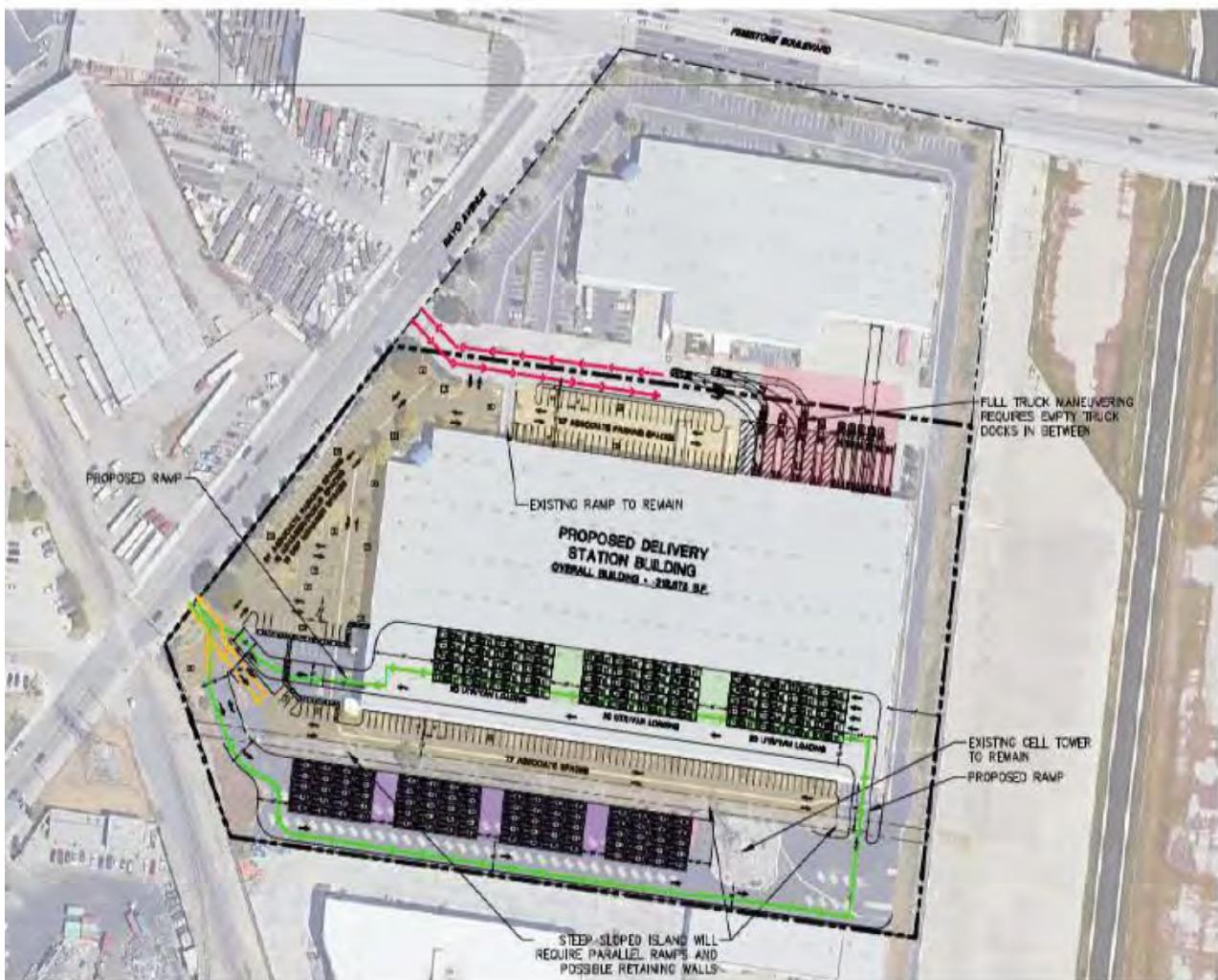


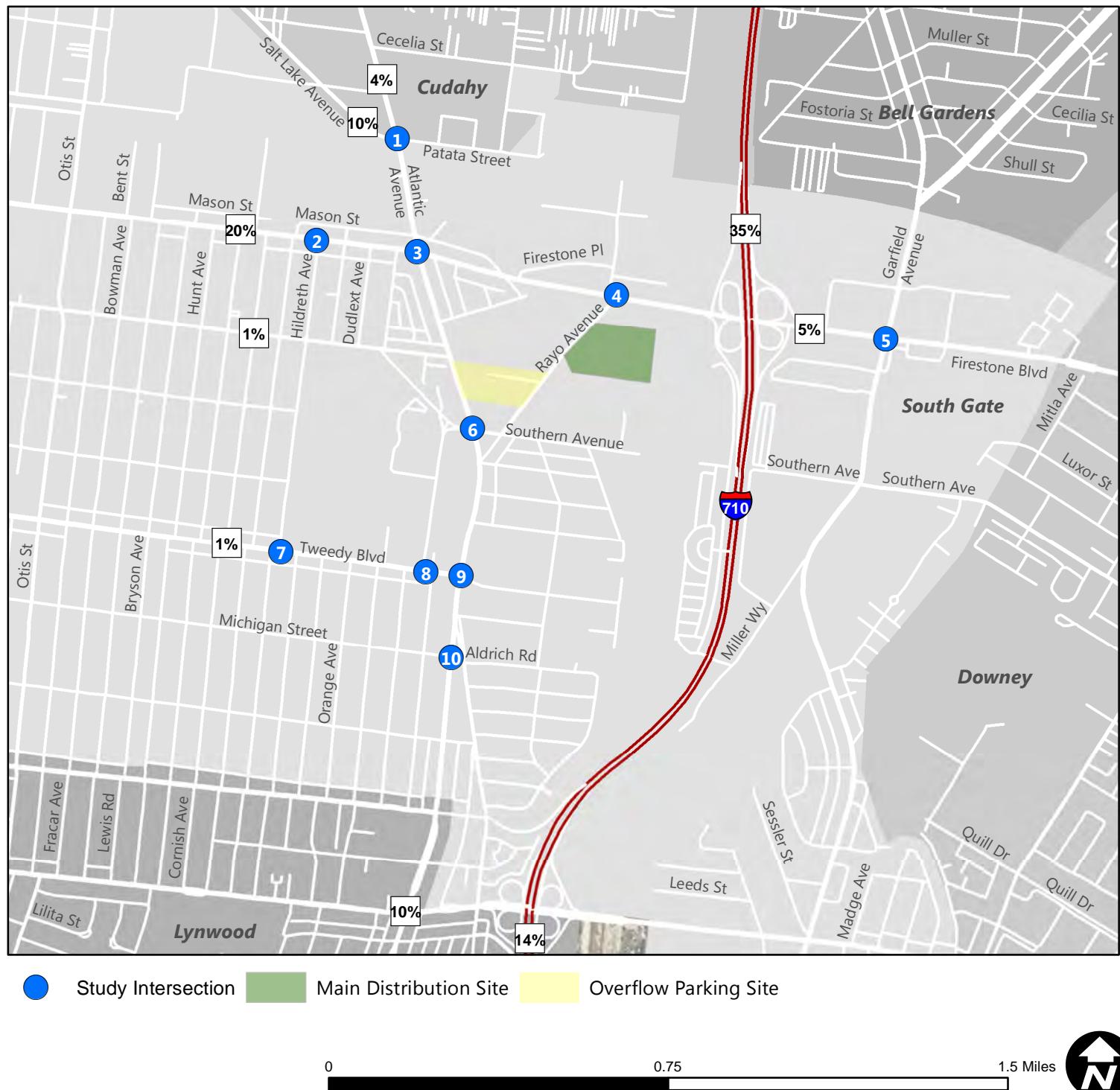
FIGURE
1B

Amazon DAX7 South Gate Distribution Facility
Lot 1 Site Plan



FIGURE
2

Amazon DAX 7 South Gate Distribution Facility Study Area and Trip Distribution



1.3 ANALYZED SCENARIOS

Traffic impacts associated with the proposed Project were analyzed at the study intersections for the weekday a.m. and weekday p.m. peak-hour periods. The study included the analysis of the following traffic scenarios:

- Existing
- Existing with Project
- Future without Project
- Future with Project

1.4 ANALYSIS METHODOLOGY

KOA coordinated with City of South Gate staff as the first step in the traffic analysis, in order to define the study area and other major details. The scoping document provided to the City and then revised based on comments is provided in Appendix A.

The following text describes the methodology applied in this report.

Existing Condition

New traffic counts were conducted at the study intersections. The counts were used to determine existing traffic conditions. Counts included auto and truck counts, with the latter categorized by number of axles. Passenger Car Equivalency (PCE) factors were applied to the truck volumes based on categories of axle numbers – two, three, and four plus. This acknowledges the effects of truck length and typical speeds on roadway capacity.

Fieldwork within the study area was undertaken to identify the condition of key study area roadways including traffic control and approach lane configuration at each study intersection, and on-street parking restrictions.

The existing level of service (LOS) at each of the study intersections is discussed in Section 2 of this report.

Project Trip Generation and Distribution

Project trip generation calculations were based on planned line-haul truck delivery patterns, employee shift times, and delivery van/vehicle activity patterns. The trip generation and distribution calculations are discussed in Section 3 of this report.

Existing with-Project Condition

Based on the projected Project traffic and the traffic count totals, an Existing plus-Proposed Project conditions scenario was analyzed per the California Environmental Quality Act (CEQA) precedents that define the need for project impacts to be analyzed against existing conditions. The level of service analysis for existing with-Project conditions is discussed in Section 4 of this report.

Future without-Project Condition

In order to account for traffic growth in the study area, an ambient/background traffic growth rate was applied to the existing traffic counts. In addition, traffic from related/area projects (approved and pending

developments) was also added to the study area. The levels of service at the study intersections for future without-Project conditions are discussed in Section 5 of this report.

Future with-Project Condition

Based on the future without-Project volumes plus traffic from the proposed Project, the future with-Project traffic volume conditions were determined and analyzed. The levels of service for this scenario are discussed in Section 6 of this report.

Level of Service Methodology

This project impact analysis was conducted in accordance with County of Los Angeles guidelines, which are applied to local projects by City of South Gate policies. The current version of the guidelines is dated December 2013.

For analysis of LOS at signalized intersections, the County of Los Angeles has designated the Intersection Capacity Utilization (ICU) methodology as the desired tool. The concept of roadway level of service under the ICU methodology is calculated as the volume of vehicles that pass through the facility divided by the capacity of that facility. A 10% adjustment to the clearance and loss time factor based on the critical phases of the signalized control was included in the traffic analysis. A facility is "at capacity" (ICU value of 1.00 or greater) when extreme congestion occurs. This value is a function of hourly volumes, signal phasing, and approach lane configuration on each leg of the intersection.

A facility with LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay.

Tables 1 and 2 define the level of service criteria applied to the unsignalized and signalized study intersections.

**Table 1 – All-Way and Partial Stop-Controlled (HCM)
Intersection Level of Service Definitions**

LOS	Average Control Delay (sec/veh)
A	0 - 10
B	10 to 15
C	15-25
D	25-35
E	35-50
F	>50

Table 2 – Signalized Intersection (ICU)
Level of Service Definitions

LOS	Volume to Capacity Ratio
A	0 - .600
B	.601 to .700
C	.701-.800
D	.801-.900
E	.901-1.000
F	>1.000

Significant Traffic Impacts

Significant impacts of a proposed Project at an intersection must be mitigated to a level of insignificance, where feasible. Determination of potential significant traffic impacts due to the proposed Project is discussed in Section 7 of this report.

2. EXISTING CONDITIONS

This section describes the existing conditions within the study area in terms of roadway facilities, transit service and traffic operating conditions.

2.1 EXISTING ROADWAY SYSTEM

The key roadways within the study area are described here. The discussion is limited to specific roadways that traverse the study intersections and serve the Project site. Figure 3 illustrates the existing traffic controls and approach lane geometries at the study intersections.

The city of South Gate has designated a network of streets to help keep the negative impacts from truck traffic at bay, these routes were selected according to the general plan because of their proximity to the freeway and their connection to other truck routes in neighboring cities; local delivery trucks are exempt from these truck routes.

Atlantic Boulevard is a north-south thoroughfare with six lanes and is classified as Boulevard or Primary Arterial, it is also part of the truck route network in the South Gate General Plan. The posted speed limit is 35 mph.

Firestone Boulevard is a Boulevard or Primary Arterial thoroughfare that runs east-west. West of Atlantic Avenue it has six lanes and eight lanes between Atlantic Avenue and Garfield Avenue, it is also part of the truck route network in the City of South Gate. The posted speed limit is 35 mph.

Garfield Avenue is classified as a Primary Arterial on the South Gate General Plan and is comprised of six lanes, also serving as part of the truck route network for the City of South Gate.

Hildreth Avenue is classified as a local street in the City of South Gate General Plan. This roadway provides one travel lane in each direction. On-street parking is permitted on both sides. The posted speed limit is 25 mph.

Michigan Avenue is classified as a local street in the City of South Gate General Plan. This roadway provides one travel lane in each direction. On-street parking is permitted on both sides.

Patata Street is classified as a local street in the City of South Gate General Plan. This roadway provides one travel lane in each direction. On-street parking is permitted on both sides. The posted speed limit is 35 mph. Patata Street is also part of the truck route network for the City of South Gate.

Pinehurst Avenue is classified as a local street in the City of South Gate General Plan. This roadway provides one travel lane in each direction. On-street parking is permitted on both sides. The posted speed limit is 15 mph.

Rayo Avenue is designated as a collector street in the general plan with two travel lanes that run north-south.

Southern Avenue is a two lane collector street in the general plan, which runs east-west, between Atlantic Avenue and Garfield Avenue, it is also part of the truck route network.

Tweedy Boulevard is an east-west thoroughfare with four lanes and is classified as an Avenue or Secondary

Arterial.

2.2 EXISTING TRANSIT SERVICE

The vicinity of the proposed Project site is served by bus transit lines operated by Metro. Table 2 provides a description of the service provided by these lines.

Table 3 – Existing Transit Service Summary

Agency	Line	From	To	Via	Peak Frequency
MTA	115	Norwalk Station	Playa Del Rey	Firestone Boulevard	10 minutes
MTA	117	Lakewood Boulevard Station	LAX Bus Center	Arrow Highway, Live Oak Avenue	24 minutes
MTA	258	Paramount	Altadena	Garfield Avenue	44 minutes
MTA	Rapid 260	Artesia Station	Altadena	Fair Oaks, Atlantic Boulevard	14 minutes
MTA	Rapid 762	Artesia Station	Altadena	Fair Oaks, Atlantic Boulevard	23 minutes

2.3 EXISTING TRAFFIC VOLUMES

Vehicle turning movement counts were collected at the study intersections on November 19, 2019 from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. Counts included auto and truck counts, with the latter categorized by number of axles. Passenger Car Equivalency (PCE) factors were applied to the truck volumes based on categories of axle numbers – two (PCE factor of 2.0), three (PCE factor of 2.5), and four or more (PCE factor of 3.0).

Existing weekday a.m. peak-hour and p.m. peak-hour traffic turn movement volume count summaries are provided in Appendix B of this report.

2.4 EXISTING INTERSECTION LEVEL OF SERVICE

Based on the intersection lane configurations and the existing traffic volumes, volume-to-capacity ratios and average delay values and corresponding levels of service (LOS) were determined for each of the study intersections during the weekday a.m. and p.m. peak hours.

Table 4 summarizes the volume-to-capacity ratios and LOS values for existing traffic conditions.

Table 4 – Study Intersection Existing Conditions

Study Intersections		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1	Atlantic Avenue/Patata Street	0.962	E	1.059	F
2	Hildreth Avenue/ Firestone Boulevard	0.512	A	0.586	A
3	Atlantic Avenue/ Firestone Boulevard	0.792	C	0.804	D
4	Rayo Avenue/ Firestone Boulevard	1.114	F	1.014	F
5	Garfield Avenue/ Firestone Boulevard	0.843	D	0.824	D
6	Atlantic Avenue/ Southern Avenue	0.624	B	0.636	B
7	Hildreth Avenue/ Tweedy Boulevard	0.788	C	0.695	B
8	Pinehurst Avenue/ Tweedy Boulevard	0.753	C	0.695	B
9	Atlantic Avenue/ Tweedy Boulevard	0.845	D	0.746	C
10	Atlantic Avenue/ Michigan Avenue	0.596	A	0.495	A

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

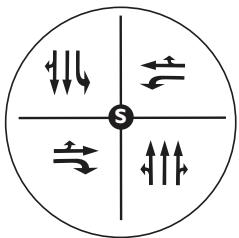
Eight of the 10 study intersections are currently operating at LOS D or better during the weekday a.m. and p.m. peak hours. The following intersections operate at LOS E or F during one or both peak periods:

- Atlantic Avenue/Patata Street
- Rayo Avenue/ Firestone Boulevard

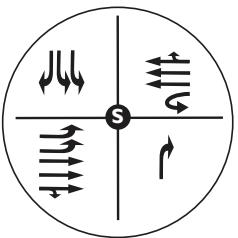
The existing traffic volumes for the weekday a.m. and p.m. peak hours are illustrated on Figure 4. The existing traffic analysis scenario worksheets are provided in Appendix C.

Figure 3 - Existing Study Intersection Lane and Control Configurations

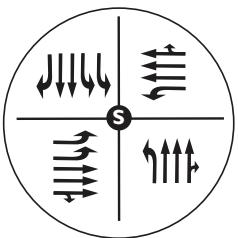
#1 Altantic Avenue & Patata Street



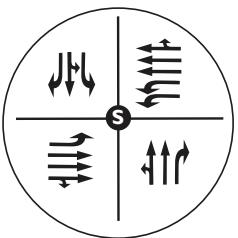
#2 Firestone Boulevard & Hildreth Avenue



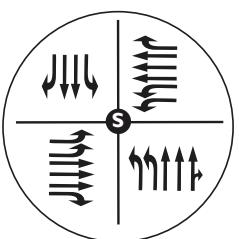
#3 Atlantic Avenue & Firestone Boulevard



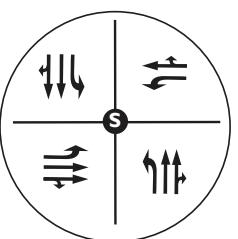
#4 Firestone Boulevard & Rayo Avenue



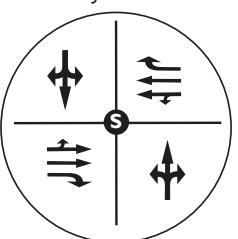
#5 Garfield Avenue & Firestone Boulevard



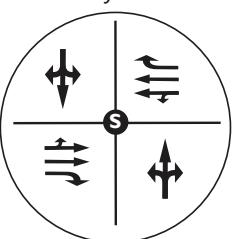
#6 Atlantic Avenue & Southern Avenue



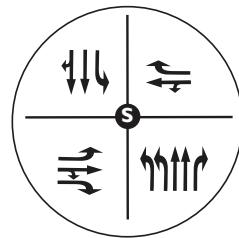
#7 Hildreth Avenue & Tweedy Boulevard



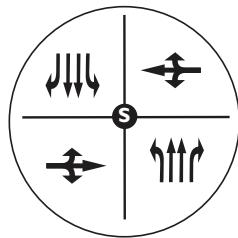
#8 Pinehurst Avenue & Tweedy Boulevard



#9 Atlantic Avenue & Tweedy Boulevard



#10 Atlantic Avenue & Michigan Avenue



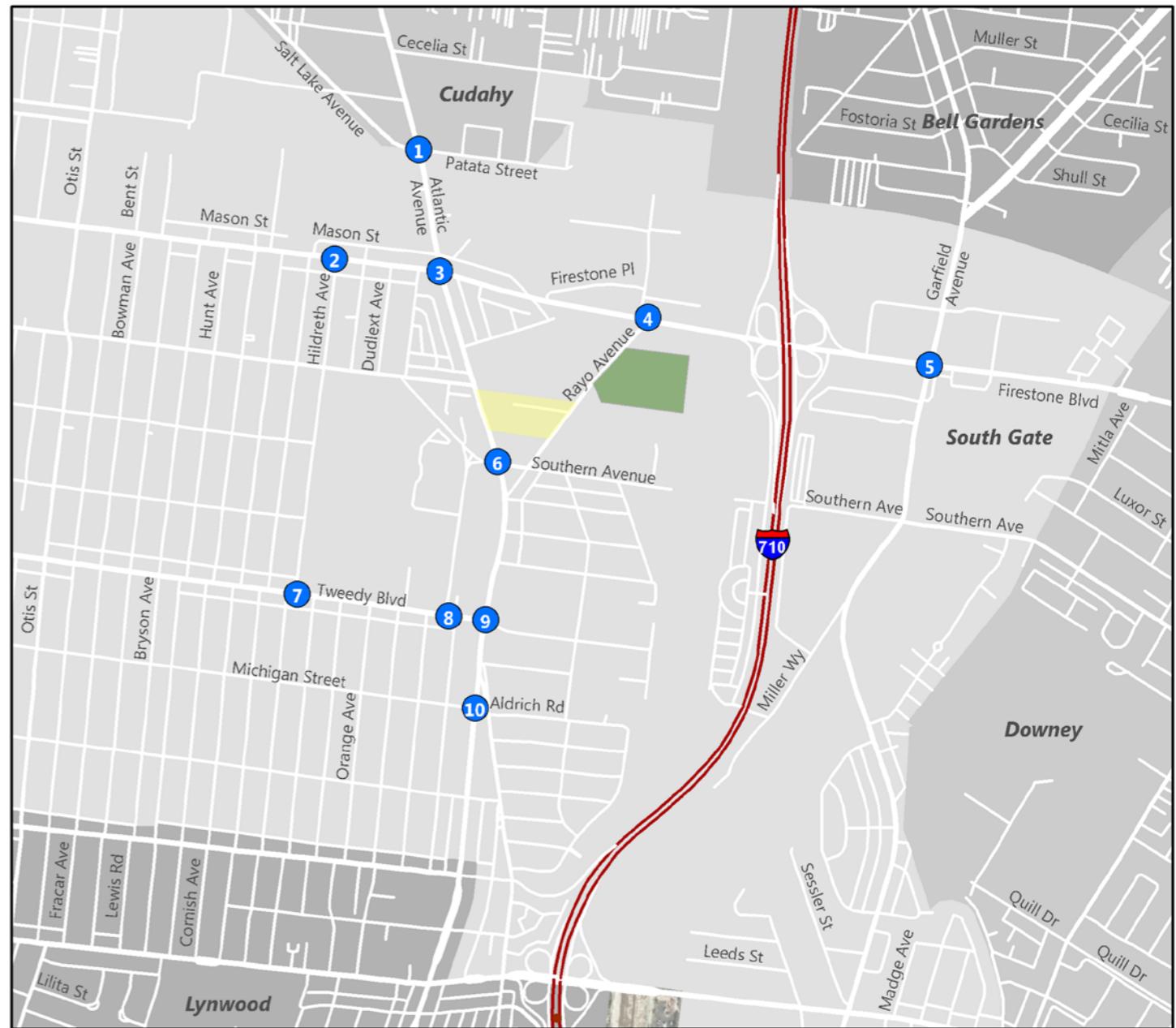
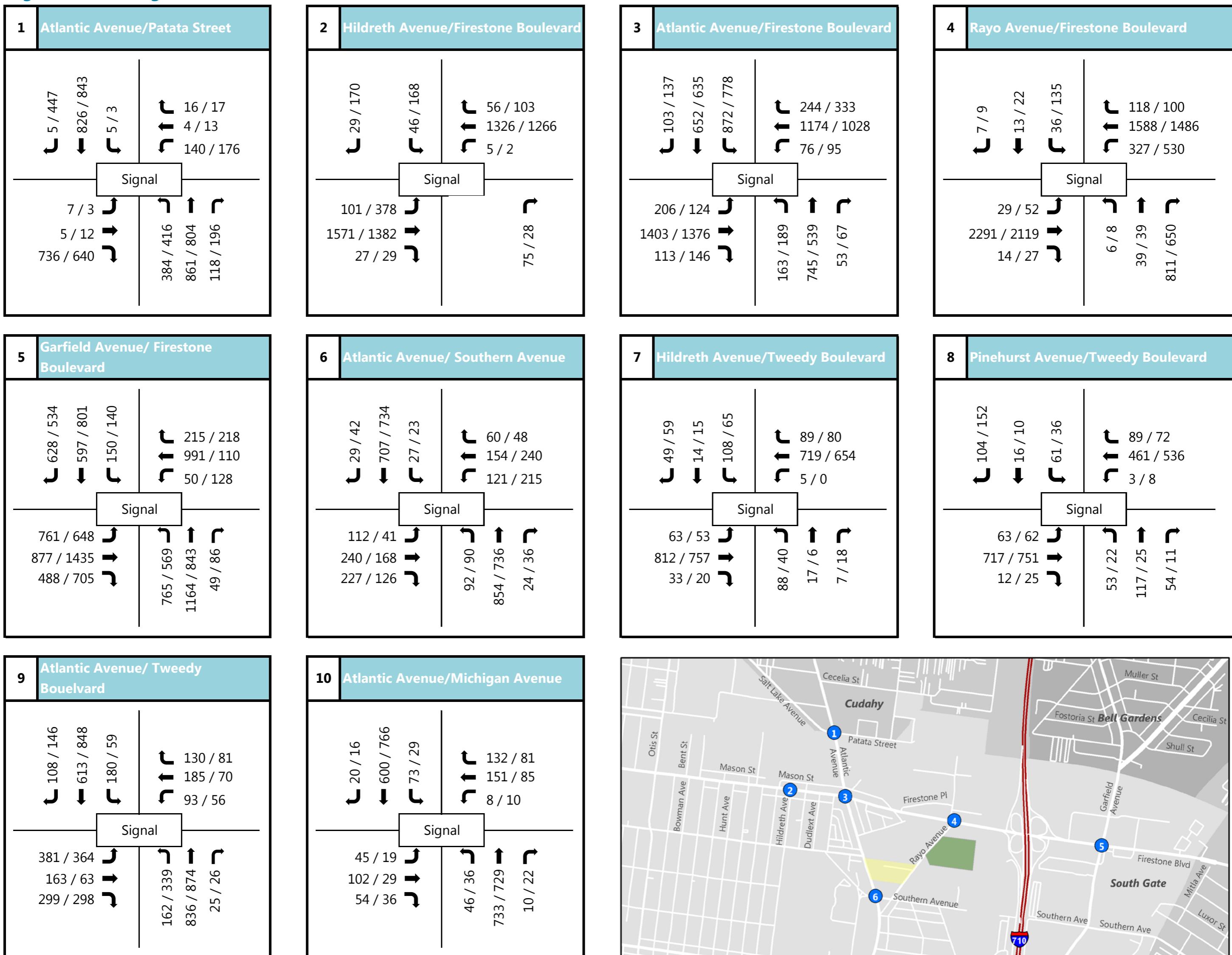
LANE CONFIGURATION

Signalized Intersection

Intersection Lane Geometry



Figure 4 - Existing AM/PM Peak Hour Traffic Volumes



3. PROJECT TRAFFIC

This section defines the traffic that would be generated by the proposed Project in a three-step process including trip generation, trip distribution and trip assignment.

3.1 PROJECT TRIP GENERATION

The proposed Project would consist of a distribution facility (main site) on the east side of Rayo Avenue, a remote employee/delivery vehicle parking lot on the west side of Rayo Avenue (Lot 1), and a second remote parking lot at a currently undetermined location to the south of the City of South Gate (Lot 2). Collectively, the sites are expected to generate a mix of semi-truck trips, delivery van trips, personal vehicle (or "Flex") delivery trips and employee personal vehicle commute trips.

Employees commuting to the site would include sorting and packing staff working at the distribution facility and delivery drivers beginning and ending their delivery cycles at the site. The former would park in the main parking lot to the east of Rayo Avenue, and the latter would park in Lot 1 on the west side of Rayo Avenue once that lot is operational.

Table 5 provides a summary of hourly trip generation patterns for the site, based on Amazon data on the planned daily sorting shifts for employees, the waves of delivery trips that would begin at the end of the major sorting shifts, the activity of Flex drivers, and line-haul deliveries by semi-trucks.

The total Project trip generation analysis is provided in Table 6, based on the hourly trip generation totals. A passenger car equivalent (PCE) rate of 2.5 was applied to the delivery truck trips. This acknowledges the effects of truck length and typical speeds on roadway capacity.

The Project trips would total 1,513 on a daily basis, including 19 vehicle trips during the a.m. peak hour (14 inbound trips and 5 outbound trips) and 7 vehicle trips during the p.m. peak hour (0 inbound trips and 7 outbound trips). All peak analyzed trips were assigned to main project site, as those trips were constituted by line-haul trucks and sorting employees.

Table 5 – Hourly Project Trip Generation by Vehicle Type

Hour	Autos		Line-Haul		Vans		Flex		Total
	IN	OUT	IN	OUT	IN	OUT	IN	OUT	
12-1a	163	0	2	2	0	0	0	0	167
1-2a	0	0	2	2	0	0	0	0	4
2-3a	0	0	2	2	0	0	0	0	4
3-4a	0	0	4	4	0	0	0	0	8
4-5a	0	0	4	4	0	0	0	0	8
5-6a	0	0	4	4	0	0	0	0	8
6-7a	11	0	2	2	0	0	0	0	15
7-8a	11	0	1	2	0	0	0	0	14
8-9a	11	0	0	0	0	0	0	0	11
9-10a	0	0	0	0	0	0	0	0	0
10-11a	0	0	0	0	180	180	0	0	360
11-12p	0	20	0	0	150	150	0	0	320
12-1p	28	163	0	0	0	0	0	0	191
1-2p	0	0	0	0	0	0	0	0	0
2-3p	0	0	0	0	0	0	0	0	0
3-4p	0	0	0	0	0	0	0	0	0
4-5p	0	0	0	0	0	0	0	0	0
5-6p	0	7	0	0	0	0	0	0	7
6-7p	0	34	0	0	0	0	60	60	154
7-8p	0	7	0	0	0	0	60	60	127
8-9p	0	7	0	0	0	0	0	0	7
9-10p	0	6	0	0	0	0	0	0	6
10-11p	0	0	2	1	0	0	0	0	3
11-12a	20	0	2	2	0	0	0	0	24
Total	244	244	25	25	330	330	120	120	1438

Table 6 – Total Project Vehicle Trip Generation

Trip Types	Daily Total	AM Peak Hour			PM Peak Hour		
		Total	In	Out	Total	In	Out
Trip Generation-Vehicles							
Semi-Trucks *	50	3	1	2	0	0	0
Vans	660	0	0	0	0	0	0
Employees/ Personal Vehicles	728	11	11	0	7	0	7
Passenger Car Equivalents							
Semi-Trucks				2.5			
Vans				1			
Employees/ Personal Vehicles				1			
Trip Generation with PCEs							
Semi-Trucks	125	8	3	5	0	0	0
Vans	660	0	0	0	0	0	0
Employees/ Personal Vehicles- Main Site	728	11	11	0	7	0	7
Project Total	1,513	19	14	5	7	0	7

* Defined by typical daily patterns by hour for delivery truck trips, from Amazon site planning data.

3.2 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of assigning the directions from which traffic will access the Project site. For projects in general, trip distribution is dependent upon the land use characteristics of the project, the local roadway network, and the general locations of other land uses to which Project trips would originate or terminate. For the proposed project, the trip distribution was based on the following:

- Location of the main project site and the overflow parking lots and the number of employee and van trips associated with each
- Estimated distribution of employee commute trips, based on the location of the nearby I-710 freeway interchange and regional travel routes such as Firestone Boulevard, Atlantic Avenue, and Imperial Highway.
- The targeted service area for the proposed Amazon facility, and the estimated distribution of delivery trips that would traverse that area.
- The location of regional freeway access for delivery truck trips.

Figure 5 illustrates the overall trip distribution percentages at the study intersections that were used for the traffic impact analysis, based on these trip origin/destination considerations.

3.3 PROJECT TRIP ASSIGNMENT

Based on the trip generation and distribution assumptions described above, Project traffic was assigned to the roadway system. Figure 6 illustrates the assigned Project trips for the analyzed weekday a.m. and p.m. peak hours.

Figure 5 - Project Trip Distribution

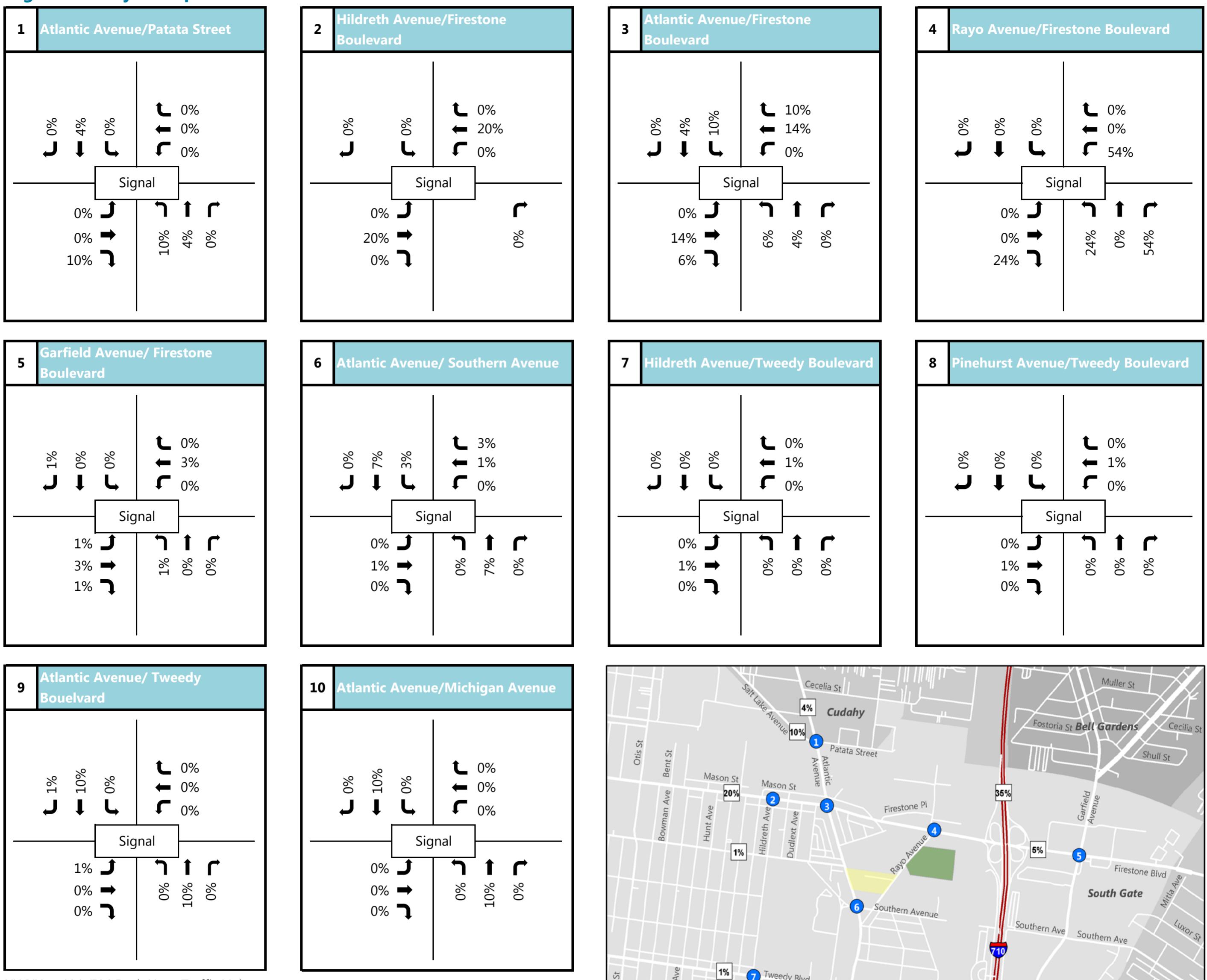
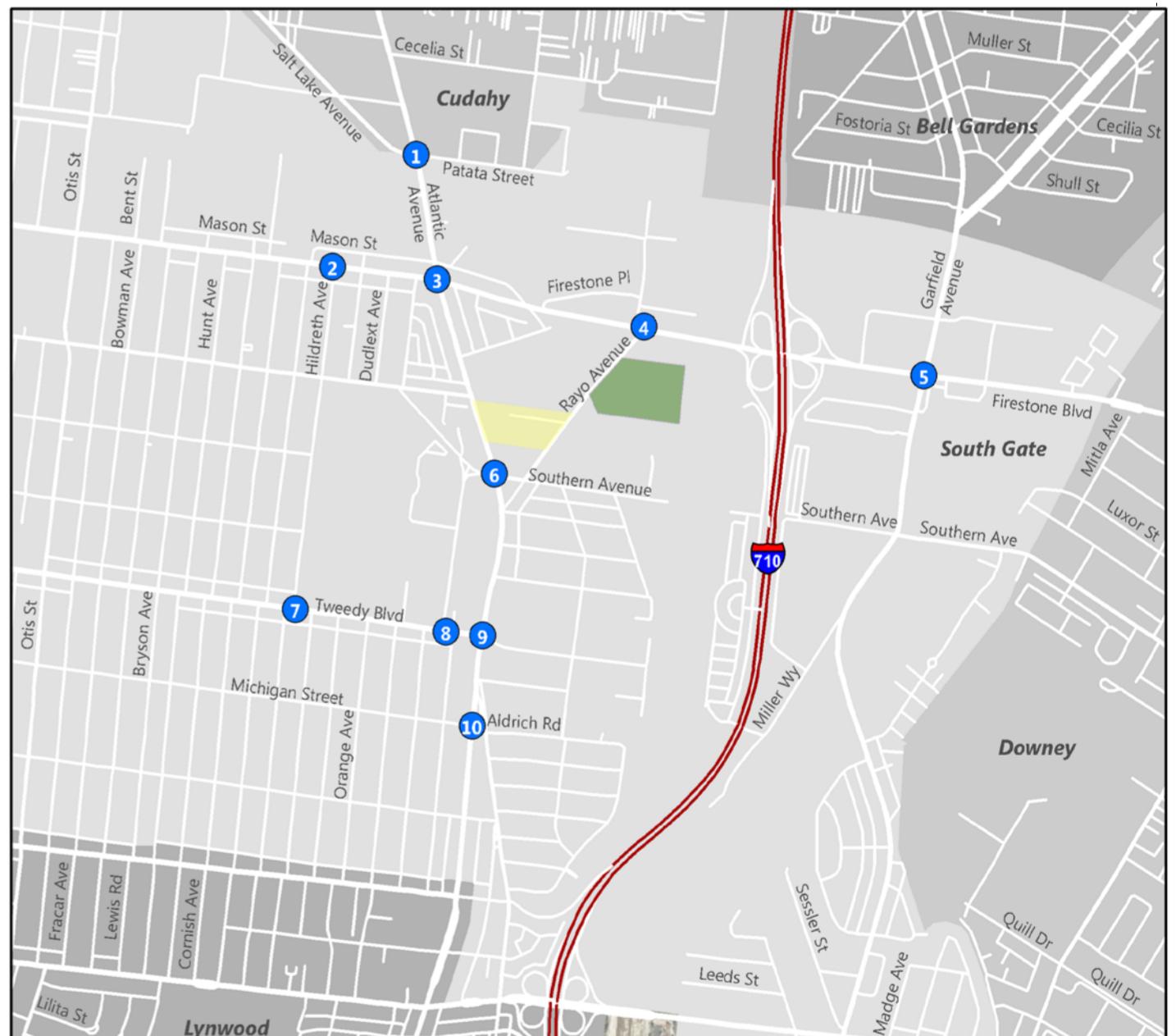
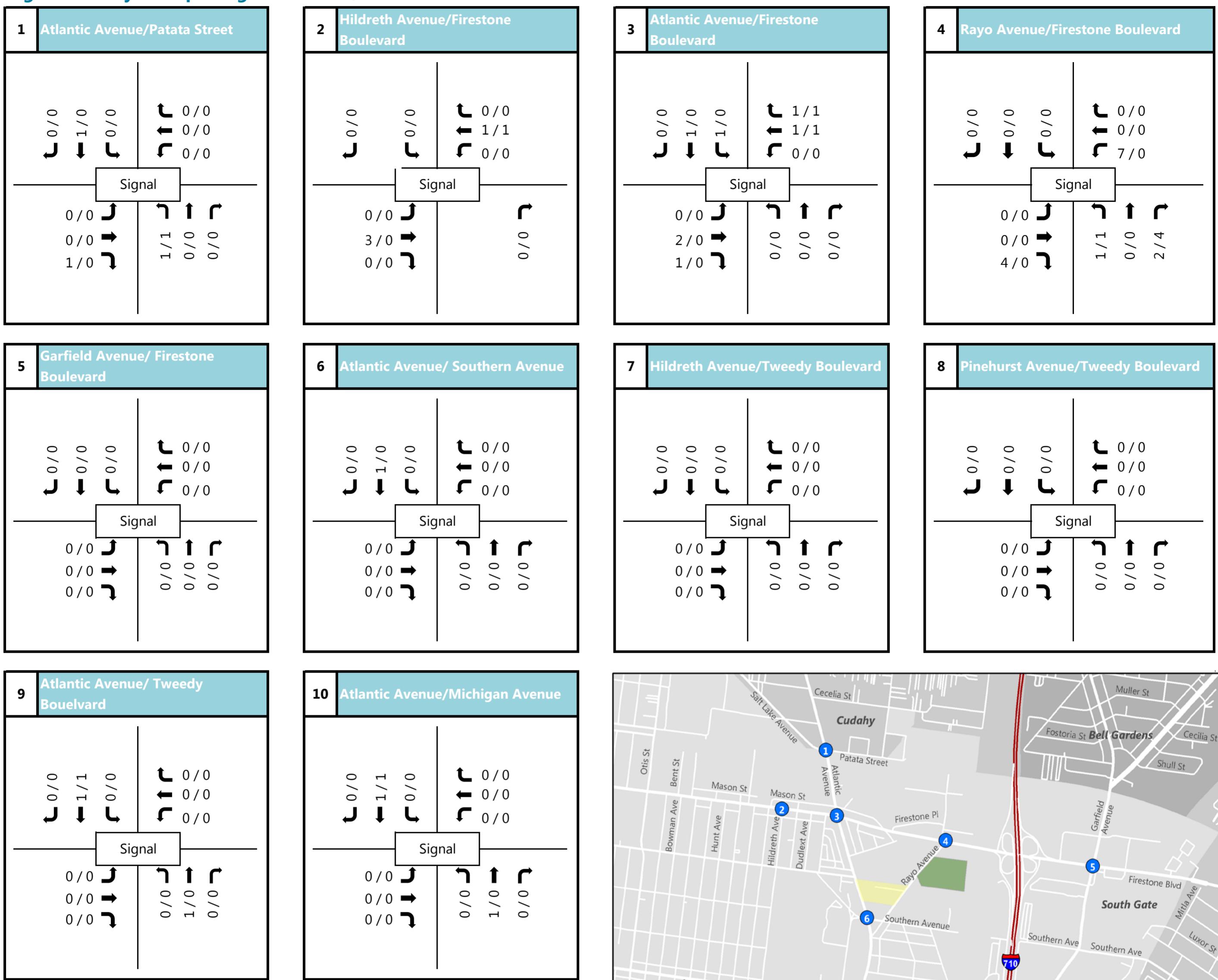


Figure 6 - Project Trip Assignment - AM/PM Peak Hour Traffic Volumes



4. EXISTING WITH PROJECT CONDITIONS

This section documents existing traffic conditions at the study intersections with the addition of Project-generated traffic. Traffic volumes for these conditions were derived by adding Project trips to the existing traffic volumes.

Table 7 summarizes the resulting V/C, Vehicle Delay and LOS values at the study intersections for the existing with-Project conditions. The traffic analysis worksheets for this scenario are provided in Appendix D of this report.

Table 7 – Study Intersection Existing With-Project Conditions

Study Intersections		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1	Atlantic Avenue/Patata Street	0.963	E	1.059	F
2	Hildreth Avenue/ Firestone Boulevard	0.513	A	0.586	A
3	Atlantic Avenue/ Firestone Boulevard	0.793	C	0.804	D
4	Rayo Avenue/ Firestone Boulevard	1.116	F	1.016	F
5	Garfield Avenue/ Firestone Boulevard	0.843	D	0.824	D
6	Atlantic Avenue/ Southern Avenue	0.624	B	0.636	B
7	Hildreth Avenue/ Tweedy Boulevard	0.788	C	0.695	B
8	Pinehurst Avenue/ Tweedy Boulevard	0.753	C	0.695	B
9	Atlantic Avenue/ Tweedy Boulevard	0.846	D	0.746	C
10	Atlantic Avenue/ Michigan Avenue	0.596	A	0.495	A

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

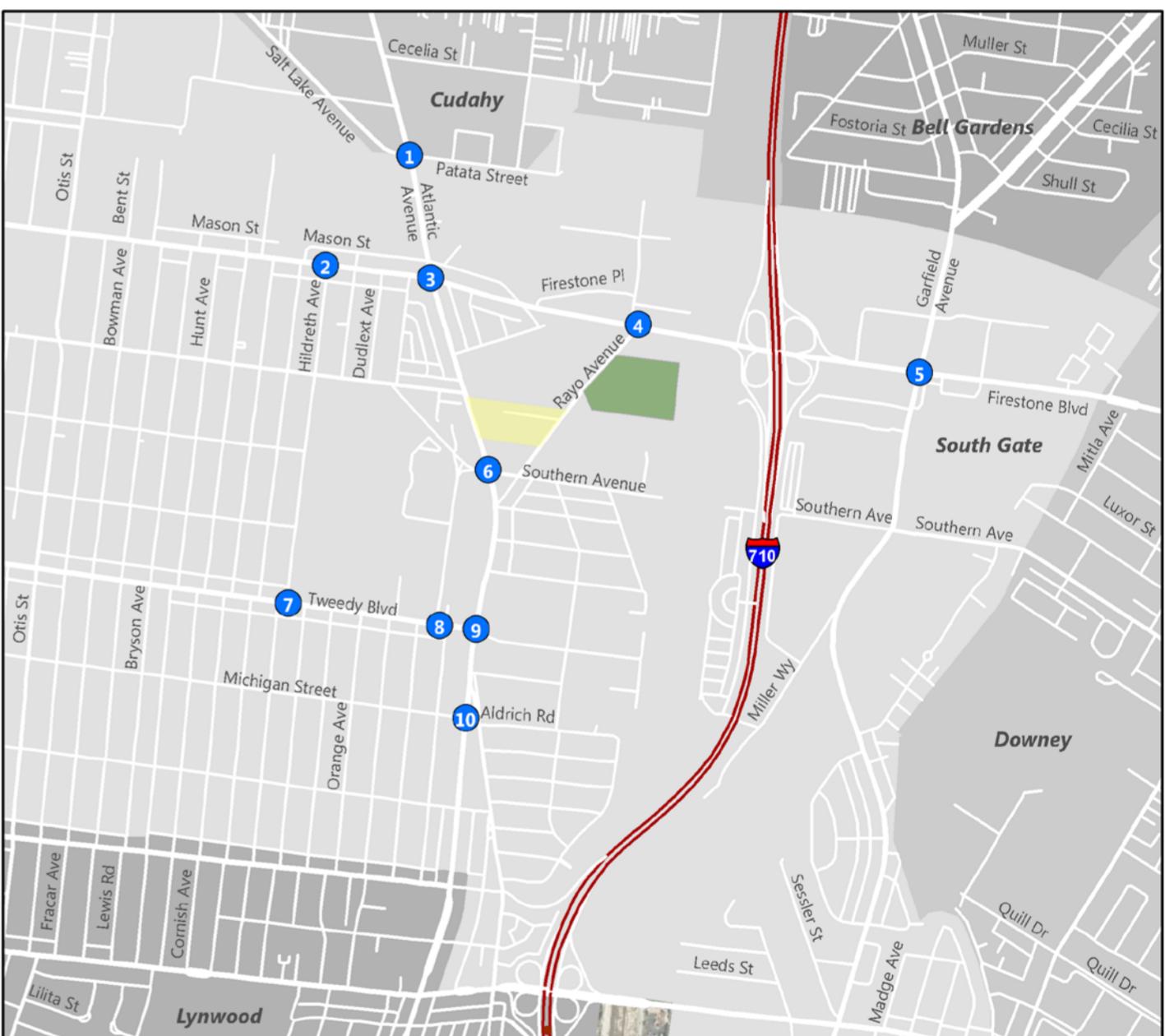
Eight of the 10 study intersections would continue to operate at LOS D or better during the weekday a.m. and p.m. peak hours. The following study intersections would operate at LOS values of E or F during either peak period:

- Atlantic Avenue/Patata Street
- Rayo Avenue/ Firestone Boulevard

The existing with-Project traffic volumes for the weekday a.m. and p.m. peak hours are illustrated in Figure 7.

Figure 7 - Existing With-Project - AM/PM Peak Hour Traffic Volumes

XX/XX AM /PM Peak Hour Traffic Volumes



5. FUTURE WITHOUT PROJECT CONDITIONS

This section provides an analysis of future traffic conditions in the study area with area/related project trips and background growth added, but without Project traffic. The proposed Project is anticipated to be completed within the year 2020, and this defines the future analysis year.

5.1 AMBIENT GROWTH

In order to acknowledge regional population and employment growth outside of the study area, an ambient traffic growth rate was applied to the existing traffic counts. An annual growth rate of two percent was used for this analysis.

5.2 AREA PROJECTS

In addition to the application of the ambient traffic growth rate, traffic from related/area projects (approved or pending developments) was included as part of the year-2020 analysis. A total of 3 projects were identified for inclusion in the traffic impact analysis within the City of South Gate. The surrounding cities of Bell Gardens were also asked to provide a list of related projects within the one mile radius from the project site but did not have or failed to provide such list.

Table 8 provides the trip generation estimates for the related/area projects. The locations of these projects are illustrated on Figure 8.

Table 8 – Area Projects Trip Generation Estimate

ID	Location	Land Use	Units	Intensity	Daily Total	AM PEAK			PM PEAK		
						TOTAL	IN	OUT	TOTAL	IN	OUT
1	9923 Atlantic Boulevard	Multifamily Housing (mid-rise)	D.U.	91	495	33	9	24	40	24	16
2	10920 Garfield Ave	Multifamily Housing (mid-rise)	D.U.	244	1327	88	23	65	107	65	42
3	5610 Imperial Highway	Congregate Care Facility	D.U.	60	121	4	2	2	11	6	5
TOTAL						1943	125	34	91	158	95
<i>Source: ITE Trip Generation Manual, 10th Edition</i>											

The related project volumes figures for the weekday a.m. and p.m. peak hours are also provided on Figure 9.

5.3 FUTURE WITHOUT PROJECT INTERSECTION LEVEL OF SERVICE

The future without-Project traffic volumes for the weekday a.m. and p.m. peak hours are illustrated on Figure 10.

Table 9 summarizes the V/C, Vehicle Delay and LOS values at the study intersections under this scenario. The traffic analysis worksheets for this scenario are provided in Appendix E of this report.

Table 9 – Study Intersection Future without-Project Conditions

Study Intersections		AM Peak		PM Peak	
		V/C or Delay	LOS	V/C or Delay	LOS
1	Atlantic Avenue/Patata Street	0.980	E	1.081	F
2	Hildreth Avenue/ Firestone Boulevard	0.521	A	0.596	A
3	Atlantic Avenue/ Firestone Boulevard	0.816	D	0.836	D
4	Rayo Avenue/ Firestone Boulevard	1.153	F	1.046	F
5	Garfield Avenue/ Firestone Boulevard	0.860	D	0.844	D
6	Atlantic Avenue/ Southern Avenue	0.644	B	0.657	B
7	Hildreth Avenue/ Tweedy Boulevard	0.801	D	0.707	C
8	Pinehurst Avenue/ Tweedy Boulevard	0.765	C	0.708	C
9	Atlantic Avenue/ Tweedy Boulevard	0.878	D	0.778	C
10	Atlantic Avenue/ Michigan Avenue	0.620	B	0.519	A

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

Eight of the 10 study intersections would continue to operate at LOS D or better during the weekday a.m. and p.m. peak hours. The following study intersections would continue to operate at poor LOS values of E during either peak period:

- Atlantic Avenue/Patata Street
- Rayo Avenue/ Firestone Boulevard

FIGURE
8

Amazon DAX 7 South Gate Distribution Facility Location of Related Projects

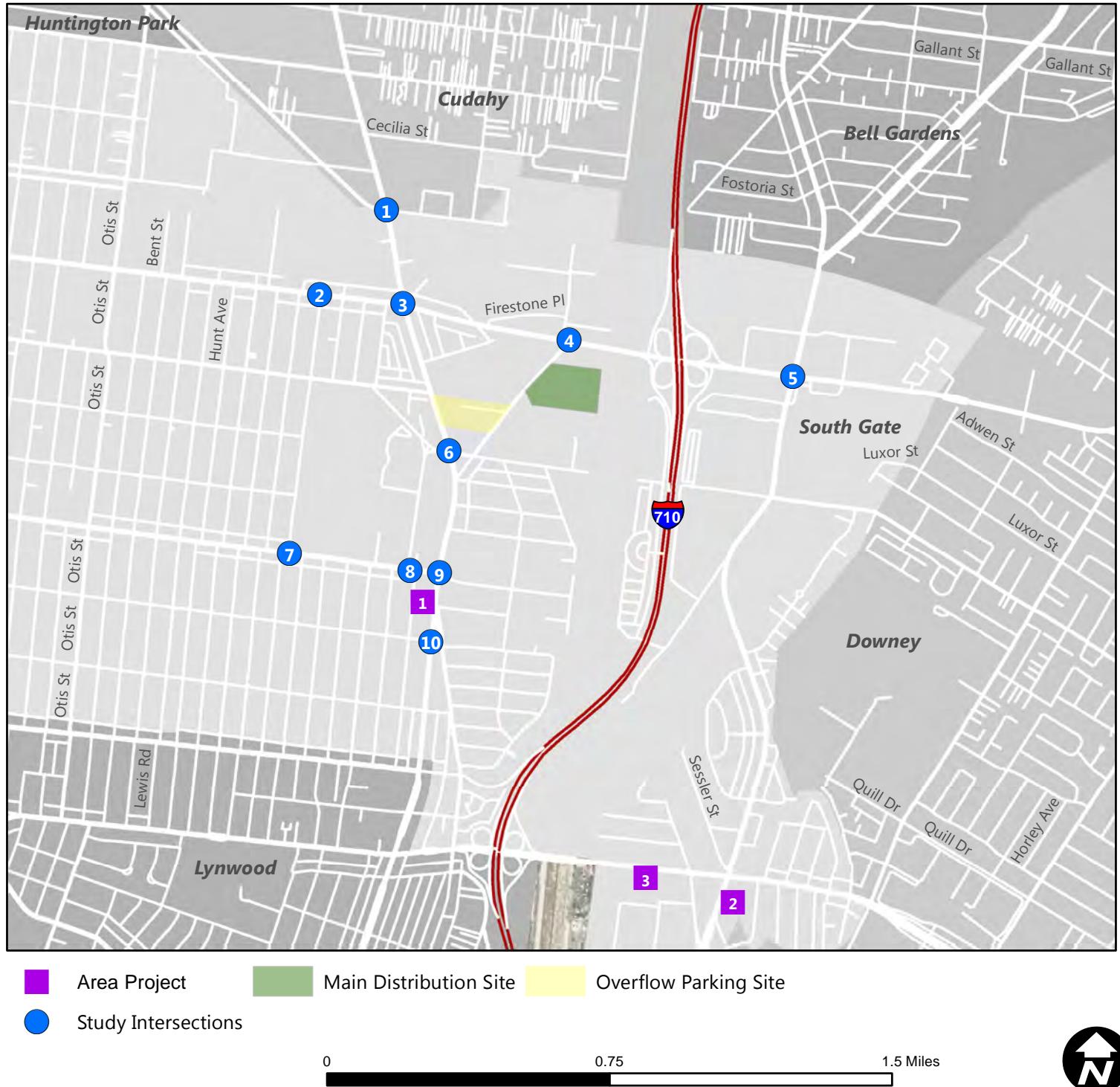


Figure 9 - Area Project Trip Assignment - AM/PM Peak Hour



XX/XX AM /PM Peak Hour Traffic Volumes

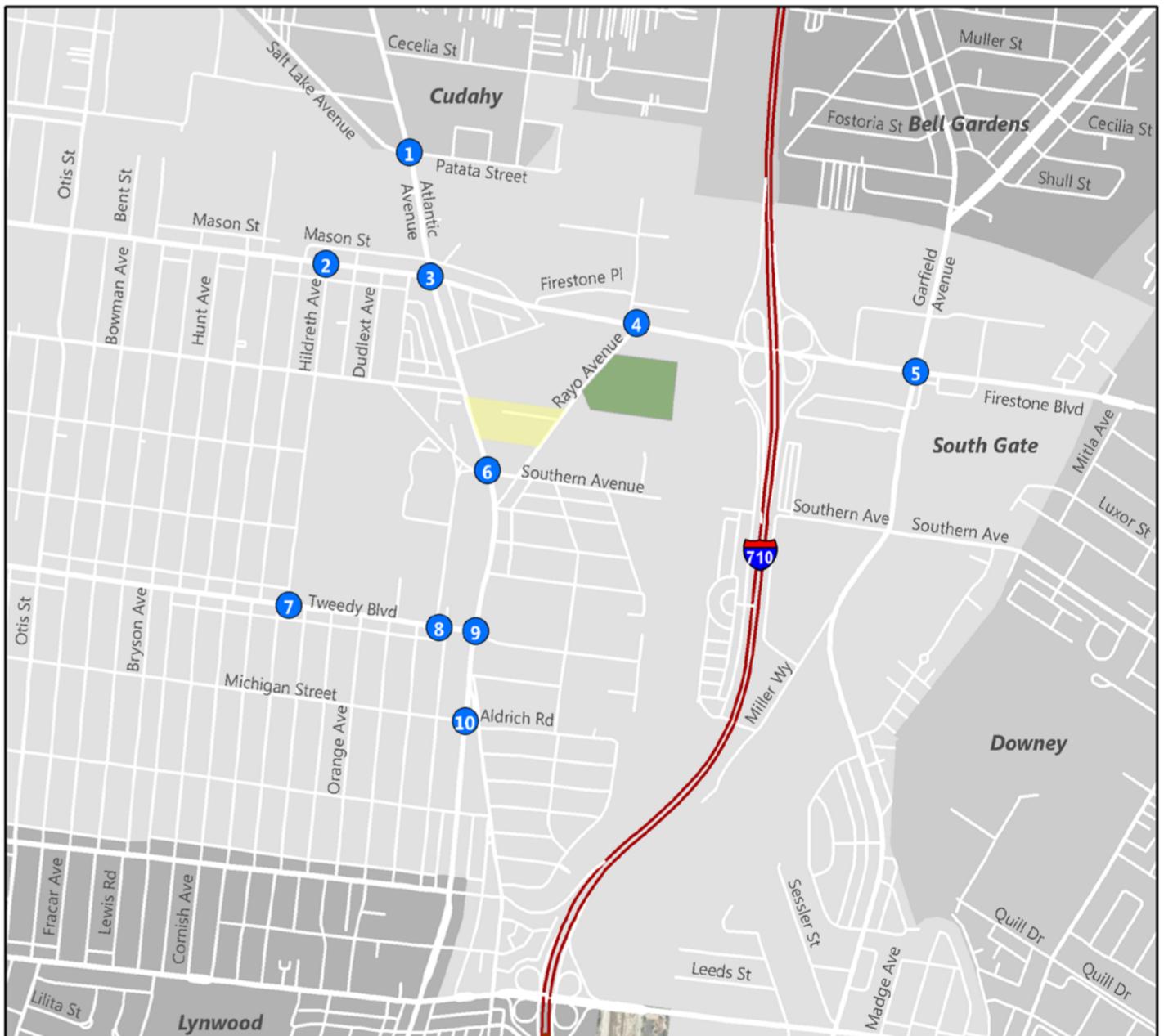
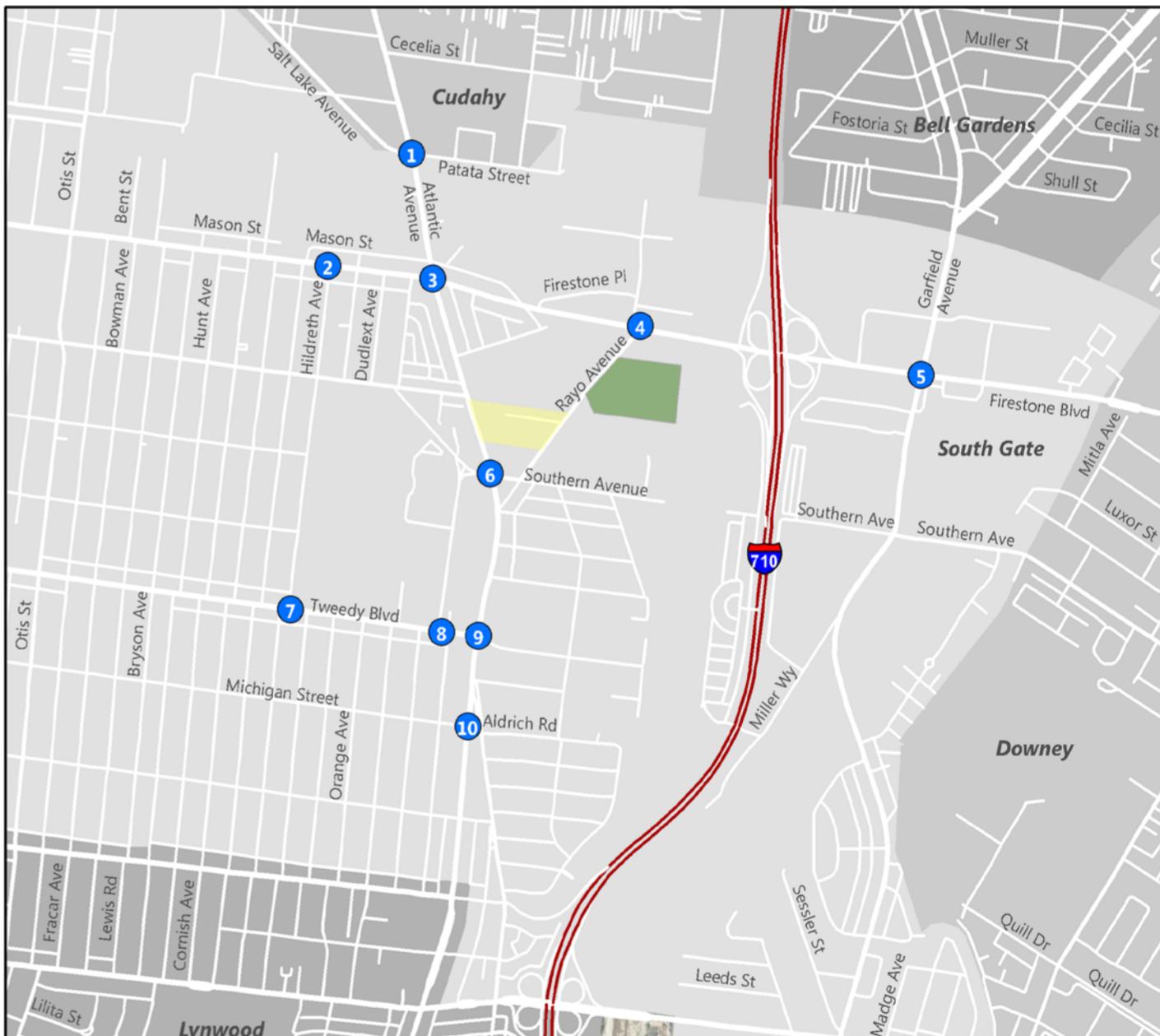
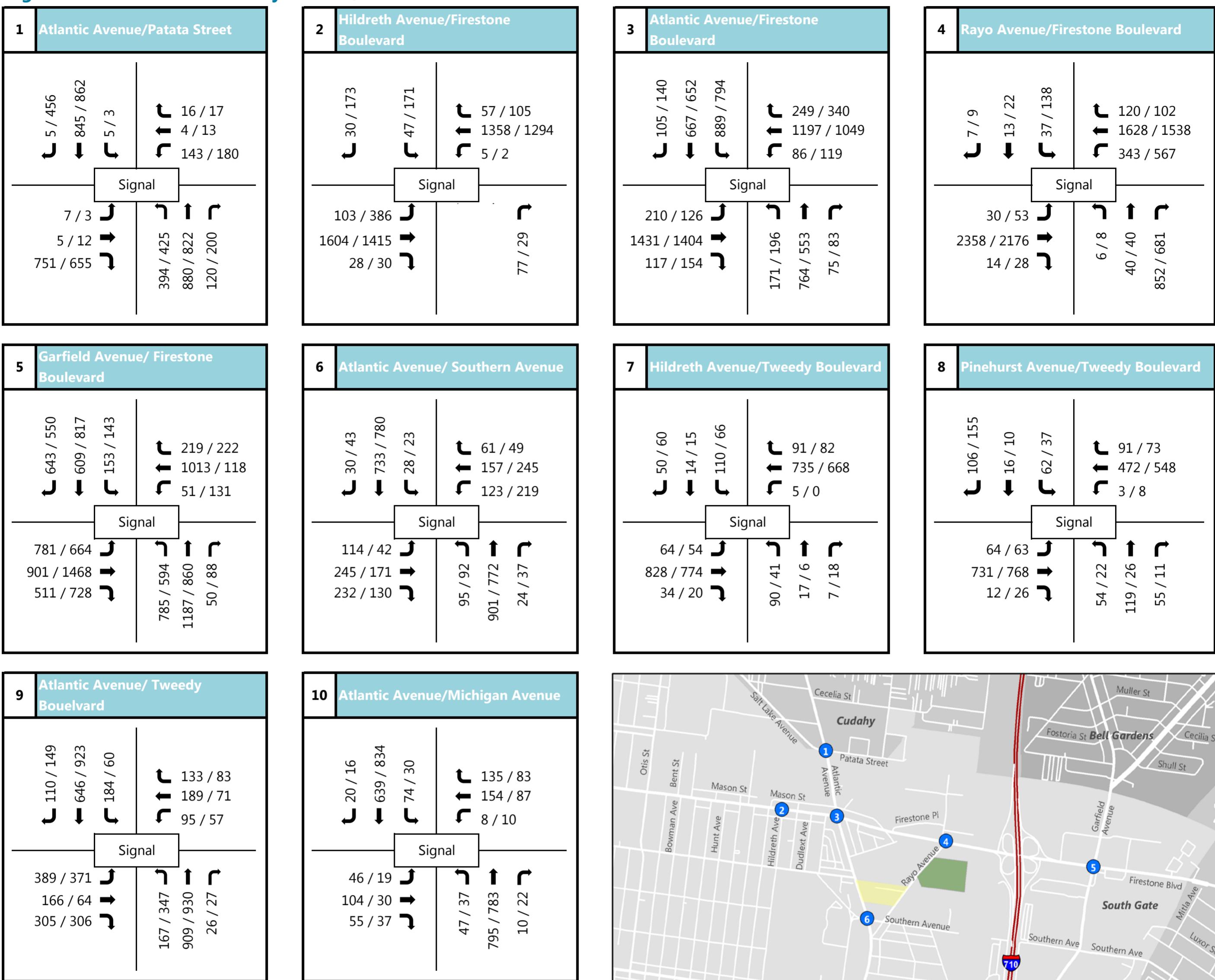


Figure 10 - Future Without Project - AM/PM Peak Hour Traffic Volumes



6. FUTURE WITH PROJECT CONDITIONS

This section documents future traffic conditions at the study intersections with the addition of Project-generated traffic. Traffic volumes for these conditions were derived by adding Project trips to the future without-Project scenario volumes.

Table 10 summarizes the resulting V/C (or delay) and LOS values at the study intersections for the future with-Project traffic conditions. The future with-Project traffic analysis worksheets are provided in Appendix F of this report.

Table 10 – Study Intersection Future with-Project Conditions

Study Intersections	AM Peak		PM Peak	
	V/C or Delay	LOS	V/C or Delay	LOS
1 Atlantic Avenue/Patata Street	0.980	E	1.080	F
2 Hildreth Avenue/ Firestone Boulevard	0.522	A	0.596	A
3 Atlantic Avenue/ Firestone Boulevard	0.817	D	0.836	D
4 Rayo Avenue/ Firestone Boulevard	1.155	F	1.048	F
5 Garfield Avenue/ Firestone Boulevard	0.860	D	0.844	D
6 Atlantic Avenue/ Southern Avenue	0.644	B	0.657	B
7 Hildreth Avenue/ Tweedy Boulevard	0.801	D	0.707	C
8 Pinehurst Avenue/ Tweedy Boulevard	0.765	C	0.708	C
9 Atlantic Avenue/ Tweedy Boulevard	0.879	D	0.778	C
10 Atlantic Avenue/ Michigan Avenue	0.620	B	0.520	A

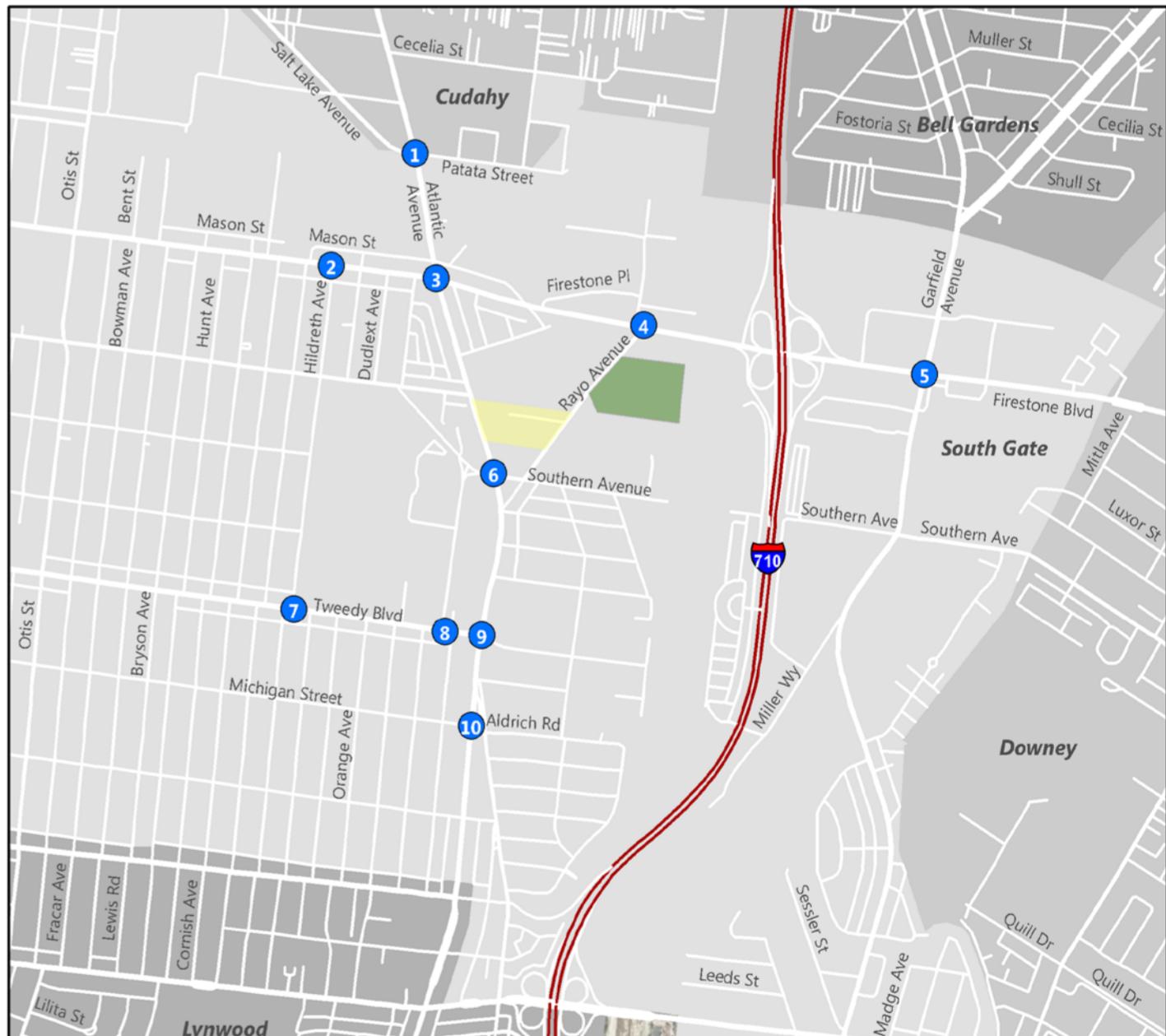
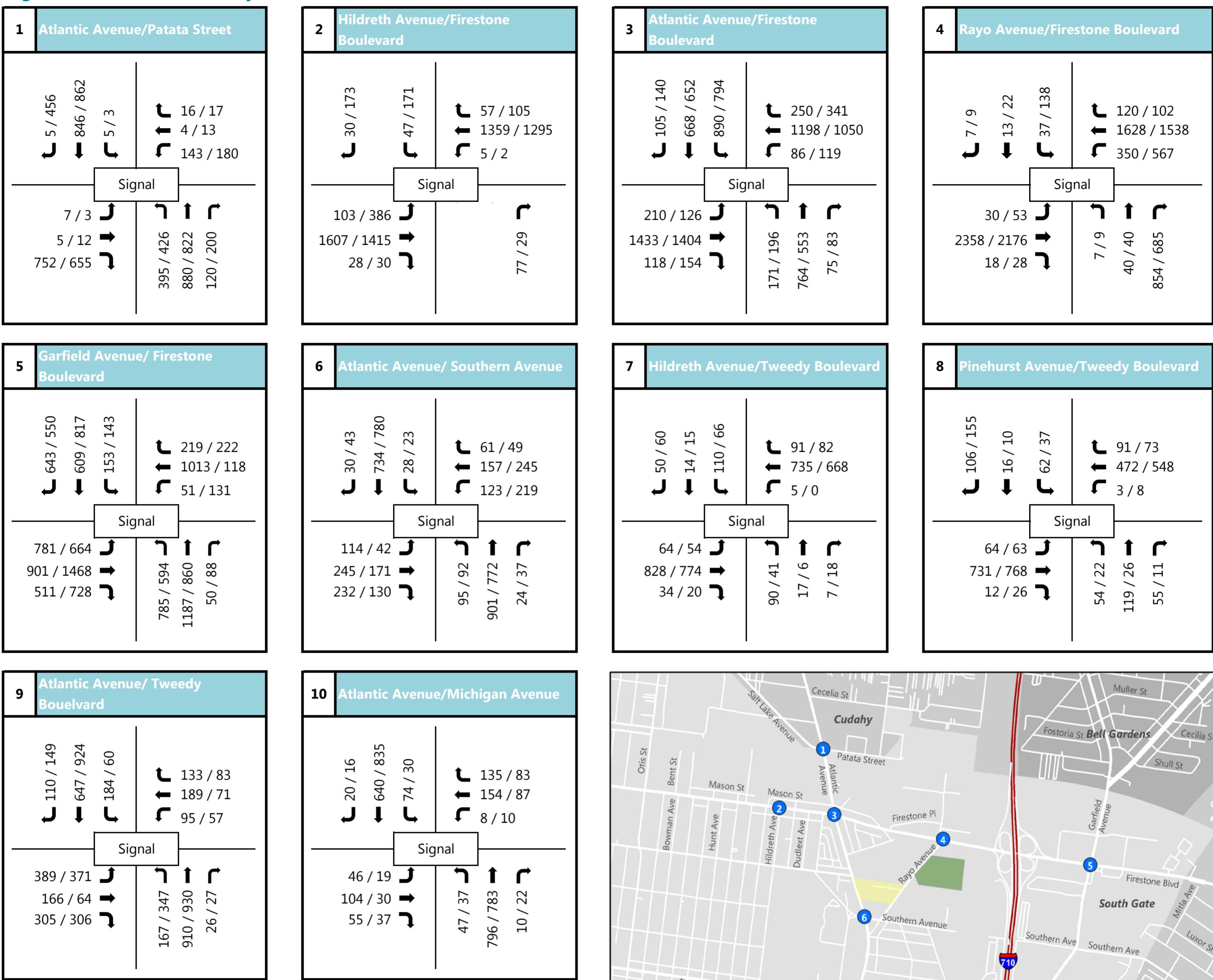
LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

Eight of the 10 study intersections would continue to operate at LOS D or better during the weekday a.m. and p.m. peak hours. The following two study intersections would operate at LOS E or F during either peak period:

- Atlantic Avenue/Patata Street
- Rayo Avenue/ Firestone Boulevard

The future with-Project traffic volumes for the weekday a.m. and p.m. peak hours are illustrated on Figure 11.

Figure 11 – Future With-Project - AM/PM Peak Hour Traffic Volumes



7. PROJECT TRAFFIC IMPACTS

7.1 DETERMINATION OF TRAFFIC IMPACTS

Traffic impacts are identified if a proposed development will result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if Project-related traffic will cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency.

The traffic study guidelines for the County of Los Angeles define significant impacts based on pre-project levels of service. These thresholds are summarized below.

Pre-Project Conditions		% Increase in V/C
LOS	V/C	
C	0.71-0.80	.04 or more
D	0.81-0.90	.02 or more
E/F	0.91 or more	.01 or more

V/C= Volume-to-Capacity Ratio

7.2 PROJECT TRAFFIC IMPACTS – EXISTING PLUS PROJECT

Table 11 provides a summary of the Project impacts under existing conditions. Traffic impacts created by the proposed Project were determined by comparing the existing scenario conditions to the existing with-Project scenario conditions.

The proposed Project would not create significant traffic impacts at any of the 10 study intersections:

**Table 11 – Determination of Project Impacts –
Existing plus-Project Conditions**

Study Intersections		Peak Hour	Existing (2019) Conditions		Existing (2019) with Project		Change in V/C	Sig Impact?
			V/C or Delay	LOS	V/C or Delay	LOS		
1	Atlantic Avenue/ Patata Street	AM	0.962	E	0.963	E	0.001	No
		PM	1.059	F	1.059	F	0.000	No
2	Hildreth Avenue/ Firestone Boulevard	AM	0.512	A	0.513	A	0.001	No
		PM	0.586	A	0.586	A	0.000	No
3	Atlantic Avenue/ Firestone Boulevard	AM	0.792	C	0.793	C	0.001	No
		PM	0.804	D	0.804	D	0.000	No
4	Rayo Avenue/ Firestone Boulevard	AM	1.114	F	1.116	F	0.002	No
		PM	1.014	F	1.016	F	0.002	No
5	Garfield Avenue/ Firestone Boulevard	AM	0.843	D	0.843	D	0.000	No
		PM	0.824	D	0.824	D	0.000	No
6	Atlantic Avenue/ Southern Avenue	AM	0.624	B	0.624	B	0.000	No
		PM	0.636	B	0.636	B	0.000	No
7	Hildreth Avenue/ Tweedy Boulevard	AM	0.788	C	0.788	C	0.000	No
		PM	0.695	B	0.695	B	0.000	No
8	Pinehurst Avenue/ Tweedy Boulevard	AM	0.753	C	0.753	C	0.000	No
		PM	0.695	B	0.695	B	0.000	No
9	Atlantic Avenue/ Tweedy Boulevard	AM	0.845	D	0.846	D	0.001	No
		PM	0.746	C	0.746	C	0.000	No
10	Atlantic Avenue/ Michigan Avenue	AM	0.596	A	0.596	A	0.000	No
		PM	0.495	A	0.495	A	0.000	No

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

7.3 PROJECT TRAFFIC IMPACTS – FUTURE WITH PROJECT

Table 12 provides a summary of the Project impacts under future conditions. Traffic impacts created by the Project were determined by comparing the future without-Project conditions to the future with-Project conditions.

The proposed Project would not create significant peak-hour traffic impacts in the future period at any of the 10 study intersections:

**Table 12 – Determination of Project Impacts –
Future with-Project Conditions**

Study Intersections		Peak Hour	Existing (2019) Conditions		Future (2020) Without Project		Future (2020) with Project		Change in V/C or Delay	Sig Impact?
			V/C	LOS	V/C or Delay	LOS	V/C or Delay	LOS		
1	Atlantic Avenue/ Patata Street	AM	0.962	E	0.980	E	0.980	E	0.000	No
		PM	1.059	F	1.081	F	1.080	F	-0.001	No
2	Hildreth Avenue/ Firestone Boulevard	AM	0.512	A	0.521	A	0.522	A	0.001	No
		PM	0.586	A	0.596	A	0.596	A	0.000	No
3	Atlantic Avenue/ Firestone Boulevard	AM	0.792	C	0.816	D	0.817	D	0.001	No
		PM	0.804	D	0.836	D	0.836	D	0.000	No
4	Rayo Avenue/ Firestone Boulevard	AM	1.114	F	1.153	F	1.155	F	0.002	No
		PM	1.014	F	1.046	F	1.048	F	0.002	No
5	Garfield Avenue/ Firestone Boulevard	AM	0.843	D	0.860	D	0.860	D	0.000	No
		PM	0.824	D	0.844	D	0.844	D	0.000	No
6	Atlantic Avenue/ Southern Avenue	AM	0.624	B	0.644	B	0.644	B	0.000	No
		PM	0.636	B	0.657	B	0.657	B	0.000	No
7	Hildreth Avenue/ Tweedy Boulevard	AM	0.788	C	0.801	D	0.801	D	0.000	No
		PM	0.695	B	0.707	C	0.707	C	0.000	No
8	Pinehurst Avenue/ Tweedy Boulevard	AM	0.753	C	0.765	C	0.765	C	0.000	No
		PM	0.695	B	0.708	C	0.708	C	0.000	No
9	Atlantic Avenue/ Tweedy Boulevard	AM	0.845	D	0.878	D	0.879	D	0.001	No
		PM	0.746	C	0.778	C	0.778	C	0.000	No
10	Atlantic Avenue/ Michigan Avenue	AM	0.596	A	0.620	B	0.620	B	0.000	No
		PM	0.495	A	0.519	A	0.520	A	0.001	No

LOS = Level of Service; V/C = Volume to Capacity ratio shown in X.XXX format.

7.4 SITE PARKING ANALYSIS

KOA analyzed the estimated parking demand of Project employees at the Project site. The planned parking supplies of each location and employee parking demand by shift were both data inputs to the analysis. The overlap of employee shifts was incorporated into the analysis, where outgoing employees from the end of a shift have not departed yet and incoming employees for the start of a new shift are parking.

The analysis indicates that the peak parking demand would result in 97 percent occupancy during the noon hour. This would be the highest peak in demand on a daily basis. From 8:00 AM to 12:00 PM there would be 93 percent to 94 percent occupancy. At thither times of day occupancy would be lower.

There would not be parking demand overflow from the Project site parking impacts would not occur. This analysis is summarized in Table 13.

Table 13 – Firestone Boulevard/Rayo Avenue Westbound Queuing

Hour	Main Site (Parked)	Main Site (Supply)	Main Site (% Utilized)
12:00 AM	183	232	79%
1:00 AM	183	232	79%
2:00 AM	183	232	79%
3:00 AM	183	232	79%
4:00 AM	183	232	79%
5:00 AM	183	232	79%
6:00 AM	194	232	84%
7:00 AM	205	232	88%
8:00 AM	216	232	93%
9:00 AM	216	232	93%
10:00 AM	216	232	93%
11:00 AM	217	232	94%
12:00 PM	224	232	97%
1:00 PM	61	232	26%
2:00 PM	61	232	26%
3:00 PM	61	232	26%
4:00 PM	61	232	26%
5:00 PM	61	232	26%
6:00 PM	54	232	23%
7:00 PM	20	232	9%
8:00 PM	13	232	6%
9:00 PM	6	232	3%
10:00 PM	0	232	0%
11:00 PM	20	232	9%

7.5 VEHICLE QUEUING ANALYSIS – FIRESTONE BOULEVARD AND MAIN PROJECT DRIVEWAY

The City of South Gate, during the traffic scoping process, requested that the traffic study include an analysis of queuing with and without the proposed Project at two locations:

- The westbound left-turn pocket of the Rayo Avenue/Firestone Boulevard intersection
- The southbound left-turn movement of the main driveway and the main project site.

The text and table below provide a summary of the analysis conducted at these two locations.

Firestone Boulevard and Rayo Avenue

Table 14 provides a summary of the queuing analysis conducted for the westbound turning movement of the Rayo Avenue/Firestone Boulevard intersection, located to the north of the Project main site. This analysis was conducted as input to the City design efforts for future raised median treatments on Firestone Boulevard. The 95th percentile average for queuing is used as a design input for the necessary turning movement pocket length.

Due to higher vehicle volumes in the AM peak hour, monitoring of the existing queue length was focused on the morning peak, during a period from 7:30 AM to 8:30 AM. Monitoring was conducted on two days in January and February of 2020, with the following results:

- Tuesday January 14, 2020: The maximum observed queue was approximately 310 feet.
- Thursday February 27, 2020: The maximum observed queue was approximately 270 feet.

The westbound left-turn movement has a two-lane pocket for vehicle storage. The highest length within the two lanes was recorded.

The operations analysis of the intersection indicates that the queue length would increase by 7.3 percent between existing conditions and future post-project conditions. Applying that factor to the two above maximum observed queue lengths results in an approximate range of 290 to 335 feet.

As the existing turn pocket length is approximately 600 feet in length. Based on these calculations, lengthening of the turn pocket is not recommended.

Rayo Avenue and Main Site

Peak hour vehicle queuing analysis was examined for the intersection of Rayo Avenue at the main site driveway using the Highway Capacity Manual methodology for unsignalized intersections. On average, southbound left turn queueing was observed to be less than one vehicle during peak-hour periods.

7.6 TRANSPORTATION INDEX (TI) CALCULATIONS FOR RAYO AVENUE

Transportation Index (TI) calculations for Rayo Avenue were included in the impact analysis, to provide input to the City on a roadway pavement/base evaluation. The results of this analysis provide input to the necessary pavement/base profile for without-Project and with-Project conditions. The methodology is based on the Highway Design Manual.

The results of the TI analysis are as follows:

- The 10-year TI calculation is 10.496 under existing conditions and 10.662 under existing plus-Project conditions.
- The 20-year TI calculation is 11.398 under existing conditions and 11.579 under existing plus-Project conditions.
- Rounding to the nearest 0.5 increment yields a 10.5 value for exiting conditions and an 11.5 value for future conditions, regardless of project trips.

The detailed calculations are provided in Attachment G.

8. CONGESTION MANAGEMENT PROGRAM AND FREEWAY FACILITY IMPACTS

This section demonstrates the ways in which this traffic study was prepared to be in conformance with the procedures mandated by the County of Los Angeles Congestion Management Program (CMP). An analysis was also conducted of potential freeway impacts per Caltrans impact standards.

The CMP was created statewide because of Proposition 111 and was implemented locally by the Los Angeles County Metropolitan Transportation Authority (Metro). The CMP for Los Angeles County requires that the traffic impact of individual development projects of potentially regional significance be analyzed. A specific system of arterial roadways plus all freeways comprises the CMP system. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis is conducted where:

- At CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed Project will add 50 or more vehicle trips during either a.m. or p.m. weekday peak hours.
- At CMP mainline freeway-monitoring locations, where the Project will add 150 or more trips, in either direction, during the either the a.m. or p.m. weekday peak hours.

The closest CMP arterial monitoring station to the Project site is Atlantic Avenue and Firestone Boulevard, which is less than one-half mile to the northwest of the Project site. The CMP intersection of Alameda Street and Firestone Boulevard is located approximately three miles to the west of the Project site:

- CM ID 144 – Atlantic Avenue and Firestone Boulevard
- CMP ID 143 – Alameda Street and Firestone Boulevard

The Project trip assignment analysis indicates that 7 Project trips are expected to travel to/from the Project site along arterial roadways to the west during the AM peak hour. The intersection of Atlantic Avenue and Firestone Boulevard also would not have impacts that exceed the CMP standards. Additional impact analysis is not required at this CMP arterial monitoring station.

At the intersection of Alameda Street and Firestone Boulevard, Project trips would not exceed the 50-trip threshold for peak hours. Additional impact analysis is also not required at this station.

The Project will not add more than 150 peak-hour trips to any freeway mainline segment.

APPENDIX A
Study Scoping Document



TECHNICAL MEMORANDUM

Date: October 31, 2019

To: Jose Loera – City of South Gate

cc: Richard Ludt, LEED AP – Interior Removal Specialist, Inc.

From: Brian Marchetti, AICP

Subject: Traffic Analysis Scoping – Amazon DAX7 Project

KOA is working with Interior Removal Specialist, Inc. (IRS) on Rayo Avenue to develop a traffic analysis scope of work for the proposed Amazon DAX7 distribution facility and overflow parking operations on Rayo Avenue in South Gate. IRS is negotiating a lease of the vacant parcel they own on Rayo Avenue to Amazon, to support their operations on the main site.

Project Development Details

The proposal main site for the Amazon operations would be at 9350 Rayo Avenue, at an existing industrial parcel on the east side of the street, north of the railroad corridor. 232 off-street parking spaces would be provided. The proposed use at this site is by-right and would not require any zoning changes.

The proposed overflow parking site for delivery vans and employee vehicles would be at approximately 9315 Rayo Avenue, on the south side of the railroad corridor, between Rayo Avenue and Atlantic Avenue. The sole access point would be on Rayo Avenue. 250 spaces would be provided for van storage and 120 spaces would be provided for employee vehicle parking.

KOA has been asked to produce a traffic analysis for the project that would satisfy City of South Gate conditions for the overflow parking facility. Therefore, this Scoping Document acknowledges that the project will be prepared in accordance with current traffic study guidelines and policies of the City of South Gate.

Project Trip Generating Characteristics

Packages will be shipped to the project delivery stations from Amazon fulfillment and sortation centers. Packages arrive from line haul trucks, and are sorted based on ZIP codes, and loaded into delivery vans operated by delivery service providers ("DSP") or personal vehicles operated by individuals ("Amazon FLEX"). Operations for the site will be 24/7.

Delivery stations operate 24/7, with sortation activity done early in the morning. The project operations would require 26 line haul truck trips delivering packages between 8:00 pm and 7:00 am each day. Sorting



would occur in two shifts, with the first occurring between 8:00 PM and 5:00 AM and the second occurring between 6:30 AM to 12:30 PM, with 120 Amazon associates entering and departing between those times.

There will be 16 full time managers supervising sortation operations, arriving between 6:00 AM and 9:00 AM and departing between 3:00 PM and 6:00 PM.

The first wave of DSP drivers will arrive at 6:30 AM. DSP drivers will either park their personal vehicles onsite and pick-up their delivery vans or park their personal vehicles offsite, pickup their delivery vans and drive to the delivery station. Once at the delivery station with their delivery van, DSP drivers load their delivery van and depart to deliver packages. Each delivery wave takes about 30 minutes to load and depart. As a wave of DSP drivers prepare to depart, a new wave of DSP drivers queue and prepare to load their delivery van. The last wave of DSP drivers would depart the delivery station around 11:00 AM.

After DSP drivers complete their routes, they return to the delivery station, park the delivery van either onsite or at the offsite location, and leave using a personal vehicle or public transportation. It was anticipated that routes would take 8 hours to complete, and inbound trips during the PM peak hour were based on this assumption.

The site will also use FLEX drivers to deliver packages in passenger cars (corresponding to FHWA classes 2 and 3¹) . There will be 56 FLEX vehicles entering the facility, staggered between 12:00 PM and 3:00 PM. FLEX loading waves similarly take 30 minutes to complete.

Amazon proposes to use the remote site for employee vehicle and delivery van parking, with van movements to and from the main site occurring under the following pattern:

- 20 vans per wave and 12 waves per day
- Each wave spaced 20 minutes apart

No intersections are located between the main project site and the remote parking site.

Trip Generation

The overall project trip generation estimate is provided in Table 1 below. The project will generate 2,690 trips per day, including 316 trips during the AM peak hour and 280 trips during the PM peak hour. The peak-hour trips include inbound and outbound trips within the same 60-minute period.

Peak-hour trip generation includes delivery van and personal vehicle trips for shipments and employee commuter vehicles. Daily trips also include overnight semi-truck deliveries, multiplied by a passenger car equivalency (PCE) factor of 2.5.

¹ See <https://www.fhwa.dot.gov/publications/research/infrastructure/pavements/ltpp/13091/002.cfm>



TABLE 1 – OVERALL PROJECT TRIP GENERATION ESTIMATE

Land Use	Trip Types	Weekday					
		Daily Total	AM Peak Hour			PM Peak Hour	
<i>Trip Generation-Raw</i>							
Distribution Facility and Parking	Semi-Trucks	52	4	2	2	0	0
	Vans	1,032	114	0	114	114	114
	Employees/Personal Vehicles	1,528	190	190	0	166	18
<i>Passenger Car Equivalents</i>							
-	Semi-Trucks				2.5		
	Vans				1		
	Employees/Personal Vehicles				1		
<i>Trip Generation with PCEs</i>							
Distribution Facility and Parking	Semi-Trucks	130	12	6	6	0	0
	Vans	1,032	114	0	114	114	114
	Employees/Personal Vehicles	1,528	190	190	0	166	18
Total		2,690	316	196	120	280	132
							148

The study intersection analysis will be based on peak-hour trips in the AM and PM periods.

Table 2 provides the constituent breakdown of trips for project employees. This includes sorting/warehouse employees and delivery drivers. As trips between the remote parking site and the main parking site would not traverse any study intersections, the trips will be treated as one source of trip generation. Where employees would enter or leave across a range of hours, the number of employees entering or leaving represents the number entering or leaving within a typical hour in that range.

TABLE 2 – EMPLOYEE COMPONENT – TRIP GENERATION CALCULATIONS

Category	Period	In time	Number In per hour	AM Peak	Out Time	Number out per hour	PM Peak	Daily
Sorting	AM Staff	6:30 AM	60	In	12:30 PM	60	-	120
	Managers	6:00-9:00 AM	16	In	3:00-6:00 PM	16	Out	32
	Night time	8:00 PM	60	-	5:00 AM	60	-	120
Delivery drivers	DSP	6:30-10:30 AM	114	In	3:00-7:00 PM	114	Out	1032
	Flex	12:00-3:00 PM	18	-	5:30-8:30 PM	18	Out	112

The number of delivery driver trips into and out of the project site was based on the number of delivery vans and FLEX vehicles that would load or unload per hour, shown in Table 4.

Table 3 provides the constituent delivery truck trips, primarily occurring during overnight hours but also overlapping with the AM peak hour. PCE factors were applied to these trips.



TABLE 3 – DELIVERY TRUCK COMPONENT – TRIP GENERATION CALCULATIONS

Time: 8:00 PM to 7:00 AM	
Daily Trucks	26
Daily Round trip	52
x PCE (2.5)-Total Daily	130
Total Time (Hours)	11:00
AM Peak Hour Trips (6-7am)	12

Table 4 provides the constituent trips for local delivery vans. The DSP peak-hour trips were based on total daily trips (derived from the trip count provided in the distribution table) and the overall timeframe of deliveries, divided by the number of hours. The FLEX personal vehicle trips were calculated in a similar manner.

TABLE 4 – DELIVERY VANS COMPONENT – TRIP GENERATION CALCULATIONS

Type	Time	In	Out	Daily
DSP	AM	0	114	1032
	PM	114	0	
Flex	PM	18	0	112

DSP Peak Hour Calculations	
Shift Period: 6:30-11:00 AM	
516	DSP Trips per day
4.5	Hours per DSP shift period
0.5	Hours per wave
9	Waves
57	Vehicles or employees/wave
114	Vehicles or employees/peak hour

Distribution and Study Area

Amazon estimates the trip distribution for van deliveries to be as follows, based on the planned service area of the facility.



	Customer Volume	% Volume	Daily Trip Count	Max Distance in Miles(One way)
East	17,225	14%	78	6
North	69,546	55%	316	14.5
South	17,663	14%	80	5
West	21,567	17%	98	8.5
Total	126,001	100%	572	-

Study Intersections

The scope of work includes an impact analysis at ten signalized intersections within a half-mile of the project site and main driveway approaches from distribution center and parking lot. The intersections were chosen to comply with the City policy of requiring that traffic impact reports should analyze all signalized intersections within a half-mile radius from a project. Commercial center driveway and minor intersection signalized intersections were removed from this list.

- | |
|--|
| 1. Atlantic Avenue/Patata Street |
| 2. Hildreth Avenue/Firestone Boulevard |
| 3. Atlantic Avenue/Firestone Boulevard |
| 4. Rayo Avenue/Firestone Boulevard |
| 5. Garfield Avenue/Firestone Boulevard |
| 6. Atlantic Avenue/Southern Avenue |
| 7. Hildreth Avenue/Tweedy Boulevard |
| 8. Pinehurst Avenue/Tweedy Boulevard |
| 9. Atlantic Avenue/Tweedy Boulevard |
| 10. Atlantic Avenue at Michigan Avenue |



Transportation Index Calculations and Queueing

Transportation Index (TI) calculations will be provided for Rayo Avenue, between the project site access and Firestone Boulevard. A daily volume machine count with full FHWA classifications will be taken on Rayo Avenue for two weekdays within the same week except for Mondays/Fridays or holidays. TI calculations for existing and with-project conditions will be provided, from which the City can calculate required versus existing roadway pavement/base thickness.

Potential driveway queuing for inbound traffic at the project site will be examined, by analyzing the driveway intersection with Rayo Avenue as an unsignalized intersection. Left-turn inbound movements will be the focus of this analysis, and the estimated peak queuing length for vehicles will be reviewed for any overlap with existing nearby driveways.

An additional queuing analysis will be conducted at the Firestone/Rayo intersection, for the westbound left-turn movement from Firestone to Rayo. As the City will be soon improving the Firestone Boulevard corridor in the area, calcs will be made for project-related increased in queuing at that turn pocket, and the final estimated required length of the turn pocket will be calculated.

Geographic Distribution

The trip distribution to the study area is estimated to be as follows:

- 35 percent of trips to/from I-710 to the north via Firestone Boulevard
- 5 percent of trips to/from Firestone Boulevard to the east
- 10 percent of trips to/from I-710 to the south via Atlantic Avenue
- 14 percent of trips to/from I-710 to the south via Firestone Boulevard
- 1 percent of trips to/from Tweedy Boulevard to the west
- 1 percent of trips to/from Southern Avenue to the west
- 20 percent of trips to/from Firestone Boulevard to the west
- 10 percent of trips to/from Salt Lake Avenue to the north
- 4 percent of trips to/from Atlantic Avenue to the north

The attached Figure 1 in Attachment A provides an area map with the locations of the project sites. The proposed site plan for the main site is provided in Attachment B, and the site plan for the remote parking site is provided in Attachment C.

The proposed study area and trip distribution percentages are provided in Attachment D.

Parking Study

To determine whether the project's on-site parking supply is sufficient to accommodate both employees and delivery vehicles associated with the project, a parking study will be conducted to assess existing and projected demand levels.



Impact Determinations

The project will follow the Traffic Impact Report guidelines laid out by the Los Angeles County Department of Public Works. These guidelines designate Intersection Capacity Utilization (ICU) as the preferred analysis methodology.

Project Year: 2020

Attachment A
Area Map

FIGURE
1

Amazon DAX 7 South Gate Distribution Facility
Main Site and Overflow Parking Site Locations

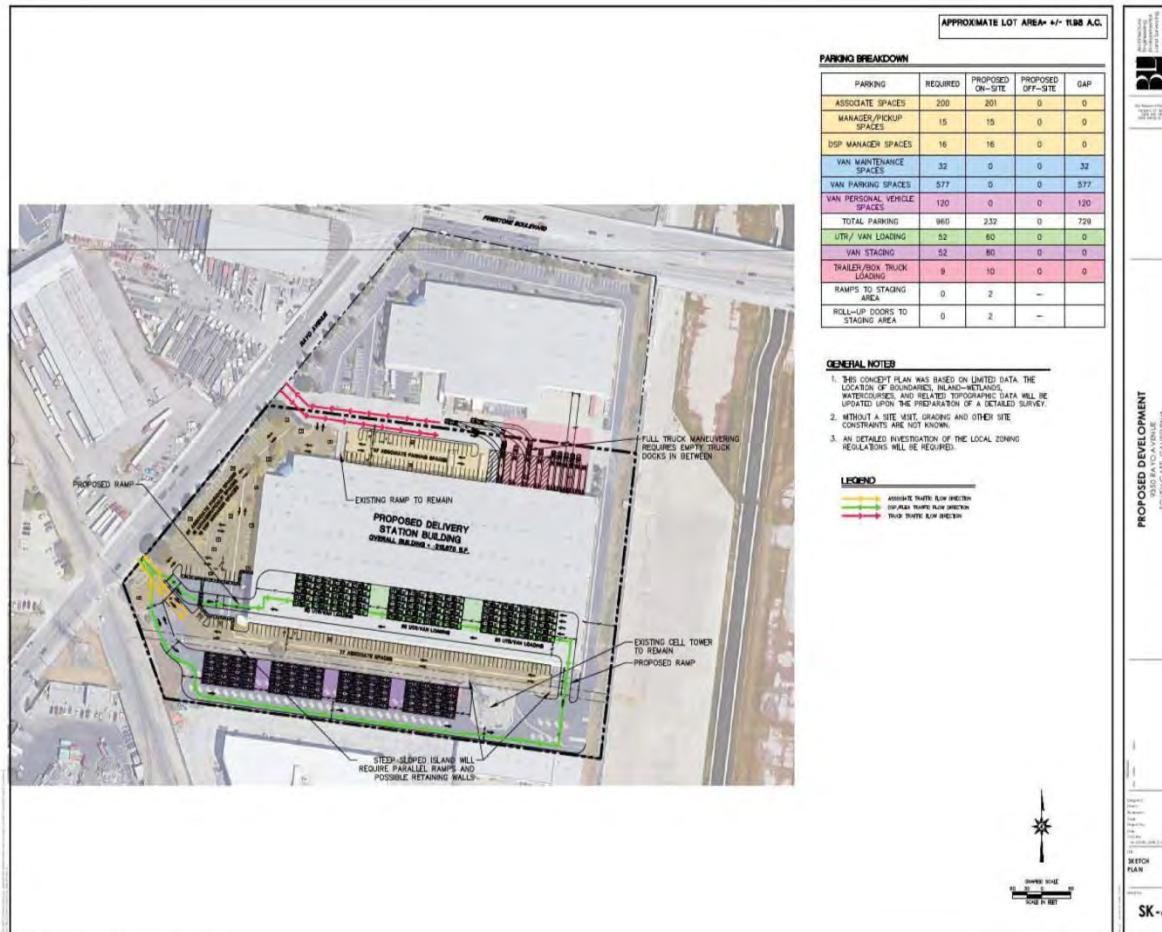


Main Site and Overflow Parking Site Locations

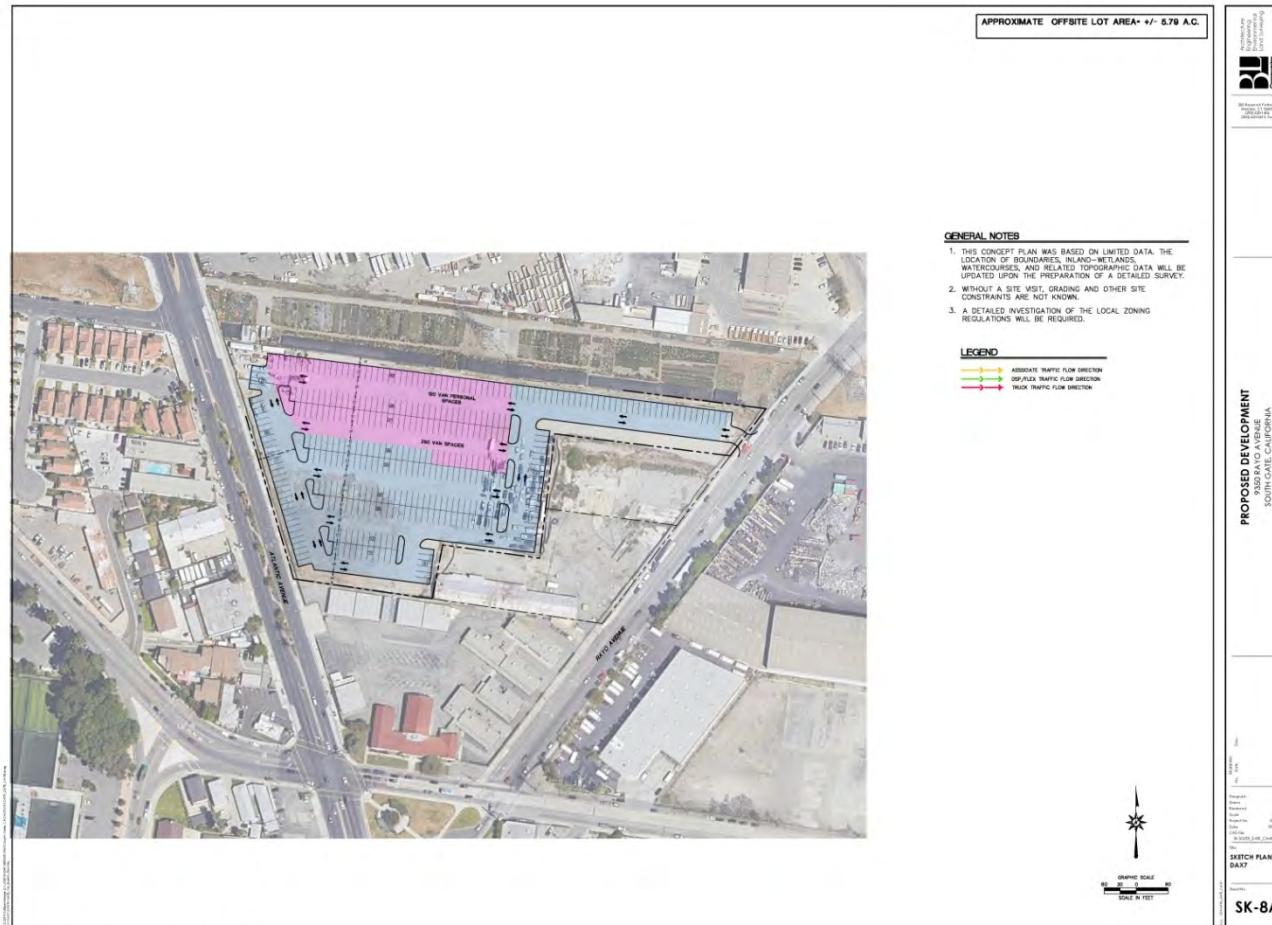
Site

- Main Distribution Site
- Overflow Parking Site

Attachment B
Proposed Site Plan - Main Site



Attachment C
Proposed Site Plan - Remote Parking Site



Attachment D
Project Study Area and Trip Distribution Percentages

FIGURE
1

Amazon DAX 7 South Gate Distribution Facility
Study Area and Trip Distribution



APPENDIX B
Traffic Count Data

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of South Gate
 N/S: Atlantic Avenue
 E/W: Salt Lake Avenue/Patata Street
 Weather: Clear

File Name : 01_SGE_Atlantic_Patata AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

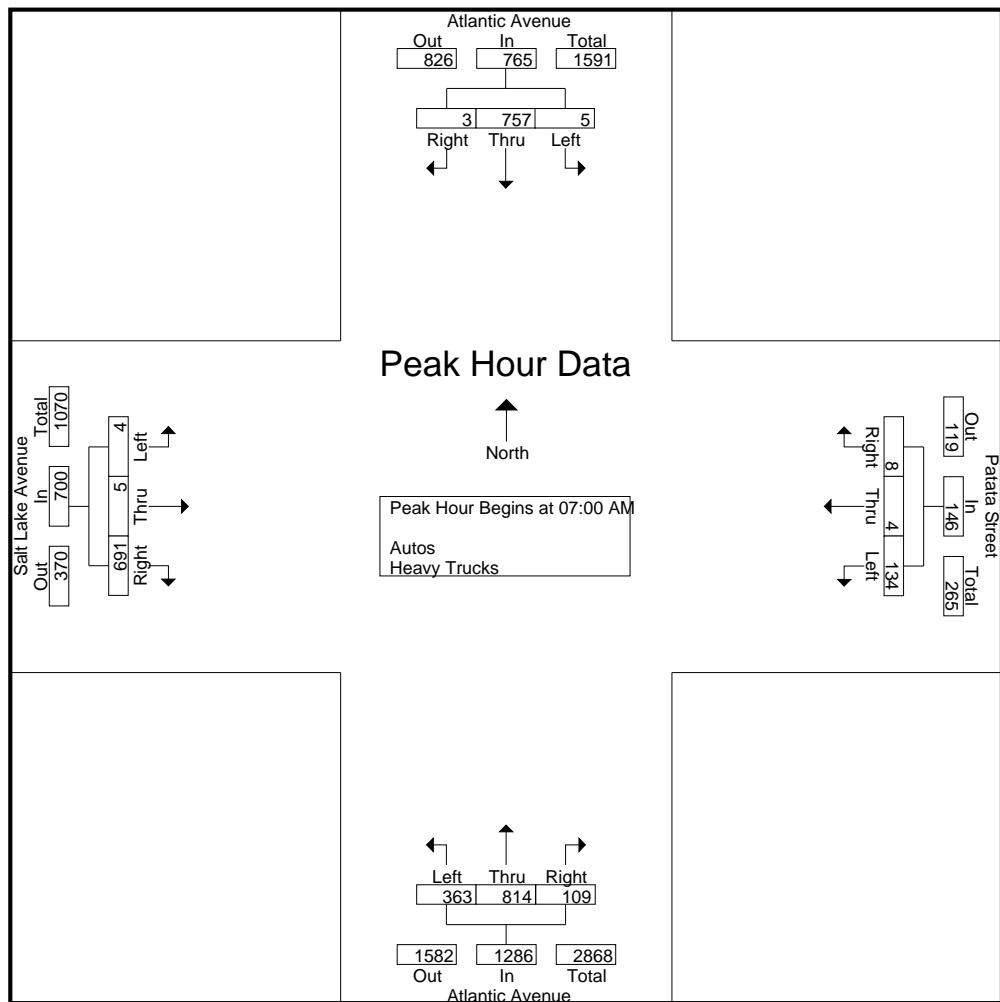
	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	159	1	161	27	1	1	29	90	193	29	312	2	1	169	172	674
07:15 AM	1	177	1	179	35	0	1	36	93	208	25	326	1	1	188	190	731
07:30 AM	1	197	0	198	39	1	2	42	97	217	22	336	1	2	189	192	768
07:45 AM	2	224	1	227	33	2	4	39	83	196	33	312	0	1	145	146	724
Total	5	757	3	765	134	4	8	146	363	814	109	1286	4	5	691	700	2897
08:00 AM	0	153	2	155	22	3	2	27	84	201	30	315	0	1	168	169	666
08:15 AM	1	156	2	159	41	1	3	45	64	204	25	293	1	3	115	119	616
08:30 AM	3	130	2	135	22	2	2	26	85	173	21	279	1	0	125	126	566
08:45 AM	7	145	1	153	24	0	2	26	91	151	21	263	2	1	119	122	564
Total	11	584	7	602	109	6	9	124	324	729	97	1150	4	5	527	536	2412
Grand Total	16	1341	10	1367	243	10	17	270	687	1543	206	2436	8	10	1218	1236	5309
Apprch %	1.2	98.1	0.7		90	3.7	6.3		28.2	63.3	8.5		0.6	0.8	98.5		
Total %	0.3	25.3	0.2	25.7	4.6	0.2	0.3	5.1	12.9	29.1	3.9	45.9	0.2	0.2	22.9	23.3	
Autos	15	1261	6	1282	233	10	8	251	633	1479	194	2306	5	10	1153	1168	5007
% Autos	93.8	94	60	93.8	95.9	100	47.1	93	92.1	95.9	94.2	94.7	62.5	100	94.7	94.5	94.3
Heavy Trucks	1	80	4	85	10	0	9	19	54	64	12	130	3	0	65	68	302
% Heavy Trucks	6.2	6	40	6.2	4.1	0	52.9	7	7.9	4.1	5.8	5.3	37.5	0	5.3	5.5	5.7

	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	1	159	1	161	27	1	1	29	90	193	29	312	2	1	169	172	674
07:15 AM	1	177	1	179	35	0	1	36	93	208	25	326	1	1	188	190	731
07:30 AM	1	197	0	198	39	1	2	42	97	217	22	336	1	2	189	192	768
07:45 AM	2	224	1	227	33	2	4	39	83	196	33	312	0	1	145	146	724
Total Volume	5	757	3	765	134	4	8	146	363	814	109	1286	4	5	691	700	2897
% App. Total	0.7	99	0.4		91.8	2.7	5.5		28.2	63.3	8.5		0.6	0.7	98.7		
PHF	.625	.845	.750	.843	.859	.500	.500	.869	.936	.938	.826	.957	.500	.625	.914	.911	.943

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of South Gate
 N/S: Atlantic Avenue
 E/W: Salt Lake Avenue/Patata Street
 Weather: Clear

File Name : 01_SGE_Atlantic_Patata AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:15 AM				07:00 AM			
+0 mins.	1	159	1	161	39	1	2	42	93	208	25	326	2	1	169	172
+15 mins.	1	177	1	179	33	2	4	39	97	217	22	336	1	1	188	190
+30 mins.	1	197	0	198	22	3	2	27	83	196	33	312	1	2	189	192
+45 mins.	2	224	1	227	41	1	3	45	84	201	30	315	0	1	145	146
Total Volume	5	757	3	765	135	7	11	153	357	822	110	1289	4	5	691	700
% App. Total	0.7	99	0.4		88.2	4.6	7.2		27.7	63.8	8.5		0.6	0.7	98.7	
PHF	.625	.845	.750	.843	.823	.583	.688	.850	.920	.947	.833	.959	.500	.625	.914	.911

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File Name : 01_SGE_Atlantic_Patata AM
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 Start Date : 11/19/2019
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Groups Printed- Autos

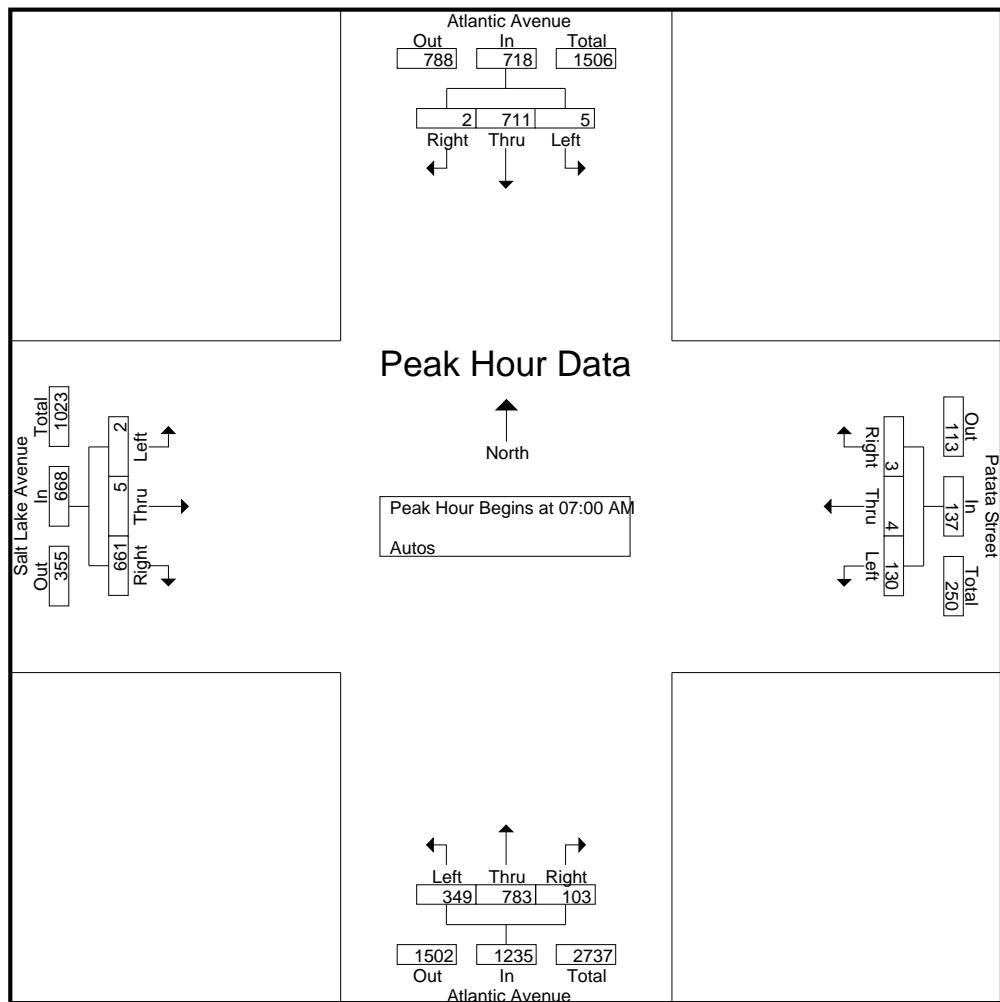
	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	147	1	149	27	1	0	28	87	182	28	297	1	1	155	157	631
07:15 AM	1	169	1	171	34	0	0	34	91	201	24	316	0	1	181	182	703
07:30 AM	1	178	0	179	37	1	2	40	91	209	21	321	1	2	184	187	727
07:45 AM	2	217	0	219	32	2	1	35	80	191	30	301	0	1	141	142	697
Total	5	711	2	718	130	4	3	137	349	783	103	1235	2	5	661	668	2758
08:00 AM	0	146	1	147	22	3	1	26	74	196	30	300	0	1	158	159	632
08:15 AM	1	147	1	149	38	1	1	40	55	192	22	269	1	3	110	114	572
08:30 AM	3	122	2	127	20	2	1	23	74	160	19	253	1	0	118	119	522
08:45 AM	6	135	0	141	23	0	2	25	81	148	20	249	1	1	106	108	523
Total	10	550	4	564	103	6	5	114	284	696	91	1071	3	5	492	500	2249
Grand Total	15	1261	6	1282	233	10	8	251	633	1479	194	2306	5	10	1153	1168	5007
Apprch %	1.2	98.4	0.5		92.8	4	3.2		27.5	64.1	8.4		0.4	0.9	98.7		
Total %	0.3	25.2	0.1	25.6	4.7	0.2	0.2		5	12.6	29.5	3.9	46.1	0.1	0.2	23	23.3

	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	147	1	149	27	1	0	28	87	182	28	297	1	1	155	157	631
07:15 AM	1	169	1	171	34	0	0	34	91	201	24	316	0	1	181	182	703
07:30 AM	1	178	0	179	37	1	2	40	91	209	21	321	1	2	184	187	727
07:45 AM	2	217	0	219	32	2	1	35	80	191	30	301	0	1	141	142	697
Total Volume	5	711	2	718	130	4	3	137	349	783	103	1235	2	5	661	668	2758
% App. Total	0.7	99	0.3		94.9	2.9	2.2		28.3	63.4	8.3		0.3	0.7	99		
PHF	.625	.819	.500	.820	.878	.500	.375	.856	.959	.937	.858	.962	.500	.625	.898	.893	.948

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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	1	147	1	149	27	1	0	28	87	182	28	297	1	1	155	157
+15 mins.	1	169	1	171	34	0	0	34	91	201	24	316	0	1	181	182
+30 mins.	1	178	0	179	37	1	2	40	91	209	21	321	1	2	184	187
+45 mins.	2	217	0	219	32	2	1	35	80	191	30	301	0	1	141	142
Total Volume	5	711	2	718	130	4	3	137	349	783	103	1235	2	5	661	668
% App. Total	0.7	99	0.3		94.9	2.9	2.2		28.3	63.4	8.3		0.3	0.7	99	
PHF	.625	.819	.500	.820	.878	.500	.375	.856	.959	.937	.858	.962	.500	.625	.898	.893

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Groups Printed- Heavy Trucks

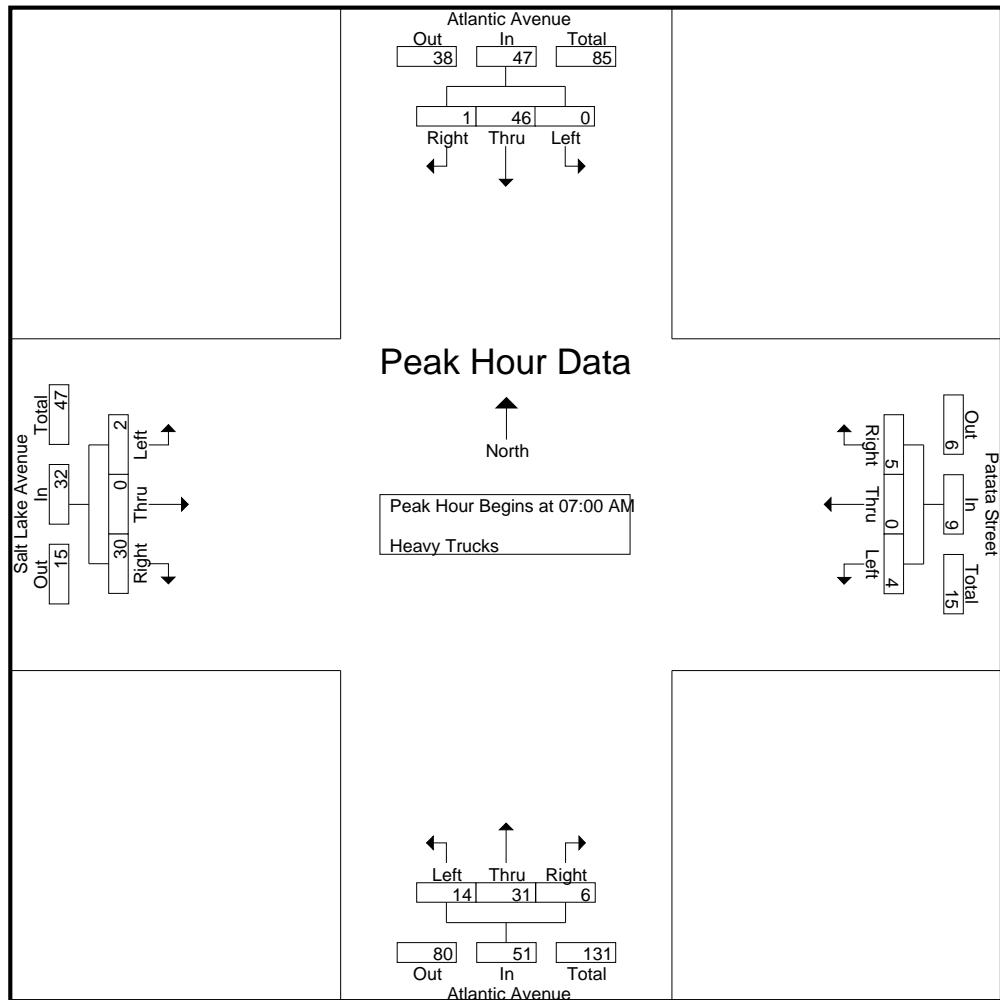
	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	12	0	12	0	0	1	1	3	11	1	15	1	0	14	15	43
07:15 AM	0	8	0	8	1	0	1	2	2	7	1	10	1	0	7	8	28
07:30 AM	0	19	0	19	2	0	0	2	6	8	1	15	0	0	5	5	41
07:45 AM	0	7	1	8	1	0	3	4	3	5	3	11	0	0	4	4	27
Total	0	46	1	47	4	0	5	9	14	31	6	51	2	0	30	32	139
08:00 AM	0	7	1	8	0	0	1	1	10	5	0	15	0	0	10	10	34
08:15 AM	0	9	1	10	3	0	2	5	9	12	3	24	0	0	5	5	44
08:30 AM	0	8	0	8	2	0	1	3	11	13	2	26	0	0	7	7	44
08:45 AM	1	10	1	12	1	0	0	1	10	3	1	14	1	0	13	14	41
Total	1	34	3	38	6	0	4	10	40	33	6	79	1	0	35	36	163
Grand Total	1	80	4	85	10	0	9	19	54	64	12	130	3	0	65	68	302
Apprch %	1.2	94.1	4.7		52.6	0	47.4		41.5	49.2	9.2		4.4	0	95.6		
Total %	0.3	26.5	1.3	28.1	3.3	0	3	6.3	17.9	21.2	4	43	1	0	21.5	22.5	

	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	12	0	12	0	0	1	1	3	11	1	15	1	0	14	15	43
07:15 AM	0	8	0	8	1	0	1	2	2	7	1	10	1	0	7	8	28
07:30 AM	0	19	0	19	2	0	0	2	6	8	1	15	0	0	5	5	41
07:45 AM	0	7	1	8	1	0	3	4	3	5	3	11	0	0	4	4	27
Total Volume	0	46	1	47	4	0	5	9	14	31	6	51	2	0	30	32	139
% App. Total	0	97.9	2.1		44.4	0	55.6		27.5	60.8	11.8		6.2	0	93.8		
PHF	.000	.605	.250	.618	.500	.000	.417	.563	.583	.705	.500	.850	.500	.000	.536	.533	.808

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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	12	0	12	0	0	1	1	3	11	1	15	1	0	14	15
+15 mins.	0	8	0	8	1	0	1	2	2	7	1	10	1	0	7	8
+30 mins.	0	19	0	19	2	0	0	2	6	8	1	15	0	0	5	5
+45 mins.	0	7	1	8	1	0	3	4	3	5	3	11	0	0	4	4
Total Volume	0	46	1	47	4	0	5	9	14	31	6	51	2	0	30	32
% App. Total	0	97.9	2.1		44.4	0	55.6		27.5	60.8	11.8		6.2	0	93.8	
PHF	.000	.605	.250	.618	.500	.000	.417	.563	.583	.705	.500	.850	.500	.000	.536	.533

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Salt Lake Avenue/Patata Street
 Weather: Clear

File Name : 01_SGE_Atlantic_Patata PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

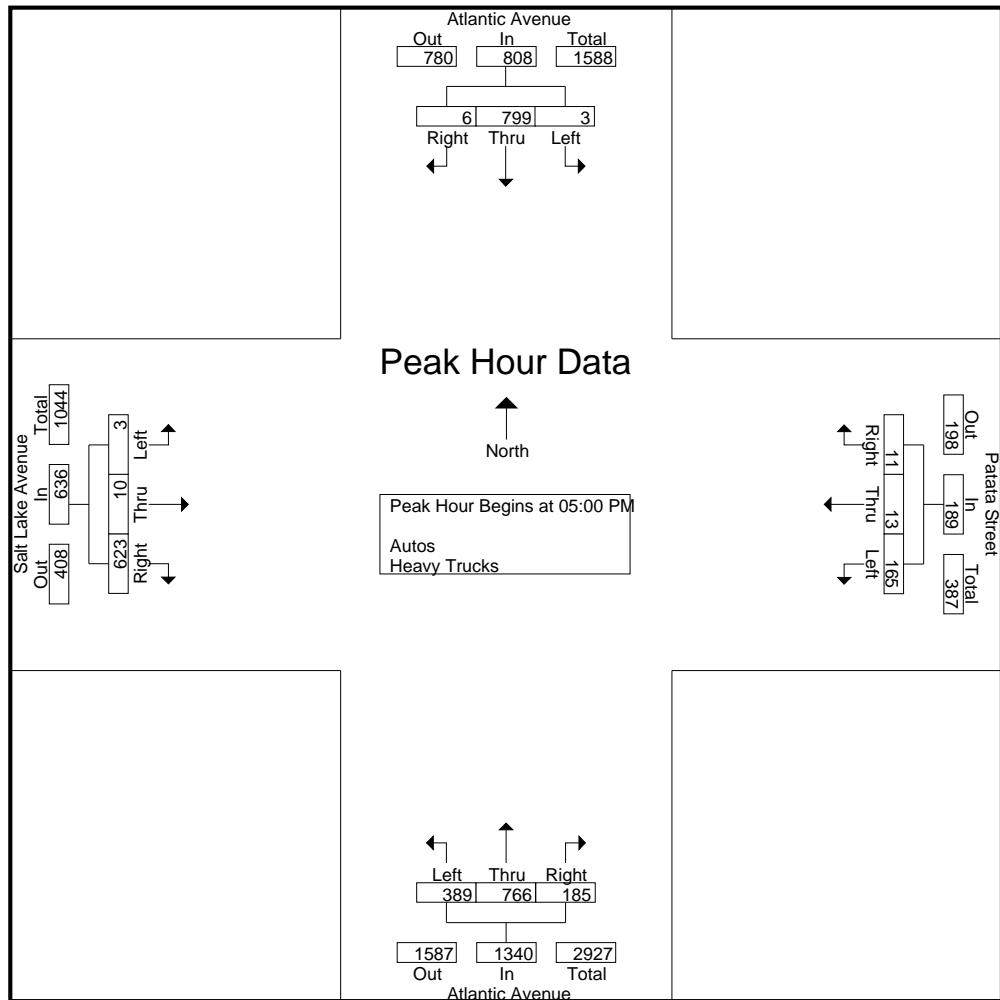
	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	5	218	2	225	44	2	5	51	86	188	44	318	2	2	153	157	751
04:15 PM	0	184	0	184	31	2	2	35	104	212	28	344	1	2	157	160	723
04:30 PM	1	232	0	233	44	4	4	52	93	178	34	305	0	1	134	135	725
04:45 PM	0	209	0	209	35	0	3	38	106	189	44	339	2	3	144	149	735
Total	6	843	2	851	154	8	14	176	389	767	150	1306	5	8	588	601	2934
05:00 PM	1	222	4	227	33	5	3	41	90	188	39	317	1	4	153	158	743
05:15 PM	1	135	1	137	27	2	3	32	104	171	47	322	0	1	171	172	663
05:30 PM	1	221	0	222	48	5	5	58	105	223	53	381	1	1	167	169	830
05:45 PM	0	221	1	222	57	1	0	58	90	184	46	320	1	4	132	137	737
Total	3	799	6	808	165	13	11	189	389	766	185	1340	3	10	623	636	2973
Grand Total	9	1642	8	1659	319	21	25	365	778	1533	335	2646	8	18	1211	1237	5907
Apprch %	0.5	99	0.5		87.4	5.8	6.8		29.4	57.9	12.7		0.6	1.5	97.9		
Total %	0.2	27.8	0.1	28.1	5.4	0.4	0.4	6.2	13.2	26	5.7	44.8	0.1	0.3	20.5	20.9	
Autos	5	1590	8	1603	308	20	17	345	736	1483	321	2540	7	17	1171	1195	5683
% Autos	55.6	96.8	100	96.6	96.6	95.2	68	94.5	94.6	96.7	95.8	96	87.5	94.4	96.7	96.6	96.2
Heavy Trucks	4	52	0	56	11	1	8	20	42	50	14	106	1	1	40	42	224
% Heavy Trucks	44.4	3.2	0	3.4	3.4	4.8	32	5.5	5.4	3.3	4.2	4	12.5	5.6	3.3	3.4	3.8

	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	1	222	4	227	33	5	3	41	90	188	39	317	1	4	153	158	743
05:15 PM	1	135	1	137	27	2	3	32	104	171	47	322	0	1	171	172	663
05:30 PM	1	221	0	222	48	5	5	58	105	223	53	381	1	1	167	169	830
05:45 PM	0	221	1	222	57	1	0	58	90	184	46	320	1	4	132	137	737
Total Volume	3	799	6	808	165	13	11	189	389	766	185	1340	3	10	623	636	2973
% App. Total	0.4	98.9	0.7		87.3	6.9	5.8		29	57.2	13.8		0.5	1.6	98		
PHF	.750	.900	.375	.890	.724	.650	.550	.815	.926	.859	.873	.879	.750	.625	.911	.924	.895

Counts Unlimited
 PO Box 1178
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Salt Lake Avenue/Patata Street
 Weather: Clear

File Name : 01_SGE_Atlantic_Patata PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:45 PM				04:45 PM			
+0 mins.	0	184	0	184	33	5	3	41	106	189	44	339	2	3	144	149
+15 mins.	1	232	0	233	27	2	3	32	90	188	39	317	1	4	153	158
+30 mins.	0	209	0	209	48	5	5	58	104	171	47	322	0	1	171	172
+45 mins.	1	222	4	227	57	1	0	58	105	223	53	381	1	1	167	169
Total Volume	2	847	4	853	165	13	11	189	405	771	183	1359	4	9	635	648
% App. Total	0.2	99.3	0.5		87.3	6.9	5.8		29.8	56.7	13.5		0.6	1.4	98	
PHF	.500	.913	.250	.915	.724	.650	.550	.815	.955	.864	.863	.892	.500	.563	.928	.942

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Salt Lake Avenue/Patata Street
 Weather: Clear

File Name : 01_SGE_Atlantic_Patata PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

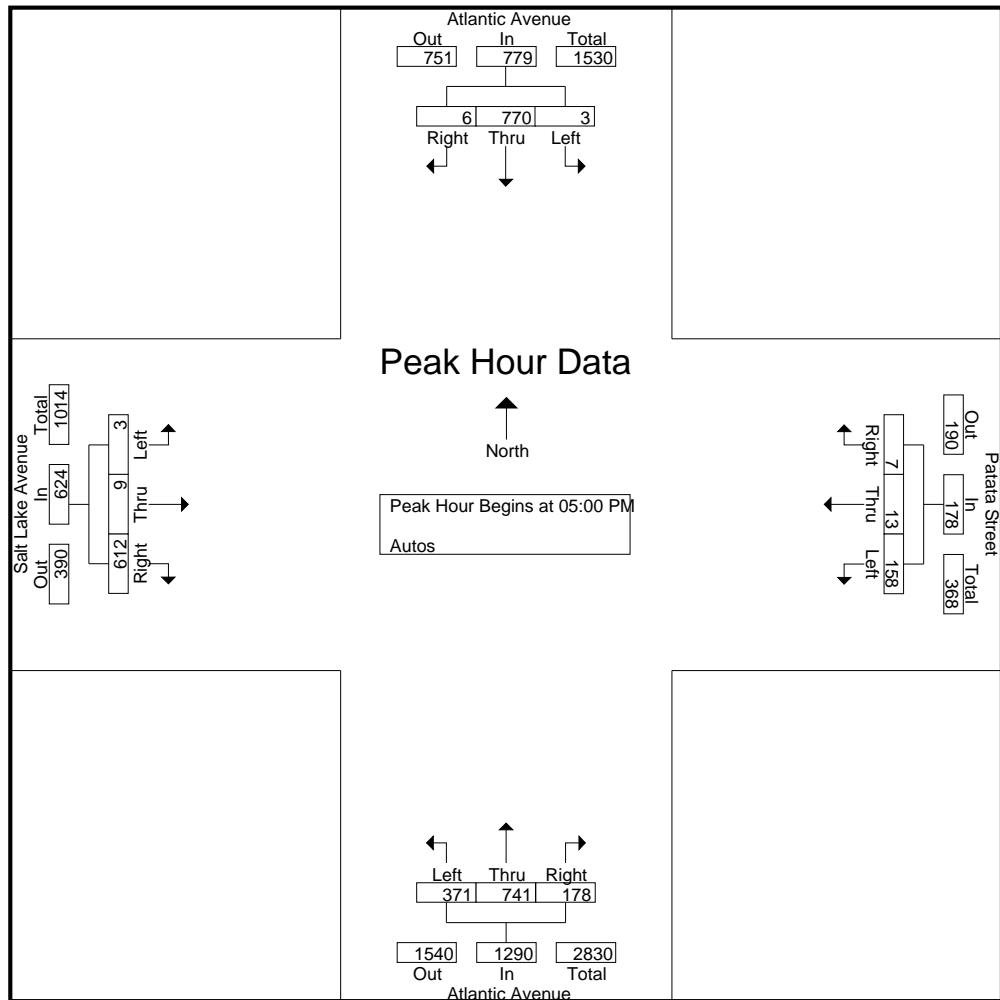
	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	210	2	213	43	1	3	47	79	178	42	299	2	2	144	148	707
04:15 PM	0	178	0	178	31	2	2	35	94	205	28	327	1	2	152	155	695
04:30 PM	1	226	0	227	44	4	2	50	88	175	33	296	0	1	125	126	699
04:45 PM	0	206	0	206	32	0	3	35	104	184	40	328	1	3	138	142	711
Total	2	820	2	824	150	7	10	167	365	742	143	1250	4	8	559	571	2812
05:00 PM	1	213	4	218	31	5	2	38	81	180	39	300	1	4	151	156	712
05:15 PM	1	133	1	135	26	2	2	30	103	166	44	313	0	1	170	171	649
05:30 PM	1	212	0	213	47	5	3	55	100	217	50	367	1	0	165	166	801
05:45 PM	0	212	1	213	54	1	0	55	87	178	45	310	1	4	126	131	709
Total	3	770	6	779	158	13	7	178	371	741	178	1290	3	9	612	624	2871
Grand Total	5	1590	8	1603	308	20	17	345	736	1483	321	2540	7	17	1171	1195	5683
Apprch %	0.3	99.2	0.5		89.3	5.8	4.9		29	58.4	12.6		0.6	1.4	98		
Total %	0.1	28	0.1	28.2	5.4	0.4	0.3	6.1	13	26.1	5.6	44.7	0.1	0.3	20.6		21

	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	1	213	4	218	31	5	2	38	81	180	39	300	1	4	151	156	712
05:15 PM	1	133	1	135	26	2	2	30	103	166	44	313	0	1	170	171	649
05:30 PM	1	212	0	213	47	5	3	55	100	217	50	367	1	0	165	166	801
05:45 PM	0	212	1	213	54	1	0	55	87	178	45	310	1	4	126	131	709
Total Volume	3	770	6	779	158	13	7	178	371	741	178	1290	3	9	612	624	2871
% App. Total	0.4	98.8	0.8		88.8	7.3	3.9		28.8	57.4	13.8		0.5	1.4	98.1		
PHF	.750	.904	.375	.893	.731	.650	.583	.809	.900	.854	.890	.879	.750	.563	.900	.912	.896

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Salt Lake Avenue/Patata Street
 Weather: Clear

File Name : 01_SGE_Atlantic_Patata PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	1	213	4	218	31	5	2	38	81	180	39	300	1	4	151	156
+15 mins.	1	133	1	135	26	2	2	30	103	166	44	313	0	1	170	171
+30 mins.	1	212	0	213	47	5	3	55	100	217	50	367	1	0	165	166
+45 mins.	0	212	1	213	54	1	0	55	87	178	45	310	1	4	126	131
Total Volume	3	770	6	779	158	13	7	178	371	741	178	1290	3	9	612	624
% App. Total	0.4	98.8	0.8		88.8	7.3	3.9		28.8	57.4	13.8		0.5	1.4	98.1	
PHF	.750	.904	.375	.893	.731	.650	.583	.809	.900	.854	.890	.879	.750	.563	.900	.912

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Salt Lake Avenue/Patata Street
 Weather: Clear

File Name : 01_SGE_Atlantic_Patata PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Heavy Trucks

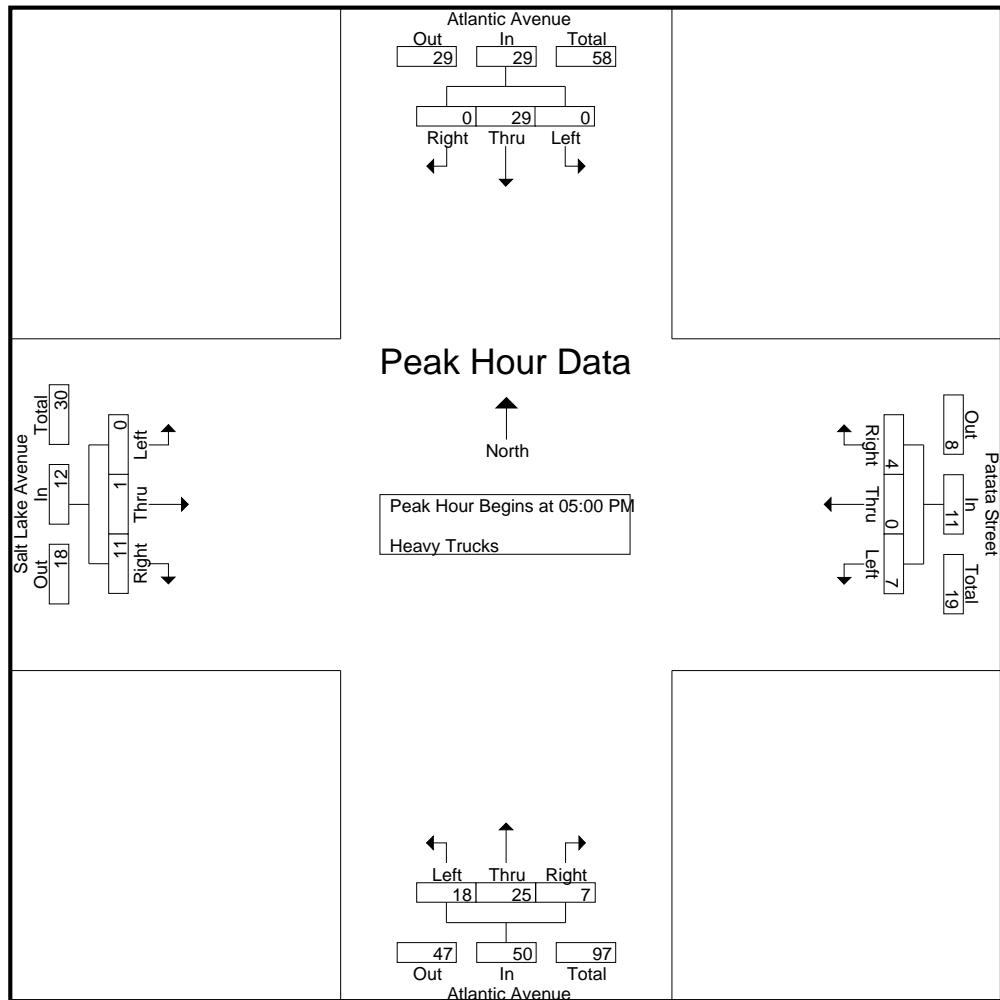
	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	8	0	12	1	1	2	4	7	10	2	19	0	0	9	9	44
04:15 PM	0	6	0	6	0	0	0	0	10	7	0	17	0	0	5	5	28
04:30 PM	0	6	0	6	0	0	2	2	5	3	1	9	0	0	9	9	26
04:45 PM	0	3	0	3	3	0	0	3	2	5	4	11	1	0	6	7	24
Total	4	23	0	27	4	1	4	9	24	25	7	56	1	0	29	30	122
05:00 PM	0	9	0	9	2	0	1	3	9	8	0	17	0	0	2	2	31
05:15 PM	0	2	0	2	1	0	1	2	1	5	3	9	0	0	1	1	14
05:30 PM	0	9	0	9	1	0	2	3	5	6	3	14	0	1	2	3	29
05:45 PM	0	9	0	9	3	0	0	3	3	6	1	10	0	0	6	6	28
Total	0	29	0	29	7	0	4	11	18	25	7	50	0	1	11	12	102
Grand Total	4	52	0	56	11	1	8	20	42	50	14	106	1	1	40	42	224
Apprch %	7.1	92.9	0		55	5	40		39.6	47.2	13.2		2.4	2.4	95.2		
Total %	1.8	23.2	0	25	4.9	0.4	3.6	8.9	18.8	22.3	6.2	47.3	0.4	0.4	17.9	18.8	

	Atlantic Avenue Southbound				Patata Street Westbound				Atlantic Avenue Northbound				Salt Lake Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	9	0	9	2	0	1	3	9	8	0	17	0	0	2	2	31
05:15 PM	0	2	0	2	1	0	1	2	1	5	3	9	0	0	1	1	14
05:30 PM	0	9	0	9	1	0	2	3	5	6	3	14	0	1	2	3	29
05:45 PM	0	9	0	9	3	0	0	3	3	6	1	10	0	0	6	6	28
Total Volume	0	29	0	29	7	0	4	11	18	25	7	50	0	1	11	12	102
% App. Total	0	100	0		63.6	0	36.4		36	50	14		0	8.3	91.7		
PHF	.000	.806	.000	.806	.583	.000	.500	.917	.500	.781	.583	.735	.000	.250	.458	.500	.823

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Salt Lake Avenue/Patata Street
 Weather: Clear

File Name : 01_SGE_Atlantic_Patata PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 05:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	9	0	9	2	0	1	3	9	8	0	17	0	0	2	2
+15 mins.	0	2	0	2	1	0	1	2	1	5	3	9	0	0	1	1
+30 mins.	0	9	0	9	1	0	2	3	5	6	3	14	0	1	2	3
+45 mins.	0	9	0	9	3	0	0	3	3	6	1	10	0	0	6	6
Total Volume	0	29	0	29	7	0	4	11	18	25	7	50	0	1	11	12
% App. Total	0	100	0	100	63.6	0	36.4	100	36	50	14	100	0	8.3	91.7	100
PHF	.000	.806	.000	.806	.583	.000	.500	.917	.500	.781	.583	.735	.000	.250	.458	.500

Counts Unlimited
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City of South Gate
 N/S: Azalea North/Hildreth Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 02_SGE_Hildreth_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

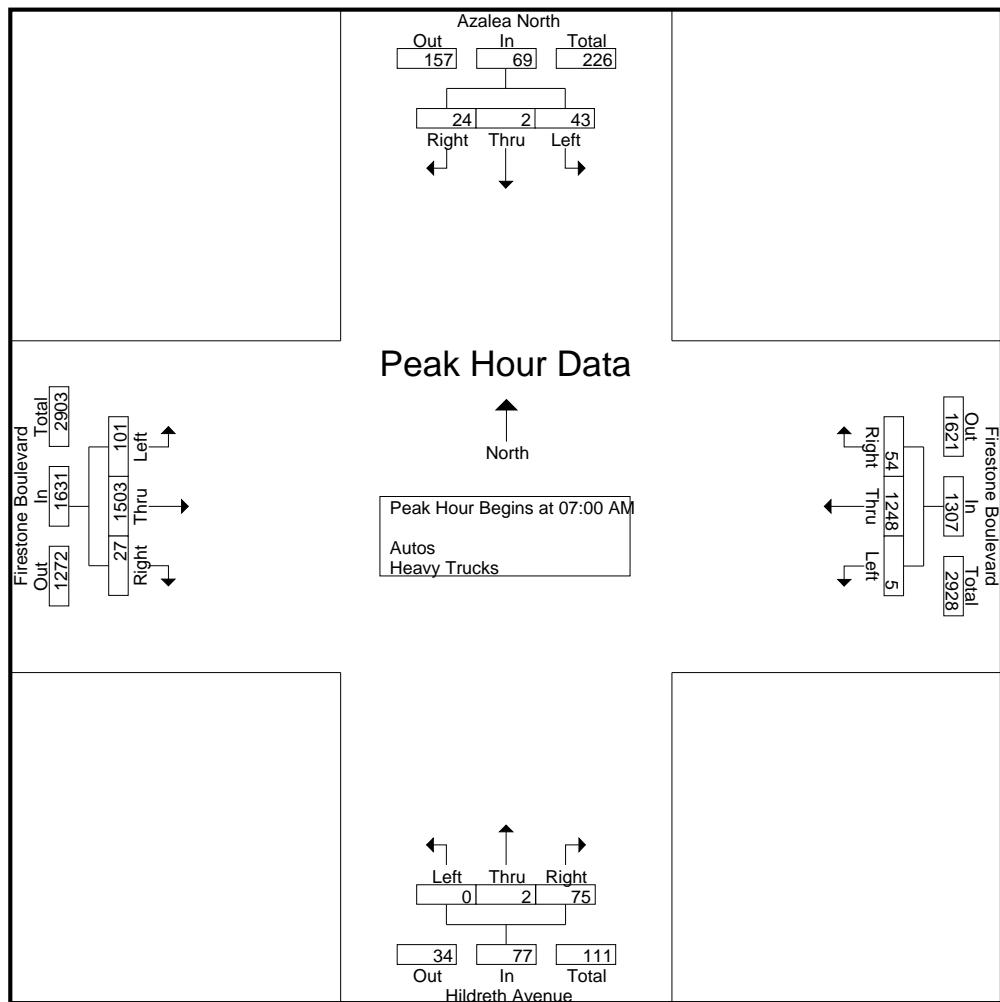
	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	13	1	5	19	0	333	9	342	0	0	17	17	12	313	3	328	706
07:15 AM	8	0	7	15	0	295	9	304	0	2	14	16	25	413	7	445	780
07:30 AM	10	1	5	16	2	333	14	349	0	0	24	24	33	387	3	423	812
07:45 AM	12	0	7	19	3	287	22	312	0	0	20	20	31	390	14	435	786
Total	43	2	24	69	5	1248	54	1307	0	2	75	77	101	1503	27	1631	3084
08:00 AM	9	0	9	18	2	226	16	244	0	0	14	14	39	322	4	365	641
08:15 AM	19	0	10	29	1	264	20	285	0	0	16	16	43	300	5	348	678
08:30 AM	17	0	10	27	0	244	16	260	0	0	7	7	41	288	1	330	624
08:45 AM	9	0	10	19	0	279	20	299	0	1	9	10	53	233	5	291	619
Total	54	0	39	93	3	1013	72	1088	0	1	46	47	176	1143	15	1334	2562
Grand Total	97	2	63	162	8	2261	126	2395	0	3	121	124	277	2646	42	2965	5646
Apprch %	59.9	1.2	38.9		0.3	94.4	5.3		0	2.4	97.6		9.3	89.2	1.4		
Total %	1.7	0	1.1	2.9	0.1	40	2.2	42.4	0	0.1	2.1	2.2	4.9	46.9	0.7	52.5	
Autos	95	2	60	157	8	2151	125	2284	0	3	120	123	275	2546	42	2863	5427
% Autos	97.9	100	95.2	96.9	100	95.1	99.2	95.4	0	100	99.2	99.2	99.3	96.2	100	96.6	96.1
Heavy Trucks	2	0	3	5	0	110	1	111	0	0	1	1	2	100	0	102	219
% Heavy Trucks	2.1	0	4.8	3.1	0	4.9	0.8	4.6	0	0	0.8	0.8	0.7	3.8	0	3.4	3.9

	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	13	1	5	19	0	333	9	342	0	0	17	17	12	313	3	328	706
07:15 AM	8	0	7	15	0	295	9	304	0	2	14	16	25	413	7	445	780
07:30 AM	10	1	5	16	2	333	14	349	0	0	24	24	33	387	3	423	812
07:45 AM	12	0	7	19	3	287	22	312	0	0	20	20	31	390	14	435	786
Total Volume	43	2	24	69	5	1248	54	1307	0	2	75	77	101	1503	27	1631	3084
% App. Total	62.3	2.9	34.8		0.4	95.5	4.1		0	2.6	97.4		6.2	92.2	1.7		
PHF	.827	.500	.857	.908	.417	.937	.614	.936	.000	.250	.781	.802	.765	.910	.482	.916	.950

Counts Unlimited
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City of South Gate
 N/S: Azalea North/Hildreth Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 02_SGE_Hildreth_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:45 AM				07:00 AM				07:00 AM				07:15 AM			
+0 mins.	12	0	7	19	0	333	9	342	0	0	17	17	25	413	7	445
+15 mins.	9	0	9	18	0	295	9	304	0	2	14	16	33	387	3	423
+30 mins.	19	0	10	29	2	333	14	349	0	0	24	24	31	390	14	435
+45 mins.	17	0	10	27	3	287	22	312	0	0	20	20	39	322	4	365
Total Volume	57	0	36	93	5	1248	54	1307	0	2	75	77	128	1512	28	1668
% App. Total	61.3	0	38.7		0.4	95.5	4.1		0	2.6	97.4		7.7	90.6	1.7	
PHF	.750	.000	.900	.802	.417	.937	.614	.936	.000	.250	.781	.802	.821	.915	.500	.937

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City of South Gate
 N/S: Azalea North/Hildreth Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 02_SGE_Hildreth_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

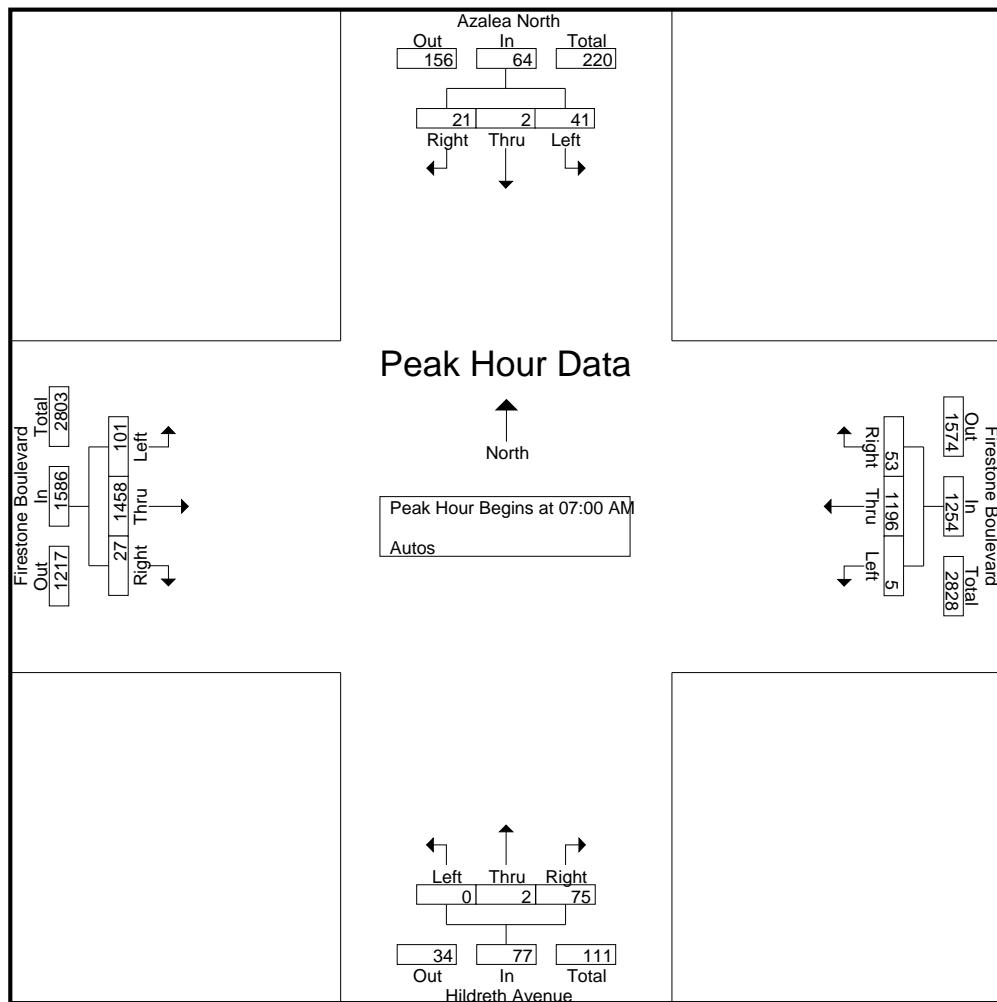
	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	13	1	5	19	0	322	9	331	0	0	17	17	12	302	3	317	684
07:15 AM	7	0	7	14	0	286	9	295	0	2	14	16	25	403	7	435	760
07:30 AM	10	1	5	16	2	313	13	328	0	0	24	24	33	372	3	408	776
07:45 AM	11	0	4	15	3	275	22	300	0	0	20	20	31	381	14	426	761
Total	41	2	21	64	5	1196	53	1254	0	2	75	77	101	1458	27	1586	2981
08:00 AM	9	0	9	18	2	213	16	231	0	0	14	14	39	312	4	355	618
08:15 AM	19	0	10	29	1	254	20	275	0	0	16	16	43	284	5	332	652
08:30 AM	17	0	10	27	0	224	16	240	0	0	7	7	39	271	1	311	585
08:45 AM	9	0	10	19	0	264	20	284	0	1	8	9	53	221	5	279	591
Total	54	0	39	93	3	955	72	1030	0	1	45	46	174	1088	15	1277	2446
Grand Total	95	2	60	157	8	2151	125	2284	0	3	120	123	275	2546	42	2863	5427
Apprch %	60.5	1.3	38.2		0.4	94.2	5.5		0	2.4	97.6		9.6	88.9	1.5		
Total %	1.8	0	1.1	2.9	0.1	39.6	2.3	42.1	0	0.1	2.2	2.3	5.1	46.9	0.8	52.8	

	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	13	1	5	19	0	322	9	331	0	0	17	17	12	302	3	317	684
07:15 AM	7	0	7	14	0	286	9	295	0	2	14	16	25	403	7	435	760
07:30 AM	10	1	5	16	2	313	13	328	0	0	24	24	33	372	3	408	776
07:45 AM	11	0	4	15	3	275	22	300	0	0	20	20	31	381	14	426	761
Total Volume	41	2	21	64	5	1196	53	1254	0	2	75	77	101	1458	27	1586	2981
% App. Total	64.1	3.1	32.8		0.4	95.4	4.2		0	2.6	97.4		6.4	91.9	1.7		
PHF	.788	.500	.750	.842	.417	.929	.602	.947	.000	.250	.781	.802	.765	.904	.482	.911	.960

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City of South Gate
 N/S: Azalea North/Hildreth Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 02_SGE_Hildreth_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	13	1	5	19	0	322	9	331	0	0	17	17	12	302	3	317
+15 mins.	7	0	7	14	0	286	9	295	0	2	14	16	25	403	7	435
+30 mins.	10	1	5	16	2	313	13	328	0	0	24	24	33	372	3	408
+45 mins.	11	0	4	15	3	275	22	300	0	0	20	20	31	381	14	426
Total Volume	41	2	21	64	5	1196	53	1254	0	2	75	77	101	1458	27	1586
% App. Total	64.1	3.1	32.8		0.4	95.4	4.2		0	2.6	97.4		6.4	91.9	1.7	
PHF	.788	.500	.750	.842	.417	.929	.602	.947	.000	.250	.781	.802	.765	.904	.482	.911

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City of South Gate
 N/S: Azalea North/Hildreth Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 02_SGE_Hildreth_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Heavy Trucks

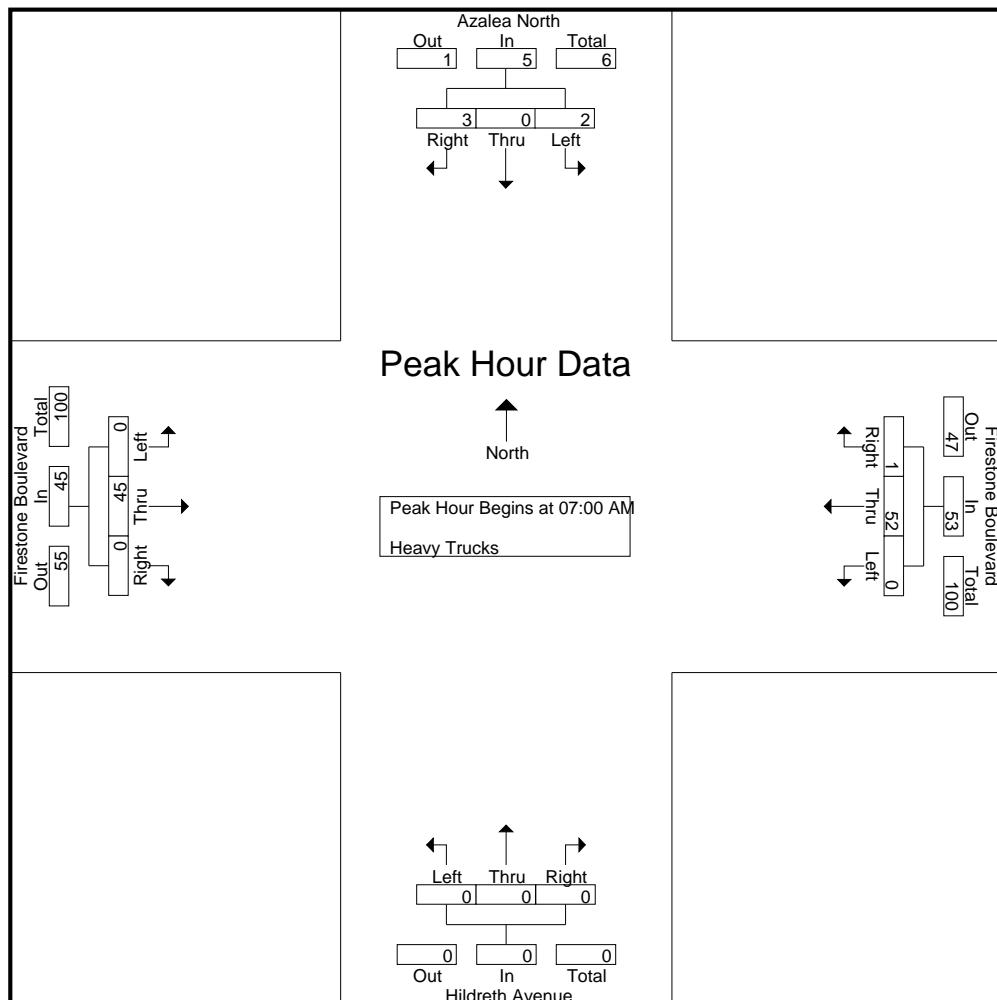
	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	11	0	11	0	0	0	0	0	11	0	11	22
07:15 AM	1	0	0	1	0	9	0	9	0	0	0	0	0	10	0	10	20
07:30 AM	0	0	0	0	0	20	1	21	0	0	0	0	0	15	0	15	36
07:45 AM	1	0	3	4	0	12	0	12	0	0	0	0	0	9	0	9	25
Total	2	0	3	5	0	52	1	53	0	0	0	0	0	45	0	45	103
08:00 AM	0	0	0	0	0	13	0	13	0	0	0	0	0	10	0	10	23
08:15 AM	0	0	0	0	0	10	0	10	0	0	0	0	0	16	0	16	26
08:30 AM	0	0	0	0	0	20	0	20	0	0	0	0	2	17	0	19	39
08:45 AM	0	0	0	0	0	15	0	15	0	0	1	1	0	12	0	12	28
Total	0	0	0	0	0	58	0	58	0	0	1	1	2	55	0	57	116
Grand Total	2	0	3	5	0	110	1	111	0	0	1	1	2	100	0	102	219
Apprch %	40	0	60		0	99.1	0.9		0	0	100		2	98	0		
Total %	0.9	0	1.4	2.3	0	50.2	0.5	50.7	0	0	0.5	0.5	0.9	45.7	0	46.6	

	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	11	0	11	0	0	0	0	0	11	0	11	22
07:15 AM	1	0	0	1	0	9	0	9	0	0	0	0	0	10	0	10	20
07:30 AM	0	0	0	0	0	20	1	21	0	0	0	0	0	15	0	15	36
07:45 AM	1	0	3	4	0	12	0	12	0	0	0	0	0	9	0	9	25
Total Volume	2	0	3	5	0	52	1	53	0	0	0	0	0	45	0	45	103
% App. Total	40	0	60		0	98.1	1.9		0	0	0	0	0	100	0		
PHF	.500	.000	.250	.313	.000	.650	.250	.631	.000	.000	.000	.000	.000	.750	.000	.750	.715

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City of South Gate
 N/S: Azalea North/Hildreth Avenue
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File Name : 02_SGE_Hildreth_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	11	0	11	0	0	0	0	0	11	0	11
+15 mins.	1	0	0	1	0	9	0	9	0	0	0	0	0	10	0	10
+30 mins.	0	0	0	0	0	20	1	21	0	0	0	0	0	15	0	15
+45 mins.	1	0	3	4	0	12	0	12	0	0	0	0	0	9	0	9
Total Volume	2	0	3	5	0	52	1	53	0	0	0	0	0	45	0	45
% App. Total	40	0	60		0	98.1	1.9		0	0	0	0	0	100	0	
PHF	.500	.000	.250	.313	.000	.650	.250	.631	.000	.000	.000	.000	.000	.750	.000	.750

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City of South Gate
 N/S: Azalea North/Hildreth Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 02_SGE_Hildreth_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

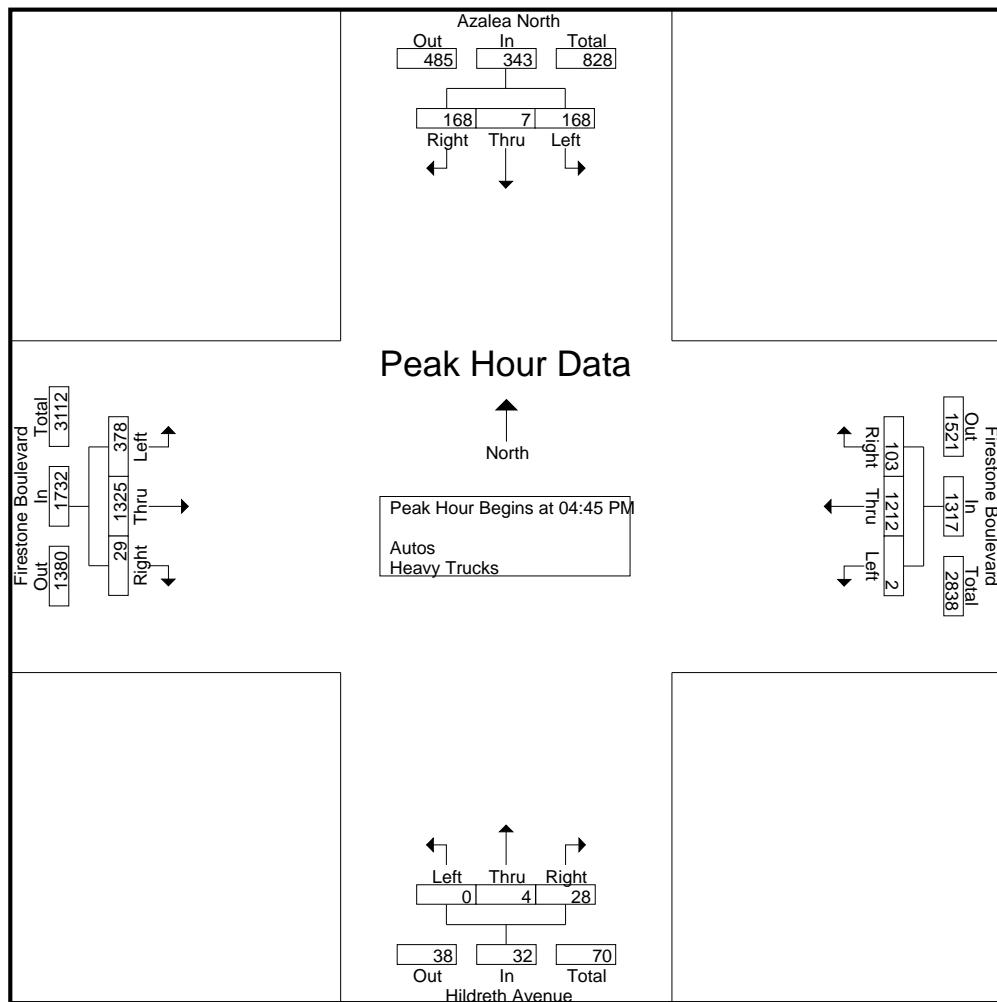
	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	45	2	40	87	0	238	22	260	1	1	8	10	79	290	2	371	728
04:15 PM	36	3	33	72	0	300	31	331	0	1	13	14	86	365	6	457	874
04:30 PM	41	2	40	83	0	265	29	294	0	1	11	12	86	332	0	418	807
04:45 PM	46	1	30	77	2	309	27	338	0	3	8	11	108	326	8	442	868
Total	168	8	143	319	2	1112	109	1223	1	6	40	47	359	1313	16	1688	3277
05:00 PM	42	3	39	84	0	285	25	310	0	0	5	5	99	322	6	427	826
05:15 PM	41	1	44	86	0	314	30	344	0	0	6	6	81	331	9	421	857
05:30 PM	39	2	55	96	0	304	21	325	0	1	9	10	90	346	6	442	873
05:45 PM	43	2	41	86	0	261	39	300	0	0	10	10	103	292	4	399	795
Total	165	8	179	352	0	1164	115	1279	0	1	30	31	373	1291	25	1689	3351
Grand Total	333	16	322	671	2	2276	224	2502	1	7	70	78	732	2604	41	3377	6628
Apprch %	49.6	2.4	48		0.1	91	9		1.3	9	89.7		21.7	77.1	1.2		
Total %	5	0.2	4.9	10.1	0	34.3	3.4	37.7	0	0.1	1.1	1.2	11	39.3	0.6	51	
Autos	332	16	321	669	2	2206	223	2431	1	7	70	78	732	2506	41	3279	6457
% Autos	99.7	100	99.7	99.7	100	96.9	99.6	97.2	100	100	100	100	100	96.2	100	97.1	97.4
Heavy Trucks	1	0	1	2	0	70	1	71	0	0	0	0	0	98	0	98	171
% Heavy Trucks	0.3	0	0.3	0.3	0	3.1	0.4	2.8	0	0	0	0	0	3.8	0	2.9	2.6

	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	46	1	30	77	2	309	27	338	0	3	8	11	108	326	8	442	868
05:00 PM	42	3	39	84	0	285	25	310	0	0	5	5	99	322	6	427	826
05:15 PM	41	1	44	86	0	314	30	344	0	0	6	6	81	331	9	421	857
05:30 PM	39	2	55	96	0	304	21	325	0	1	9	10	90	346	6	442	873
Total Volume	168	7	168	343	2	1212	103	1317	0	4	28	32	378	1325	29	1732	3424
% App. Total	49	2	49		0.2	92	7.8		0	12.5	87.5		21.8	76.5	1.7		
PHF	.913	.583	.764	.893	.250	.965	.858	.957	.000	.333	.778	.727	.875	.957	.806	.980	.981

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City of South Gate
 N/S: Azalea North/Hildreth Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 02_SGE_Hildreth_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:00 PM				04:15 PM			
+0 mins.	42	3	39	84	2	309	27	338	1	1	8	10	86	365	6	457
+15 mins.	41	1	44	86	0	285	25	310	0	1	13	14	86	332	0	418
+30 mins.	39	2	55	96	0	314	30	344	0	1	11	12	108	326	8	442
+45 mins.	43	2	41	86	0	304	21	325	0	3	8	11	99	322	6	427
Total Volume	165	8	179	352	2	1212	103	1317	1	6	40	47	379	1345	20	1744
% App. Total	46.9	2.3	50.9		0.2	92	7.8		2.1	12.8	85.1		21.7	77.1	1.1	
PHF	.959	.667	.814	.917	.250	.965	.858	.957	.250	.500	.769	.839	.877	.921	.625	.954

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City of South Gate
 N/S: Azalea North/Hildreth Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 02_SGE_Hildreth_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

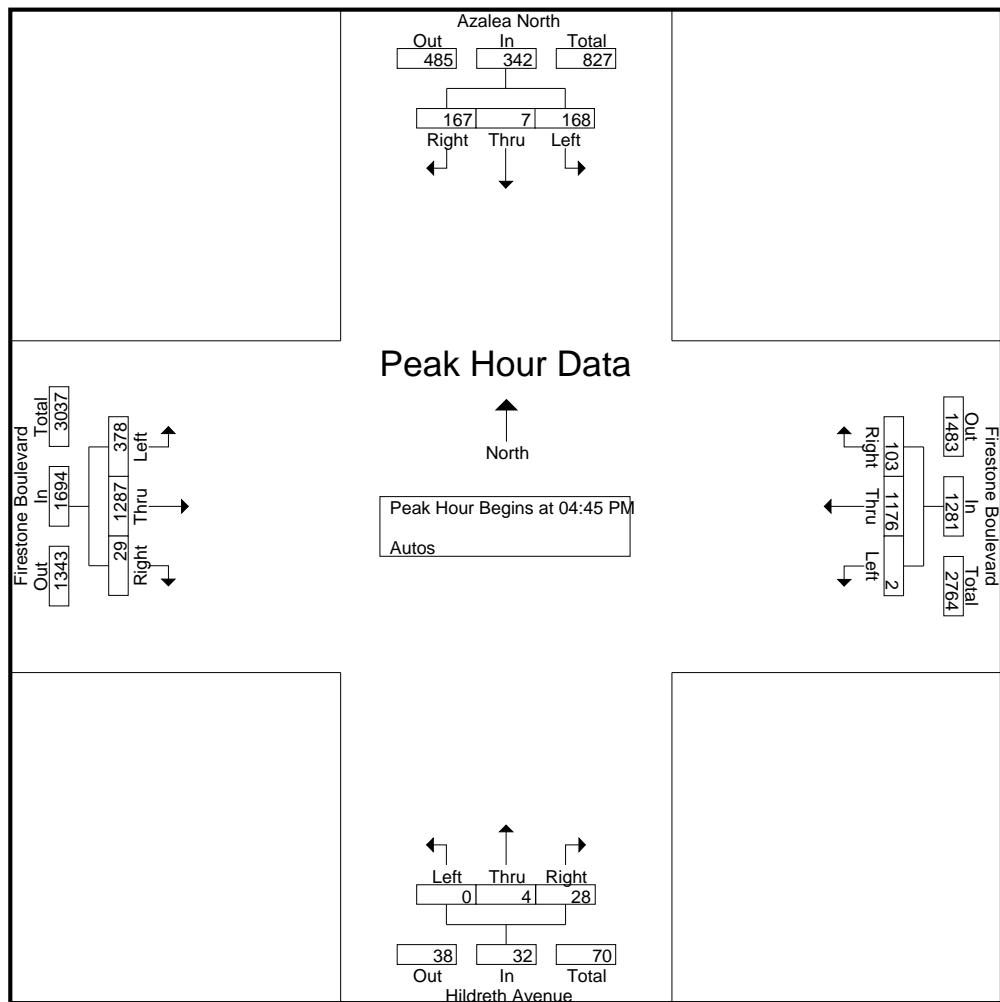
	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	45	2	40	87	0	233	22	255	1	1	8	10	79	269	2	350	702
04:15 PM	36	3	33	72	0	290	31	321	0	1	13	14	86	353	6	445	852
04:30 PM	41	2	40	83	0	253	28	281	0	1	11	12	86	315	0	401	777
04:45 PM	46	1	29	76	2	290	27	319	0	3	8	11	108	316	8	432	838
Total	168	8	142	318	2	1066	108	1176	1	6	40	47	359	1253	16	1628	3169
05:00 PM	42	3	39	84	0	277	25	302	0	0	5	5	99	312	6	417	808
05:15 PM	41	1	44	86	0	308	30	338	0	0	6	6	81	318	9	408	838
05:30 PM	39	2	55	96	0	301	21	322	0	1	9	10	90	341	6	437	865
05:45 PM	42	2	41	85	0	254	39	293	0	0	10	10	103	282	4	389	777
Total	164	8	179	351	0	1140	115	1255	0	1	30	31	373	1253	25	1651	3288
Grand Total	332	16	321	669	2	2206	223	2431	1	7	70	78	732	2506	41	3279	6457
Apprch %	49.6	2.4	48		0.1	90.7	9.2		1.3	9	89.7		22.3	76.4	1.3		
Total %	5.1	0.2	5	10.4	0	34.2	3.5	37.6	0	0.1	1.1	1.2	11.3	38.8	0.6	50.8	

	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	46	1	29	76	2	290	27	319	0	3	8	11	108	316	8	432	838
05:00 PM	42	3	39	84	0	277	25	302	0	0	5	5	99	312	6	417	808
05:15 PM	41	1	44	86	0	308	30	338	0	0	6	6	81	318	9	408	838
05:30 PM	39	2	55	96	0	301	21	322	0	1	9	10	90	341	6	437	865
Total Volume	168	7	167	342	2	1176	103	1281	0	4	28	32	378	1287	29	1694	3349
% App. Total	49.1	2	48.8		0.2	91.8	8		0	12.5	87.5		22.3	76	1.7		
PHF	.913	.583	.759	.891	.250	.955	.858	.947	.000	.333	.778	.727	.875	.944	.806	.969	.968

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City of South Gate
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File Name : 02_SGE_Hildreth_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	46	1	29	76	2	290	27	319	0	3	8	11	108	316	8	432
+15 mins.	42	3	39	84	0	277	25	302	0	0	5	5	99	312	6	417
+30 mins.	41	1	44	86	0	308	30	338	0	0	6	6	81	318	9	408
+45 mins.	39	2	55	96	0	301	21	322	0	1	9	10	90	341	6	437
Total Volume	168	7	167	342	2	1176	103	1281	0	4	28	32	378	1287	29	1694
% App. Total	49.1	2	48.8		0.2	91.8	8		0	12.5	87.5		22.3	76	1.7	
PHF	.913	.583	.759	.891	.250	.955	.858	.947	.000	.333	.778	.727	.875	.944	.806	.969

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City of South Gate
 N/S: Azalea North/Hildreth Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 02_SGE_Hildreth_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
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Groups Printed- Heavy Trucks

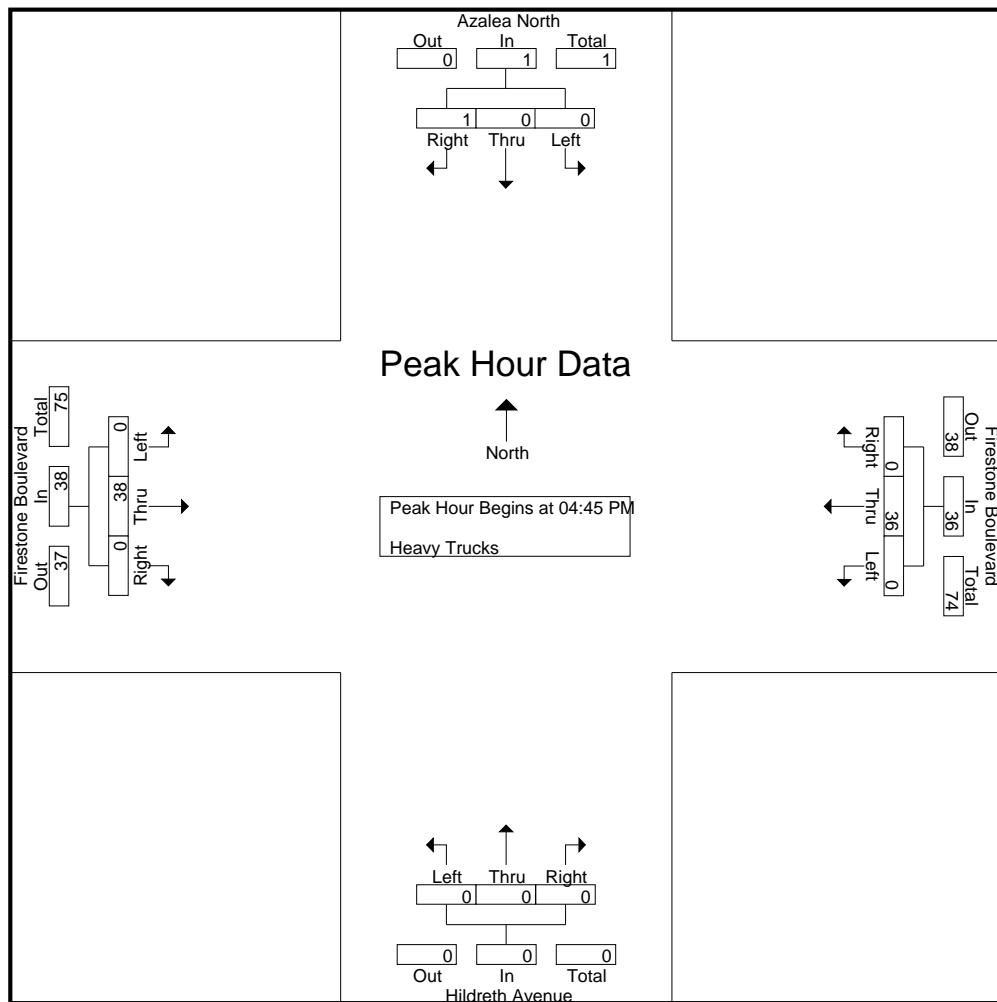
	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	5	0	5	0	0	0	0	0	21	0	21	26
04:15 PM	0	0	0	0	0	10	0	10	0	0	0	0	0	12	0	12	22
04:30 PM	0	0	0	0	0	12	1	13	0	0	0	0	0	17	0	17	30
04:45 PM	0	0	1	1	0	19	0	19	0	0	0	0	0	10	0	10	30
Total	0	0	1	1	0	46	1	47	0	0	0	0	0	60	0	60	108
05:00 PM	0	0	0	0	0	8	0	8	0	0	0	0	0	10	0	10	18
05:15 PM	0	0	0	0	0	6	0	6	0	0	0	0	0	13	0	13	19
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
05:45 PM	1	0	0	1	0	7	0	7	0	0	0	0	0	10	0	10	18
Total	1	0	0	1	0	24	0	24	0	0	0	0	0	38	0	38	63
Grand Total	1	0	1	2	0	70	1	71	0	0	0	0	0	98	0	98	171
Apprch %	50	0	50		0	98.6	1.4		0	0	0	0	0	100	0	100	
Total %	0.6	0	0.6	1.2	0	40.9	0.6	41.5	0	0	0	0	0	57.3	0	57.3	

	Azalea North Southbound				Firestone Boulevard Westbound				Hildreth Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	1	1	0	19	0	19	0	0	0	0	0	10	0	10	30
05:00 PM	0	0	0	0	0	8	0	8	0	0	0	0	0	10	0	10	18
05:15 PM	0	0	0	0	0	6	0	6	0	0	0	0	0	13	0	13	19
05:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
Total Volume	0	0	1	1	0	36	0	36	0	0	0	0	0	38	0	38	75
% App. Total	0	0	100		0	100	0		0	0	0	0	0	100	0	100	
PHF	.000	.000	.250	.250	.000	.474	.000	.474	.000	.000	.000	.000	.000	.731	.000	.731	.625

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City of South Gate
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File Name : 02_SGE_Hildreth_Firestone PM
 Site Code : 04119797
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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	1	1	0	19	0	19	0	0	0	0	0	0	10	0	10
+15 mins.	0	0	0	0	0	8	0	8	0	0	0	0	0	0	10	0	10
+30 mins.	0	0	0	0	0	6	0	6	0	0	0	0	0	0	13	0	13
+45 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	0	5	0	5
Total Volume	0	0	1	1	0	36	0	36	0	0	0	0	0	0	38	0	38
% App. Total	0	0	100		0	100	0		0	0	0	0	0	0	100	0	
PHF	.000	.000	.250	.250	.000	.474	.000	.474	.000	.000	.000	.000	.000	.000	.731	.000	.731

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Bus and 2, 3 Axle Trucks - 4+ Axle Trucks

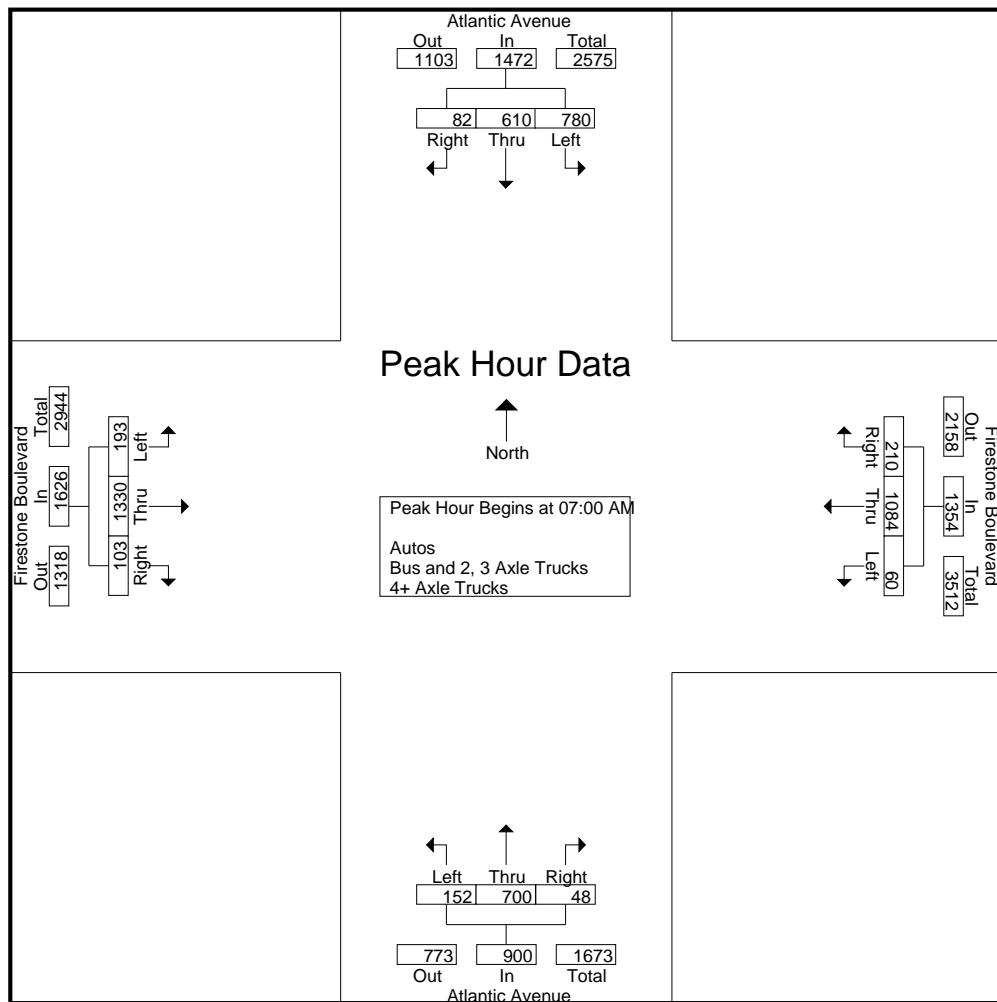
	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	187	118	24	329	11	278	47	336	47	184	11	242	47	303	26	376	1283
07:15 AM	216	156	22	394	16	244	57	317	38	157	11	206	42	325	30	397	1314
07:30 AM	220	179	15	414	20	286	41	347	28	188	18	234	49	348	18	415	1410
07:45 AM	157	157	21	335	13	276	65	354	39	171	8	218	55	354	29	438	1345
Total	780	610	82	1472	60	1084	210	1354	152	700	48	900	193	1330	103	1626	5352
08:00 AM	178	153	27	358	14	216	42	272	28	150	12	190	44	246	24	314	1134
08:15 AM	122	99	18	239	19	246	51	316	34	156	10	200	44	269	13	326	1081
08:30 AM	141	104	28	273	9	238	56	303	18	149	18	185	37	249	13	299	1060
08:45 AM	112	76	25	213	14	230	41	285	33	142	17	192	40	192	12	244	934
Total	553	432	98	1083	56	930	190	1176	113	597	57	767	165	956	62	1183	4209
Grand Total	1333	1042	180	2555	116	2014	400	2530	265	1297	105	1667	358	2286	165	2809	9561
Apprch %	52.2	40.8	7		4.6	79.6	15.8		15.9	77.8	6.3		12.7	81.4	5.9		
Total %	13.9	10.9	1.9	26.7	1.2	21.1	4.2	26.5	2.8	13.6	1.1	17.4	3.7	23.9	1.7	29.4	
Autos	1226	990	164	2380	101	1898	342	2341	252	1230	94	1576	344	2193	148	2685	8982
% Autos	92	95	91.1	93.2	87.1	94.2	85.5	92.5	95.1	94.8	89.5	94.5	96.1	95.9	89.7	95.6	93.9
Bus and 2, 3 Axle Trucks	40	48	10	98	11	82	31	124	13	52	6	71	11	66	16	93	386
% Bus and 2, 3 Axle Trucks	3	4.6	5.6	3.8	9.5	4.1	7.8	4.9	4.9	4	5.7	4.3	3.1	2.9	9.7	3.3	4
4+ Axle Trucks	67	4	6	77	4	34	27	65	0	15	5	20	3	27	1	31	193
% 4+ Axle Trucks	5	0.4	3.3	3	3.4	1.7	6.8	2.6	0	1.2	4.8	1.2	0.8	1.2	0.6	1.1	2

	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	187	118	24	329	11	278	47	336	47	184	11	242	47	303	26	376	1283
07:15 AM	216	156	22	394	16	244	57	317	38	157	11	206	42	325	30	397	1314
07:30 AM	220	179	15	414	20	286	41	347	28	188	18	234	49	348	18	415	1410
07:45 AM	157	157	21	335	13	276	65	354	39	171	8	218	55	354	29	438	1345
Total Volume	780	610	82	1472	60	1084	210	1354	152	700	48	900	193	1330	103	1626	5352
% App. Total	53	41.4	5.6		4.4	80.1	15.5		16.9	77.8	5.3		11.9	81.8	6.3		
PHF	.886	.852	.854	.889	.750	.948	.808	.956	.809	.931	.667	.930	.877	.939	.858	.928	.949

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City of South Gate
 N/S: Atlantic Avenue
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File Name : 03_SGE_Atlantic_Firestone AM
 Site Code : 04119797
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 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM	07:00 AM	07:00 AM	07:00 AM
+0 mins.	216	156	22	394
+15 mins.	220	179	15	414
+30 mins.	157	157	21	335
+45 mins.	178	153	27	358
Total Volume	771	645	85	1501
% App. Total	51.4	43	5.7	
PHF	.876	.901	.787	.906
	60	1084	210	1354
				152
				700
				48
				900
				193
				1330
				103
				1626

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

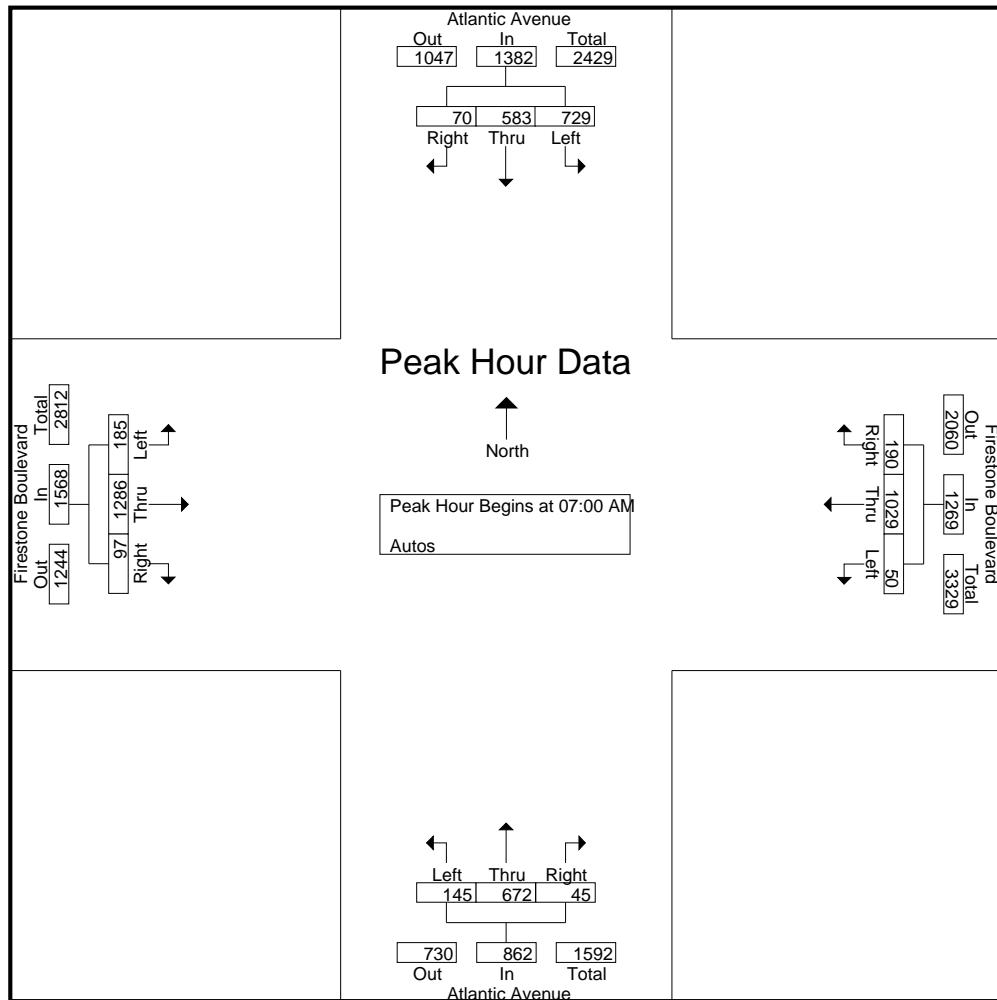
	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	171	112	23	306	8	266	44	318	45	179	10	234	45	294	25	364	1222
07:15 AM	205	148	21	374	15	235	51	301	37	147	10	194	41	316	28	385	1254
07:30 AM	205	171	10	386	16	268	35	319	26	180	17	223	45	334	16	395	1323
07:45 AM	148	152	16	316	11	260	60	331	37	166	8	211	54	342	28	424	1282
Total	729	583	70	1382	50	1029	190	1269	145	672	45	862	185	1286	97	1568	5081
08:00 AM	163	147	27	337	14	207	35	256	24	143	10	177	44	237	22	303	1073
08:15 AM	109	94	16	219	18	230	37	285	33	146	8	187	42	254	12	308	999
08:30 AM	129	96	27	252	7	218	45	270	18	136	15	169	36	232	9	277	968
08:45 AM	96	70	24	190	12	214	35	261	32	133	16	181	37	184	8	229	861
Total	497	407	94	998	51	869	152	1072	107	558	49	714	159	907	51	1117	3901
Grand Total	1226	990	164	2380	101	1898	342	2341	252	1230	94	1576	344	2193	148	2685	8982
Apprch %	51.5	41.6	6.9		4.3	81.1	14.6		16	78	6		12.8	81.7	5.5		
Total %	13.6	11	1.8	26.5	1.1	21.1	3.8	26.1	2.8	13.7	1	17.5	3.8	24.4	1.6		29.9

	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	171	112	23	306	8	266	44	318	45	179	10	234	45	294	25	364	1222
07:15 AM	205	148	21	374	15	235	51	301	37	147	10	194	41	316	28	385	1254
07:30 AM	205	171	10	386	16	268	35	319	26	180	17	223	45	334	16	395	1323
07:45 AM	148	152	16	316	11	260	60	331	37	166	8	211	54	342	28	424	1282
Total Volume	729	583	70	1382	50	1029	190	1269	145	672	45	862	185	1286	97	1568	5081
% App. Total	52.7	42.2	5.1		3.9	81.1	15		16.8	78	5.2		11.8	82	6.2		
PHF	.889	.852	.761	.895	.781	.960	.792	.958	.806	.933	.662	.921	.856	.940	.866	.925	.960

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City of South Gate
 N/S: Atlantic Avenue
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File Name : 03_SGE_Atlantic_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	171	112	23	306	8	266	44	318	45	179	10	234	45	294	25	364
+15 mins.	205	148	21	374	15	235	51	301	37	147	10	194	41	316	28	385
+30 mins.	205	171	10	386	16	268	35	319	26	180	17	223	45	334	16	395
+45 mins.	148	152	16	316	11	260	60	331	37	166	8	211	54	342	28	424
Total Volume	729	583	70	1382	50	1029	190	1269	145	672	45	862	185	1286	97	1568
% App. Total	52.7	42.2	5.1		3.9	81.1	15		16.8	78	5.2		11.8	82	6.2	
PHF	.889	.852	.761	.895	.781	.960	.792	.958	.806	.933	.662	.921	.856	.940	.866	.925

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Bus and 2, 3 Axle Trucks

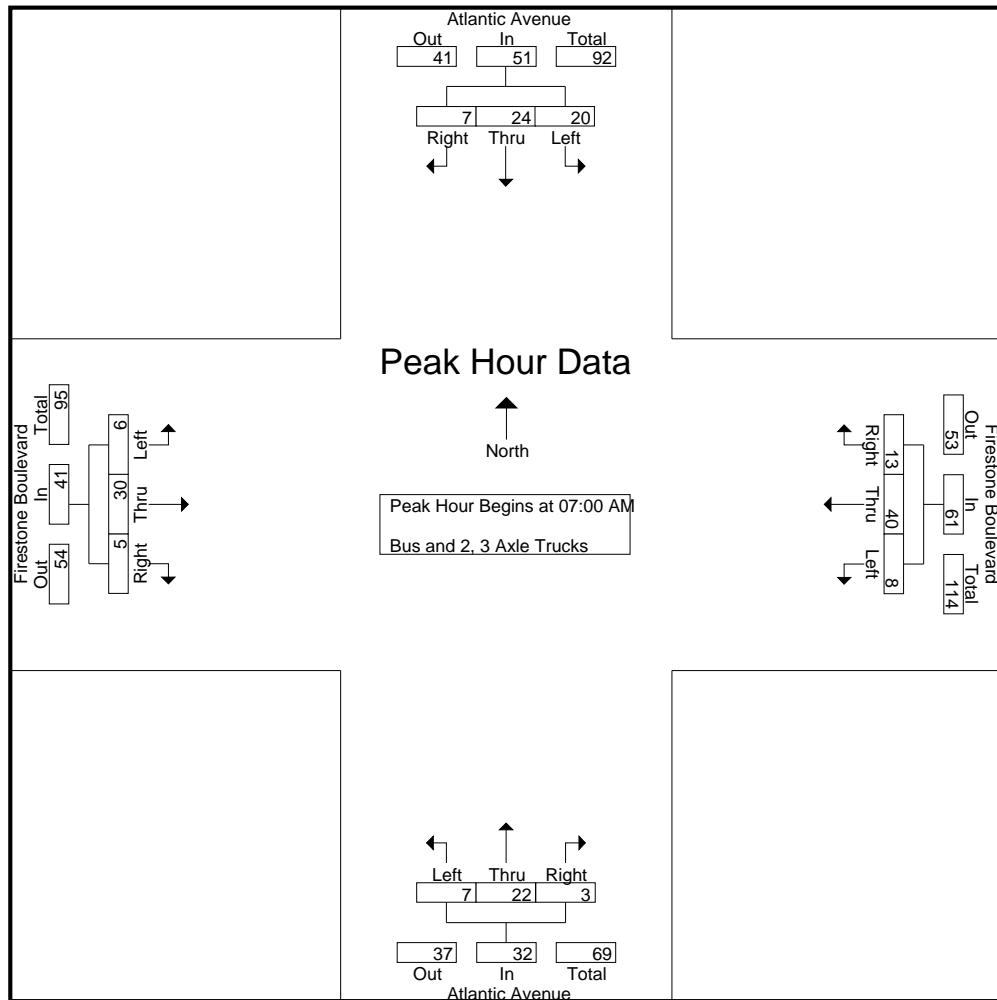
	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	5	1	11	2	8	3	13	2	5	1	8	2	6	1	9	41
07:15 AM	4	7	1	12	1	7	3	11	1	8	1	10	0	3	1	4	37
07:30 AM	5	8	4	17	3	12	4	19	2	5	1	8	3	10	2	15	59
07:45 AM	6	4	1	11	2	13	3	18	2	4	0	6	1	11	1	13	48
Total	20	24	7	51	8	40	13	61	7	22	3	32	6	30	5	41	185
08:00 AM	3	6	0	9	0	6	5	11	4	6	2	12	0	6	2	8	40
08:15 AM	6	5	1	12	1	11	5	17	1	6	0	7	2	13	1	16	52
08:30 AM	8	7	1	16	1	13	5	19	0	11	0	11	1	11	4	16	62
08:45 AM	3	6	1	10	1	12	3	16	1	7	1	9	2	6	4	12	47
Total	20	24	3	47	3	42	18	63	6	30	3	39	5	36	11	52	201
Grand Total	40	48	10	98	11	82	31	124	13	52	6	71	11	66	16	93	386
Apprch %	40.8	49	10.2		8.9	66.1	25		18.3	73.2	8.5		11.8	71	17.2		
Total %	10.4	12.4	2.6	25.4	2.8	21.2	8	32.1	3.4	13.5	1.6	18.4	2.8	17.1	4.1	24.1	

	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	5	5	1	11	2	8	3	13	2	5	1	8	2	6	1	9	41
07:15 AM	4	7	1	12	1	7	3	11	1	8	1	10	0	3	1	4	37
07:30 AM	5	8	4	17	3	12	4	19	2	5	1	8	3	10	2	15	59
07:45 AM	6	4	1	11	2	13	3	18	2	4	0	6	1	11	1	13	48
Total Volume	20	24	7	51	8	40	13	61	7	22	3	32	6	30	5	41	185
% App. Total	39.2	47.1	13.7		13.1	65.6	21.3		21.9	68.8	9.4		14.6	73.2	12.2		
PHF	.833	.750	.438	.750	.667	.769	.813	.803	.875	.688	.750	.800	.500	.682	.625	.683	.784

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City of South Gate
 N/S: Atlantic Avenue
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File Name : 03_SGE_Atlantic_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	5	5	1	11	2	8	3	13	2	5	1	8	2	6	1	9
+15 mins.	4	7	1	12	1	7	3	11	1	8	1	10	0	3	1	4
+30 mins.	5	8	4	17	3	12	4	19	2	5	1	8	3	10	2	15
+45 mins.	6	4	1	11	2	13	3	18	2	4	0	6	1	11	1	13
Total Volume	20	24	7	51	8	40	13	61	7	22	3	32	6	30	5	41
% App. Total	39.2	47.1	13.7		13.1	65.6	21.3		21.9	68.8	9.4		14.6	73.2	12.2	
PHF	.833	.750	.438	.750	.667	.769	.813	.803	.875	.688	.750	.800	.500	.682	.625	.683

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- 4+ Axle Trucks

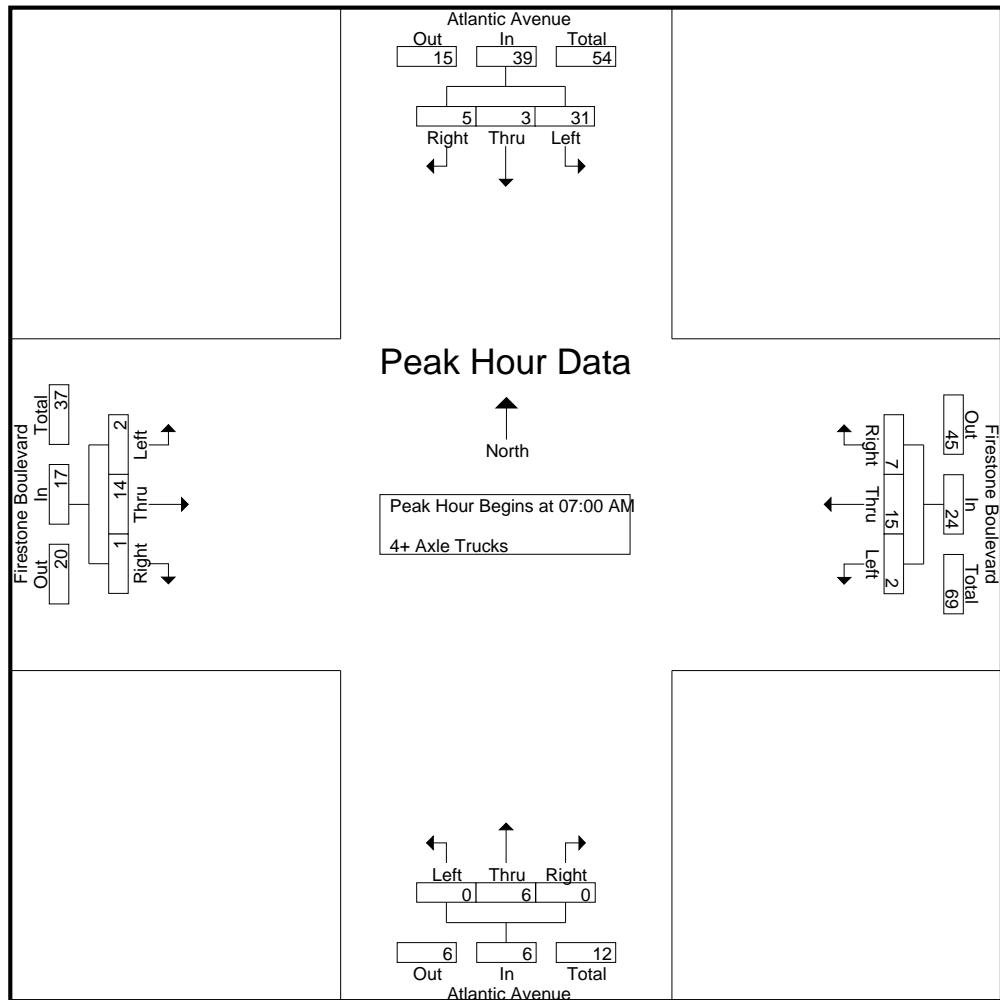
	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	11	1	0	12	1	4	0	5	0	0	0	0	0	3	0	3	20
07:15 AM	7	1	0	8	0	2	3	5	0	2	0	2	1	6	1	8	23
07:30 AM	10	0	1	11	1	6	2	9	0	3	0	3	1	4	0	5	28
07:45 AM	3	1	4	8	0	3	2	5	0	1	0	1	0	1	0	1	15
Total	31	3	5	39	2	15	7	24	0	6	0	6	2	14	1	17	86
08:00 AM	12	0	0	12	0	3	2	5	0	1	0	1	0	3	0	3	21
08:15 AM	7	0	1	8	0	5	9	14	0	4	2	6	0	2	0	2	30
08:30 AM	4	1	0	5	1	7	6	14	0	2	3	5	0	6	0	6	30
08:45 AM	13	0	0	13	1	4	3	8	0	2	0	2	1	2	0	3	26
Total	36	1	1	38	2	19	20	41	0	9	5	14	1	13	0	14	107
Grand Total	67	4	6	77	4	34	27	65	0	15	5	20	3	27	1	31	193
Apprch %	87	5.2	7.8		6.2	52.3	41.5		0	75	25		9.7	87.1	3.2		
Total %	34.7	2.1	3.1	39.9	2.1	17.6	14	33.7	0	7.8	2.6	10.4	1.6	14	0.5	16.1	

	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	11	1	0	12	1	4	0	5	0	0	0	0	0	3	0	3	20
07:15 AM	7	1	0	8	0	2	3	5	0	2	0	2	1	6	1	8	23
07:30 AM	10	0	1	11	1	6	2	9	0	3	0	3	1	4	0	5	28
07:45 AM	3	1	4	8	0	3	2	5	0	1	0	1	0	1	0	1	15
Total Volume	31	3	5	39	2	15	7	24	0	6	0	6	2	14	1	17	86
% App. Total	79.5	7.7	12.8		8.3	62.5	29.2		0	100	0		11.8	82.4	5.9		
PHF	.705	.750	.313	.813	.500	.625	.583	.667	.000	.500	.000	.500	.500	.583	.250	.531	.768

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File Name : 03_SGE_Atlantic_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	11	1	0	12	1	4	0	5	0	0	0	0	0	3	0	3	
+15 mins.	7	1	0	8	0	2	3	5	0	2	0	0	2	1	6	1	8
+30 mins.	10	0	1	11	1	6	2	9	0	3	0	3	1	4	0	5	
+45 mins.	3	1	4	8	0	3	2	5	0	1	0	1	0	1	0	1	
Total Volume	31	3	5	39	2	15	7	24	0	6	0	6	2	14	1	17	
% App. Total	79.5	7.7	12.8		8.3	62.5	29.2		0	100	0		11.8	82.4	5.9		
PHF	.705	.750	.313	.813	.500	.625	.583	.667	.000	.500	.000	.500	.500	.583	.250	.531	

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City of South Gate
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 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Bus and 2, 3 Axle Trucks - 4+ Axle Trucks

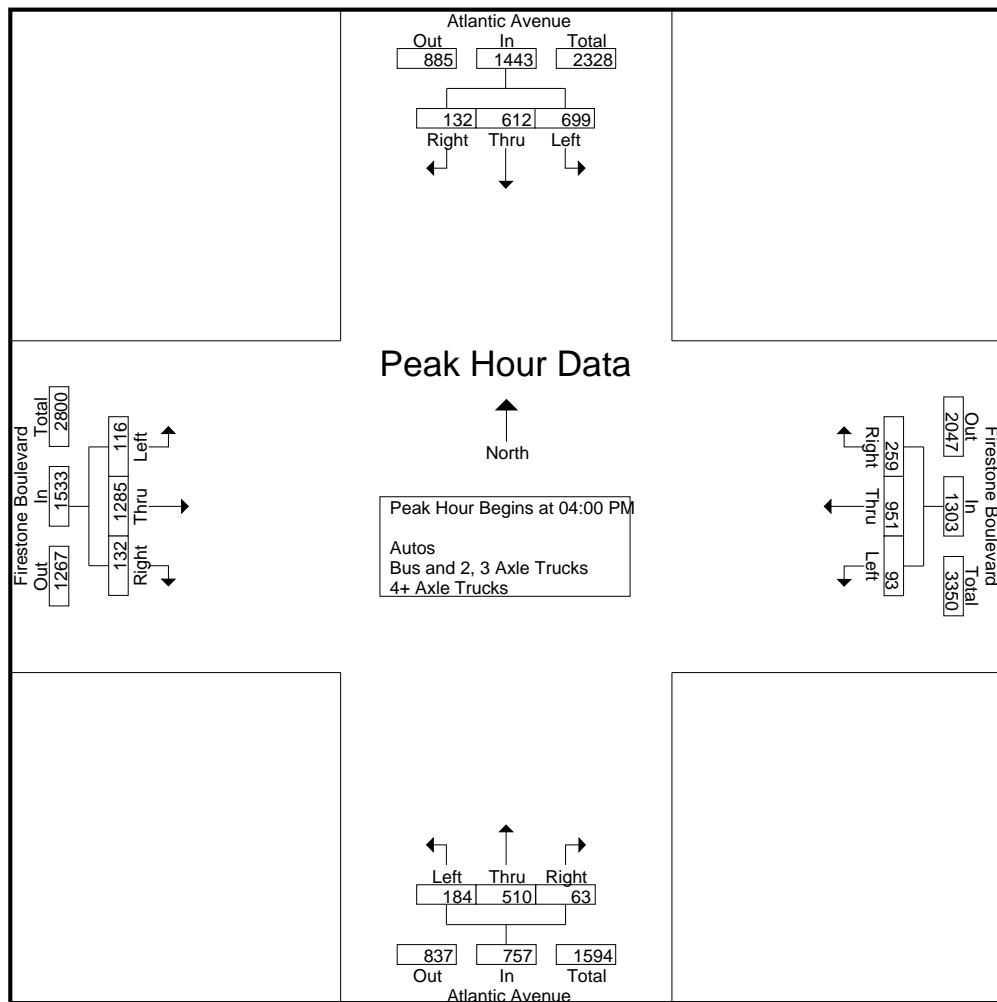
	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	197	155	34	386	22	229	61	312	41	119	15	175	30	337	31	398	1271
04:15 PM	167	143	25	335	23	228	65	316	49	142	15	206	37	305	30	372	1229
04:30 PM	174	132	33	339	20	277	60	357	43	114	15	172	19	343	35	397	1265
04:45 PM	161	182	40	383	28	217	73	318	51	135	18	204	30	300	36	366	1271
Total	699	612	132	1443	93	951	259	1303	184	510	63	757	116	1285	132	1533	5036
05:00 PM	170	142	24	336	26	262	65	353	48	114	25	187	43	314	28	385	1261
05:15 PM	158	144	31	333	13	245	77	335	30	98	10	138	32	282	25	339	1145
05:30 PM	149	167	30	346	38	240	79	357	55	147	23	225	47	301	25	373	1301
05:45 PM	147	173	26	346	35	236	66	337	50	104	14	168	31	287	29	347	1198
Total	624	626	111	1361	112	983	287	1382	183	463	72	718	153	1184	107	1444	4905
Grand Total	1323	1238	243	2804	205	1934	546	2685	367	973	135	1475	269	2469	239	2977	9941
Apprch %	47.2	44.2	8.7		7.6	72	20.3		24.9	66	9.2		9	82.9	8		
Total %	13.3	12.5	2.4	28.2	2.1	19.5	5.5	27	3.7	9.8	1.4	14.8	2.7	24.8	2.4	29.9	
Autos	1252	1203	235	2690	202	1865	480	2547	361	943	130	1434	261	2376	226	2863	9534
% Autos	94.6	97.2	96.7	95.9	98.5	96.4	87.9	94.9	98.4	96.9	96.3	97.2	97	96.2	94.6	96.2	95.9
Bus and 2, 3 Axle Trucks	33	27	7	67	3	51	24	78	6	24	2	32	6	66	12	84	261
% Bus and 2, 3 Axle Trucks	2.5	2.2	2.9	2.4	1.5	2.6	4.4	2.9	1.6	2.5	1.5	2.2	2.2	2.7	5	2.8	2.6
4+ Axle Trucks	38	8	1	47	0	18	42	60	0	6	3	9	2	27	1	30	146
% 4+ Axle Trucks	2.9	0.6	0.4	1.7	0	0.9	7.7	2.2	0	0.6	2.2	0.6	0.7	1.1	0.4	1	1.5

	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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 04:00 PM																	
04:00 PM	197	155	34	386	22	229	61	312	41	119	15	175	30	337	31	398	1271
04:15 PM	167	143	25	335	23	228	65	316	49	142	15	206	37	305	30	372	1229
04:30 PM	174	132	33	339	20	277	60	357	43	114	15	172	19	343	35	397	1265
04:45 PM	161	182	40	383	28	217	73	318	51	135	18	204	30	300	36	366	1271
Total Volume	699	612	132	1443	93	951	259	1303	184	510	63	757	116	1285	132	1533	5036
% App. Total	48.4	42.4	9.1		7.1	73	19.9		24.3	67.4	8.3		7.6	83.8	8.6		
PHF	.887	.841	.825	.935	.830	.858	.887	.912	.902	.898	.875	.919	.784	.937	.917	.963	.991

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
 (951) 268-6268

City of South Gate
 N/S: Atlantic Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				05:00 PM				04:15 PM				04:00 PM			
+0 mins.	197	155	34	386	26	262	65	353	49	142	15	206	30	337	31	398
+15 mins.	167	143	25	335	13	245	77	335	43	114	15	172	37	305	30	372
+30 mins.	174	132	33	339	38	240	79	357	51	135	18	204	19	343	35	397
+45 mins.	161	182	40	383	35	236	66	337	48	114	25	187	30	300	36	366
Total Volume	699	612	132	1443	112	983	287	1382	191	505	73	769	116	1285	132	1533
% App. Total	48.4	42.4	9.1		8.1	71.1	20.8		24.8	65.7	9.5		7.6	83.8	8.6	
PHF	.887	.841	.825	.935	.737	.938	.908	.968	.936	.889	.730	.933	.784	.937	.917	.963

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

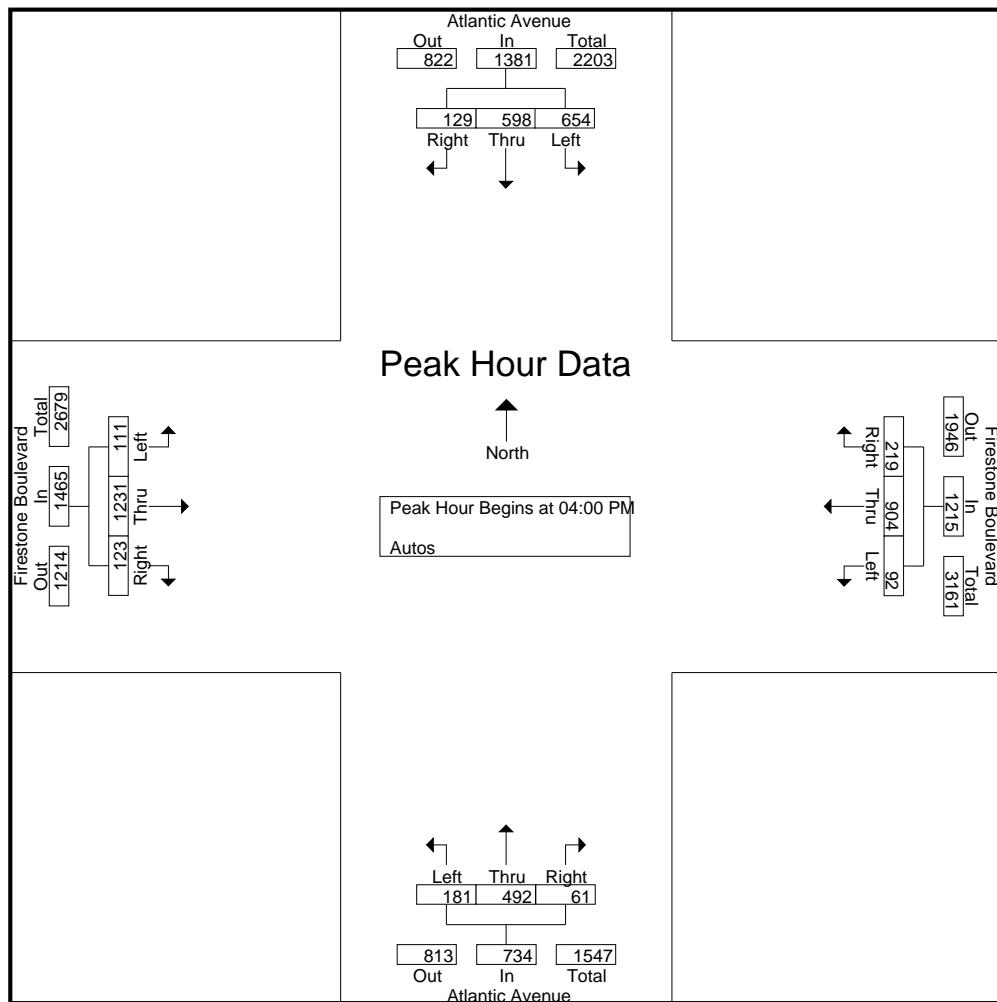
	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	181	152	33	366	21	220	50	291	41	113	15	169	27	319	27	373	1199
04:15 PM	158	139	24	321	23	217	54	294	49	138	15	202	36	296	29	361	1178
04:30 PM	162	128	33	323	20	263	51	334	42	111	13	166	19	330	32	381	1204
04:45 PM	153	179	39	371	28	204	64	296	49	130	18	197	29	286	35	350	1214
Total	654	598	129	1381	92	904	219	1215	181	492	61	734	111	1231	123	1465	4795
05:00 PM	165	137	22	324	26	250	58	334	48	111	23	182	42	305	27	374	1214
05:15 PM	153	142	30	325	13	242	71	326	29	95	10	134	31	269	23	323	1108
05:30 PM	141	163	29	333	36	238	72	346	54	142	22	218	46	295	25	366	1263
05:45 PM	139	163	25	327	35	231	60	326	49	103	14	166	31	276	28	335	1154
Total	598	605	106	1309	110	961	261	1332	180	451	69	700	150	1145	103	1398	4739
Grand Total	1252	1203	235	2690	202	1865	480	2547	361	943	130	1434	261	2376	226	2863	9534
Apprch %	46.5	44.7	8.7		7.9	73.2	18.8		25.2	65.8	9.1		9.1	83	7.9		
Total %	13.1	12.6	2.5	28.2	2.1	19.6	5	26.7	3.8	9.9	1.4	15	2.7	24.9	2.4		30

	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	181	152	33	366	21	220	50	291	41	113	15	169	27	319	27	373	1199
04:15 PM	158	139	24	321	23	217	54	294	49	138	15	202	36	296	29	361	1178
04:30 PM	162	128	33	323	20	263	51	334	42	111	13	166	19	330	32	381	1204
04:45 PM	153	179	39	371	28	204	64	296	49	130	18	197	29	286	35	350	1214
Total Volume	654	598	129	1381	92	904	219	1215	181	492	61	734	111	1231	123	1465	4795
% App. Total	47.4	43.3	9.3		7.6	74.4	18		24.7	67	8.3		7.6	84	8.4		
PHF	.903	.835	.827	.931	.821	.859	.855	.909	.923	.891	.847	.908	.771	.933	.879	.961	.987

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone PM
 Site Code : 04119797
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	181	152	33	366	21	220	50	291	41	113	15	169	27	319	27	373
+15 mins.	158	139	24	321	23	217	54	294	49	138	15	202	36	296	29	361
+30 mins.	162	128	33	323	20	263	51	334	42	111	13	166	19	330	32	381
+45 mins.	153	179	39	371	28	204	64	296	49	130	18	197	29	286	35	350
Total Volume	654	598	129	1381	92	904	219	1215	181	492	61	734	111	1231	123	1465
% App. Total	47.4	43.3	9.3		7.6	74.4	18		24.7	67	8.3		7.6	84	8.4	
PHF	.903	.835	.827	.931	.821	.859	.855	.909	.923	.891	.847	.908	.771	.933	.879	.961

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Bus and 2, 3 Axle Trucks

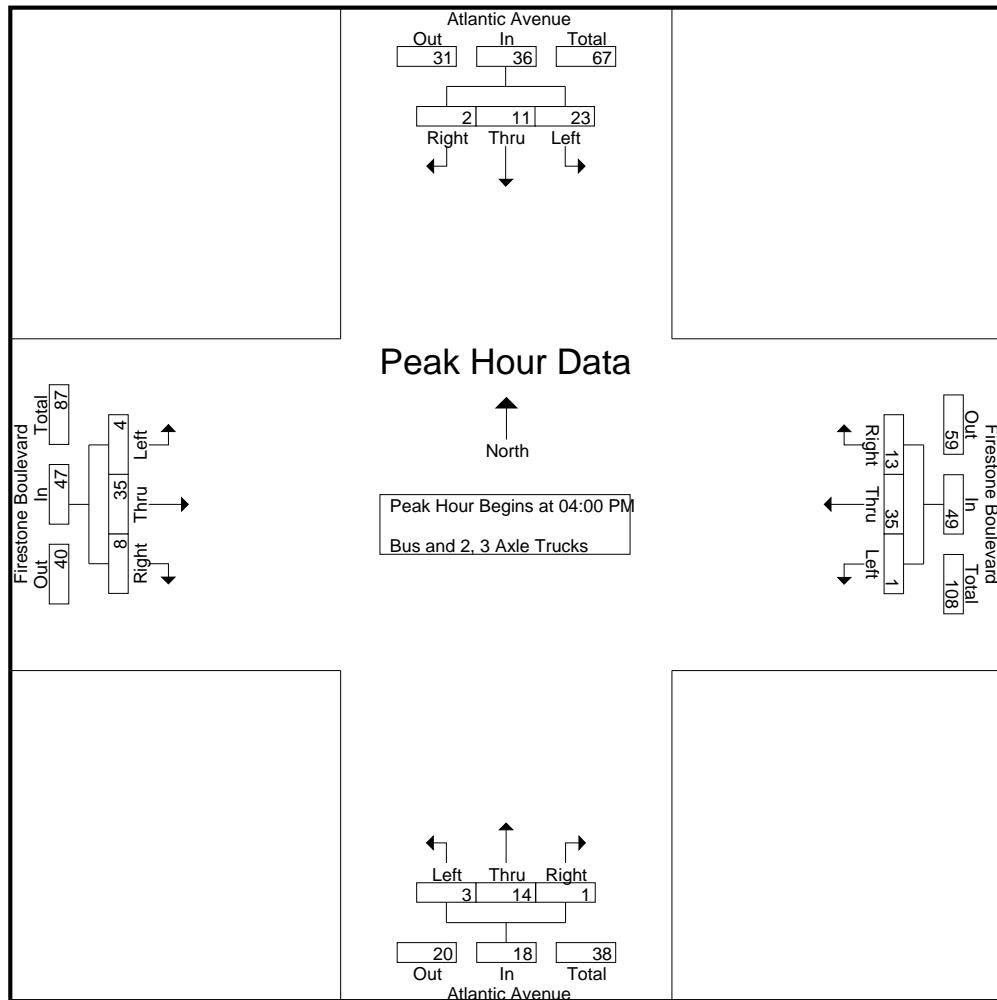
	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	8	2	0	10	1	9	2	12	0	5	0	5	2	12	3	17	44
04:15 PM	6	3	1	10	0	6	3	9	0	2	0	2	1	6	1	8	29
04:30 PM	6	3	0	9	0	10	2	12	1	3	1	5	0	8	3	11	37
04:45 PM	3	3	1	7	0	10	6	16	2	4	0	6	1	9	1	11	40
Total	23	11	2	36	1	35	13	49	3	14	1	18	4	35	8	47	150
05:00 PM	1	4	2	7	0	10	3	13	0	2	0	2	0	9	1	10	32
05:15 PM	1	0	1	2	0	2	1	3	1	2	0	3	1	11	2	14	22
05:30 PM	5	4	1	10	2	2	5	9	1	5	1	7	1	6	0	7	33
05:45 PM	3	8	1	12	0	2	2	4	1	1	0	2	0	5	1	6	24
Total	10	16	5	31	2	16	11	29	3	10	1	14	2	31	4	37	111
Grand Total	33	27	7	67	3	51	24	78	6	24	2	32	6	66	12	84	261
Apprch %	49.3	40.3	10.4		3.8	65.4	30.8		18.8	75	6.2		7.1	78.6	14.3		
Total %	12.6	10.3	2.7	25.7	1.1	19.5	9.2	29.9	2.3	9.2	0.8	12.3	2.3	25.3	4.6	32.2	

	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	8	2	0	10	1	9	2	12	0	5	0	5	2	12	3	17	44
04:15 PM	6	3	1	10	0	6	3	9	0	2	0	2	1	6	1	8	29
04:30 PM	6	3	0	9	0	10	2	12	1	3	1	5	0	8	3	11	37
04:45 PM	3	3	1	7	0	10	6	16	2	4	0	6	1	9	1	11	40
Total Volume	23	11	2	36	1	35	13	49	3	14	1	18	4	35	8	47	150
% App. Total	63.9	30.6	5.6		2	71.4	26.5		16.7	77.8	5.6		8.5	74.5	17		
PHF	.719	.917	.500	.900	.250	.875	.542	.766	.375	.700	.250	.750	.500	.729	.667	.691	.852

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	8	2	0	10	1	9	2	12	0	5	0	5	2	12	3	17
+15 mins.	6	3	1	10	0	6	3	9	0	2	0	2	1	6	1	8
+30 mins.	6	3	0	9	0	10	2	12	1	3	1	5	0	8	3	11
+45 mins.	3	3	1	7	0	10	6	16	2	4	0	6	1	9	1	11
Total Volume	23	11	2	36	1	35	13	49	3	14	1	18	4	35	8	47
% App. Total	63.9	30.6	5.6		2	71.4	26.5		16.7	77.8	5.6		8.5	74.5	17	
PHF	.719	.917	.500	.900	.250	.875	.542	.766	.375	.700	.250	.750	.500	.729	.667	.691

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- 4+ Axle Trucks

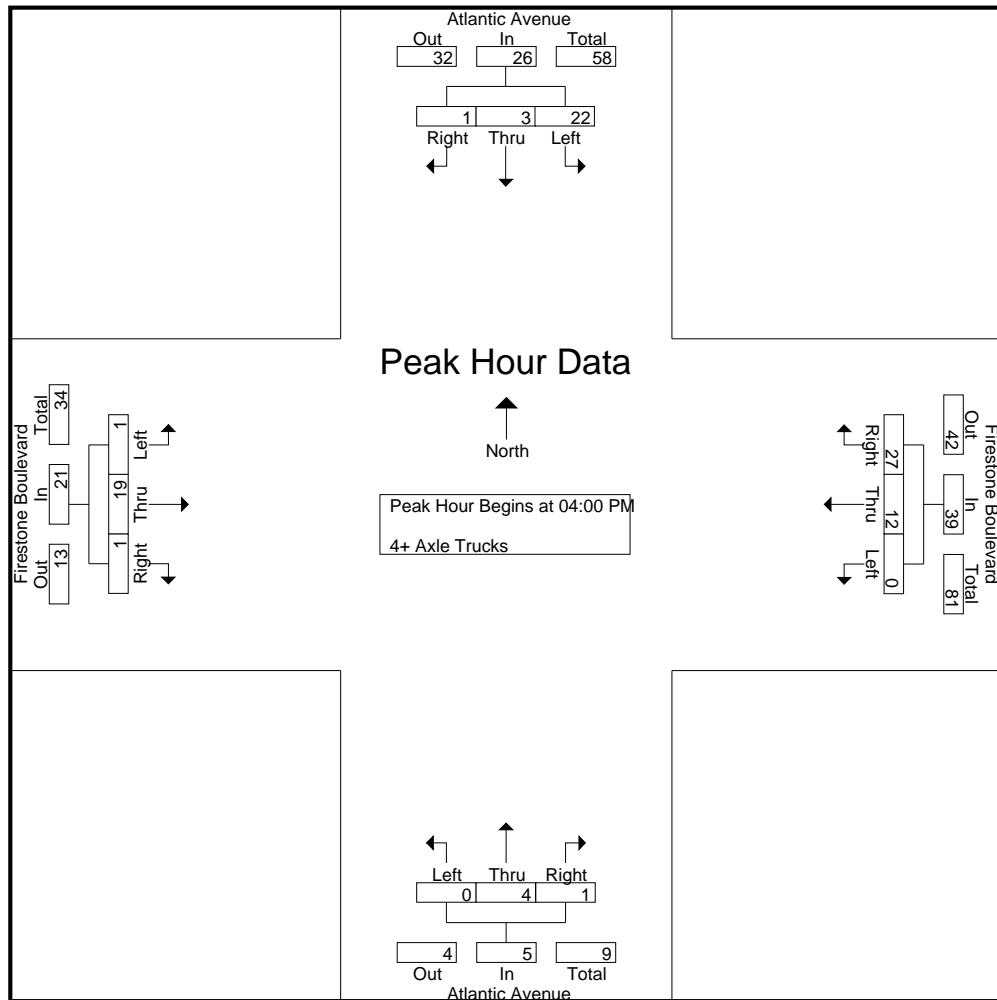
	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				Int. Total	
	Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	8	1	1	10	0	0	9	9	0	1	0	1	1	1	6	1	8	28
04:15 PM	3	1	0	4	0	5	8	13	0	2	0	2	0	3	0	3	3	22
04:30 PM	6	1	0	7	0	4	7	11	0	0	1	1	0	5	0	5	5	24
04:45 PM	5	0	0	5	0	3	3	6	0	1	0	1	0	5	0	5	5	17
Total	22	3	1	26	0	12	27	39	0	4	1	5	1	19	1	21	91	
05:00 PM	4	1	0	5	0	2	4	6	0	1	2	3	1	0	0	1	15	
05:15 PM	4	2	0	6	0	1	5	6	0	1	0	1	0	2	0	2	15	
05:30 PM	3	0	0	3	0	0	2	2	0	0	0	0	0	0	0	0	0	5
05:45 PM	5	2	0	7	0	3	4	7	0	0	0	0	0	6	0	6	6	20
Total	16	5	0	21	0	6	15	21	0	2	2	4	1	8	0	9	55	
Grand Total	38	8	1	47	0	18	42	60	0	6	3	9	2	27	1	30	146	
Apprch %	80.9	17	2.1		0	30	70		0	66.7	33.3		6.7	90	3.3			
Total %	26	5.5	0.7	32.2	0	12.3	28.8	41.1	0	4.1	2.1	6.2	1.4	18.5	0.7	20.5		

	Atlantic Avenue Southbound				Firestone Boulevard Westbound				Atlantic Avenue Northbound				Firestone Boulevard Eastbound				Int. Total
	Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	8	1	1	10	0	0	9	9	0	1	0	1	1	6	1	8	28
04:15 PM	3	1	0	4	0	5	8	13	0	2	0	2	0	3	0	3	3
04:30 PM	6	1	0	7	0	4	7	11	0	0	1	1	0	5	0	5	24
04:45 PM	5	0	0	5	0	3	3	6	0	1	0	1	0	5	0	5	17
Total Volume	22	3	1	26	0	12	27	39	0	4	1	5	1	19	1	21	91
% App. Total	84.6	11.5	3.8		0	30.8	69.2		0	80	20		4.8	90.5	4.8		
PHF	.688	.750	.250	.650	.000	.600	.750	.750	.000	.500	.250	.625	.250	.792	.250	.656	.813

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 03_SGE_Atlantic_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	8	1	1	10	0	0	9	9	0	1	0	1	1	1	6	1	8
+15 mins.	3	1	0	4	0	5	8	13	0	2	0	2	0	3	0	0	3
+30 mins.	6	1	0	7	0	4	7	11	0	0	1	1	0	5	0	0	5
+45 mins.	5	0	0	5	0	3	3	6	0	1	0	1	0	5	0	0	5
Total Volume	22	3	1	26	0	12	27	39	0	4	1	5	1	19	1	21	
% App. Total	84.6	11.5	3.8		0	30.8	69.2		0	80	20		4.8	90.5	4.8		
PHF	.688	.750	.250	.650	.000	.600	.750	.750	.000	.500	.250	.625	.250	.792	.250	.656	

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City of South Gate
 N/S: Rayo Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 04_SGE_Rayo_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Bus and 2, 3 Axle Trucks - 4+ Axle Trucks

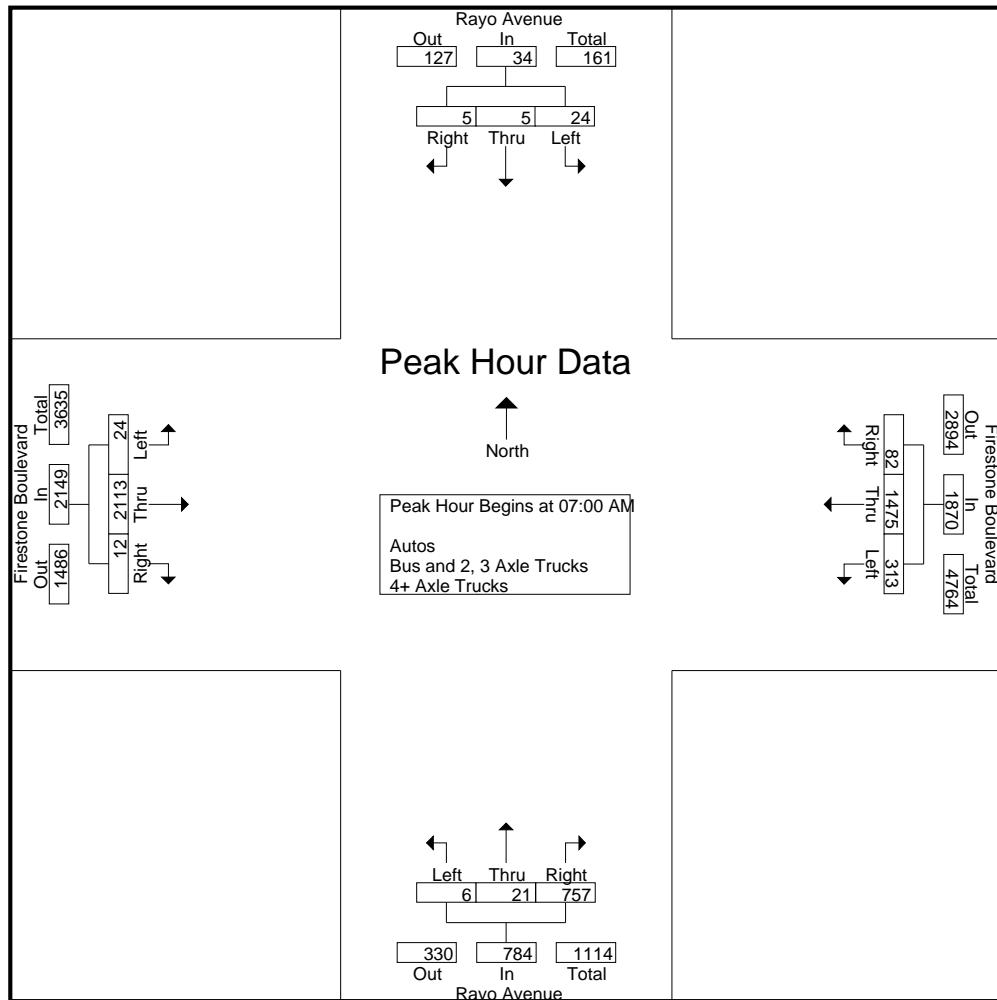
	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	7	0	0	7	60	389	16	465	0	5	154	159	8	465	3	476	1107
07:15 AM	7	3	1	11	74	341	11	426	0	4	231	235	5	536	2	543	1215
07:30 AM	6	1	2	9	89	401	27	517	1	5	180	186	4	597	1	602	1314
07:45 AM	4	1	2	7	90	344	28	462	5	7	192	204	7	515	6	528	1201
Total	24	5	5	34	313	1475	82	1870	6	21	757	784	24	2113	12	2149	4837
08:00 AM	6	4	2	12	68	317	26	411	3	6	156	165	5	428	4	437	1025
08:15 AM	9	1	1	11	49	312	16	377	2	4	145	151	3	386	6	395	934
08:30 AM	6	3	4	13	65	338	14	417	1	5	147	153	7	342	8	357	940
08:45 AM	15	0	2	17	53	287	23	363	2	5	121	128	3	356	2	361	869
Total	36	8	9	53	235	1254	79	1568	8	20	569	597	18	1512	20	1550	3768
Grand Total	60	13	14	87	548	2729	161	3438	14	41	1326	1381	42	3625	32	3699	8605
Apprch %	69	14.9	16.1		15.9	79.4	4.7		1	3	96		1.1	98	0.9		
Total %	0.7	0.2	0.2	1	6.4	31.7	1.9	40	0.2	0.5	15.4	16	0.5	42.1	0.4	43	
Autos	33	5	12	50	514	2578	120	3212	13	26	1268	1307	36	3424	27	3487	8056
% Autos	55	38.5	85.7	57.5	93.8	94.5	74.5	93.4	92.9	63.4	95.6	94.6	85.7	94.5	84.4	94.3	93.6
Bus and 2, 3 Axle Trucks	7	0	1	8	18	82	9	109	0	1	27	28	4	101	4	109	254
% Bus and 2, 3 Axle Trucks	11.7	0	7.1	9.2	3.3	3	5.6	3.2	0	2.4	2	2	9.5	2.8	12.5	2.9	3
4+ Axle Trucks	20	8	1	29	16	69	32	117	1	14	31	46	2	100	1	103	295
% 4+ Axle Trucks	33.3	61.5	7.1	33.3	2.9	2.5	19.9	3.4	7.1	34.1	2.3	3.3	4.8	2.8	3.1	2.8	3.4

	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	7	0	0	7	60	389	16	465	0	5	154	159	8	465	3	476	1107
07:15 AM	7	3	1	11	74	341	11	426	0	4	231	235	5	536	2	543	1215
07:30 AM	6	1	2	9	89	401	27	517	1	5	180	186	4	597	1	602	1314
07:45 AM	4	1	2	7	90	344	28	462	5	7	192	204	7	515	6	528	1201
Total Volume	24	5	5	34	313	1475	82	1870	6	21	757	784	24	2113	12	2149	4837
% App. Total	70.6	14.7	14.7		16.7	78.9	4.4		0.8	2.7	96.6		1.1	98.3	0.6		
PHF	.857	.417	.625	.773	.869	.920	.732	.904	.300	.750	.819	.834	.750	.885	.500	.892	.920

Counts Unlimited
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City of South Gate
 N/S: Rayo Avenue
 E/W: Firestone Boulevard
 Weather: Clear

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 Site Code : 04119797
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				07:00 AM				07:15 AM				07:00 AM					
	6	4	2	12	60	389	16	465	0	4	231	235	8	465	3	476		
+0 mins.	6	4	2	12	60	389	16	465	0	4	231	235	5	536	2	543		
+15 mins.	9	1	1	11	74	341	11	426	1	5	180	186	4	597	1	602		
+30 mins.	6	3	4	13	89	401	27	517	5	7	192	204	7	515	6	528		
+45 mins.	15	0	2	17	90	344	28	462	3	6	156	165	24	2113	12	2149		
Total Volume	36	8	9	53	313	1475	82	1870	9	22	759	790	1.1	2.8	96.1	1.1	98.3	0.6
% App. Total	67.9	15.1	17		16.7	78.9	4.4		1.1									
PHF	.600	.500	.563	.779	.869	.920	.732	.904	.450	.786	.821	.840	.750	.885	.500	.892		

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City of South Gate
 N/S: Rayo Avenue
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 Weather: Clear

File Name : 04_SGE_Rayo_Firestone AM
 Site Code : 04119797
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Groups Printed- Autos

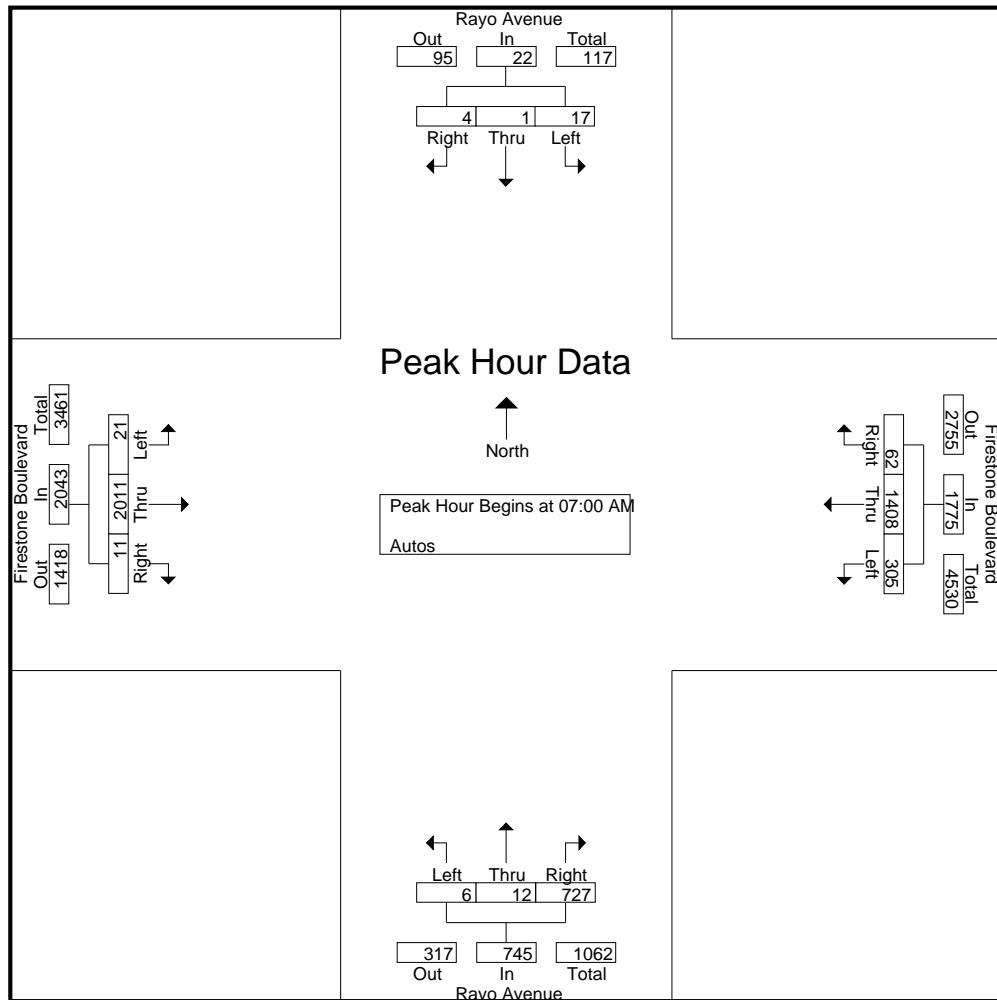
	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	0	0	6	58	372	11	441	0	2	146	148	8	436	3	447	1042
07:15 AM	3	0	0	3	72	330	10	412	0	3	225	228	5	512	1	518	1161
07:30 AM	4	1	2	7	86	378	22	486	1	2	170	173	3	567	1	571	1237
07:45 AM	4	0	2	6	89	328	19	436	5	5	186	196	5	496	6	507	1145
Total	17	1	4	22	305	1408	62	1775	6	12	727	745	21	2011	11	2043	4585
08:00 AM	1	1	2	4	58	302	21	381	3	5	150	158	4	411	4	419	962
08:15 AM	2	1	0	3	45	292	13	350	2	2	137	141	2	363	5	370	864
08:30 AM	4	2	4	10	62	306	10	378	1	4	140	145	7	315	5	327	860
08:45 AM	9	0	2	11	44	270	14	328	1	3	114	118	2	324	2	328	785
Total	16	4	8	28	209	1170	58	1437	7	14	541	562	15	1413	16	1444	3471
Grand Total	33	5	12	50	514	2578	120	3212	13	26	1268	1307	36	3424	27	3487	8056
Apprch %	66	10	24		16	80.3	3.7		1	2	97		1	98.2	0.8		
Total %	0.4	0.1	0.1	0.6	6.4	32	1.5	39.9	0.2	0.3	15.7	16.2	0.4	42.5	0.3	43.3	

	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	6	0	0	6	58	372	11	441	0	2	146	148	8	436	3	447	1042
07:15 AM	3	0	0	3	72	330	10	412	0	3	225	228	5	512	1	518	1161
07:30 AM	4	1	2	7	86	378	22	486	1	2	170	173	3	567	1	571	1237
07:45 AM	4	0	2	6	89	328	19	436	5	5	186	196	5	496	6	507	1145
Total Volume	17	1	4	22	305	1408	62	1775	6	12	727	745	21	2011	11	2043	4585
% App. Total	77.3	4.5	18.2		17.2	79.3	3.5		0.8	1.6	97.6		1	98.4	0.5		
PHF	.708	.250	.500	.786	.857	.931	.705	.913	.300	.600	.808	.817	.656	.887	.458	.894	.927

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City of South Gate
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	6	0	0	6	58	372	11	441	0	2	146	148	8	436	3	447
+15 mins.	3	0	0	3	72	330	10	412	0	3	225	228	5	512	1	518
+30 mins.	4	1	2	7	86	378	22	486	1	2	170	173	3	567	1	571
+45 mins.	4	0	2	6	89	328	19	436	5	5	186	196	5	496	6	507
Total Volume	17	1	4	22	305	1408	62	1775	6	12	727	745	21	2011	11	2043
% App. Total	77.3	4.5	18.2		17.2	79.3	3.5		0.8	1.6	97.6		1	98.4	0.5	
PHF	.708	.250	.500	.786	.857	.931	.705	.913	.300	.600	.808	.817	.656	.887	.458	.894

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City of South Gate
 N/S: Rayo Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 04_SGE_Rayo_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
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Groups Printed- Bus and 2, 3 Axle Trucks

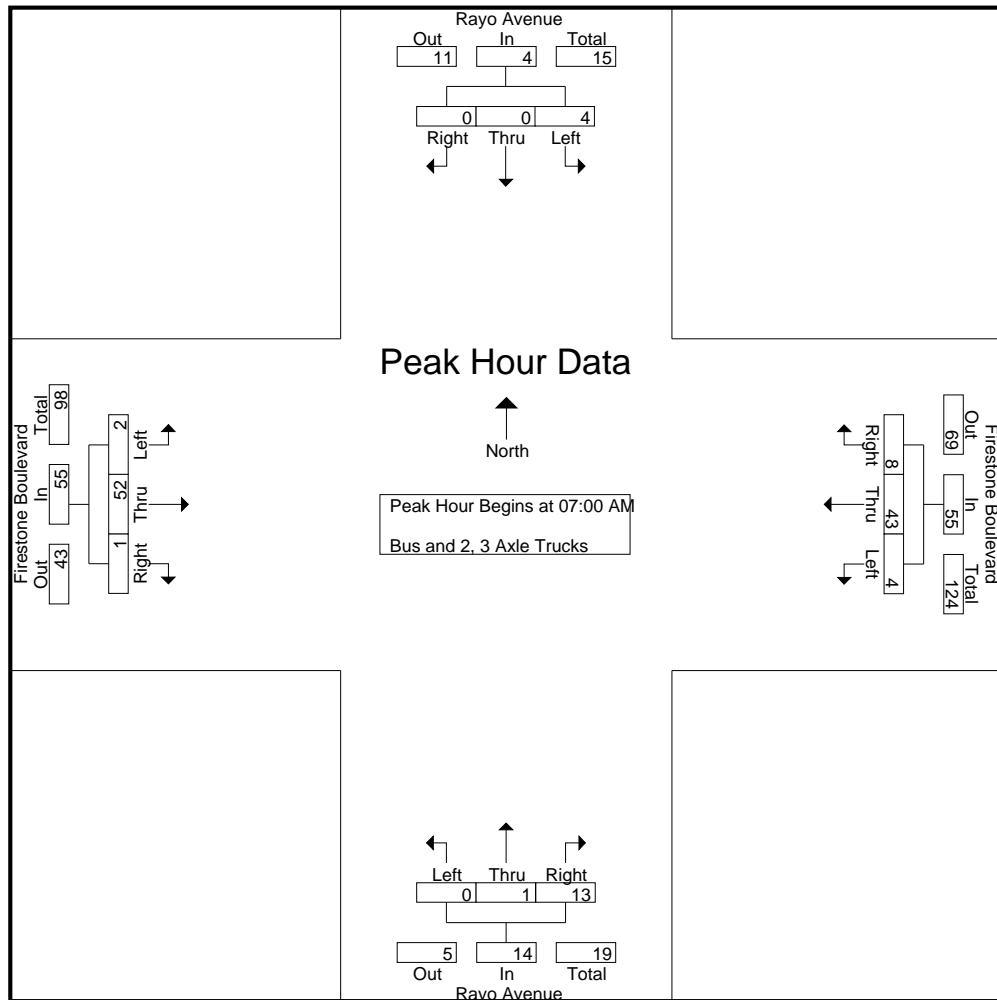
	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	0	1	1	11	2	14	0	0	2	2	0	13	0	13	30
07:15 AM	2	0	0	2	0	8	1	9	0	0	4	4	0	13	1	14	29
07:30 AM	1	0	0	1	2	12	1	15	0	1	5	6	1	14	0	15	37
07:45 AM	0	0	0	0	1	12	4	17	0	0	2	2	2	12	0	13	32
Total	4	0	0	4	4	43	8	55	0	1	13	14	2	52	1	55	128
08:00 AM	1	0	0	1	6	6	1	13	0	0	4	4	1	8	0	9	27
08:15 AM	0	0	1	1	1	9	0	10	0	0	2	2	1	10	0	11	24
08:30 AM	1	0	0	1	1	14	0	15	0	0	4	4	0	11	3	14	34
08:45 AM	1	0	0	1	6	10	0	16	0	0	4	4	0	20	0	20	41
Total	3	0	1	4	14	39	1	54	0	0	14	14	2	49	3	54	126
Grand Total	7	0	1	8	18	82	9	109	0	1	27	28	4	101	4	109	254
Apprch %	87.5	0	12.5		16.5	75.2	8.3		0	3.6	96.4		3.7	92.7	3.7		
Total %	2.8	0	0.4	3.1	7.1	32.3	3.5	42.9	0	0.4	10.6	11	1.6	39.8	1.6	42.9	

	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	0	0	1	1	11	2	14	0	0	2	2	0	13	0	13	30
07:15 AM	2	0	0	2	0	8	1	9	0	0	4	4	0	13	1	14	29
07:30 AM	1	0	0	1	2	12	1	15	0	1	5	6	1	14	0	15	37
07:45 AM	0	0	0	0	1	12	4	17	0	0	2	2	1	12	0	13	32
Total Volume	4	0	0	4	4	43	8	55	0	1	13	14	2	52	1	55	128
% App. Total	100	0	0		7.3	78.2	14.5		0	7.1	92.9		3.6	94.5	1.8		
PHF	.500	.000	.000	.500	.500	.896	.500	.809	.000	.250	.650	.583	.500	.929	.250	.917	.865

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City of South Gate
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	1	0	0	1	1	11	2	14	0	0	2	2	0	13	0	13
+15 mins.	2	0	0	2	0	8	1	9	0	0	4	4	0	13	1	14
+30 mins.	1	0	0	1	2	12	1	15	0	1	5	6	1	14	0	15
+45 mins.	0	0	0	0	1	12	4	17	0	0	2	2	1	12	0	13
Total Volume	4	0	0	4	4	43	8	55	0	1	13	14	2	52	1	55
% App. Total	100	0	0		7.3	78.2	14.5		0	7.1	92.9		3.6	94.5	1.8	
PHF	.500	.000	.000	.500	.500	.896	.500	.809	.000	.250	.650	.583	.500	.929	.250	.917

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City of South Gate
 N/S: Rayo Avenue
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File Name : 04_SGE_Rayo_Firestone AM
 Site Code : 04119797
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 Page No : 1

Groups Printed- 4+ Axle Trucks

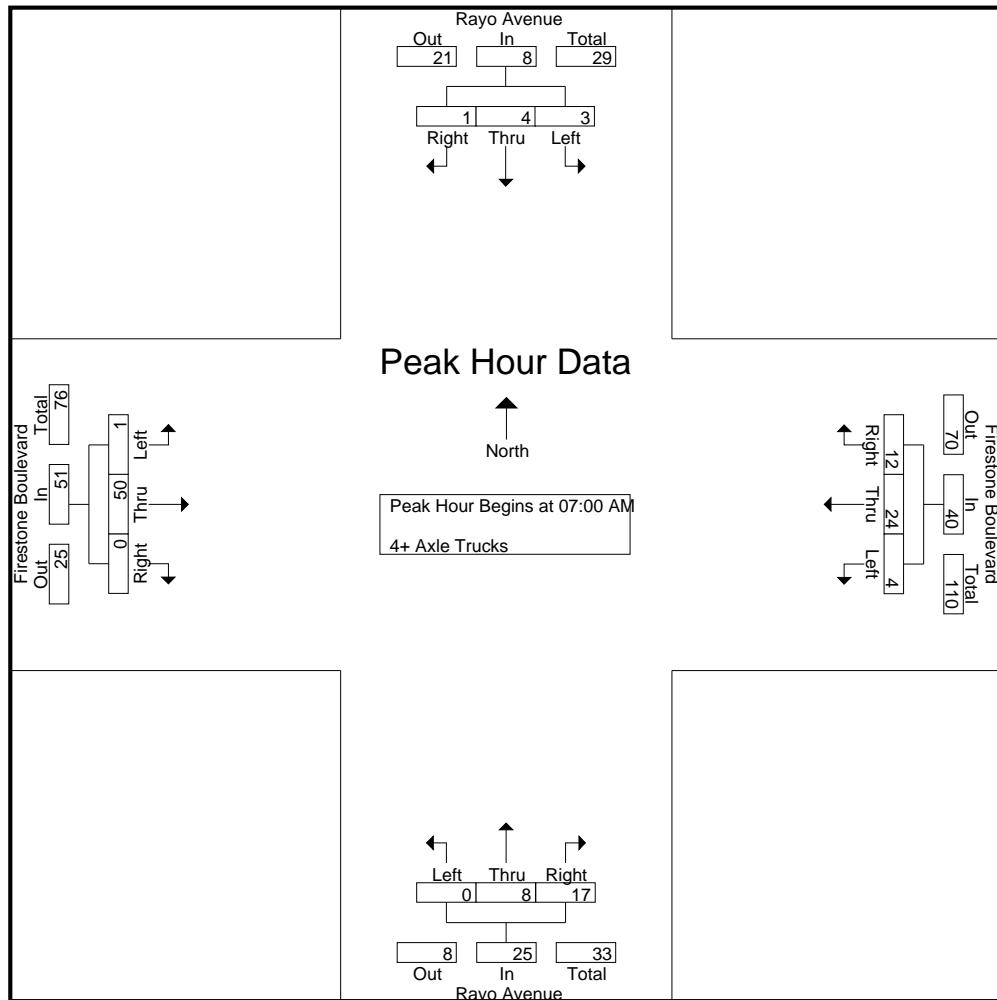
	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	6	3	10	0	3	6	9	0	16	0	16	35
07:15 AM	2	3	1	6	2	3	0	5	0	1	2	3	0	11	0	11	25
07:30 AM	1	0	0	1	1	11	4	16	0	2	5	7	0	16	0	16	40
07:45 AM	0	1	0	1	0	4	5	9	0	2	4	6	1	7	0	8	24
Total	3	4	1	8	4	24	12	40	0	8	17	25	1	50	0	51	124
08:00 AM	4	3	0	7	4	9	4	17	0	1	2	3	0	9	0	9	36
08:15 AM	7	0	0	7	3	11	3	17	0	2	6	8	0	13	1	14	46
08:30 AM	1	1	0	2	2	18	4	24	0	1	3	4	0	16	0	16	46
08:45 AM	5	0	0	5	3	7	9	19	1	2	3	6	1	12	0	13	43
Total	17	4	0	21	12	45	20	77	1	6	14	21	1	50	1	52	171
Grand Total	20	8	1	29	16	69	32	117	1	14	31	46	2	100	1	103	295
Apprch %	69	27.6	3.4		13.7	59	27.4		2.2	30.4	67.4		1.9	97.1	1		
Total %	6.8	2.7	0.3	9.8	5.4	23.4	10.8	39.7	0.3	4.7	10.5	15.6	0.7	33.9	0.3	34.9	

	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	1	6	3	10	0	3	6	9	0	16	0	16	35
07:15 AM	2	3	1	6	2	3	0	5	0	1	2	3	0	11	0	11	25
07:30 AM	1	0	0	1	1	11	4	16	0	2	5	7	0	16	0	16	40
07:45 AM	0	1	0	1	0	4	5	9	0	2	4	6	1	7	0	8	24
Total Volume	3	4	1	8	4	24	12	40	0	8	17	25	1	50	0	51	124
% App. Total	37.5	50	12.5		10	60	30		0	32	68		2	98	0		
PHF	.375	.333	.250	.333	.500	.545	.600	.625	.000	.667	.708	.694	.250	.781	.000	.797	.775

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City of South Gate
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 Site Code : 04119797
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	1	6	3	10	0	3	6	9	0	16	0	16
+15 mins.	2	3	1	6	2	3	0	5	0	1	2	3	0	11	0	11
+30 mins.	1	0	0	1	1	11	4	16	0	2	5	7	0	16	0	16
+45 mins.	0	1	0	1	0	4	5	9	0	2	4	6	1	7	0	8
Total Volume	3	4	1	8	4	24	12	40	0	8	17	25	1	50	0	51
% App. Total	37.5	50	12.5		10	60	30		0	32	68		2	98	0	
PHF	.375	.333	.250	.333	.500	.545	.600	.625	.000	.667	.708	.694	.250	.781	.000	.797

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City of South Gate
 N/S: Rayo Avenue
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 Weather: Clear

File Name : 04_SGE_Rayo_Firestone PM
 Site Code : 04119797
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 Page No : 1

Groups Printed- Autos - Bus and 2, 3 Axle Trucks - 4+ Axle Trucks

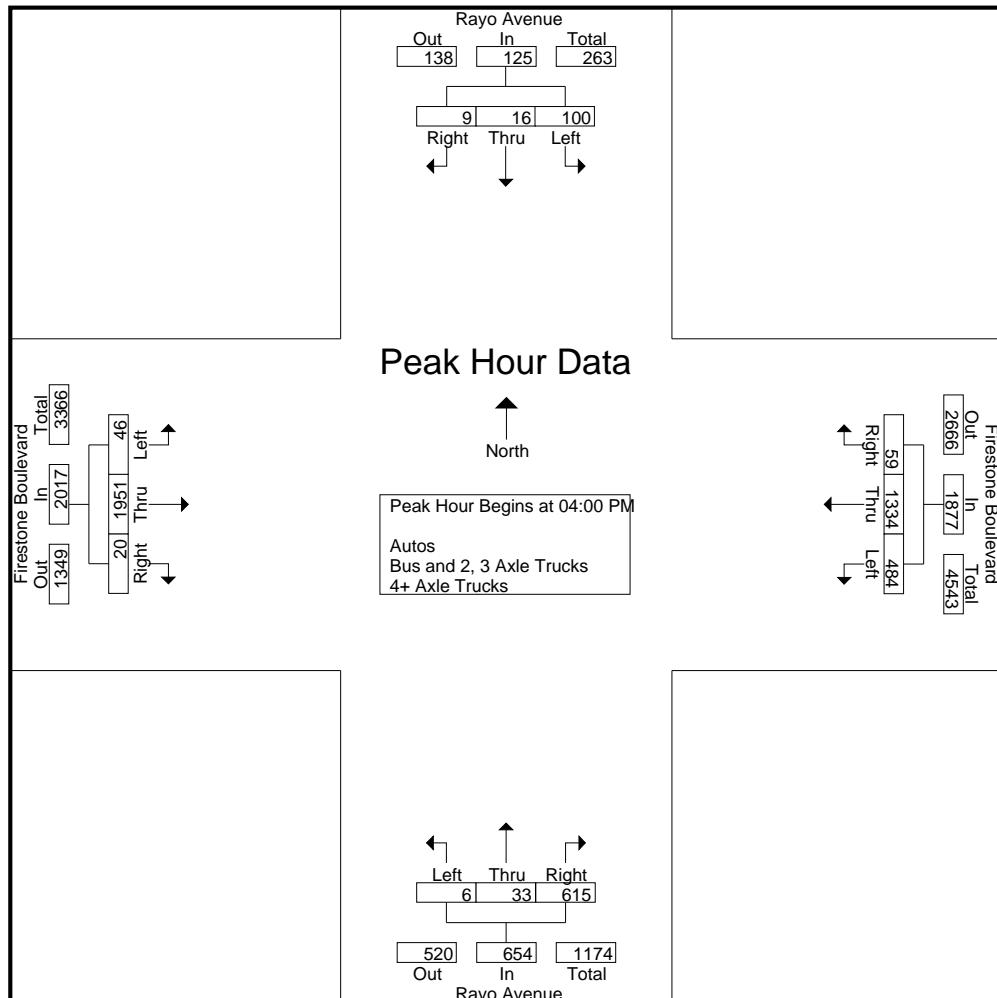
	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	26	4	3	33	100	332	13	445	1	6	166	173	12	475	4	491	1142
04:15 PM	20	3	1	24	97	376	21	494	2	5	128	135	10	540	1	551	1204
04:30 PM	36	7	4	47	126	316	14	456	2	14	158	174	14	469	7	490	1167
04:45 PM	18	2	1	21	161	310	11	482	1	8	163	172	10	467	8	485	1160
Total	100	16	9	125	484	1334	59	1877	6	33	615	654	46	1951	20	2017	4673
05:00 PM	28	3	3	34	102	322	8	432	6	5	182	193	4	473	4	481	1140
05:15 PM	27	0	3	30	98	358	6	462	2	1	147	150	5	450	5	460	1102
05:30 PM	15	3	4	22	91	366	5	462	2	1	172	175	0	492	6	498	1157
05:45 PM	17	1	2	20	107	305	7	419	4	2	160	166	4	369	5	378	983
Total	87	7	12	106	398	1351	26	1775	14	9	661	684	13	1784	20	1817	4382
Grand Total	187	23	21	231	882	2685	85	3652	20	42	1276	1338	59	3735	40	3834	9055
Apprch %	81	10	9.1		24.2	73.5	2.3		1.5	3.1	95.4		1.5	97.4	1		
Total %	2.1	0.3	0.2	2.6	9.7	29.7	0.9	40.3	0.2	0.5	14.1	14.8	0.7	41.2	0.4	42.3	
Autos	157	16	21	194	838	2554	49	3441	19	36	1236	1291	53	3580	36	3669	8595
% Autos	84	69.6	100	84	95	95.1	57.6	94.2	95	85.7	96.9	96.5	89.8	95.9	90	95.7	94.9
Bus and 2, 3 Axle Trucks	3	2	0	5	23	71	8	102	0	3	21	24	3	82	2	87	218
% Bus and 2, 3 Axle Trucks	1.6	8.7	0	2.2	2.6	2.6	9.4	2.8	0	7.1	1.6	1.8	5.1	2.2	5	2.3	2.4
4+ Axle Trucks	27	5	0	32	21	60	28	109	1	3	19	23	3	73	2	78	242
% 4+ Axle Trucks	14.4	21.7	0	13.9	2.4	2.2	32.9	3	5	7.1	1.5	1.7	5.1	2	5	2	2.7

	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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 04:00 PM																	
04:00 PM	26	4	3	33	100	332	13	445	1	6	166	173	12	475	4	491	1142
04:15 PM	20	3	1	24	97	376	21	494	2	5	128	135	10	540	1	551	1204
04:30 PM	36	7	4	47	126	316	14	456	2	14	158	174	14	469	7	490	1167
04:45 PM	18	2	1	21	161	310	11	482	1	8	163	172	10	467	8	485	1160
Total Volume	100	16	9	125	484	1334	59	1877	6	33	615	654	46	1951	20	2017	4673
% App. Total	80	12.8	7.2		25.8	71.1	3.1		0.9	5	94		2.3	96.7	1		
PHF	.694	.571	.563	.665	.752	.887	.702	.950	.750	.589	.926	.940	.821	.903	.625	.915	.970

Counts Unlimited
 PO Box 1178
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City of South Gate
 N/S: Rayo Avenue
 E/W: Firestone Boulevard
 Weather: Clear

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 Site Code : 04119797
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:45 PM				04:00 PM			
+0 mins.	36	7	4	47	100	332	13	445	1	8	163	172	12	475	4	491
+15 mins.	18	2	1	21	97	376	21	494	6	5	182	193	10	540	1	551
+30 mins.	28	3	3	34	126	316	14	456	2	1	147	150	14	469	7	490
+45 mins.	27	0	3	30	161	310	11	482	2	1	172	175	10	467	8	485
Total Volume	109	12	11	132	484	1334	59	1877	11	15	664	690	46	1951	20	2017
% App. Total	82.6	9.1	8.3		25.8	71.1	3.1		1.6	2.2	96.2		2.3	96.7	1	
PHF	.757	.429	.688	.702	.752	.887	.702	.950	.458	.469	.912	.894	.821	.903	.625	.915

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City of South Gate
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 Weather: Clear

File Name : 04_SGE_Rayo_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

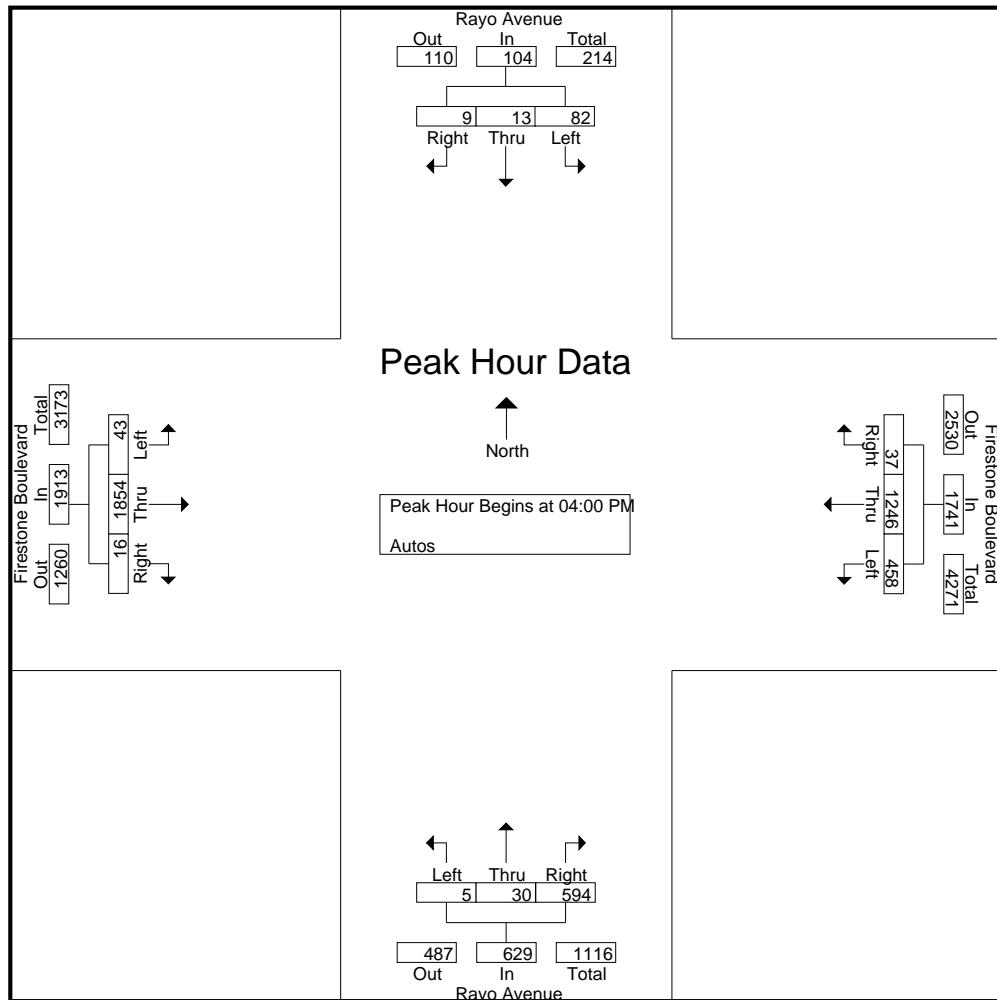
	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	24	4	3	31	92	311	6	409	1	5	164	170	12	443	3	458	1068
04:15 PM	17	1	1	19	93	351	14	458	2	4	125	131	9	515	1	525	1133
04:30 PM	28	6	4	38	122	295	10	427	2	14	156	172	13	445	6	464	1101
04:45 PM	13	2	1	16	151	289	7	447	0	7	149	156	9	451	6	466	1085
Total	82	13	9	104	458	1246	37	1741	5	30	594	629	43	1854	16	1913	4387
05:00 PM	27	1	3	31	96	307	2	405	6	3	180	189	4	455	4	463	1088
05:15 PM	18	0	3	21	93	347	4	444	2	1	139	142	3	438	5	446	1053
05:30 PM	14	2	4	20	89	358	2	449	2	1	170	173	0	479	6	485	1127
05:45 PM	16	0	2	18	102	296	4	402	4	1	153	158	3	354	5	362	940
Total	75	3	12	90	380	1308	12	1700	14	6	642	662	10	1726	20	1756	4208
Grand Total	157	16	21	194	838	2554	49	3441	19	36	1236	1291	53	3580	36	3669	8595
Apprch %	80.9	8.2	10.8		24.4	74.2	1.4		1.5	2.8	95.7		1.4	97.6	1		
Total %	1.8	0.2	0.2	2.3	9.7	29.7	0.6	40	0.2	0.4	14.4	15	0.6	41.7	0.4	42.7	

	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	24	4	3	31	92	311	6	409	1	5	164	170	12	443	3	458	1068
04:15 PM	17	1	1	19	93	351	14	458	2	4	125	131	9	515	1	525	1133
04:30 PM	28	6	4	38	122	295	10	427	2	14	156	172	13	445	6	464	1101
04:45 PM	13	2	1	16	151	289	7	447	0	7	149	156	9	451	6	466	1085
Total Volume	82	13	9	104	458	1246	37	1741	5	30	594	629	43	1854	16	1913	4387
% App. Total	78.8	12.5	8.7		26.3	71.6	2.1		0.8	4.8	94.4		2.2	96.9	0.8		
PHF	.732	.542	.563	.684	.758	.887	.661	.950	.625	.536	.905	.914	.827	.900	.667	.911	.968

Counts Unlimited
 PO Box 1178
 Corona, CA 92878
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City of South Gate
 N/S: Rayo Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 04_SGE_Rayo_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	24	4	3	31	92	311	6	409	1	5	164	170	12	443	3	458
+15 mins.	17	1	1	19	93	351	14	458	2	4	125	131	9	515	1	525
+30 mins.	28	6	4	38	122	295	10	427	2	14	156	172	13	445	6	464
+45 mins.	13	2	1	16	151	289	7	447	0	7	149	156	9	451	6	466
Total Volume	82	13	9	104	458	1246	37	1741	5	30	594	629	43	1854	16	1913
% App. Total	78.8	12.5	8.7		26.3	71.6	2.1		0.8	4.8	94.4		2.2	96.9	0.8	
PHF	.732	.542	.563	.684	.758	.887	.661	.950	.625	.536	.905	.914	.827	.900	.667	.911

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City of South Gate
 N/S: Rayo Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 04_SGE_Rayo_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Bus and 2, 3 Axle Trucks

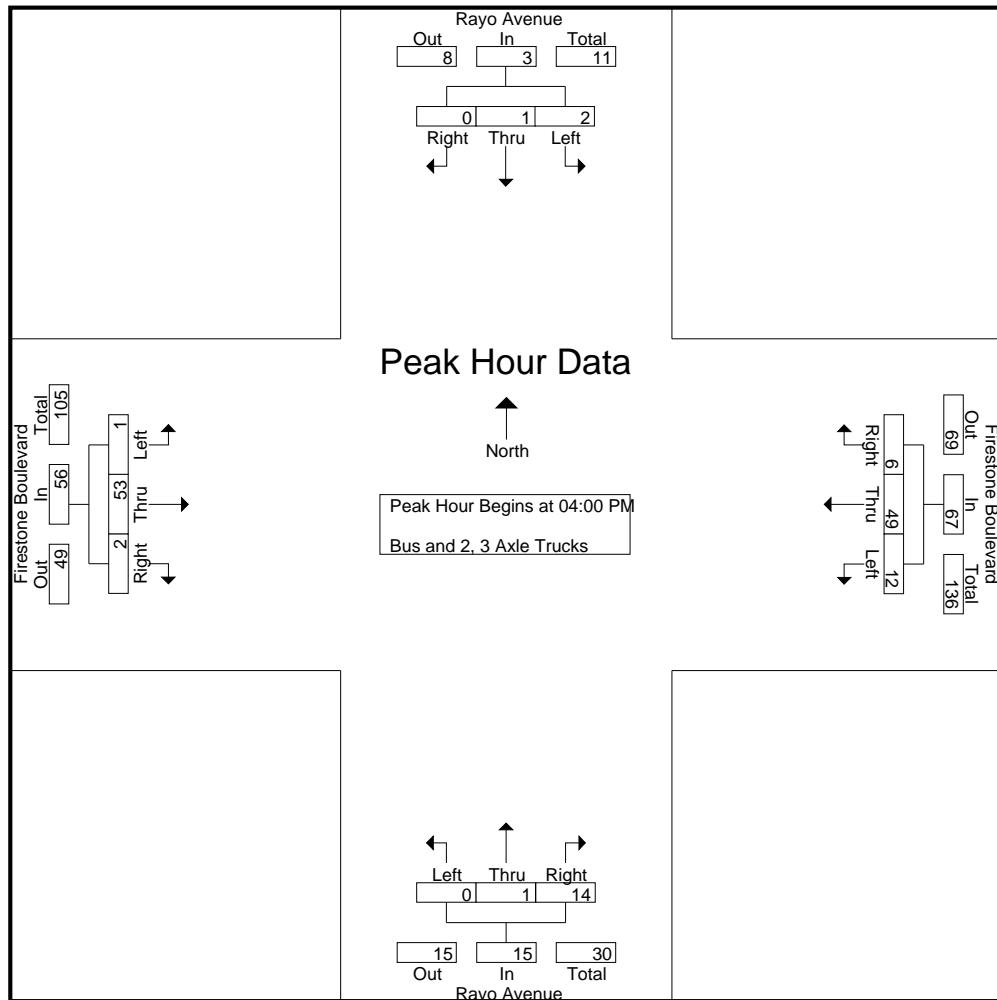
	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	0	1	3	13	3	19	0	0	2	2	0	19	1	20	42
04:15 PM	0	1	0	1	3	13	2	18	0	1	1	2	0	12	0	12	33
04:30 PM	1	0	0	1	2	12	0	14	0	0	2	2	0	15	0	15	32
04:45 PM	0	0	0	0	4	11	1	16	0	0	9	9	1	7	1	9	34
Total	2	1	0	3	12	49	6	67	0	1	14	15	1	53	2	56	141
05:00 PM	0	1	0	1	3	11	1	15	0	2	1	3	0	7	0	7	26
05:15 PM	1	0	0	1	3	3	0	6	0	0	4	4	2	6	0	8	19
05:30 PM	0	0	0	0	1	4	0	5	0	0	0	0	0	7	0	7	12
05:45 PM	0	0	0	0	4	4	1	9	0	0	2	2	0	9	0	9	20
Total	1	1	0	2	11	22	2	35	0	2	7	9	2	29	0	31	77
Grand Total	3	2	0	5	23	71	8	102	0	3	21	24	3	82	2	87	218
Apprch %	60	40	0		22.5	69.6	7.8		0	12.5	87.5		3.4	94.3	2.3		
Total %	1.4	0.9	0	2.3	10.6	32.6	3.7	46.8	0	1.4	9.6	11	1.4	37.6	0.9	39.9	

	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	0	0	1	3	13	3	19	0	0	2	2	0	19	1	20	42
04:15 PM	0	1	0	1	3	13	2	18	0	1	1	2	0	12	0	12	33
04:30 PM	1	0	0	1	2	12	0	14	0	0	2	2	0	15	0	15	32
04:45 PM	0	0	0	0	4	11	1	16	0	0	9	9	1	7	1	9	34
Total Volume	2	1	0	3	12	49	6	67	0	1	14	15	1	53	2	56	141
% App. Total	66.7	33.3	0		17.9	73.1	9		0	6.7	93.3		1.8	94.6	3.6		
PHF	.500	.250	.000	.750	.750	.942	.500	.882	.000	.250	.389	.417	.250	.697	.500	.700	.839

Counts Unlimited
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City of South Gate
 N/S: Rayo Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 04_SGE_Rayo_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	1	0	0	1	3	13	3	19	0	0	2	2	0	19	1	20
+15 mins.	0	1	0	1	3	13	2	18	0	1	1	2	0	12	0	12
+30 mins.	1	0	0	1	2	12	0	14	0	0	2	2	0	15	0	15
+45 mins.	0	0	0	0	4	11	1	16	0	0	9	9	1	7	1	9
Total Volume	2	1	0	3	12	49	6	67	0	1	14	15	1	53	2	56
% App. Total	66.7	33.3	0		17.9	73.1	9		0	6.7	93.3		1.8	94.6	3.6	
PHF	.500	.250	.000	.750	.750	.942	.500	.882	.000	.250	.389	.417	.250	.697	.500	.700

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City of South Gate
 N/S: Rayo Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 04_SGE_Rayo_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- 4+ Axle Trucks

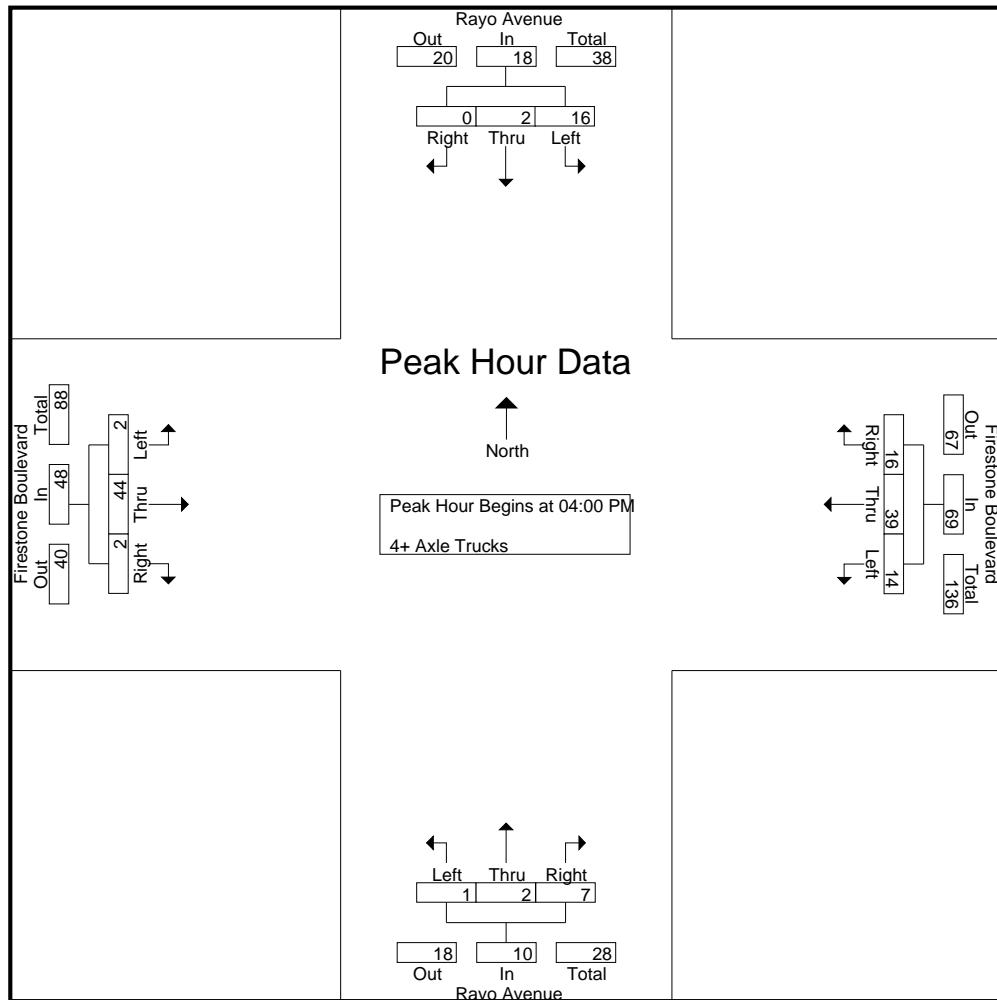
	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	0	1	5	8	4	17	0	1	0	1	0	13	0	13	32
04:15 PM	3	1	0	4	1	12	5	18	0	0	2	2	1	13	0	14	38
04:30 PM	7	1	0	8	2	9	4	15	0	0	0	0	1	9	1	11	34
04:45 PM	5	0	0	5	6	10	3	19	1	1	5	7	0	9	1	10	41
Total	16	2	0	18	14	39	16	69	1	2	7	10	2	44	2	48	145
05:00 PM	1	1	0	2	3	4	5	12	0	0	1	1	0	11	0	11	26
05:15 PM	8	0	0	8	2	8	2	12	0	0	4	4	0	6	0	6	30
05:30 PM	1	1	0	2	1	4	3	8	0	0	2	2	0	6	0	6	18
05:45 PM	1	1	0	2	1	5	2	8	0	1	5	6	1	6	0	7	23
Total	11	3	0	14	7	21	12	40	0	1	12	13	1	29	0	30	97
Grand Total	27	5	0	32	21	60	28	109	1	3	19	23	3	73	2	78	242
Apprch %	84.4	15.6	0	19.3	55	25.7			4.3	13	82.6		3.8	93.6	2.6		
Total %	11.2	2.1	0	13.2	8.7	24.8	11.6	45	0.4	1.2	7.9	9.5	1.2	30.2	0.8	32.2	

	Rayo Avenue Southbound				Firestone Boulevard Westbound				Rayo Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	0	0	1	5	8	4	17	0	1	0	1	0	13	0	13	32
04:15 PM	3	1	0	4	1	12	5	18	0	0	2	2	1	13	0	14	38
04:30 PM	7	1	0	8	2	9	4	15	0	0	0	0	1	9	1	11	34
04:45 PM	5	0	0	5	6	10	3	19	1	1	5	7	0	9	1	10	41
Total Volume	16	2	0	18	14	39	16	69	1	2	7	10	2	44	2	48	145
% App. Total	88.9	11.1	0		20.3	56.5	23.2		10	20	70		4.2	91.7	4.2		
PHF	.571	.500	.000	.563	.583	.813	.800	.908	.250	.500	.350	.357	.500	.846	.500	.857	.884

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City of South Gate
 N/S: Rayo Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 04_SGE_Rayo_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	1	0	0	1	5	8	4	17	0	1	0	1	0	13	0	13
+15 mins.	3	1	0	4	1	12	5	18	0	0	2	2	1	13	0	14
+30 mins.	7	1	0	8	2	9	4	15	0	0	0	0	1	9	1	11
+45 mins.	5	0	0	5	6	10	3	19	1	1	5	7	0	9	1	10
Total Volume	16	2	0	18	14	39	16	69	1	2	7	10	2	44	2	48
% App. Total	88.9	11.1	0		20.3	56.5	23.2		10	20	70		4.2	91.7	4.2	
PHF	.571	.500	.000	.563	.583	.813	.800	.908	.250	.500	.350	.357	.500	.846	.500	.857

Counts Unlimited
 PO Box 1178
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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Bus and 2, 3 Axle Trucks - 4+ Axle Trucks

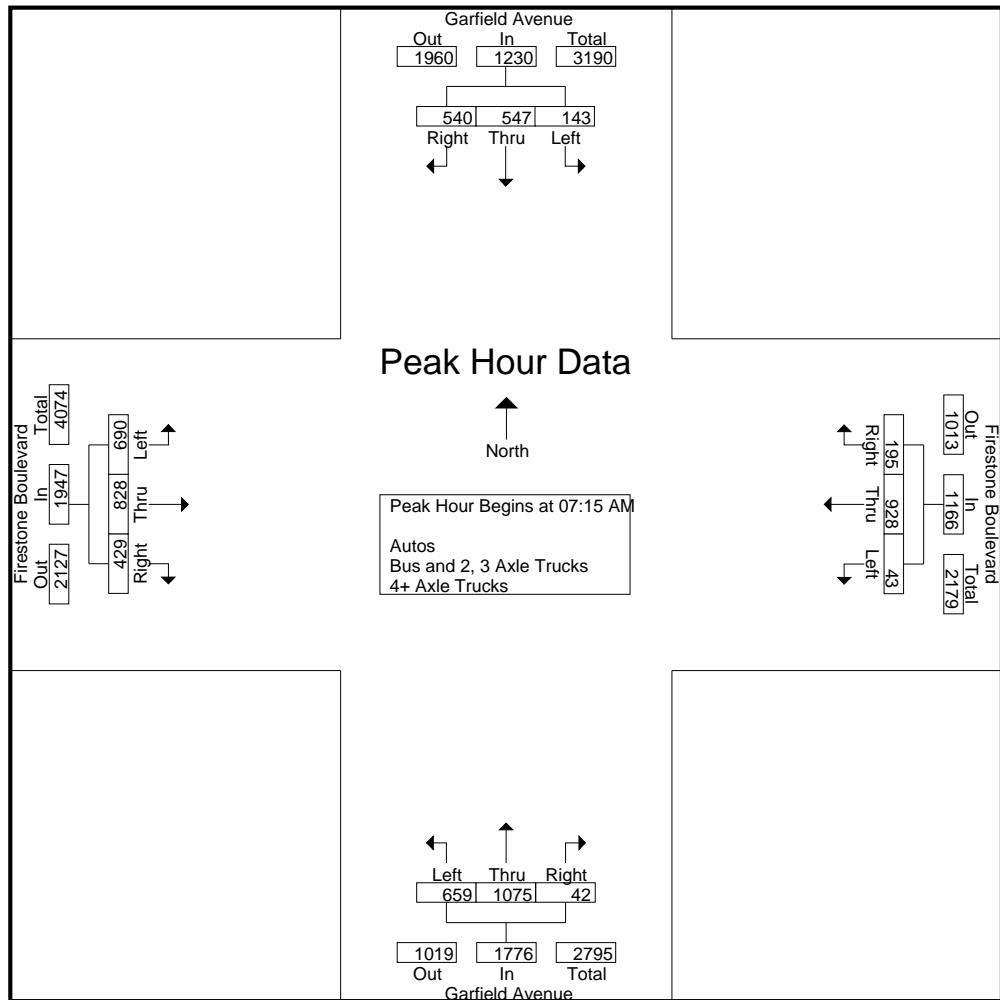
	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	46	116	146	308	5	286	62	353	157	257	3	417	127	153	82	362	1440
07:15 AM	35	105	139	279	8	215	59	282	167	261	8	436	155	255	113	523	1520
07:30 AM	37	151	136	324	7	278	45	330	147	293	9	449	182	189	103	474	1577
07:45 AM	33	115	144	292	13	207	52	272	186	267	13	466	209	216	116	541	1571
Total	151	487	565	1203	33	986	218	1237	657	1078	33	1768	673	813	414	1900	6108
08:00 AM	38	176	121	335	15	228	39	282	159	254	12	425	144	168	97	409	1451
08:15 AM	41	104	104	249	17	188	52	257	153	223	20	396	170	208	84	462	1364
08:30 AM	35	124	72	231	16	217	43	276	136	231	19	386	122	185	73	380	1273
08:45 AM	37	116	92	245	20	219	36	275	146	201	13	360	122	175	70	367	1247
Total	151	520	389	1060	68	852	170	1090	594	909	64	1567	558	736	324	1618	5335
Grand Total	302	1007	954	2263	101	1838	388	2327	1251	1987	97	3335	1231	1549	738	3518	11443
Apprch %	13.3	44.5	42.2		4.3	79	16.7		37.5	59.6	2.9		35	44	21		
Total %	2.6	8.8	8.3	19.8	0.9	16.1	3.4	20.3	10.9	17.4	0.8	29.1	10.8	13.5	6.4	30.7	
Autos	292	953	852	2097	94	1764	365	2223	1121	1887	87	3095	1133	1493	659	3285	10700
% Autos	96.7	94.6	89.3	92.7	93.1	96	94.1	95.5	89.6	95	89.7	92.8	92	96.4	89.3	93.4	93.5
Bus and 2, 3 Axle Trucks	8	42	45	95	4	55	16	75	91	79	6	176	50	44	47	141	487
% Bus and 2, 3 Axle Trucks	2.6	4.2	4.7	4.2	4	3	4.1	3.2	7.3	4	6.2	5.3	4.1	2.8	6.4	4	4.3
4+ Axle Trucks	2	12	57	71	3	19	7	29	39	21	4	64	48	12	32	92	256
% 4+ Axle Trucks	0.7	1.2	6	3.1	3	1	1.8	1.2	3.1	1.1	4.1	1.9	3.9	0.8	4.3	2.6	2.2

	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	35	105	139	279	8	215	59	282	167	261	8	436	155	255	113	523	1520
07:30 AM	37	151	136	324	7	278	45	330	147	293	9	449	182	189	103	474	1577
07:45 AM	33	115	144	292	13	207	52	272	186	267	13	466	209	216	116	541	1571
08:00 AM	38	176	121	335	15	228	39	282	159	254	12	425	144	168	97	409	1451
Total Volume	143	547	540	1230	43	928	195	1166	659	1075	42	1776	690	828	429	1947	6119
% App. Total	11.6	44.5	43.9		3.7	79.6	16.7		37.1	60.5	2.4		35.4	42.5	22		
PHF	.941	.777	.938	.918	.717	.835	.826	.883	.886	.917	.808	.953	.825	.812	.925	.900	.970

Counts Unlimited
 PO Box 1178
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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:15 AM			
+0 mins.	35	105	139	279	5	286	62	353	167	261	8	436	155	255	113	523
+15 mins.	37	151	136	324	8	215	59	282	147	293	9	449	182	189	103	474
+30 mins.	33	115	144	292	7	278	45	330	186	267	13	466	209	216	116	541
+45 mins.	38	176	121	335	13	207	52	272	159	254	12	425	144	168	97	409
Total Volume	143	547	540	1230	33	986	218	1237	659	1075	42	1776	690	828	429	1947
% App. Total	11.6	44.5	43.9		2.7	79.7	17.6		37.1	60.5	2.4		35.4	42.5	22	
PHF	.941	.777	.938	.918	.635	.862	.879	.876	.886	.917	.808	.953	.825	.812	.925	.900

Counts Unlimited
 PO Box 1178
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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

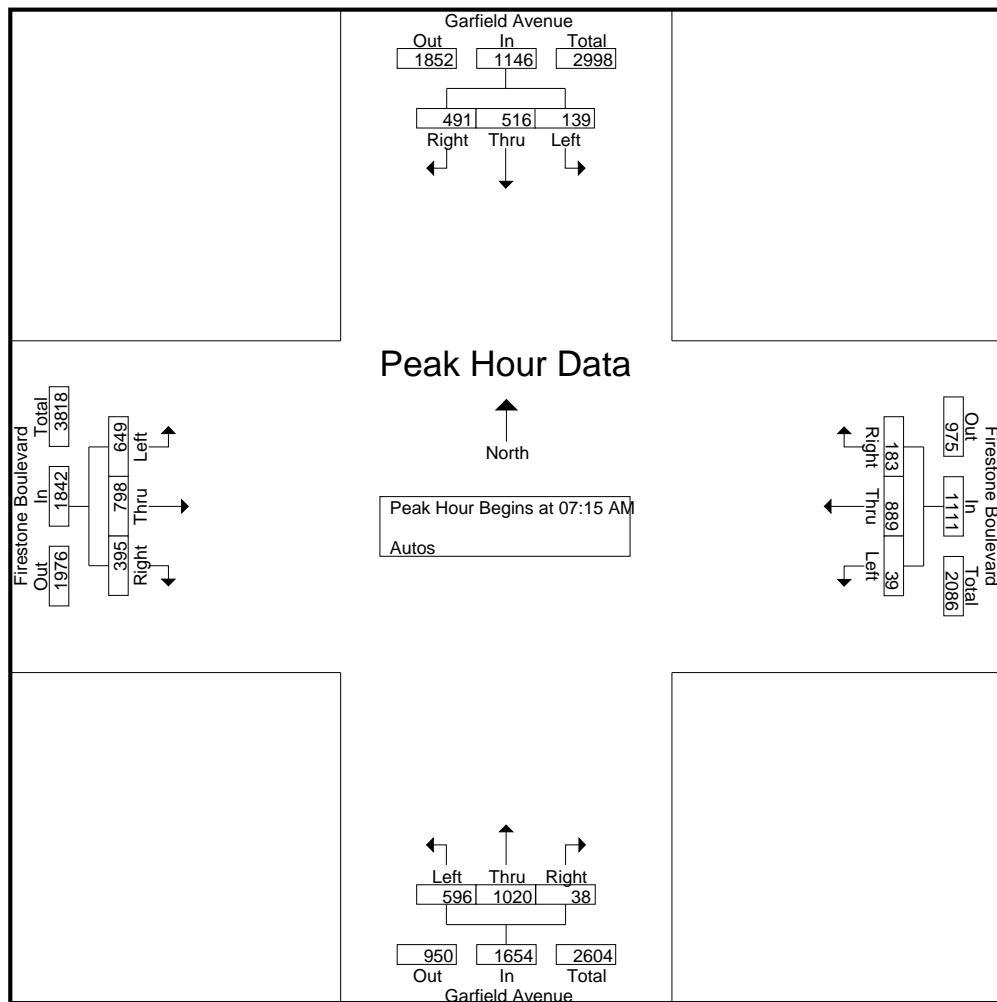
	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	45	108	127	280	4	279	58	341	141	249	3	393	117	151	70	338	1352
07:15 AM	34	96	124	254	5	208	56	269	154	245	7	406	144	246	108	498	1427
07:30 AM	35	144	122	301	7	268	44	319	126	280	8	414	175	182	91	448	1482
07:45 AM	32	109	129	270	13	200	46	259	174	253	12	439	197	206	113	516	1484
Total	146	457	502	1105	29	955	204	1188	595	1027	30	1652	633	785	382	1800	5745
08:00 AM	38	167	116	321	14	213	37	264	142	242	11	395	133	164	83	380	1360
08:15 AM	38	103	90	231	16	179	50	245	132	212	19	363	154	206	75	435	1274
08:30 AM	34	118	66	218	16	207	41	264	121	220	15	356	108	167	61	336	1174
08:45 AM	36	108	78	222	19	210	33	262	131	186	12	329	105	171	58	334	1147
Total	146	496	350	992	65	809	161	1035	526	860	57	1443	500	708	277	1485	4955
Grand Total	292	953	852	2097	94	1764	365	2223	1121	1887	87	3095	1133	1493	659	3285	10700
Apprch %	13.9	45.4	40.6		4.2	79.4	16.4		36.2	61	2.8		34.5	45.4	20.1		
Total %	2.7	8.9	8	19.6	0.9	16.5	3.4	20.8	10.5	17.6	0.8	28.9	10.6	14	6.2		30.7

	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	34	96	124	254	5	208	56	269	154	245	7	406	144	246	108	498	1427
07:30 AM	35	144	122	301	7	268	44	319	126	280	8	414	175	182	91	448	1482
07:45 AM	32	109	129	270	13	200	46	259	174	253	12	439	197	206	113	516	1484
08:00 AM	38	167	116	321	14	213	37	264	142	242	11	395	133	164	83	380	1360
Total Volume	139	516	491	1146	39	889	183	1111	596	1020	38	1654	649	798	395	1842	5753
% App. Total	12.1	45	42.8		3.5	80	16.5		36	61.7	2.3		35.2	43.3	21.4		
PHF	.914	.772	.952	.893	.696	.829	.817	.871	.856	.911	.792	.942	.824	.811	.874	.892	.969

Counts Unlimited
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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	34	96	124	254	5	208	56	269	154	245	7	406	144	246	108	498
+15 mins.	35	144	122	301	7	268	44	319	126	280	8	414	175	182	91	448
+30 mins.	32	109	129	270	13	200	46	259	174	253	12	439	197	206	113	516
+45 mins.	38	167	116	321	14	213	37	264	142	242	11	395	133	164	83	380
Total Volume	139	516	491	1146	39	889	183	1111	596	1020	38	1654	649	798	395	1842
% App. Total	12.1	45	42.8		3.5	80	16.5		36	61.7	2.3		35.2	43.3	21.4	
PHF	.914	.772	.952	.893	.696	.829	.817	.871	.856	.911	.792	.942	.824	.811	.874	.892

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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Bus and 2, 3 Axle Trucks

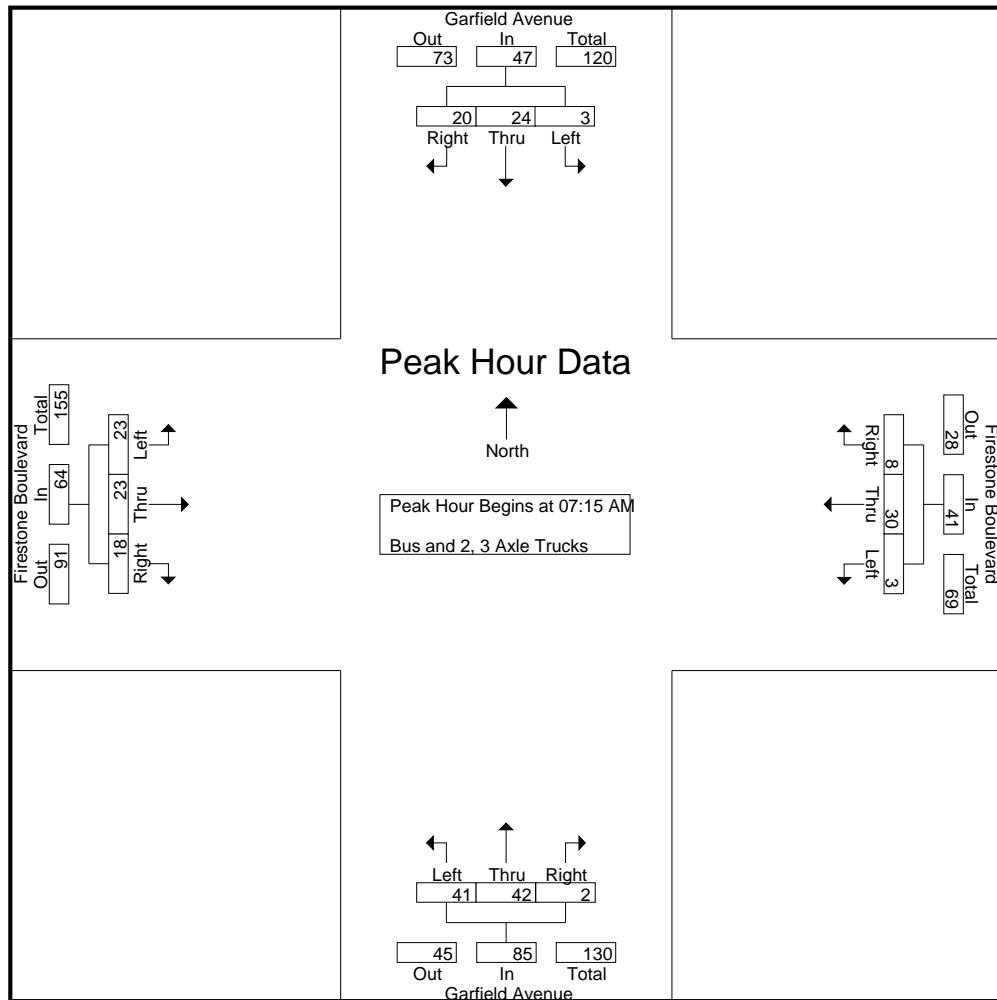
	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	6	6	13	1	5	2	8	12	7	0	19	4	0	8	12	52
07:15 AM	0	6	5	11	2	7	2	11	11	14	0	25	5	7	2	14	61
07:30 AM	2	6	5	13	0	10	1	11	14	11	0	25	4	6	9	19	68
07:45 AM	1	4	8	13	0	5	4	9	7	8	1	16	8	7	1	16	54
Total	4	22	24	50	3	27	9	39	44	40	1	85	21	20	20	61	235
08:00 AM	0	8	2	10	1	8	1	10	9	9	1	19	6	3	6	15	54
08:15 AM	3	0	10	13	0	6	2	8	19	9	1	29	8	2	6	16	66
08:30 AM	1	6	4	11	0	7	1	8	8	8	2	18	7	15	7	29	66
08:45 AM	0	6	5	11	0	7	3	10	11	13	1	25	8	4	8	20	66
Total	4	20	21	45	1	28	7	36	47	39	5	91	29	24	27	80	252
Grand Total	8	42	45	95	4	55	16	75	91	79	6	176	50	44	47	141	487
Apprch %	8.4	44.2	47.4		5.3	73.3	21.3		51.7	44.9	3.4		35.5	31.2	33.3		
Total %	1.6	8.6	9.2	19.5	0.8	11.3	3.3	15.4	18.7	16.2	1.2	36.1	10.3	9	9.7	29	

	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	6	5	11	2	7	2	11	11	14	0	25	5	7	2	14	61
07:30 AM	2	6	5	13	0	10	1	11	14	11	0	25	4	6	9	19	68
07:45 AM	1	4	8	13	0	5	4	9	7	8	1	16	8	7	1	16	54
08:00 AM	0	8	2	10	1	8	1	10	9	9	1	19	6	3	6	15	54
Total Volume	3	24	20	47	3	30	8	41	41	42	2	85	23	23	18	64	237
% App. Total	6.4	51.1	42.6		7.3	73.2	19.5		48.2	49.4	2.4		35.9	35.9	28.1		
PHF	.375	.750	.625	.904	.375	.750	.500	.932	.732	.750	.500	.850	.719	.821	.500	.842	.871

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City of South Gate
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 Weather: Clear

File Name : 05_SGE_Garfield_Firestone AM
 Site Code : 04119797
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	6	5	11	2	7	2	11	11	14	0	25	5	7	2	14
+15 mins.	2	6	5	13	0	10	1	11	14	11	0	25	4	6	9	19
+30 mins.	1	4	8	13	0	5	4	9	7	8	1	16	8	7	1	16
+45 mins.	0	8	2	10	1	8	1	10	9	9	1	19	6	3	6	15
Total Volume	3	24	20	47	3	30	8	41	41	42	2	85	23	23	18	64
% App. Total	6.4	51.1	42.6		7.3	73.2	19.5		48.2	49.4	2.4		35.9	35.9	28.1	
PHF	.375	.750	.625	.904	.375	.750	.500	.932	.732	.750	.500	.850	.719	.821	.500	.842

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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- 4+ Axle Trucks

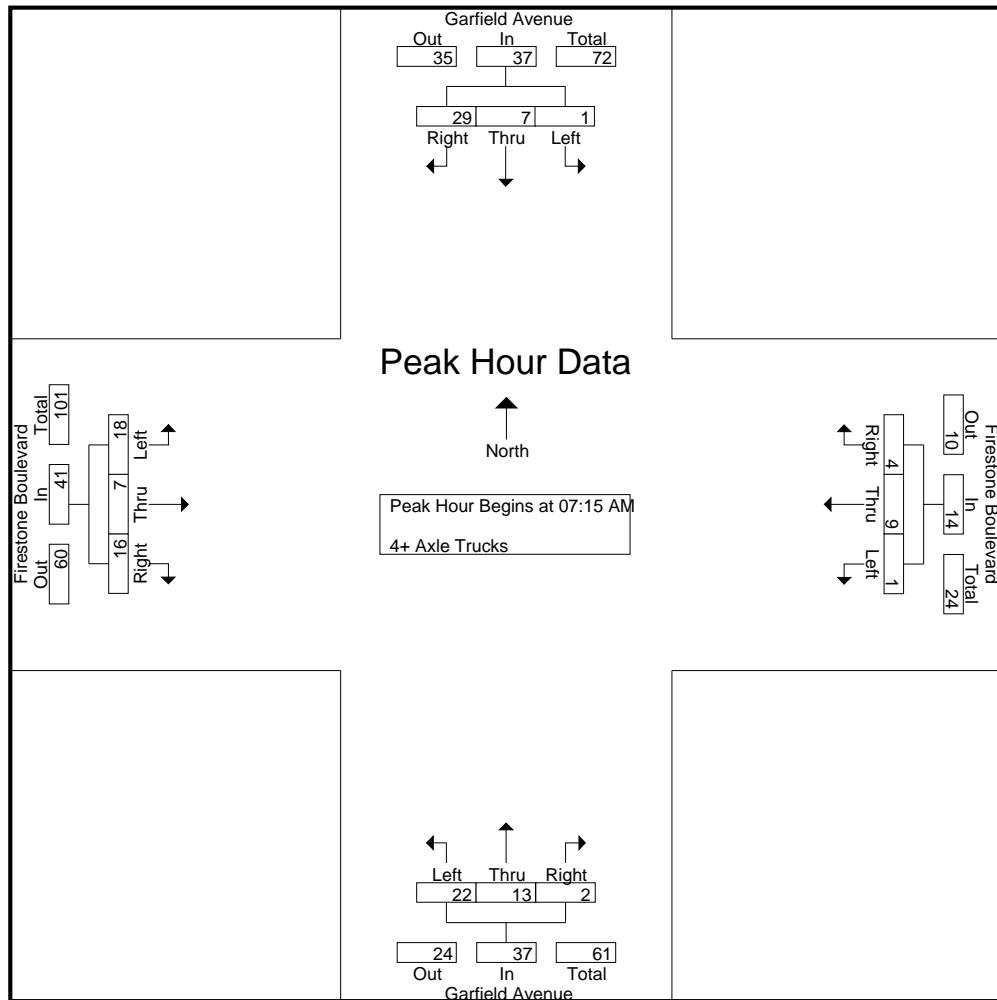
	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	13	15	0	2	2	4	4	1	0	5	6	2	4	12	36
07:15 AM	1	3	10	14	1	0	1	2	2	2	1	5	6	2	3	11	32
07:30 AM	0	1	9	10	0	0	0	0	7	2	1	10	3	1	3	7	27
07:45 AM	0	2	7	9	0	2	2	4	5	6	0	11	4	3	2	9	33
Total	1	8	39	48	1	4	5	10	18	11	2	31	19	8	12	39	128
08:00 AM	0	1	3	4	0	7	1	8	8	3	0	11	5	1	8	14	37
08:15 AM	0	1	4	5	1	3	0	4	2	2	0	4	8	0	3	11	24
08:30 AM	0	0	2	2	0	3	1	4	7	3	2	12	7	3	5	15	33
08:45 AM	1	2	9	12	1	2	0	3	4	2	0	6	9	0	4	13	34
Total	1	4	18	23	2	15	2	19	21	10	2	33	29	4	20	53	128
Grand Total	2	12	57	71	3	19	7	29	39	21	4	64	48	12	32	92	256
Apprch %	2.8	16.9	80.3		10.3	65.5	24.1		60.9	32.8	6.2		52.2	13	34.8		
Total %	0.8	4.7	22.3	27.7	1.2	7.4	2.7	11.3	15.2	8.2	1.6		25	18.8	4.7	12.5	35.9

	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	3	10	14	1	0	1	2	2	2	1	5	6	2	3	11	32
07:30 AM	0	1	9	10	0	0	0	0	7	2	1	10	3	1	3	7	27
07:45 AM	0	2	7	9	0	2	2	4	5	6	0	11	4	3	2	9	33
08:00 AM	0	1	3	4	0	7	1	8	8	3	0	11	5	1	8	14	37
Total Volume	1	7	29	37	1	9	4	14	22	13	2	37	18	7	16	41	129
% App. Total	2.7	18.9	78.4		7.1	64.3	28.6		59.5	35.1	5.4		43.9	17.1	39		
PHF	.250	.583	.725	.661	.250	.321	.500	.438	.688	.542	.500	.841	.750	.583	.500	.732	.872

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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone AM
 Site Code : 04119797
 Start Date : 11/19/2019
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	3	10	14	1	0	1	2	2	2	1	5	6	2	3	11
+15 mins.	0	1	9	10	0	0	0	0	7	2	1	10	3	1	3	7
+30 mins.	0	2	7	9	0	2	2	4	5	6	0	11	4	3	2	9
+45 mins.	0	1	3	4	0	7	1	8	8	3	0	11	5	1	8	14
Total Volume	1	7	29	37	1	9	4	14	22	13	2	37	18	7	16	41
% App. Total	2.7	18.9	78.4		7.1	64.3	28.6		59.5	35.1	5.4		43.9	17.1	39	
PHF	.250	.583	.725	.661	.250	.321	.500	.438	.688	.542	.500	.841	.750	.583	.500	.732

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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Bus and 2, 3 Axle Trucks - 4+ Axle Trucks

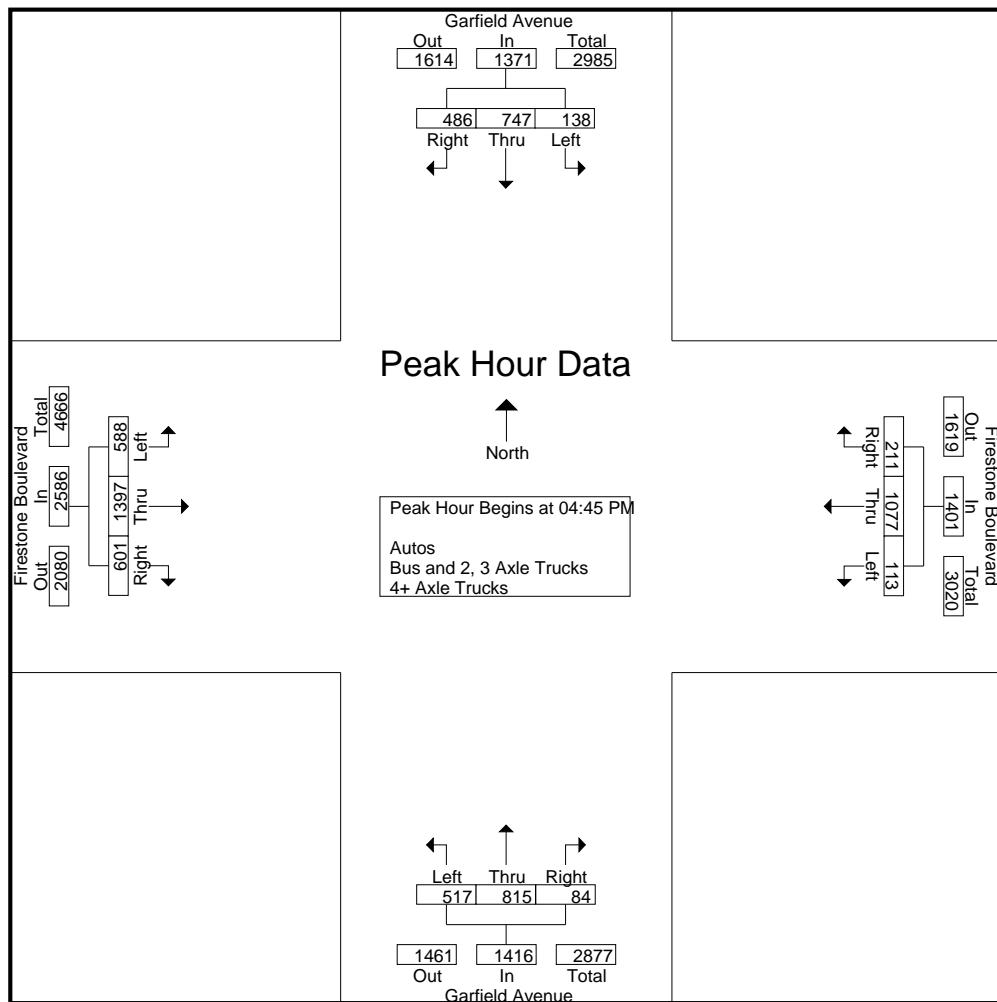
	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	40	148	137	325	24	215	51	290	140	202	24	366	163	292	145	600	1581
04:15 PM	51	155	137	343	25	234	39	298	135	220	18	373	162	292	131	585	1599
04:30 PM	40	182	144	366	26	306	55	387	115	201	28	344	134	290	133	557	1654
04:45 PM	38	181	117	336	31	219	56	306	133	199	21	353	150	316	156	622	1617
Total	169	666	535	1370	106	974	201	1281	523	822	91	1436	609	1190	565	2364	6451
05:00 PM	42	215	129	386	30	294	44	368	113	213	28	354	141	321	129	591	1699
05:15 PM	29	168	117	314	28	307	51	386	130	205	18	353	143	378	156	677	1730
05:30 PM	29	183	123	335	24	257	60	341	141	198	17	356	154	382	160	696	1728
05:45 PM	50	183	119	352	38	296	53	387	96	194	12	302	121	296	113	530	1571
Total	150	749	488	1387	120	1154	208	1482	480	810	75	1365	559	1377	558	2494	6728
Grand Total	319	1415	1023	2757	226	2128	409	2763	1003	1632	166	2801	1168	2567	1123	4858	13179
Apprch %	11.6	51.3	37.1		8.2	77	14.8		35.8	58.3	5.9		24	52.8	23.1		
Total %	2.4	10.7	7.8	20.9	1.7	16.1	3.1	21	7.6	12.4	1.3	21.3	8.9	19.5	8.5	36.9	
Autos	318	1354	969	2641	213	2093	401	2707	936	1581	158	2675	1095	2511	995	4601	12624
% Autos	99.7	95.7	94.7	95.8	94.2	98.4	98	98	93.3	96.9	95.2	95.5	93.8	97.8	88.6	94.7	95.8
Bus and 2, 3 Axle Trucks	1	48	23	72	7	26	7	40	47	41	7	95	28	43	99	170	377
% Bus and 2, 3 Axle Trucks	0.3	3.4	2.2	2.6	3.1	1.2	1.7	1.4	4.7	2.5	4.2	3.4	2.4	1.7	8.8	3.5	2.9
4+ Axle Trucks	0	13	31	44	6	9	1	16	20	10	1	31	45	13	29	87	178
% 4+ Axle Trucks	0	0.9	3	1.6	2.7	0.4	0.2	0.6	2	0.6	0.6	1.1	3.9	0.5	2.6	1.8	1.4

	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	38	181	117	336	31	219	56	306	133	199	21	353	150	316	156	622	1617
05:00 PM	42	215	129	386	30	294	44	368	113	213	28	354	141	321	129	591	1699
05:15 PM	29	168	117	314	28	307	51	386	130	205	18	353	143	378	156	677	1730
05:30 PM	29	183	123	335	24	257	60	341	141	198	17	356	154	382	160	696	1728
Total Volume	138	747	486	1371	113	1077	211	1401	517	815	84	1416	588	1397	601	2586	6774
% App. Total	10.1	54.5	35.4		8.1	76.9	15.1		36.5	57.6	5.9		22.7	54	23.2		
PHF	.821	.869	.942	.888	.911	.877	.879	.907	.917	.957	.750	.994	.955	.914	.939	.929	.979

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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone PM
 Site Code : 04119797
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 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:15 PM				05:00 PM				04:00 PM				04:45 PM			
+0 mins.	51	155	137	343	30	294	44	368	140	202	24	366	150	316	156	622
+15 mins.	40	182	144	366	28	307	51	386	135	220	18	373	141	321	129	591
+30 mins.	38	181	117	336	24	257	60	341	115	201	28	344	143	378	156	677
+45 mins.	42	215	129	386	38	296	53	387	133	199	21	353	154	382	160	696
Total Volume	171	733	527	1431	120	1154	208	1482	523	822	91	1436	588	1397	601	2586
% App. Total	11.9	51.2	36.8		8.1	77.9	14		36.4	57.2	6.3		22.7	54	23.2	
PHF	.838	.852	.915	.927	.789	.940	.867	.957	.934	.934	.813	.962	.955	.914	.939	.929

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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

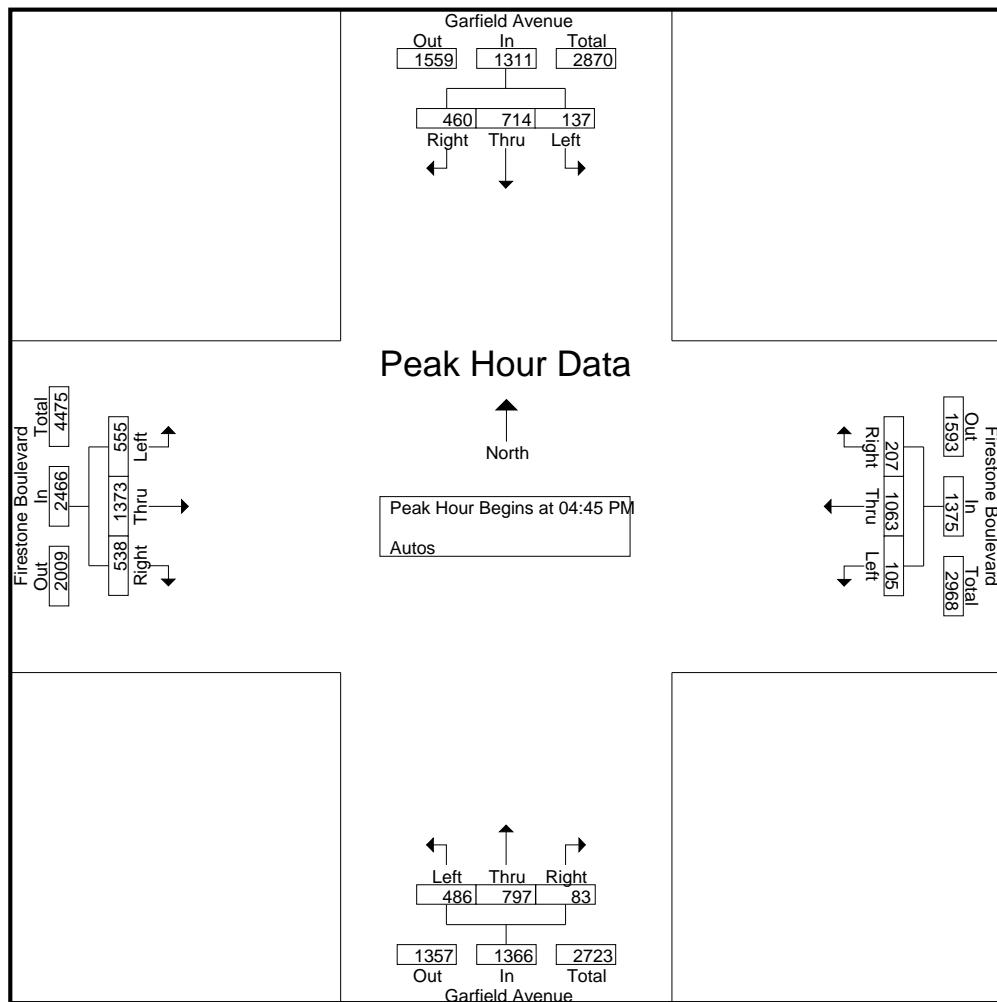
	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	40	141	131	312	22	209	49	280	131	189	22	342	152	287	126	565	1499
04:15 PM	51	145	126	322	24	228	39	291	125	215	16	356	148	283	113	544	1513
04:30 PM	40	176	139	355	24	298	54	376	105	194	25	324	124	278	117	519	1574
04:45 PM	38	177	110	325	30	216	55	301	123	195	21	339	136	306	134	576	1541
Total	169	639	506	1314	100	951	197	1248	484	793	84	1361	560	1154	490	2204	6127
05:00 PM	42	204	123	369	29	289	44	362	107	208	28	343	136	318	109	563	1637
05:15 PM	29	162	112	303	25	304	50	379	122	202	17	341	132	372	146	650	1673
05:30 PM	28	171	115	314	21	254	58	333	134	192	17	343	151	377	149	677	1667
05:45 PM	50	178	113	341	38	295	52	385	89	186	12	287	116	290	101	507	1520
Total	149	715	463	1327	113	1142	204	1459	452	788	74	1314	535	1357	505	2397	6497
Grand Total	318	1354	969	2641	213	2093	401	2707	936	1581	158	2675	1095	2511	995	4601	12624
Apprch %	12	51.3	36.7		7.9	77.3	14.8		35	59.1	5.9		23.8	54.6	21.6		
Total %	2.5	10.7	7.7	20.9	1.7	16.6	3.2	21.4	7.4	12.5	1.3	21.2	8.7	19.9	7.9	36.4	

	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	38	177	110	325	30	216	55	301	123	195	21	339	136	306	134	576	1541
05:00 PM	42	204	123	369	29	289	44	362	107	208	28	343	136	318	109	563	1637
05:15 PM	29	162	112	303	25	304	50	379	122	202	17	341	132	372	146	650	1673
05:30 PM	28	171	115	314	21	254	58	333	134	192	17	343	151	377	149	677	1667
Total Volume	137	714	460	1311	105	1063	207	1375	486	797	83	1366	555	1373	538	2466	6518
% App. Total	10.5	54.5	35.1		7.6	77.3	15.1		35.6	58.3	6.1		22.5	55.7	21.8		
PHF	.815	.875	.935	.888	.875	.874	.892	.907	.907	.958	.741	.996	.919	.910	.903	.911	.974

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City of South Gate
N/S: Garfield Avenue
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Weather: Clear

File Name : 05_SGE_Garfield_Firestone PM
Site Code : 04119797
Start Date : 11/19/2019
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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	38	177	110	325	30	216	55	301	123	195	21	339	136	306	134	576
+15 mins.	42	204	123	369	29	289	44	362	107	208	28	343	136	318	109	563
+30 mins.	29	162	112	303	25	304	50	379	122	202	17	341	132	372	146	650
+45 mins.	28	171	115	314	21	254	58	333	134	192	17	343	151	377	149	677
Total Volume	137	714	460	1311	105	1063	207	1375	486	797	83	1366	555	1373	538	2466
% App. Total	10.5	54.5	35.1		7.6	77.3	15.1		35.6	58.3	6.1		22.5	55.7	21.8	
PHF	.815	.875	.935	.888	.875	.874	.892	.907	.907	.958	.741	.996	.919	.910	.903	.911

Counts Unlimited
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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Bus and 2, 3 Axle Trucks

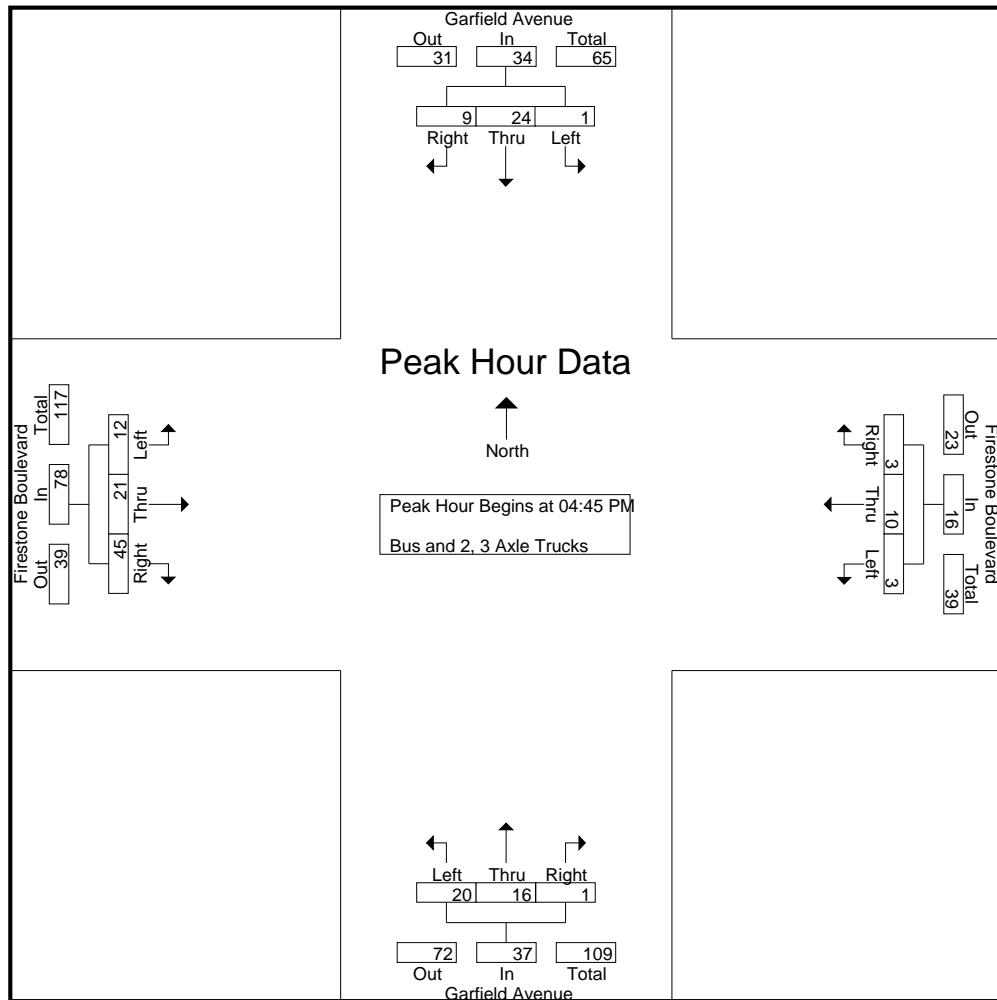
	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	7	5	12	2	4	2	8	8	12	2	22	5	2	17	24	66
04:15 PM	0	9	4	13	1	5	0	6	6	3	2	11	6	7	17	30	60
04:30 PM	0	4	2	6	1	6	1	8	8	5	2	15	5	8	13	26	55
04:45 PM	0	4	5	9	1	1	1	3	7	4	0	11	5	8	18	31	54
Total	0	24	16	40	5	16	4	25	29	24	6	59	21	25	65	111	235
05:00 PM	0	6	2	8	1	4	0	5	3	5	0	8	3	3	13	19	40
05:15 PM	0	4	0	4	1	3	1	5	5	2	1	8	3	5	7	15	32
05:30 PM	1	10	2	13	0	2	1	3	5	5	0	10	1	5	7	13	39
05:45 PM	0	4	3	7	0	1	1	2	5	5	0	10	0	5	7	12	31
Total	1	24	7	32	2	10	3	15	18	17	1	36	7	18	34	59	142
Grand Total	1	48	23	72	7	26	7	40	47	41	7	95	28	43	99	170	377
Apprch %	1.4	66.7	31.9		17.5	65	17.5		49.5	43.2	7.4		16.5	25.3	58.2		
Total %	0.3	12.7	6.1	19.1	1.9	6.9	1.9	10.6	12.5	10.9	1.9	25.2	7.4	11.4	26.3	45.1	

	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	4	5	9	1	1	1	3	7	4	0	11	5	8	18	31	54
05:00 PM	0	6	2	8	1	4	0	5	3	5	0	8	3	3	13	19	40
05:15 PM	0	4	0	4	1	3	1	5	5	2	1	8	3	5	7	15	32
05:30 PM	1	10	2	13	0	2	1	3	5	5	0	10	1	5	7	13	39
Total Volume	1	24	9	34	3	10	3	16	20	16	1	37	12	21	45	78	165
% App. Total	2.9	70.6	26.5		18.8	62.5	18.8		54.1	43.2	2.7		15.4	26.9	57.7		
PHF	.250	.600	.450	.654	.750	.625	.750	.800	.714	.800	.250	.841	.600	.656	.625	.629	.764

Counts Unlimited
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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	4	5	9	1	1	1	3	7	4	0	11	5	8	18	31
+15 mins.	0	6	2	8	1	4	0	5	3	5	0	8	3	3	13	19
+30 mins.	0	4	0	4	1	3	1	5	5	2	1	8	3	5	7	15
+45 mins.	1	10	2	13	0	2	1	3	5	5	0	10	1	5	7	13
Total Volume	1	24	9	34	3	10	3	16	20	16	1	37	12	21	45	78
% App. Total	2.9	70.6	26.5		18.8	62.5	18.8		54.1	43.2	2.7		15.4	26.9	57.7	
PHF	.250	.600	.450	.654	.750	.625	.750	.800	.714	.800	.250	.841	.600	.656	.625	.629

Counts Unlimited
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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- 4+ Axle Trucks

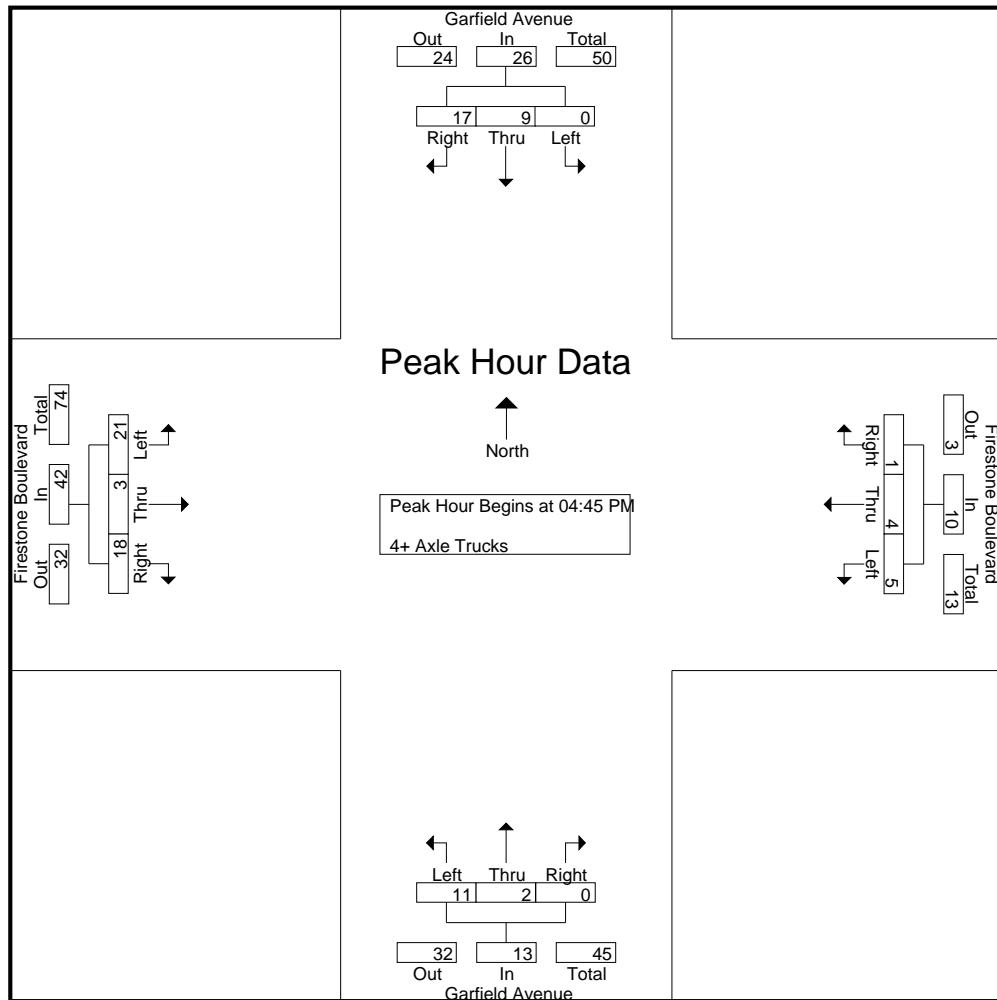
	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	1	1	0	2	0	2	1	1	0	2	6	3	2	11	16
04:15 PM	0	1	7	8	0	1	0	1	4	2	0	6	8	2	1	11	26
04:30 PM	0	2	3	5	1	2	0	3	2	2	1	5	5	4	3	12	25
04:45 PM	0	0	2	2	0	2	0	2	3	0	0	3	9	2	4	15	22
Total	0	3	13	16	1	7	0	8	10	5	1	16	28	11	10	49	89
05:00 PM	0	5	4	9	0	1	0	1	3	0	0	3	2	0	7	9	22
05:15 PM	0	2	5	7	2	0	0	2	3	1	0	4	8	1	3	12	25
05:30 PM	0	2	6	8	3	1	1	5	2	1	0	3	2	0	4	6	22
05:45 PM	0	1	3	4	0	0	0	0	2	3	0	5	5	1	5	11	20
Total	0	10	18	28	5	2	1	8	10	5	0	15	17	2	19	38	89
Grand Total	0	13	31	44	6	9	1	16	20	10	1	31	45	13	29	87	178
Apprch %	0	29.5	70.5		37.5	56.2	6.2		64.5	32.3	3.2		51.7	14.9	33.3		
Total %	0	7.3	17.4	24.7	3.4	5.1	0.6		9	11.2	5.6	0.6	17.4	25.3	7.3	16.3	48.9

	Garfield Avenue Southbound				Firestone Boulevard Westbound				Garfield Avenue Northbound				Firestone Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	2	2	0	2	0	2	3	0	0	3	9	2	4	15	22
05:00 PM	0	5	4	9	0	1	0	1	3	0	0	3	2	0	7	9	22
05:15 PM	0	2	5	7	2	0	0	2	3	1	0	4	8	1	3	12	25
05:30 PM	0	2	6	8	3	1	1	5	2	1	0	3	2	0	4	6	22
Total Volume	0	9	17	26	5	4	1	10	11	2	0	13	21	3	18	42	91
% App. Total	0	34.6	65.4		50	40	10		84.6	15.4	0		50	7.1	42.9		
PHF	.000	.450	.708	.722	.417	.500	.250	.500	.917	.500	.000	.813	.583	.375	.643	.700	.910

Counts Unlimited
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City of South Gate
 N/S: Garfield Avenue
 E/W: Firestone Boulevard
 Weather: Clear

File Name : 05_SGE_Garfield_Firestone PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	2	2	0	2	0	2	3	0	0	3	9	2	4	15
+15 mins.	0	5	4	9	0	1	0	1	3	0	0	3	2	0	7	9
+30 mins.	0	2	5	7	2	0	0	2	3	1	0	4	8	1	3	12
+45 mins.	0	2	6	8	3	1	1	5	2	1	0	3	2	0	4	6
Total Volume	0	9	17	26	5	4	1	10	11	2	0	13	21	3	18	42
% App. Total	0	34.6	65.4		50	40	10		84.6	15.4	0		50	7.1	42.9	
PHF	.000	.450	.708	.722	.417	.500	.250	.500	.917	.500	.000	.813	.583	.375	.643	.700

Counts Unlimited
 PO Box 1178
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

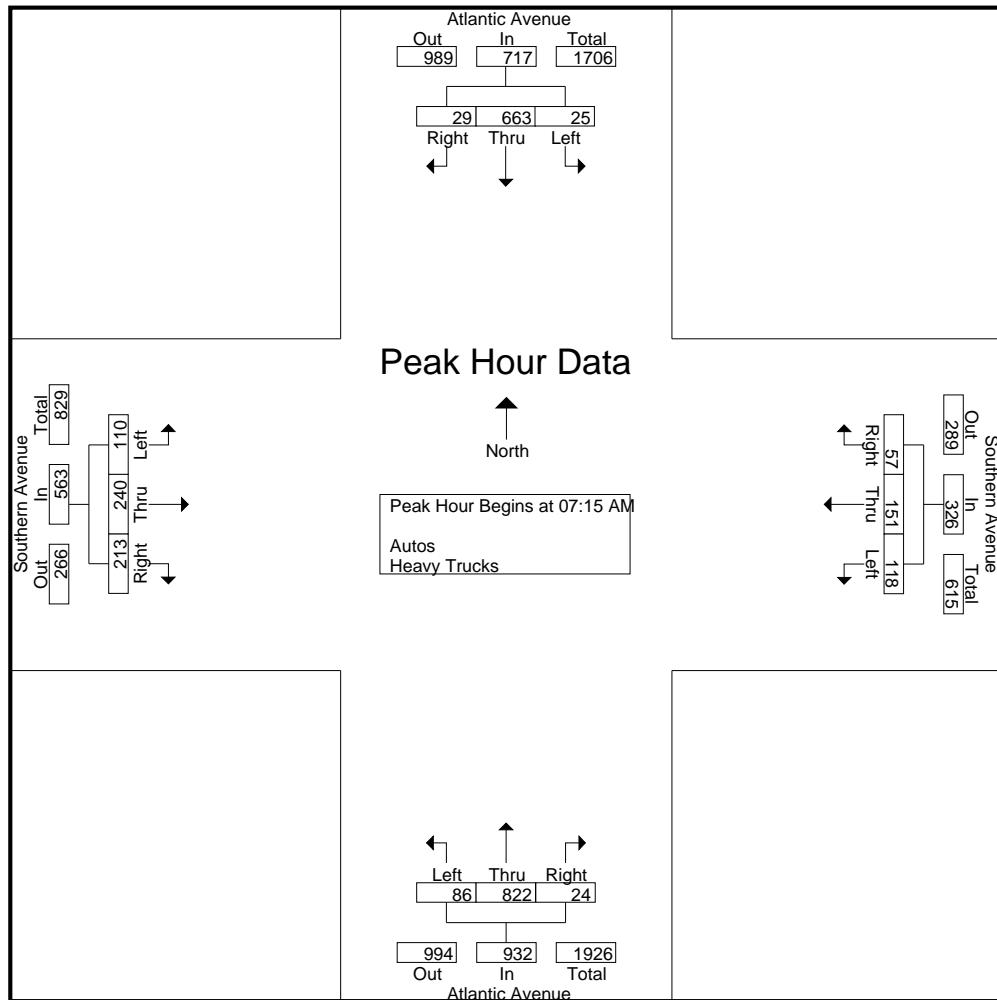
	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	146	1	151	26	40	5	71	11	208	4	223	12	59	32	103	548
07:15 AM	3	162	4	169	22	40	7	69	20	211	9	240	16	68	62	146	624
07:30 AM	7	178	11	196	32	45	14	91	22	191	9	222	29	55	52	136	645
07:45 AM	6	196	6	208	32	36	25	93	24	218	4	246	36	65	62	163	710
Total	20	682	22	724	112	161	51	324	77	828	26	931	93	247	208	548	2527
08:00 AM	9	127	8	144	32	30	11	73	20	202	2	224	29	52	37	118	559
08:15 AM	4	166	4	174	25	15	8	48	11	197	0	208	6	45	37	88	518
08:30 AM	6	100	7	113	26	24	6	56	7	165	1	173	10	35	21	66	408
08:45 AM	8	93	7	108	30	34	8	72	14	165	2	181	7	31	23	61	422
Total	27	486	26	539	113	103	33	249	52	729	5	786	52	163	118	333	1907
Grand Total	47	1168	48	1263	225	264	84	573	129	1557	31	1717	145	410	326	881	4434
Apprch %	3.7	92.5	3.8		39.3	46.1	14.7		7.5	90.7	1.8		16.5	46.5	37		
Total %	1.1	26.3	1.1	28.5	5.1	6	1.9	12.9	2.9	35.1	0.7	38.7	3.3	9.2	7.4	19.9	
Autos	42	1112	47	1201	220	261	80	561	123	1501	31	1655	144	409	311	864	4281
% Autos	89.4	95.2	97.9	95.1	97.8	98.9	95.2	97.9	95.3	96.4	100	96.4	99.3	99.8	95.4	98.1	96.5
Heavy Trucks	5	56	1	62	5	3	4	12	6	56	0	62	1	1	15	17	153
% Heavy Trucks	10.6	4.8	2.1	4.9	2.2	1.1	4.8	2.1	4.7	3.6	0	3.6	0.7	0.2	4.6	1.9	3.5

	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	3	162	4	169	22	40	7	69	20	211	9	240	16	68	62	146	624
07:30 AM	7	178	11	196	32	45	14	91	22	191	9	222	29	55	52	136	645
07:45 AM	6	196	6	208	32	36	25	93	24	218	4	246	36	65	62	163	710
08:00 AM	9	127	8	144	32	30	11	73	20	202	2	224	29	52	37	118	559
Total Volume	25	663	29	717	118	151	57	326	86	822	24	932	110	240	213	563	2538
% App. Total	3.5	92.5	4		36.2	46.3	17.5		9.2	88.2	2.6		19.5	42.6	37.8		
PHF	.694	.846	.659	.862	.922	.839	.570	.876	.896	.943	.667	.947	.764	.882	.859	.863	.894

Counts Unlimited
 PO Box 1178
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	4	146	1	151	22	40	7	69	20	211	9	240	16	68	62	146
+15 mins.	3	162	4	169	32	45	14	91	22	191	9	222	29	55	52	136
+30 mins.	7	178	11	196	32	36	25	93	24	218	4	246	36	65	62	163
+45 mins.	6	196	6	208	32	30	11	73	20	202	2	224	29	52	37	118
Total Volume	20	682	22	724	118	151	57	326	86	822	24	932	110	240	213	563
% App. Total	2.8	94.2	3	36.2	46.3	17.5			9.2	88.2	2.6		19.5	42.6	37.8	
PHF	.714	.870	.500	.870	.922	.839	.570	.876	.896	.943	.667	.947	.764	.882	.859	.863

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

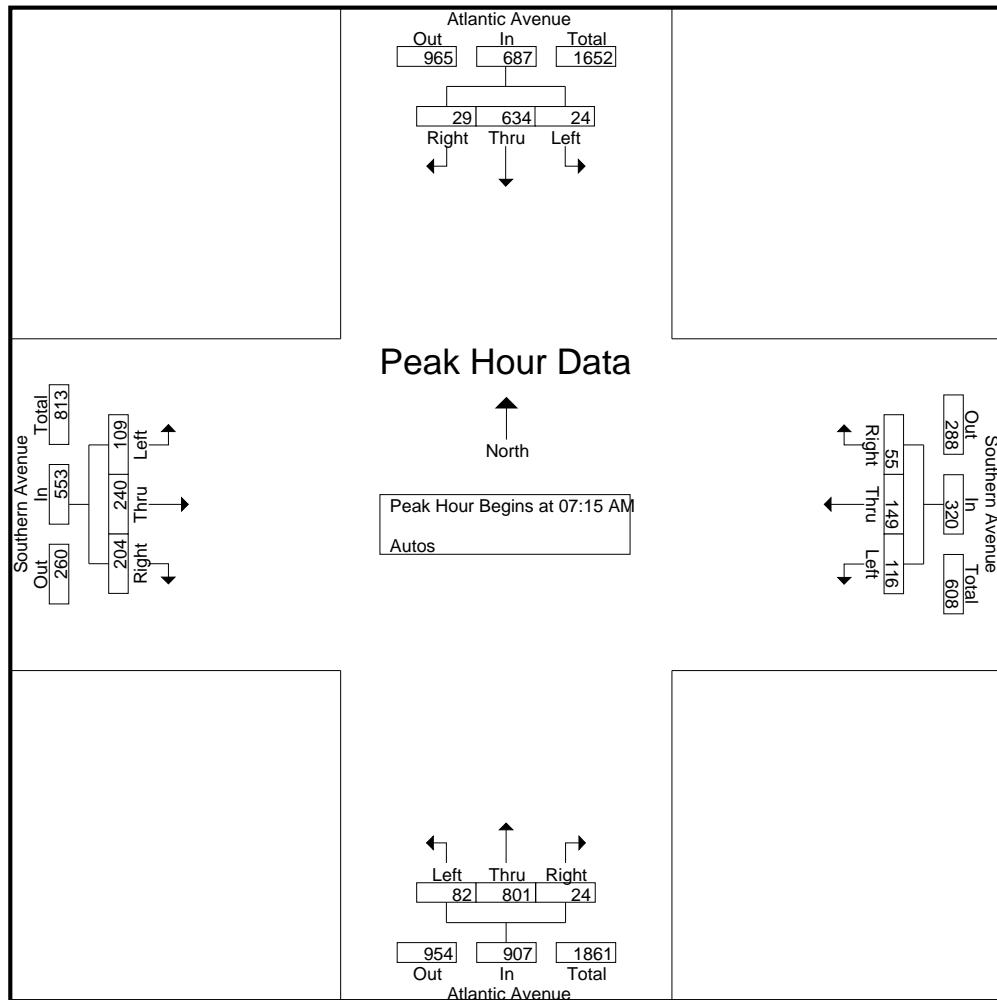
	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	136	1	141	26	40	5	71	10	203	4	217	12	59	31	102	531
07:15 AM	2	154	4	160	22	40	6	68	19	205	9	233	16	68	61	145	606
07:30 AM	7	167	11	185	32	44	14	90	22	187	9	218	28	55	50	133	626
07:45 AM	6	192	6	204	31	36	25	92	24	212	4	240	36	65	58	159	695
Total	19	649	22	690	111	160	50	321	75	807	26	908	92	247	200	539	2458
08:00 AM	9	121	8	138	31	29	10	70	17	197	2	216	29	52	35	116	540
08:15 AM	4	161	4	169	24	15	7	46	10	187	0	197	6	45	35	86	498
08:30 AM	4	96	7	107	26	24	6	56	7	151	1	159	10	34	19	63	385
08:45 AM	6	85	6	97	28	33	7	68	14	159	2	175	7	31	22	60	400
Total	23	463	25	511	109	101	30	240	48	694	5	747	52	162	111	325	1823
Grand Total	42	1112	47	1201	220	261	80	561	123	1501	31	1655	144	409	311	864	4281
Apprch %	3.5	92.6	3.9		39.2	46.5	14.3		7.4	90.7	1.9		16.7	47.3	36		
Total %	1	26	1.1	28.1	5.1	6.1	1.9	13.1	2.9	35.1	0.7	38.7	3.4	9.6	7.3		20.2

	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	154	4	160	22	40	6	68	19	205	9	233	16	68	61	145	606
07:30 AM	7	167	11	185	32	44	14	90	22	187	9	218	28	55	50	133	626
07:45 AM	6	192	6	204	31	36	25	92	24	212	4	240	36	65	58	159	695
08:00 AM	9	121	8	138	31	29	10	70	17	197	2	216	29	52	35	116	540
Total Volume	24	634	29	687	116	149	55	320	82	801	24	907	109	240	204	553	2467
% App. Total	3.5	92.3	4.2		36.2	46.6	17.2		9	88.3	2.6		19.7	43.4	36.9		
PHF	.667	.826	.659	.842	.906	.847	.550	.870	.854	.945	.667	.945	.757	.882	.836	.869	.887

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	2	154	4	160	22	40	6	68	19	205	9	233	16	68	61	145
+15 mins.	7	167	11	185	32	44	14	90	22	187	9	218	28	55	50	133
+30 mins.	6	192	6	204	31	36	25	92	24	212	4	240	36	65	58	159
+45 mins.	9	121	8	138	31	29	10	70	17	197	2	216	29	52	35	116
Total Volume	24	634	29	687	116	149	55	320	82	801	24	907	109	240	204	553
% App. Total	3.5	92.3	4.2		36.2	46.6	17.2		9	88.3	2.6		19.7	43.4	36.9	
PHF	.667	.826	.659	.842	.906	.847	.550	.870	.854	.945	.667	.945	.757	.882	.836	.869

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Heavy Trucks

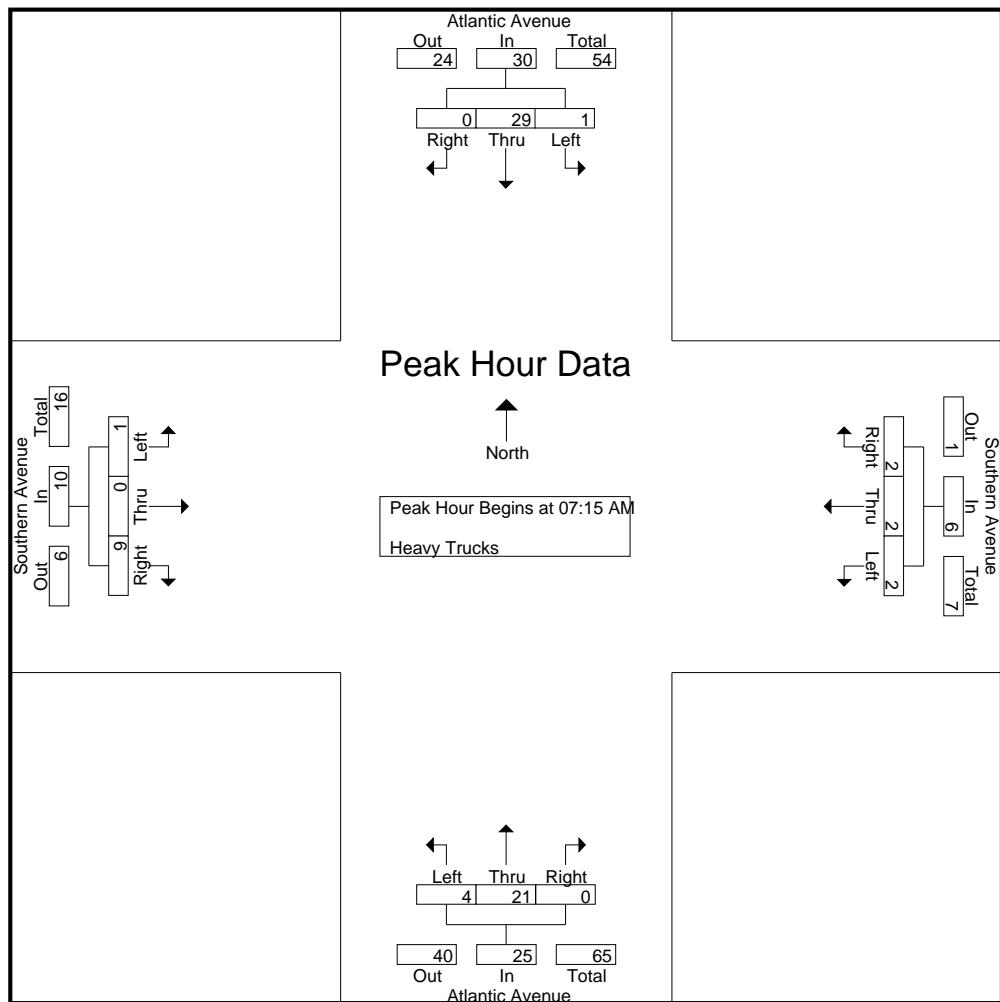
	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	10	0	10	0	0	0	0	1	5	0	6	0	0	1	1	17
07:15 AM	1	8	0	9	0	0	1	1	1	6	0	7	0	0	1	1	18
07:30 AM	0	11	0	11	0	1	0	1	0	4	0	4	1	0	2	3	19
07:45 AM	0	4	0	4	1	0	0	1	0	6	0	6	0	0	4	4	15
Total	1	33	0	34	1	1	1	3	2	21	0	23	1	0	8	9	69
08:00 AM	0	6	0	6	1	1	1	3	3	5	0	8	0	0	2	2	19
08:15 AM	0	5	0	5	1	0	1	2	1	10	0	11	0	0	2	2	20
08:30 AM	2	4	0	6	0	0	0	0	0	14	0	14	0	1	2	3	23
08:45 AM	2	8	1	11	2	1	1	4	0	6	0	6	0	0	1	1	22
Total	4	23	1	28	4	2	3	9	4	35	0	39	0	1	7	8	84
Grand Total	5	56	1	62	5	3	4	12	6	56	0	62	1	1	15	17	153
Apprch %	8.1	90.3	1.6		41.7	25	33.3		9.7	90.3	0		5.9	5.9	88.2		
Total %	3.3	36.6	0.7	40.5	3.3	2	2.6	7.8	3.9	36.6	0	40.5	0.7	0.7	9.8	11.1	

	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	8	0	9	0	0	1	1	1	6	0	7	0	0	1	1	18
07:30 AM	0	11	0	11	0	1	0	1	0	4	0	4	1	0	2	3	19
07:45 AM	0	4	0	4	1	0	0	1	0	6	0	6	0	0	4	4	15
08:00 AM	0	6	0	6	1	1	1	3	3	5	0	8	0	0	2	2	19
Total Volume	1	29	0	30	2	2	2	6	4	21	0	25	1	0	9	10	71
% App. Total	3.3	96.7	0		33.3	33.3	33.3		16	84	0		10	0	90		
PHF	.250	.659	.000	.682	.500	.500	.500	.500	.333	.875	.000	.781	.250	.000	.563	.625	.934

Counts Unlimited
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 Corona, CA 92878
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	8	0	9	0	0	1	1	1	6	0	7	0	0	1	1
+15 mins.	0	11	0	11	0	1	0	1	0	4	0	4	1	0	2	3
+30 mins.	0	4	0	4	1	0	0	1	0	6	0	6	0	0	4	4
+45 mins.	0	6	0	6	1	1	1	3	3	5	0	8	0	0	2	2
Total Volume	1	29	0	30	2	2	2	6	4	21	0	25	1	0	9	10
% App. Total	3.3	96.7	0	33.3	33.3	33.3			16	84	0		10	0	90	
PHF	.250	.659	.000	.682	.500	.500	.500	.500	.333	.875	.000	.781	.250	.000	.563	.625

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

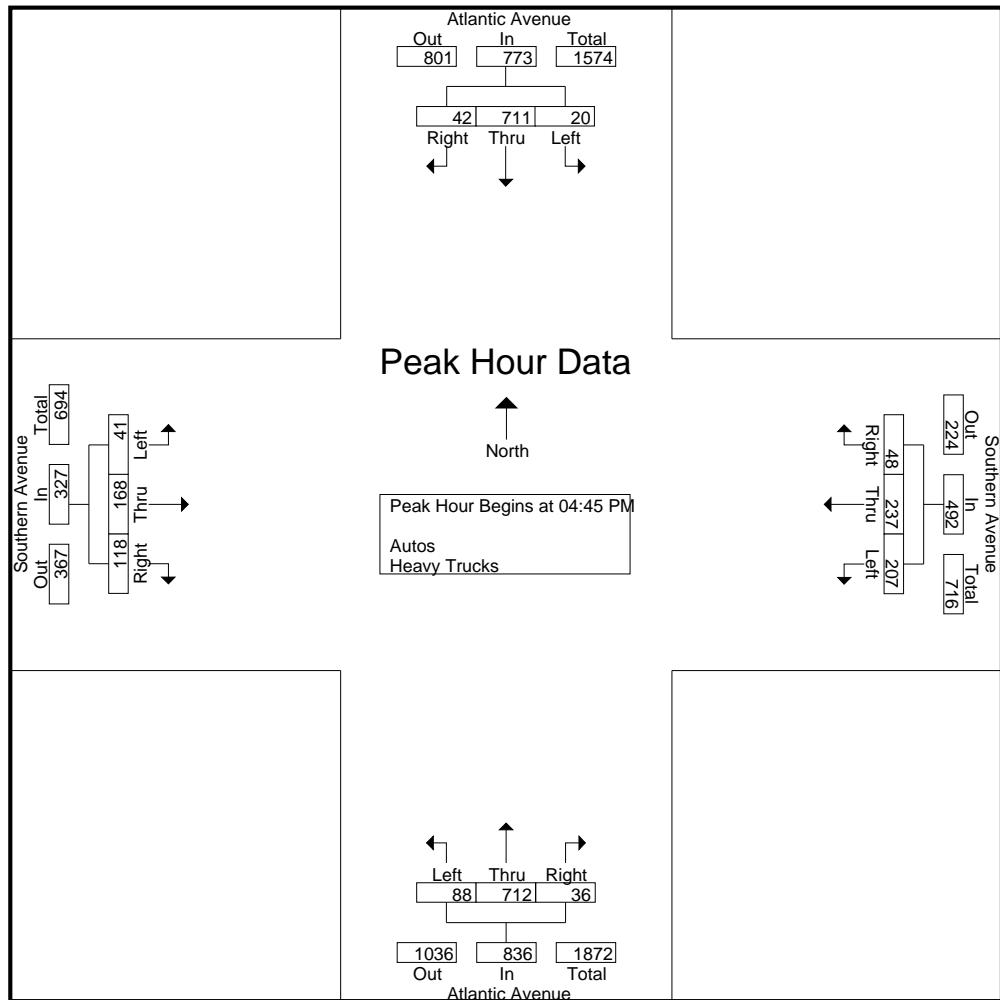
	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	168	7	177	36	57	10	103	13	184	3	200	7	55	26	88	568
04:15 PM	8	154	13	175	43	60	12	115	11	173	5	189	10	30	37	77	556
04:30 PM	3	166	15	184	56	67	9	132	15	176	2	193	9	29	31	69	578
04:45 PM	4	192	6	202	78	62	10	150	22	161	8	191	5	42	31	78	621
Total	17	680	41	738	213	246	41	500	61	694	18	773	31	156	125	312	2323
05:00 PM	6	179	8	193	49	69	10	128	26	183	20	229	10	47	31	88	638
05:15 PM	6	152	8	166	41	52	8	101	23	180	5	208	9	34	30	73	548
05:30 PM	4	188	20	212	39	54	20	113	17	188	3	208	17	45	26	88	621
05:45 PM	9	163	16	188	33	54	15	102	21	170	5	196	23	33	28	84	570
Total	25	682	52	759	162	229	53	444	87	721	33	841	59	159	115	333	2377
Grand Total	42	1362	93	1497	375	475	94	944	148	1415	51	1614	90	315	240	645	4700
Apprch %	2.8	91	6.2		39.7	50.3	10		9.2	87.7	3.2		14	48.8	37.2		
Total %	0.9	29	2	31.9	8	10.1	2	20.1	3.1	30.1	1.1	34.3	1.9	6.7	5.1	13.7	
Autos	38	1327	93	1458	370	472	91	933	147	1384	51	1582	90	313	230	633	4606
% Autos	90.5	97.4	100	97.4	98.7	99.4	96.8	98.8	99.3	97.8	100	98	100	99.4	95.8	98.1	98
Heavy Trucks	4	35	0	39	5	3	3	11	1	31	0	32	0	2	10	12	94
% Heavy Trucks	9.5	2.6	0	2.6	1.3	0.6	3.2	1.2	0.7	2.2	0	2	0	0.6	4.2	1.9	2

	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	4	192	6	202	78	62	10	150	22	161	8	191	5	42	31	78	621
05:00 PM	6	179	8	193	49	69	10	128	26	183	20	229	10	47	31	88	638
05:15 PM	6	152	8	166	41	52	8	101	23	180	5	208	9	34	30	73	548
05:30 PM	4	188	20	212	39	54	20	113	17	188	3	208	17	45	26	88	621
Total Volume	20	711	42	773	207	237	48	492	88	712	36	836	41	168	118	327	2428
% App. Total	2.6	92	5.4		42.1	48.2	9.8		10.5	85.2	4.3		12.5	51.4	36.1		
PHF	.833	.926	.525	.912	.663	.859	.600	.820	.846	.947	.450	.913	.603	.894	.952	.929	.951

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern PM
 Site Code : 04119797
 Start Date : 11/19/2019
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				05:00 PM				05:00 PM			
+0 mins.	4	192	6	202	43	60	12	115	26	183	20	229	10	47	31	88
+15 mins.	6	179	8	193	56	67	9	132	23	180	5	208	9	34	30	73
+30 mins.	6	152	8	166	78	62	10	150	17	188	3	208	17	45	26	88
+45 mins.	4	188	20	212	49	69	10	128	21	170	5	196	23	33	28	84
Total Volume	20	711	42	773	226	258	41	525	87	721	33	841	59	159	115	333
% App. Total	2.6	92	5.4		43	49.1	7.8		10.3	85.7	3.9		17.7	47.7	34.5	
PHF	.833	.926	.525	.912	.724	.935	.854	.875	.837	.959	.413	.918	.641	.846	.927	.946

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

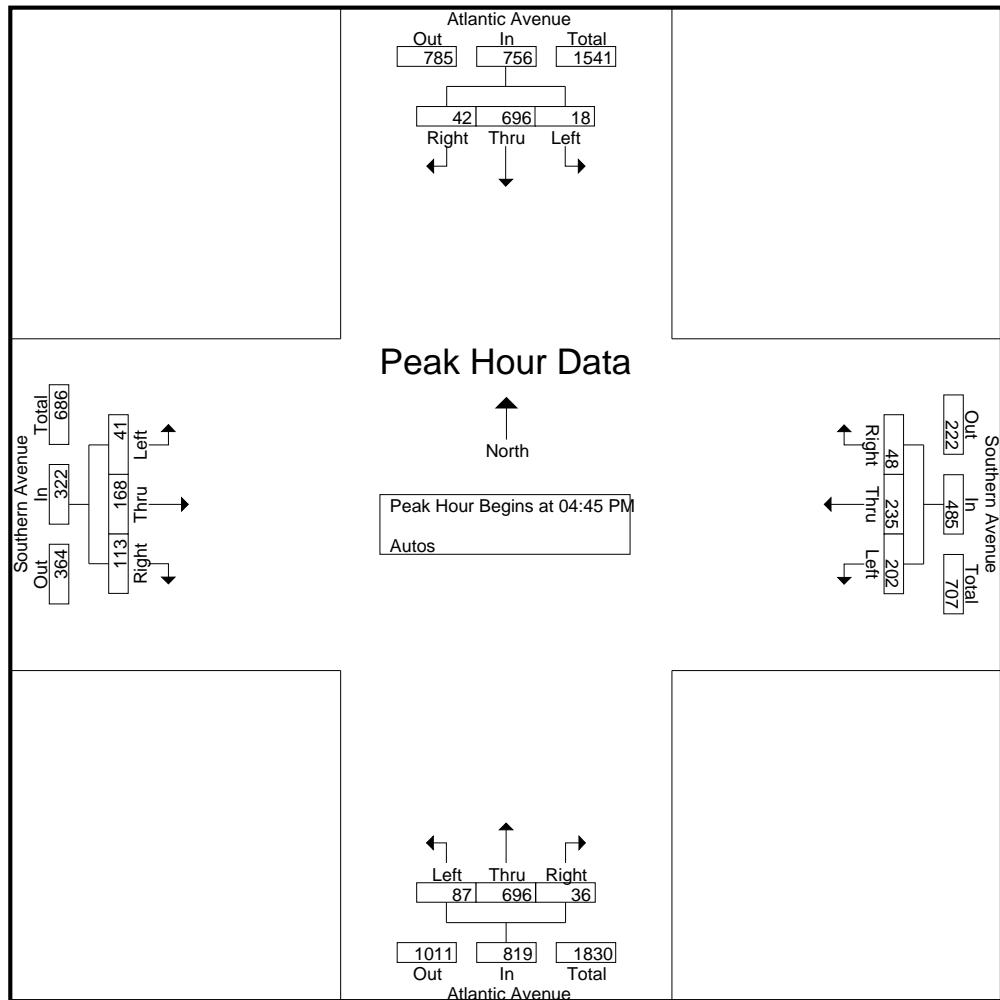
	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	2	164	7	173	36	56	10	102	13	177	3	193	7	54	24	85	553
04:15 PM	7	151	13	171	43	60	11	114	11	170	5	186	10	30	36	76	547
04:30 PM	3	160	15	178	56	67	8	131	15	173	2	190	9	29	29	67	566
04:45 PM	4	190	6	200	76	62	10	148	21	157	8	186	5	42	30	77	611
Total	16	665	41	722	211	245	39	495	60	677	18	755	31	155	119	305	2277
05:00 PM	6	172	8	186	48	69	10	127	26	179	20	225	10	47	29	86	624
05:15 PM	5	151	8	164	40	51	8	99	23	177	5	205	9	34	29	72	540
05:30 PM	3	183	20	206	38	53	20	111	17	183	3	203	17	45	25	87	607
05:45 PM	8	156	16	180	33	54	14	101	21	168	5	194	23	32	28	83	558
Total	22	662	52	736	159	227	52	438	87	707	33	827	59	158	111	328	2329
Grand Total	38	1327	93	1458	370	472	91	933	147	1384	51	1582	90	313	230	633	4606
Apprch %	2.6	91	6.4		39.7	50.6	9.8		9.3	87.5	3.2		14.2	49.4	36.3		
Total %	0.8	28.8	2	31.7	8	10.2	2	20.3	3.2	30	1.1	34.3	2	6.8	5	13.7	

	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	4	190	6	200	76	62	10	148	21	157	8	186	5	42	30	77	611
05:00 PM	6	172	8	186	48	69	10	127	26	179	20	225	10	47	29	86	624
05:15 PM	5	151	8	164	40	51	8	99	23	177	5	205	9	34	29	72	540
05:30 PM	3	183	20	206	38	53	20	111	17	183	3	203	17	45	25	87	607
Total Volume	18	696	42	756	202	235	48	485	87	696	36	819	41	168	113	322	2382
% App. Total	2.4	92.1	5.6		41.6	48.5	9.9		10.6	85	4.4		12.7	52.2	35.1		
PHF	.750	.916	.525	.917	.664	.851	.600	.819	.837	.951	.450	.910	.603	.894	.942	.925	.954

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	4	190	6	200	76	62	10	148	21	157	8	186	5	42	30	77
+15 mins.	6	172	8	186	48	69	10	127	26	179	20	225	10	47	29	86
+30 mins.	5	151	8	164	40	51	8	99	23	177	5	205	9	34	29	72
+45 mins.	3	183	20	206	38	53	20	111	17	183	3	203	17	45	25	87
Total Volume	18	696	42	756	202	235	48	485	87	696	36	819	41	168	113	322
% App. Total	2.4	92.1	5.6		41.6	48.5	9.9		10.6	85	4.4		12.7	52.2	35.1	
PHF	.750	.916	.525	.917	.664	.851	.600	.819	.837	.951	.450	.910	.603	.894	.942	.925

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Heavy Trucks

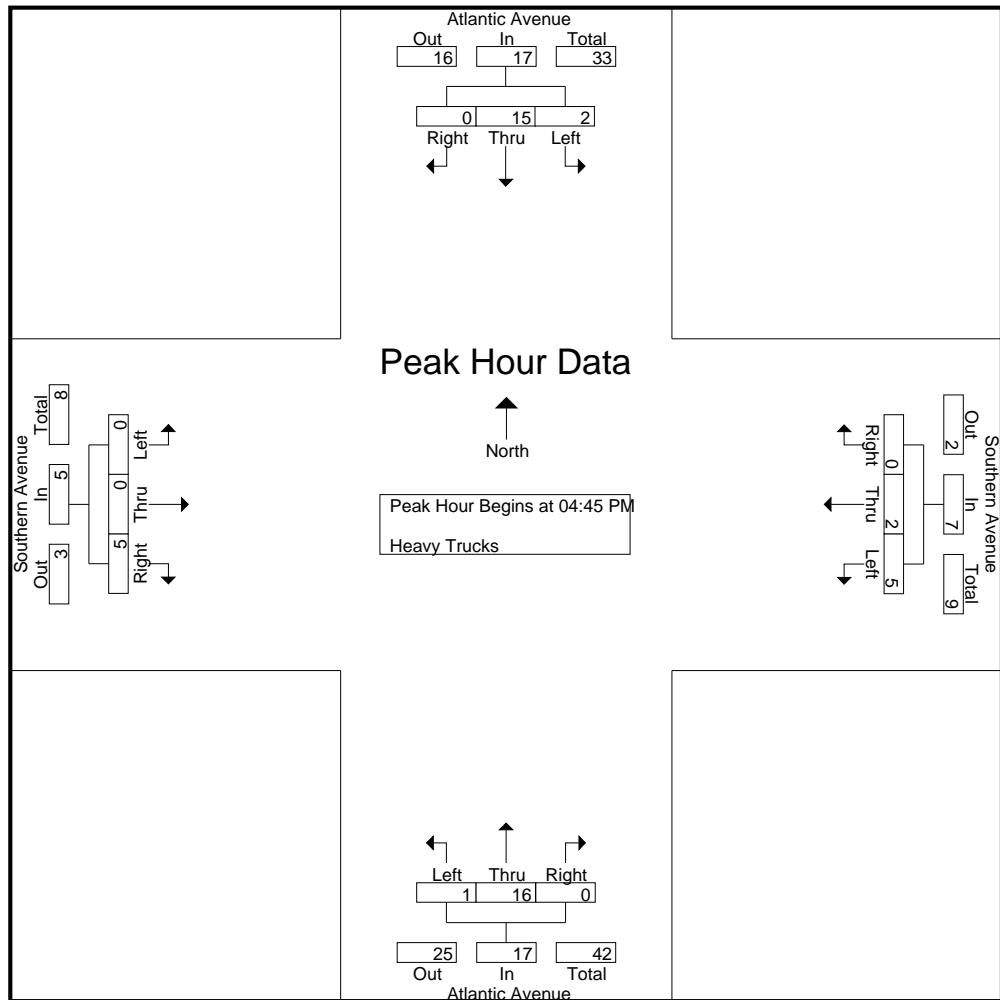
	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	4	0	4	0	1	0	1	0	7	0	7	0	1	2	3	15
04:15 PM	1	3	0	4	0	0	1	1	0	3	0	3	0	0	1	1	9
04:30 PM	0	6	0	6	0	0	1	1	0	3	0	3	0	0	2	2	12
04:45 PM	0	2	0	2	2	0	0	2	1	4	0	5	0	0	1	1	10
Total	1	15	0	16	2	1	2	5	1	17	0	18	0	1	6	7	46
05:00 PM	0	7	0	7	1	0	0	1	0	4	0	4	0	0	2	2	14
05:15 PM	1	1	0	2	1	1	0	2	0	3	0	3	0	0	1	1	8
05:30 PM	1	5	0	6	1	1	0	2	0	5	0	5	0	0	1	1	14
05:45 PM	1	7	0	8	0	0	1	1	0	2	0	2	0	1	0	1	12
Total	3	20	0	23	3	2	1	6	0	14	0	14	0	1	4	5	48
Grand Total	4	35	0	39	5	3	3	11	1	31	0	32	0	2	10	12	94
Apprch %	10.3	89.7	0		45.5	27.3	27.3		3.1	96.9	0		0	16.7	83.3		
Total %	4.3	37.2	0	41.5	5.3	3.2	3.2	11.7	1.1	33	0	34	0	2.1	10.6	12.8	

	Atlantic Avenue Southbound				Southern Avenue Westbound				Atlantic Avenue Northbound				Southern Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	2	0	2	2	0	0	2	1	4	0	5	0	0	1	1	10
05:00 PM	0	7	0	7	1	0	0	1	0	4	0	4	0	0	2	2	14
05:15 PM	1	1	0	2	1	1	0	2	0	3	0	3	0	0	1	1	8
05:30 PM	1	5	0	6	1	1	0	2	0	5	0	5	0	0	1	1	14
Total Volume	2	15	0	17	5	2	0	7	1	16	0	17	0	0	5	5	46
% App. Total	11.8	88.2	0		71.4	28.6	0		5.9	94.1	0		0	0	100		
PHF	.500	.536	.000	.607	.625	.500	.000	.875	.250	.800	.000	.850	.000	.000	.625	.625	.821

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Southern Avenue
 Weather: Clear

File Name : 06_SGE_Atlantic_Southern PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	2	0	2	2	0	0	2	1	4	0	5	0	0	1	1
+15 mins.	0	7	0	7	1	0	0	1	0	4	0	4	0	0	2	2
+30 mins.	1	1	0	2	1	1	0	2	0	3	0	3	0	0	1	1
+45 mins.	1	5	0	6	1	1	0	2	0	5	0	5	0	0	1	1
Total Volume	2	15	0	17	5	2	0	7	1	16	0	17	0	0	5	5
% App. Total	11.8	88.2	0		71.4	28.6	0		5.9	94.1	0		0	0	100	
PHF	.500	.536	.000	.607	.625	.500	.000	.875	.250	.800	.000	.850	.000	.000	.625	.625

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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

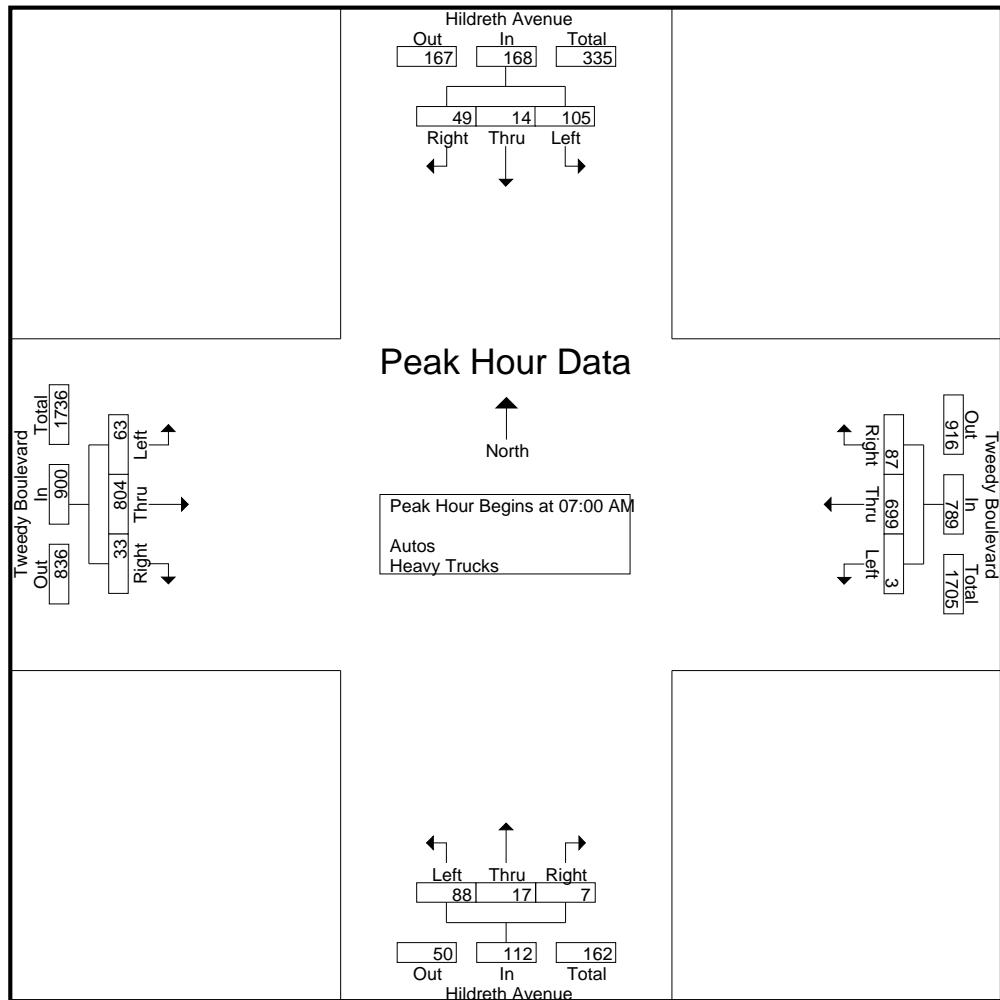
	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	15	1	7	23	0	162	7	169	15	3	4	22	8	229	6	243	457
07:15 AM	29	4	10	43	1	192	17	210	28	8	2	38	17	212	9	238	529
07:30 AM	31	4	15	50	1	179	36	216	26	4	1	31	21	180	7	208	505
07:45 AM	30	5	17	52	1	166	27	194	19	2	0	21	17	183	11	211	478
Total	105	14	49	168	3	699	87	789	88	17	7	112	63	804	33	900	1969
08:00 AM	31	5	14	50	1	118	20	139	5	1	2	8	10	190	7	207	404
08:15 AM	16	0	15	31	0	112	17	129	4	0	3	7	8	143	1	152	319
08:30 AM	18	2	12	32	1	113	15	129	6	1	0	7	8	112	1	121	289
08:45 AM	15	1	13	29	0	98	14	112	6	1	2	9	13	111	4	128	278
Total	80	8	54	142	2	441	66	509	21	3	7	31	39	556	13	608	1290
Grand Total	185	22	103	310	5	1140	153	1298	109	20	14	143	102	1360	46	1508	3259
Apprch %	59.7	7.1	33.2		0.4	87.8	11.8		76.2	14	9.8		6.8	90.2	3.1		
Total %	5.7	0.7	3.2	9.5	0.2	35	4.7	39.8	3.3	0.6	0.4	4.4	3.1	41.7	1.4	46.3	
Autos	182	22	103	307	4	1109	150	1263	109	20	13	142	102	1348	46	1496	3208
% Autos	98.4	100	100	99	80	97.3	98	97.3	100	100	92.9	99.3	100	99.1	100	99.2	98.4
Heavy Trucks	3	0	0	3	1	31	3	35	0	0	1	1	0	12	0	12	51
% Heavy Trucks	1.6	0	0	1	20	2.7	2	2.7	0	0	7.1	0.7	0	0.9	0	0.8	1.6

	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	15	1	7	23	0	162	7	169	15	3	4	22	8	229	6	243	457
07:15 AM	29	4	10	43	1	192	17	210	28	8	2	38	17	212	9	238	529
07:30 AM	31	4	15	50	1	179	36	216	26	4	1	31	21	180	7	208	505
07:45 AM	30	5	17	52	1	166	27	194	19	2	0	21	17	183	11	211	478
Total Volume	105	14	49	168	3	699	87	789	88	17	7	112	63	804	33	900	1969
% App. Total	62.5	8.3	29.2		0.4	88.6	11		78.6	15.2	6.2		7	89.3	3.7		
PHF	.847	.700	.721	.808	.750	.910	.604	.913	.786	.531	.438	.737	.750	.878	.750	.926	.931

Counts Unlimited
 PO Box 1178
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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	29	4	10	43	0	162	7	169	15	3	4	22	8	229	6	243
+15 mins.	31	4	15	50	1	192	17	210	28	8	2	38	17	212	9	238
+30 mins.	30	5	17	52	1	179	36	216	26	4	1	31	21	180	7	208
+45 mins.	31	5	14	50	1	166	27	194	19	2	0	21	17	183	11	211
Total Volume	121	18	56	195	3	699	87	789	88	17	7	112	63	804	33	900
% App. Total	62.1	9.2	28.7		0.4	88.6	11		78.6	15.2	6.2		7	89.3	3.7	
PHF	.976	.900	.824	.938	.750	.910	.604	.913	.786	.531	.438	.737	.750	.878	.750	.926

Counts Unlimited
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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

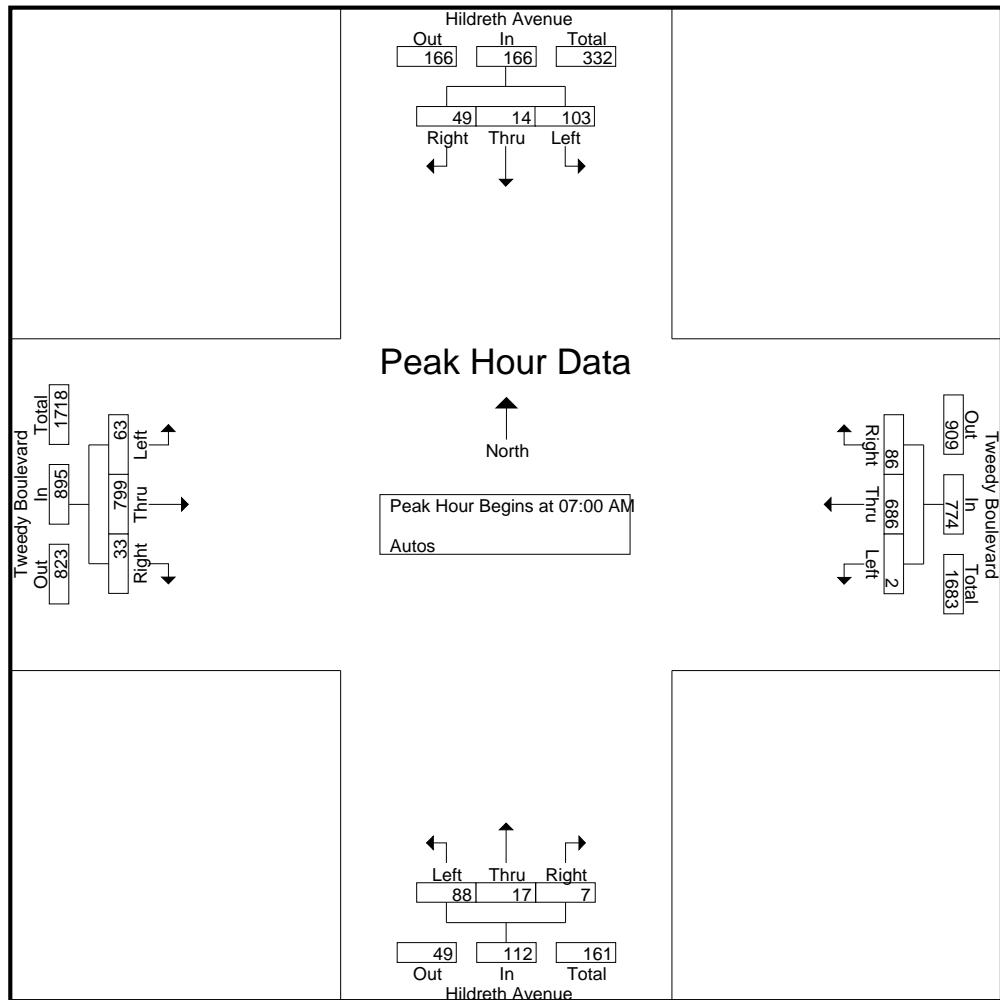
	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	15	1	7	23	0	159	7	166	15	3	4	22	8	227	6	241	452
07:15 AM	29	4	10	43	1	188	17	206	28	8	2	38	17	211	9	237	524
07:30 AM	30	4	15	49	0	178	36	214	26	4	1	31	21	179	7	207	501
07:45 AM	29	5	17	51	1	161	26	188	19	2	0	21	17	182	11	210	470
Total	103	14	49	166	2	686	86	774	88	17	7	112	63	799	33	895	1947
08:00 AM	31	5	14	50	1	114	19	134	5	1	2	8	10	187	7	204	396
08:15 AM	15	0	15	30	0	108	17	125	4	0	2	6	8	141	1	150	311
08:30 AM	18	2	12	32	1	108	15	124	6	1	0	7	8	112	1	121	284
08:45 AM	15	1	13	29	0	93	13	106	6	1	2	9	13	109	4	126	270
Total	79	8	54	141	2	423	64	489	21	3	6	30	39	549	13	601	1261
Grand Total	182	22	103	307	4	1109	150	1263	109	20	13	142	102	1348	46	1496	3208
Apprch %	59.3	7.2	33.6		0.3	87.8	11.9		76.8	14.1	9.2		6.8	90.1	3.1		
Total %	5.7	0.7	3.2	9.6	0.1	34.6	4.7	39.4	3.4	0.6	0.4	4.4	3.2	42	1.4	46.6	

	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	15	1	7	23	0	159	7	166	15	3	4	22	8	227	6	241	452
07:15 AM	29	4	10	43	1	188	17	206	28	8	2	38	17	211	9	237	524
07:30 AM	30	4	15	49	0	178	36	214	26	4	1	31	21	179	7	207	501
07:45 AM	29	5	17	51	1	161	26	188	19	2	0	21	17	182	11	210	470
Total Volume	103	14	49	166	2	686	86	774	88	17	7	112	63	799	33	895	1947
% App. Total	62	8.4	29.5		0.3	88.6	11.1		78.6	15.2	6.2		7	89.3	3.7		
PHF	.858	.700	.721	.814	.500	.912	.597	.904	.786	.531	.438	.737	.750	.880	.750	.928	.929

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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	15	1	7	23	0	159	7	166	15	3	4	22	8	227	6	241
+15 mins.	29	4	10	43	1	188	17	206	28	8	2	38	17	211	9	237
+30 mins.	30	4	15	49	0	178	36	214	26	4	1	31	21	179	7	207
+45 mins.	29	5	17	51	1	161	26	188	19	2	0	21	17	182	11	210
Total Volume	103	14	49	166	2	686	86	774	88	17	7	112	63	799	33	895
% App. Total	62	8.4	29.5		0.3	88.6	11.1		78.6	15.2	6.2		7	89.3	3.7	
PHF	.858	.700	.721	.814	.500	.912	.597	.904	.786	.531	.438	.737	.750	.880	.750	.928

Counts Unlimited
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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Heavy Trucks

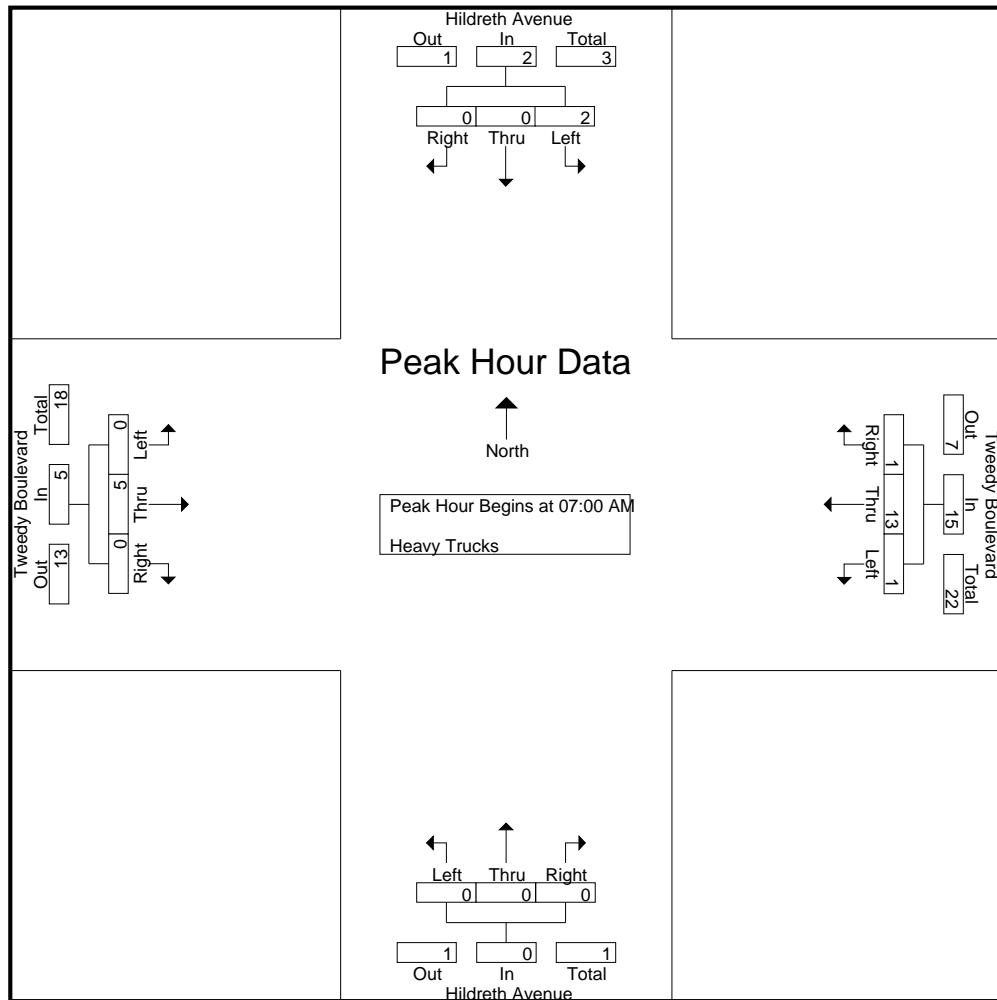
	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
07:30 AM	1	0	0	1	1	1	0	2	0	0	0	0	0	1	0	1	4
07:45 AM	1	0	0	1	0	5	1	6	0	0	0	0	0	1	0	1	8
Total	2	0	0	2	1	13	1	15	0	0	0	0	0	5	0	5	22
08:00 AM	0	0	0	0	0	4	1	5	0	0	0	0	0	3	0	3	8
08:15 AM	1	0	0	1	0	4	0	4	0	0	1	1	0	2	0	2	8
08:30 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
08:45 AM	0	0	0	0	0	5	1	6	0	0	0	0	0	2	0	2	8
Total	1	0	0	1	0	18	2	20	0	0	1	1	0	7	0	7	29
Grand Total	3	0	0	3	1	31	3	35	0	0	1	1	0	12	0	12	51
Apprch %	100	0	0		2.9	88.6	8.6		0	0	100		0	100	0		
Total %	5.9	0	0	5.9	2	60.8	5.9	68.6	0	0	2	2	0	23.5	0	23.5	

	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
07:15 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1	5
07:30 AM	1	0	0	1	1	1	0	2	0	0	0	0	0	1	0	1	4
07:45 AM	1	0	0	1	0	5	1	6	0	0	0	0	0	1	0	1	8
Total Volume	2	0	0	2	1	13	1	15	0	0	0	0	0	5	0	5	22
% App. Total	100	0	0		6.7	86.7	6.7		0	0	0	0	0	100	0		
PHF	.500	.000	.000	.500	.250	.650	.250	.625	.000	.000	.000	.000	.000	.625	.000	.625	.688

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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	1	0	1
+30 mins.	1	0	0	1	1	1	0	2	0	0	0	0	0	1	0	1
+45 mins.	1	0	0	1	0	5	1	6	0	0	0	0	0	1	0	1
Total Volume	2	0	0	2	1	13	1	15	0	0	0	0	0	5	0	5
% App. Total	100	0	0		6.7	86.7	6.7		0	0	0		0	100	0	
PHF	.500	.000	.000	.500	.250	.650	.250	.625	.000	.000	.000	.000	.000	.625	.000	.625

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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

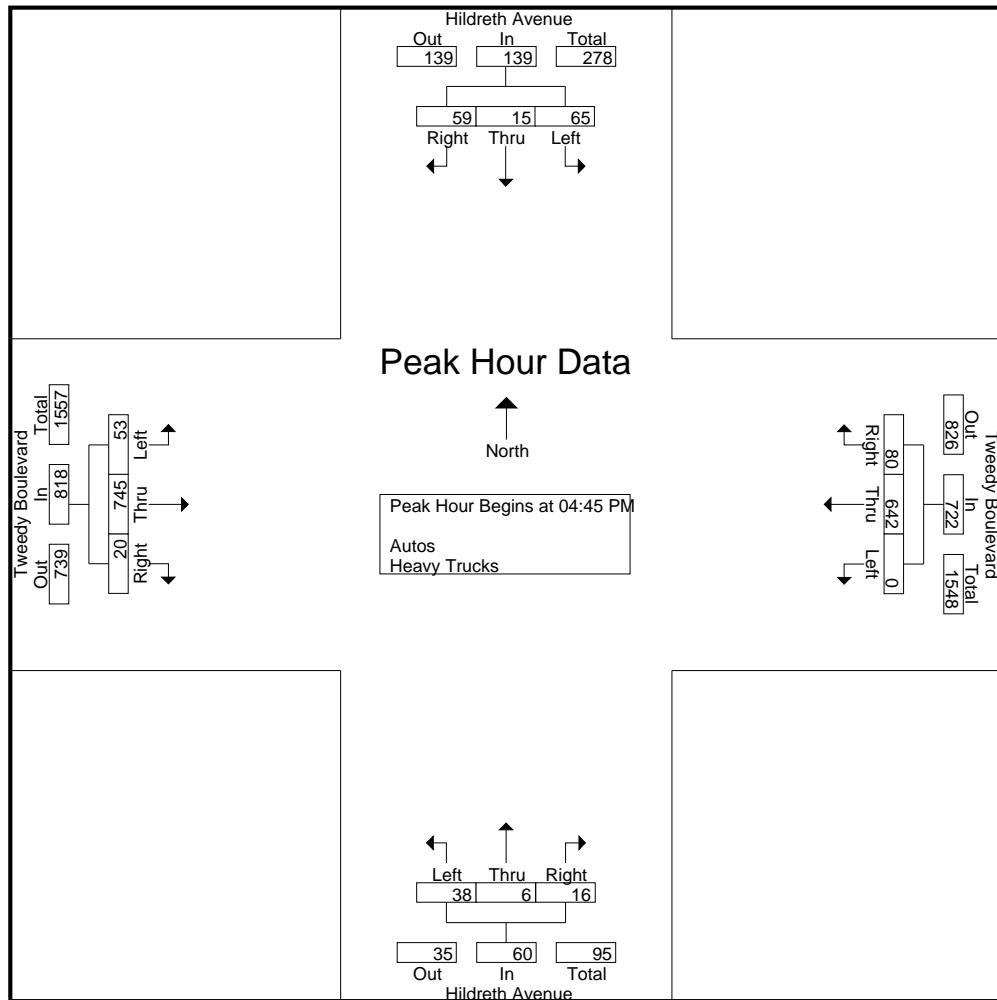
	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	18	2	12	32	4	153	18	175	3	2	6	11	8	160	6	174	392
04:15 PM	13	1	9	23	0	165	16	181	6	0	2	8	13	177	0	190	402
04:30 PM	14	2	11	27	0	139	17	156	7	1	1	9	16	187	3	206	398
04:45 PM	12	3	15	30	0	147	23	170	12	2	5	19	16	177	7	200	419
Total	57	8	47	112	4	604	74	682	28	5	14	47	53	701	16	770	1611
05:00 PM	17	2	13	32	0	180	15	195	9	0	3	12	13	182	6	201	440
05:15 PM	12	3	15	30	0	170	22	192	7	2	5	14	11	197	5	213	449
05:30 PM	24	7	16	47	0	145	20	165	10	2	3	15	13	189	2	204	431
05:45 PM	22	4	18	44	0	134	18	152	6	4	1	11	18	189	4	211	418
Total	75	16	62	153	0	629	75	704	32	8	12	52	55	757	17	829	1738
Grand Total	132	24	109	265	4	1233	149	1386	60	13	26	99	108	1458	33	1599	3349
Apprch %	49.8	9.1	41.1		0.3	89	10.8		60.6	13.1	26.3		6.8	91.2	2.1		
Total %	3.9	0.7	3.3	7.9	0.1	36.8	4.4	41.4	1.8	0.4	0.8	3	3.2	43.5	1	47.7	
Autos	131	24	109	264	4	1217	149	1370	59	13	25	97	108	1445	33	1586	3317
% Autos	99.2	100	100	99.6	100	98.7	100	98.8	98.3	100	96.2	98	100	99.1	100	99.2	99
Heavy Trucks	1	0	0	1	0	16	0	16	1	0	1	2	0	13	0	13	32
% Heavy Trucks	0.8	0	0	0.4	0	1.3	0	1.2	1.7	0	3.8	2	0	0.9	0	0.8	1

	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	12	3	15	30	0	147	23	170	12	2	5	19	16	177	7	200	419
05:00 PM	17	2	13	32	0	180	15	195	9	0	3	12	13	182	6	201	440
05:15 PM	12	3	15	30	0	170	22	192	7	2	5	14	11	197	5	213	449
05:30 PM	24	7	16	47	0	145	20	165	10	2	3	15	13	189	2	204	431
Total Volume	65	15	59	139	0	642	80	722	38	6	16	60	53	745	20	818	1739
% App. Total	46.8	10.8	42.4		0	88.9	11.1		63.3	10	26.7		6.5	91.1	2.4		
PHF	.677	.536	.922	.739	.000	.892	.870	.926	.792	.750	.800	.789	.828	.945	.714	.960	.968

Counts Unlimited
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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				04:45 PM				05:00 PM			
+0 mins.	17	2	13	32	0	147	23	170	12	2	5	19	13	182	6	201
+15 mins.	12	3	15	30	0	180	15	195	9	0	3	12	11	197	5	213
+30 mins.	24	7	16	47	0	170	22	192	7	2	5	14	13	189	2	204
+45 mins.	22	4	18	44	0	145	20	165	10	2	3	15	18	189	4	211
Total Volume	75	16	62	153	0	642	80	722	38	6	16	60	55	757	17	829
% App. Total	49	10.5	40.5		0	88.9	11.1		63.3	10	26.7		6.6	91.3	2.1	
PHF	.781	.571	.861	.814	.000	.892	.870	.926	.792	.750	.800	.789	.764	.961	.708	.973

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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

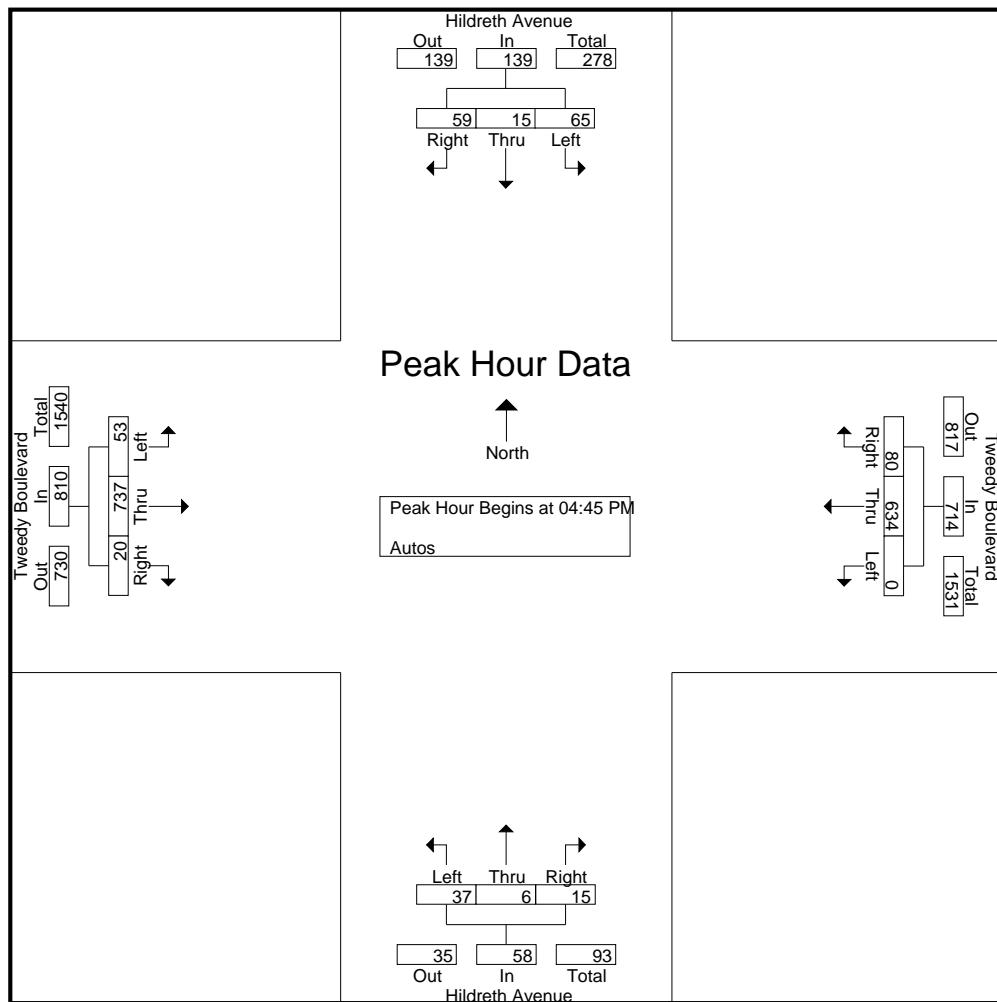
	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	17	2	12	31	4	150	18	172	3	2	6	11	8	157	6	171	385
04:15 PM	13	1	9	23	0	163	16	179	6	0	2	8	13	176	0	189	399
04:30 PM	14	2	11	27	0	137	17	154	7	1	1	9	16	186	3	205	395
04:45 PM	12	3	15	30	0	145	23	168	11	2	5	18	16	175	7	198	414
Total	56	8	47	111	4	595	74	673	27	5	14	46	53	694	16	763	1593
05:00 PM	17	2	13	32	0	178	15	193	9	0	3	12	13	181	6	200	437
05:15 PM	12	3	15	30	0	167	22	189	7	2	4	13	11	193	5	209	441
05:30 PM	24	7	16	47	0	144	20	164	10	2	3	15	13	188	2	203	429
05:45 PM	22	4	18	44	0	133	18	151	6	4	1	11	18	189	4	211	417
Total	75	16	62	153	0	622	75	697	32	8	11	51	55	751	17	823	1724
Grand Total	131	24	109	264	4	1217	149	1370	59	13	25	97	108	1445	33	1586	3317
Apprch %	49.6	9.1	41.3		0.3	88.8	10.9		60.8	13.4	25.8		6.8	91.1	2.1		
Total %	3.9	0.7	3.3	8	0.1	36.7	4.5	41.3	1.8	0.4	0.8	2.9	3.3	43.6	1	47.8	

	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	12	3	15	30	0	145	23	168	11	2	5	18	16	175	7	198	414
05:00 PM	17	2	13	32	0	178	15	193	9	0	3	12	13	181	6	200	437
05:15 PM	12	3	15	30	0	167	22	189	7	2	4	13	11	193	5	209	441
05:30 PM	24	7	16	47	0	144	20	164	10	2	3	15	13	188	2	203	429
Total Volume	65	15	59	139	0	634	80	714	37	6	15	58	53	737	20	810	1721
% App. Total	46.8	10.8	42.4		0	88.8	11.2		63.8	10.3	25.9		6.5	91	2.5		
PHF	.677	.536	.922	.739	.000	.890	.870	.925	.841	.750	.750	.806	.828	.955	.714	.969	.976

Counts Unlimited
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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	12	3	15	30	0	145	23	168	11	2	5	18	16	175	7	198
+15 mins.	17	2	13	32	0	178	15	193	9	0	3	12	13	181	6	200
+30 mins.	12	3	15	30	0	167	22	189	7	2	4	13	11	193	5	209
+45 mins.	24	7	16	47	0	144	20	164	10	2	3	15	13	188	2	203
Total Volume	65	15	59	139	0	634	80	714	37	6	15	58	53	737	20	810
% App. Total	46.8	10.8	42.4		0	88.8	11.2		63.8	10.3	25.9		6.5	91	2.5	
PHF	.677	.536	.922	.739	.000	.890	.870	.925	.841	.750	.750	.806	.828	.955	.714	.969

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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Heavy Trucks

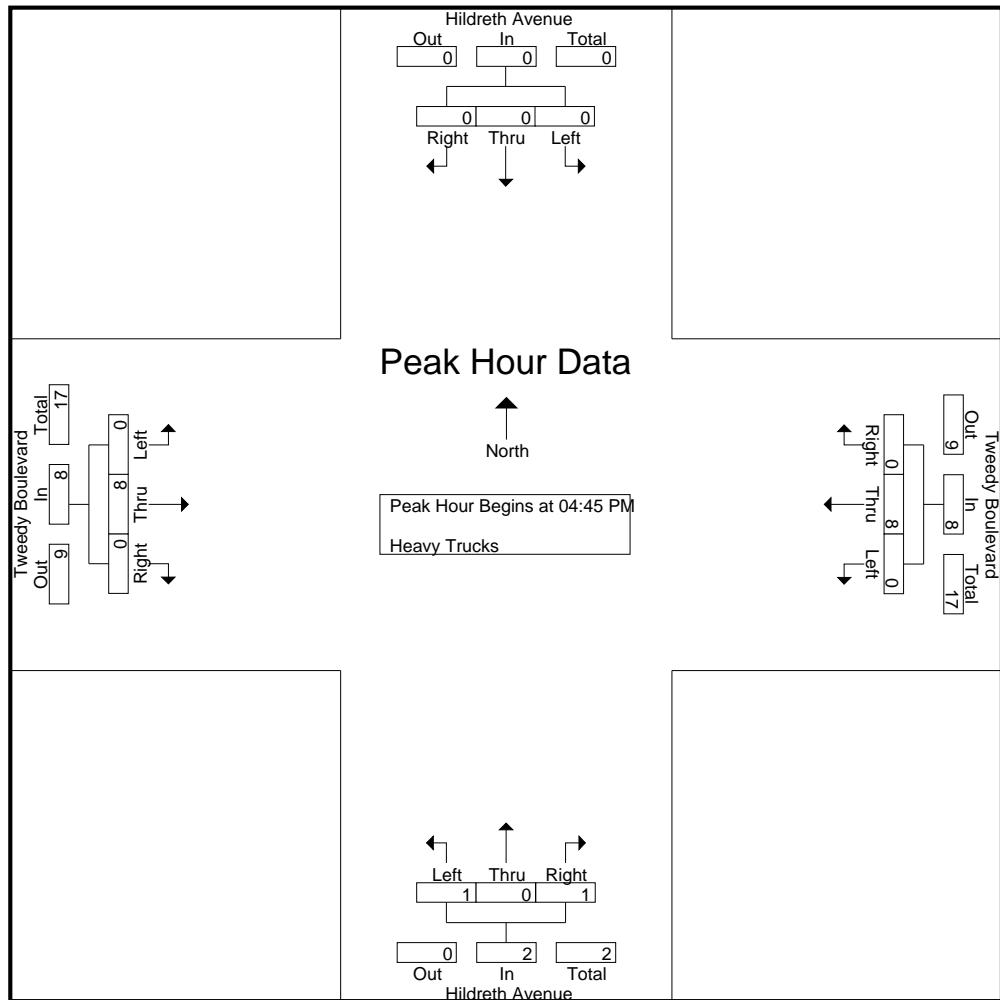
	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	0	1	0	3	0	3	0	0	0	0	0	3	0	3	7
04:15 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
04:45 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	2	0	2	5
Total	1	0	0	1	0	9	0	9	1	0	0	1	0	7	0	7	18
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	3	0	3	0	0	1	1	0	4	0	4	8
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	7	0	7	0	0	1	1	0	6	0	6	14
Grand Total	1	0	0	1	0	16	0	16	1	0	1	2	0	13	0	13	32
Apprch %	100	0	0	0	0	100	0	50	0	0	50	0	0	100	0	0	100
Total %	3.1	0	0	3.1	0	50	0	50	3.1	0	3.1	6.2	0	40.6	0	40.6	

	Hildreth Avenue Southbound				Tweedy Boulevard Westbound				Hildreth Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	2	0	2	1	0	0	1	0	2	0	2	5
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:15 PM	0	0	0	0	0	3	0	3	0	0	1	1	0	4	0	4	8
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	0	0	8	0	8	1	0	1	2	0	8	0	8	18
% App. Total	0	0	0	0	0	100	0	50	0	0	50	0	0	100	0	0	100
PHF	.000	.000	.000	.000	.000	.667	.000	.667	.250	.000	.250	.500	.000	.500	.000	.500	.563

Counts Unlimited
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City of South Gate
 N/S: Hildreth Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 07_SGE_Hildreth_Tweedy PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	0	0	0	0	2	0	2	1	0	0	1	0	2	0	2
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	3	0	3	0	0	1	1	0	4	0	4
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	8	0	8	1	0	1	2	0	8	0	8
% App. Total	0	0	0	0	0	100	0	0	50	0	50	0	100	0	100	0
PHF	.000	.000	.000	.000	.000	.667	.000	.667	.250	.000	.250	.500	.000	.500	.000	.500

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 09_SGE_Atlantic_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

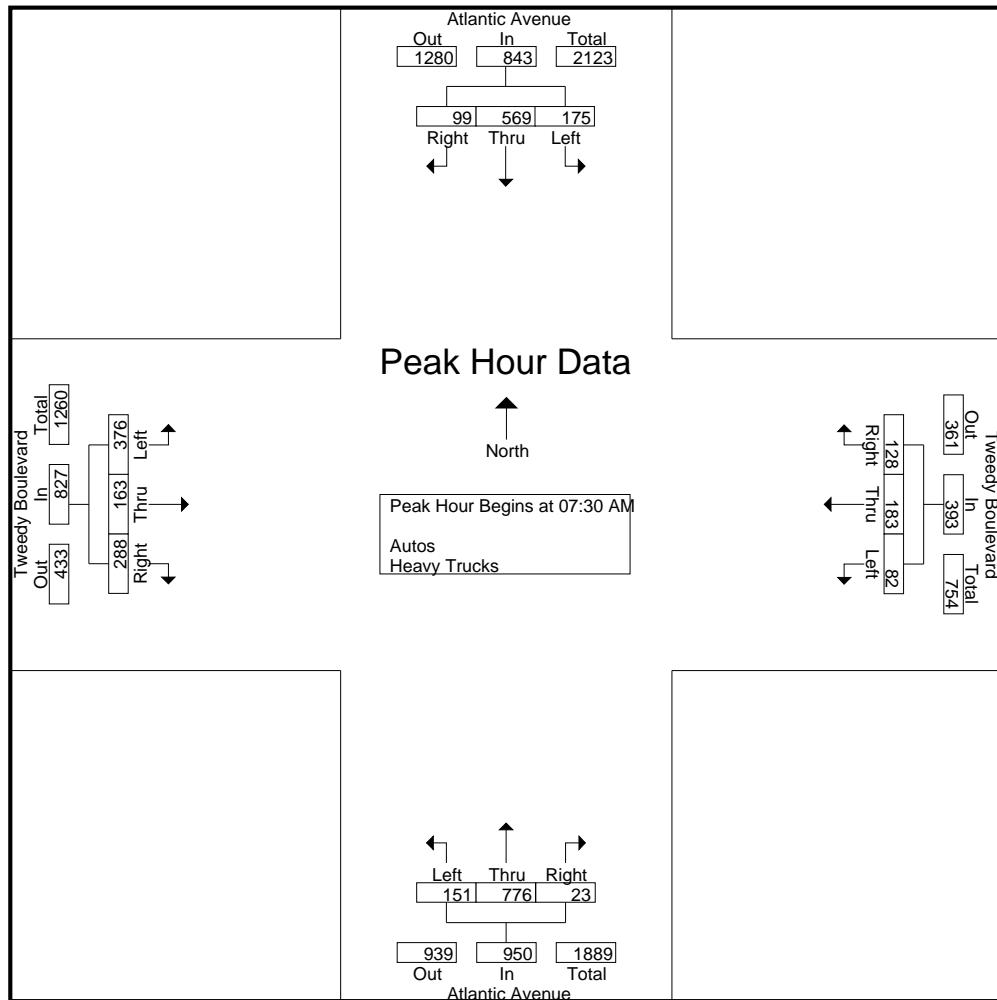
	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	30	110	28	168	14	33	16	63	28	215	3	246	78	44	51	173	650
07:15 AM	31	139	25	195	12	61	29	102	26	237	3	266	101	50	49	200	763
07:30 AM	38	127	28	193	19	69	14	102	21	188	3	212	128	48	56	232	739
07:45 AM	35	135	24	194	28	52	39	119	37	194	3	234	94	46	72	212	759
Total	134	511	105	750	73	215	98	386	112	834	12	958	401	188	228	817	2911
08:00 AM	37	158	25	220	17	31	34	82	41	198	6	245	82	27	81	190	737
08:15 AM	65	149	22	236	18	31	41	90	52	196	11	259	72	42	79	193	778
08:30 AM	18	119	21	158	12	33	35	80	58	195	5	258	56	21	56	133	629
08:45 AM	8	105	31	144	7	7	12	26	56	210	5	271	61	7	56	124	565
Total	128	531	99	758	54	102	122	278	207	799	27	1033	271	97	272	640	2709
Grand Total	262	1042	204	1508	127	317	220	664	319	1633	39	1991	672	285	500	1457	5620
Apprch %	17.4	69.1	13.5		19.1	47.7	33.1		16	82	2		46.1	19.6	34.3		
Total %	4.7	18.5	3.6	26.8	2.3	5.6	3.9	11.8	5.7	29.1	0.7	35.4	12	5.1	8.9	25.9	
Autos	257	979	190	1426	119	315	218	652	302	1545	38	1885	669	285	485	1439	5402
% Autos	98.1	94	93.1	94.6	93.7	99.4	99.1	98.2	94.7	94.6	97.4	94.7	99.6	100	97	98.8	96.1
Heavy Trucks	5	63	14	82	8	2	2	12	17	88	1	106	3	0	15	18	218
% Heavy Trucks	1.9	6	6.9	5.4	6.3	0.6	0.9	1.8	5.3	5.4	2.6	5.3	0.4	0	3	1.2	3.9

	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	38	127	28	193	19	69	14	102	21	188	3	212	128	48	56	232	739
07:45 AM	35	135	24	194	28	52	39	119	37	194	3	234	94	46	72	212	759
08:00 AM	37	158	25	220	17	31	34	82	41	198	6	245	82	27	81	190	737
08:15 AM	65	149	22	236	18	31	41	90	52	196	11	259	72	42	79	193	778
Total Volume	175	569	99	843	82	183	128	393	151	776	23	950	376	163	288	827	3013
% App. Total	20.8	67.5	11.7		20.9	46.6	32.6		15.9	81.7	2.4		45.5	19.7	34.8		
PHF	.673	.900	.884	.893	.732	.663	.780	.826	.726	.980	.523	.917	.734	.849	.889	.891	.968

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 09_SGE_Atlantic_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				08:00 AM				07:15 AM			
+0 mins.	38	127	28	193	12	61	29	102	41	198	6	245	101	50	49	200
+15 mins.	35	135	24	194	19	69	14	102	52	196	11	259	128	48	56	232
+30 mins.	37	158	25	220	28	52	39	119	58	195	5	258	94	46	72	212
+45 mins.	65	149	22	236	17	31	34	82	56	210	5	271	82	27	81	190
Total Volume	175	569	99	843	76	213	116	405	207	799	27	1033	405	171	258	834
% App. Total	20.8	67.5	11.7		18.8	52.6	28.6		20	77.3	2.6		48.6	20.5	30.9	
PHF	.673	.900	.884	.893	.679	.772	.744	.851	.892	.951	.614	.953	.791	.855	.796	.899

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 09_SGE_Atlantic_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

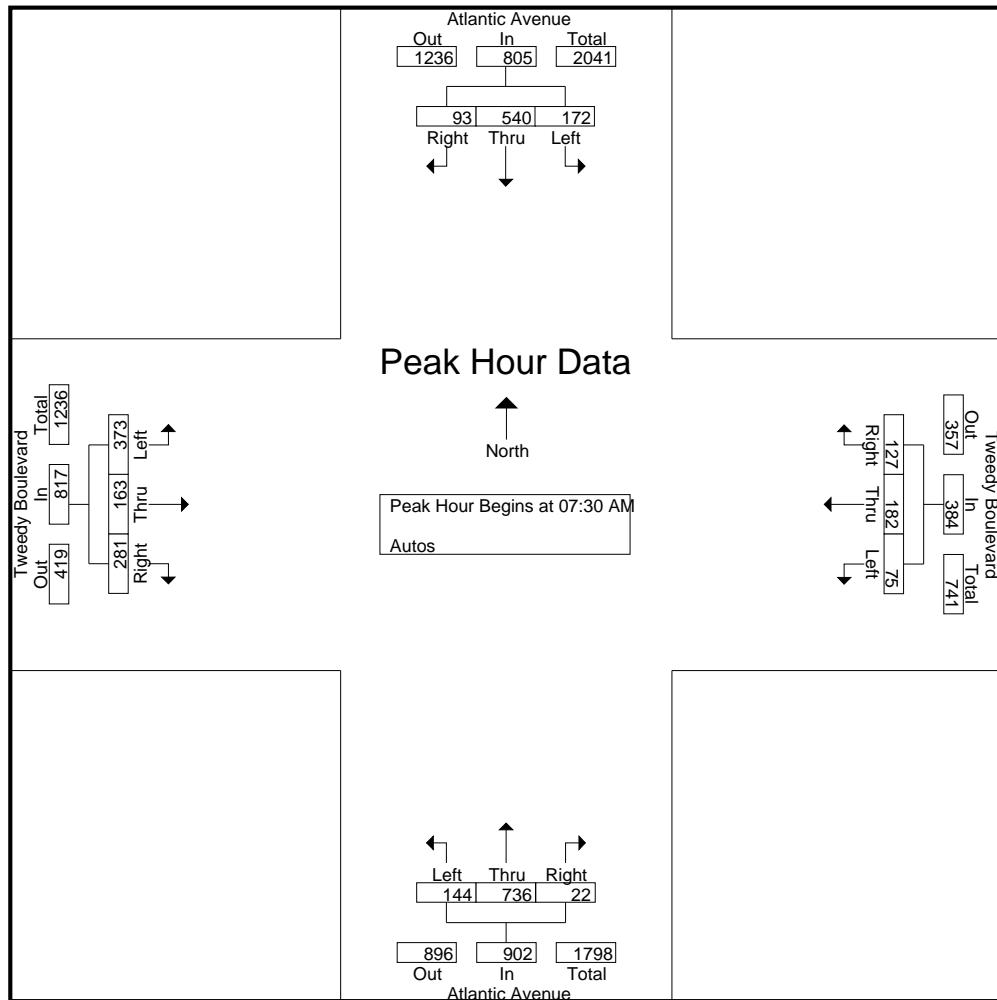
	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	30	102	26	158	14	32	15	61	27	203	3	233	78	44	49	171	623
07:15 AM	30	129	23	182	12	61	29	102	23	224	3	250	101	50	47	198	732
07:30 AM	38	118	27	183	19	69	14	102	20	180	3	203	127	48	55	230	718
07:45 AM	34	130	22	186	27	52	39	118	35	187	2	224	94	46	70	210	738
Total	132	479	98	709	72	214	97	383	105	794	11	910	400	188	221	809	2811
08:00 AM	36	148	24	208	15	30	33	78	39	185	6	230	82	27	78	187	703
08:15 AM	64	144	20	228	14	31	41	86	50	184	11	245	70	42	78	190	749
08:30 AM	17	110	19	146	12	33	35	80	54	180	5	239	56	21	54	131	596
08:45 AM	8	98	29	135	6	7	12	25	54	202	5	261	61	7	54	122	543
Total	125	500	92	717	47	101	121	269	197	751	27	975	269	97	264	630	2591
Grand Total	257	979	190	1426	119	315	218	652	302	1545	38	1885	669	285	485	1439	5402
Apprch %	18	68.7	13.3		18.3	48.3	33.4		16	82	2		46.5	19.8	33.7		
Total %	4.8	18.1	3.5	26.4	2.2	5.8	4	12.1	5.6	28.6	0.7	34.9	12.4	5.3	9	26.6	

	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	38	118	27	183	19	69	14	102	20	180	3	203	127	48	55	230	718
07:45 AM	34	130	22	186	27	52	39	118	35	187	2	224	94	46	70	210	738
08:00 AM	36	148	24	208	15	30	33	78	39	185	6	230	82	27	78	187	703
08:15 AM	64	144	20	228	14	31	41	86	50	184	11	245	70	42	78	190	749
Total Volume	172	540	93	805	75	182	127	384	144	736	22	902	373	163	281	817	2908
% App. Total	21.4	67.1	11.6		19.5	47.4	33.1		16	81.6	2.4		45.7	20	34.4		
PHF	.672	.912	.861	.883	.694	.659	.774	.814	.720	.984	.500	.920	.734	.849	.901	.888	.971

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 09_SGE_Atlantic_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	38	118	27	183	19	69	14	102	20	180	3	203	127	48	55	230
+15 mins.	34	130	22	186	27	52	39	118	35	187	2	224	94	46	70	210
+30 mins.	36	148	24	208	15	30	33	78	39	185	6	230	82	27	78	187
+45 mins.	64	144	20	228	14	31	41	86	50	184	11	245	70	42	78	190
Total Volume	172	540	93	805	75	182	127	384	144	736	22	902	373	163	281	817
% App. Total	21.4	67.1	11.6		19.5	47.4	33.1		16	81.6	2.4		45.7	20	34.4	
PHF	.672	.912	.861	.883	.694	.659	.774	.814	.720	.984	.500	.920	.734	.849	.901	.888

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 09_SGE_Atlantic_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Heavy Trucks

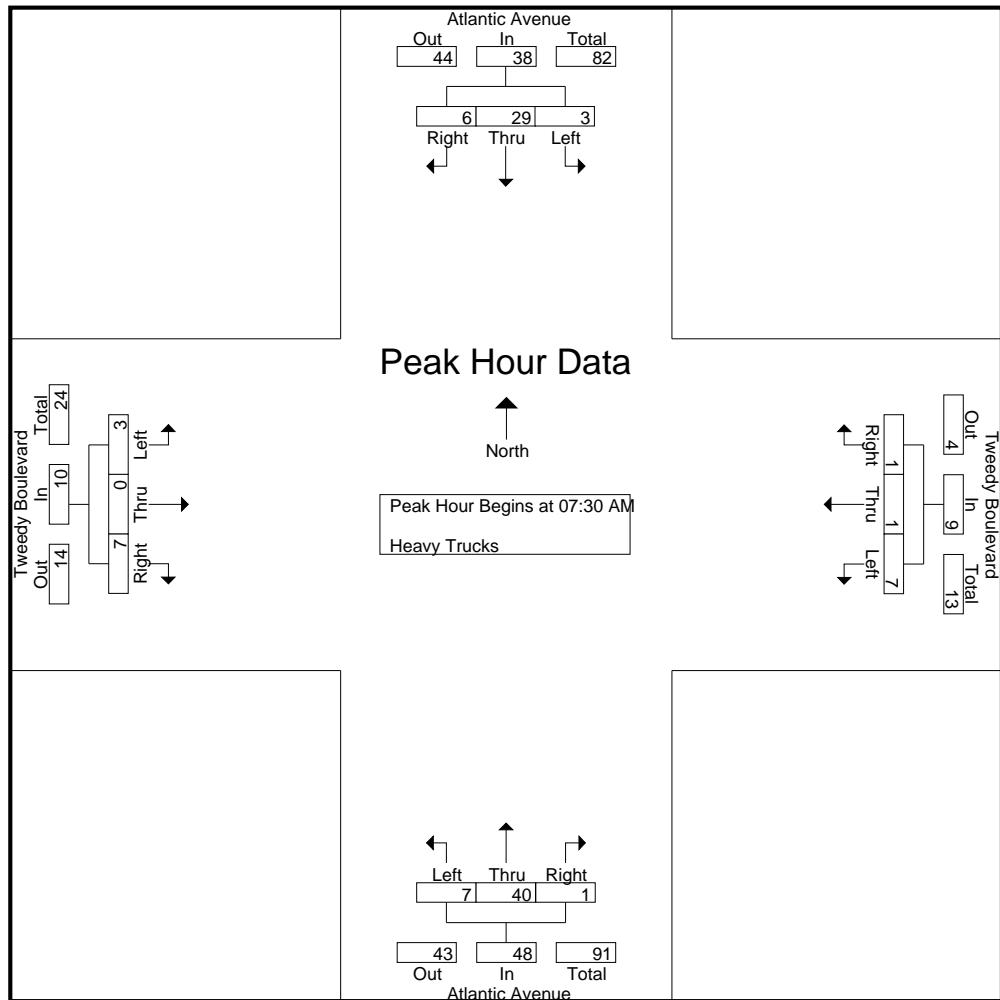
	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	8	2	10	0	1	1	2	1	12	0	13	0	0	2	2	27
07:15 AM	1	10	2	13	0	0	0	0	3	13	0	16	0	0	2	2	31
07:30 AM	0	9	1	10	0	0	0	0	1	8	0	9	1	0	1	2	21
07:45 AM	1	5	2	8	1	0	0	1	2	7	1	10	0	0	2	2	21
Total	2	32	7	41	1	1	1	3	7	40	1	48	1	0	7	8	100
08:00 AM	1	10	1	12	2	1	1	4	2	13	0	15	0	0	3	3	34
08:15 AM	1	5	2	8	4	0	0	4	2	12	0	14	2	0	1	3	29
08:30 AM	1	9	2	12	0	0	0	0	4	15	0	19	0	0	2	2	33
08:45 AM	0	7	2	9	1	0	0	1	2	8	0	10	0	0	2	2	22
Total	3	31	7	41	7	1	1	9	10	48	0	58	2	0	8	10	118
Grand Total	5	63	14	82	8	2	2	12	17	88	1	106	3	0	15	18	218
Apprch %	6.1	76.8	17.1		66.7	16.7	16.7		16	83	0.9		16.7	0	83.3		
Total %	2.3	28.9	6.4	37.6	3.7	0.9	0.9	5.5	7.8	40.4	0.5	48.6	1.4	0	6.9	8.3	

	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	9	1	10	0	0	0	0	1	8	0	9	1	0	1	2	21
07:45 AM	1	5	2	8	1	0	0	1	2	7	1	10	0	0	2	2	21
08:00 AM	1	10	1	12	2	1	1	4	2	13	0	15	0	0	3	3	34
08:15 AM	1	5	2	8	4	0	0	4	2	12	0	14	2	0	1	3	29
Total Volume	3	29	6	38	7	1	1	9	7	40	1	48	3	0	7	10	105
% App. Total	7.9	76.3	15.8		77.8	11.1	11.1		14.6	83.3	2.1		30	0	70		
PHF	.750	.725	.750	.792	.438	.250	.250	.563	.875	.769	.250	.800	.375	.000	.583	.833	.772

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 09_SGE_Atlantic_Tweedy AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	9	1	10	0	0	0	0	1	8	0	9	1	0	1	2
+15 mins.	1	5	2	8	1	0	0	1	2	7	1	10	0	0	2	2
+30 mins.	1	10	1	12	2	1	1	4	2	13	0	15	0	0	3	3
+45 mins.	1	5	2	8	4	0	0	4	2	12	0	14	2	0	1	3
Total Volume	3	29	6	38	7	1	1	9	7	40	1	48	3	0	7	10
% App. Total	7.9	76.3	15.8		77.8	11.1	11.1		14.6	83.3	2.1		30	0	70	
PHF	.750	.725	.750	.792	.438	.250	.250	.563	.875	.769	.250	.800	.375	.000	.583	.833

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 09_SGE_Atlantic_Tweedy PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

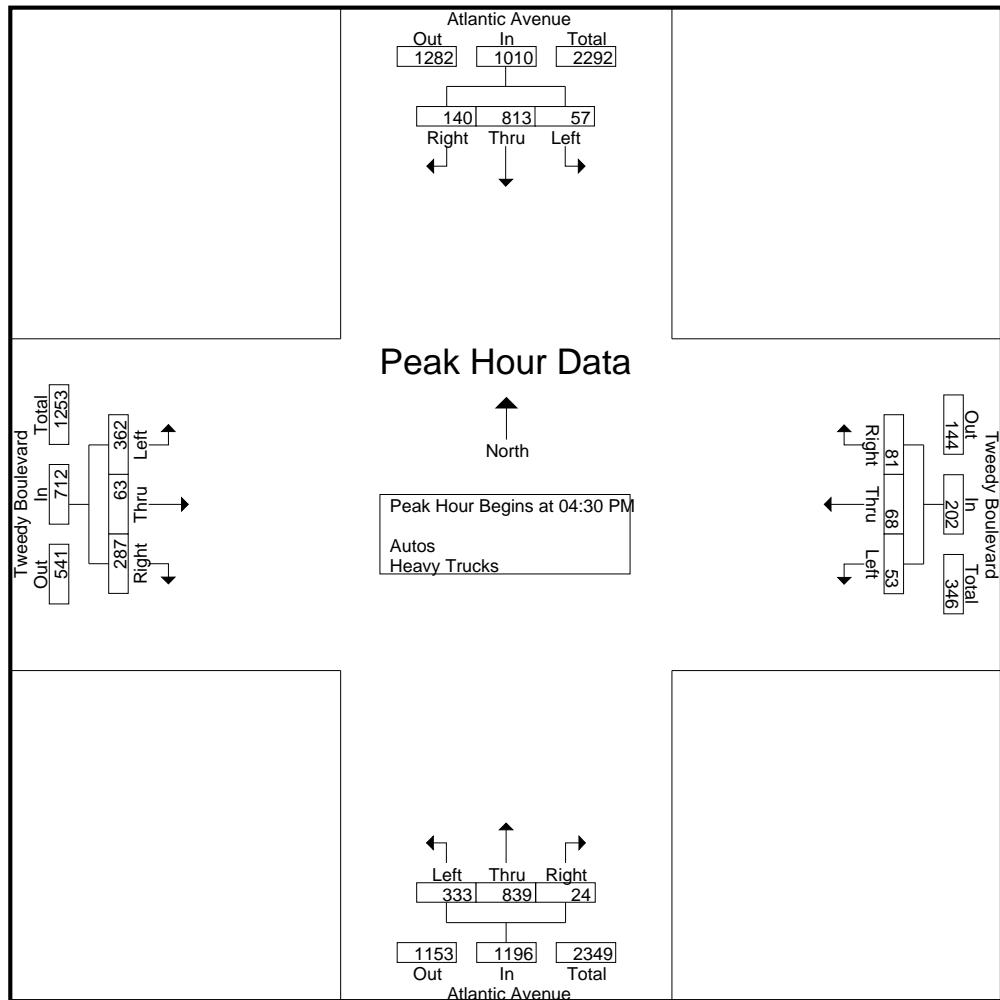
	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	14	168	34	216	28	23	36	87	91	181	5	277	90	13	76	179	759
04:15 PM	17	165	34	216	12	18	16	46	89	201	7	297	70	23	67	160	719
04:30 PM	19	215	40	274	19	14	13	46	68	215	5	288	87	14	63	164	772
04:45 PM	16	189	36	241	9	12	21	42	74	200	5	279	95	14	76	185	747
Total	66	737	144	947	68	67	86	221	322	797	22	1141	342	64	282	688	2997
05:00 PM	16	218	32	266	13	18	26	57	88	207	8	303	89	21	69	179	805
05:15 PM	6	191	32	229	12	24	21	57	103	217	6	326	91	14	79	184	796
05:30 PM	16	189	29	234	14	20	21	55	74	186	8	268	99	15	81	195	752
05:45 PM	24	183	46	253	8	8	16	32	91	196	11	298	72	21	88	181	764
Total	62	781	139	982	47	70	84	201	356	806	33	1195	351	71	317	739	3117
Grand Total	128	1518	283	1929	115	137	170	422	678	1603	55	2336	693	135	599	1427	6114
Apprch %	6.6	78.7	14.7		27.3	32.5	40.3		29	68.6	2.4		48.6	9.5	42		
Total %	2.1	24.8	4.6	31.6	1.9	2.2	2.8	6.9	11.1	26.2	0.9	38.2	11.3	2.2	9.8	23.3	
Autos	126	1476	275	1877	111	136	170	417	671	1557	54	2282	690	135	589	1414	5990
% Autos	98.4	97.2	97.2	97.3	96.5	99.3	100	98.8	99	97.1	98.2	97.7	99.6	100	98.3	99.1	98
Heavy Trucks	2	42	8	52	4	1	0	5	7	46	1	54	3	0	10	13	124
% Heavy Trucks	1.6	2.8	2.8	2.7	3.5	0.7	0	1.2	1	2.9	1.8	2.3	0.4	0	1.7	0.9	2

	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	19	215	40	274	19	14	13	46	68	215	5	288	87	14	63	164	772
04:45 PM	16	189	36	241	9	12	21	42	74	200	5	279	95	14	76	185	747
05:00 PM	16	218	32	266	13	18	26	57	88	207	8	303	89	21	69	179	805
05:15 PM	6	191	32	229	12	24	21	57	103	217	6	326	91	14	79	184	796
Total Volume	57	813	140	1010	53	68	81	202	333	839	24	1196	362	63	287	712	3120
% App. Total	5.6	80.5	13.9		26.2	33.7	40.1		27.8	70.2	2		50.8	8.8	40.3		
PHF	.750	.932	.875	.922	.697	.708	.779	.886	.808	.967	.750	.917	.953	.750	.908	.962	.969

Counts Unlimited
 PO Box 1178
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 09_SGE_Atlantic_Tweedy PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:30 PM				04:45 PM			
+0 mins.	19	215	40	274	28	23	36	87	68	215	5	288	95	14	76	185
+15 mins.	16	189	36	241	12	18	16	46	74	200	5	279	89	21	69	179
+30 mins.	16	218	32	266	19	14	13	46	88	207	8	303	91	14	79	184
+45 mins.	6	191	32	229	9	12	21	42	103	217	6	326	99	15	81	195
Total Volume	57	813	140	1010	68	67	86	221	333	839	24	1196	374	64	305	743
% App. Total	5.6	80.5	13.9		30.8	30.3	38.9		27.8	70.2	2		50.3	8.6	41	
PHF	.750	.932	.875	.922	.607	.728	.597	.635	.808	.967	.750	.917	.944	.762	.941	.953

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 09_SGE_Atlantic_Tweedy PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

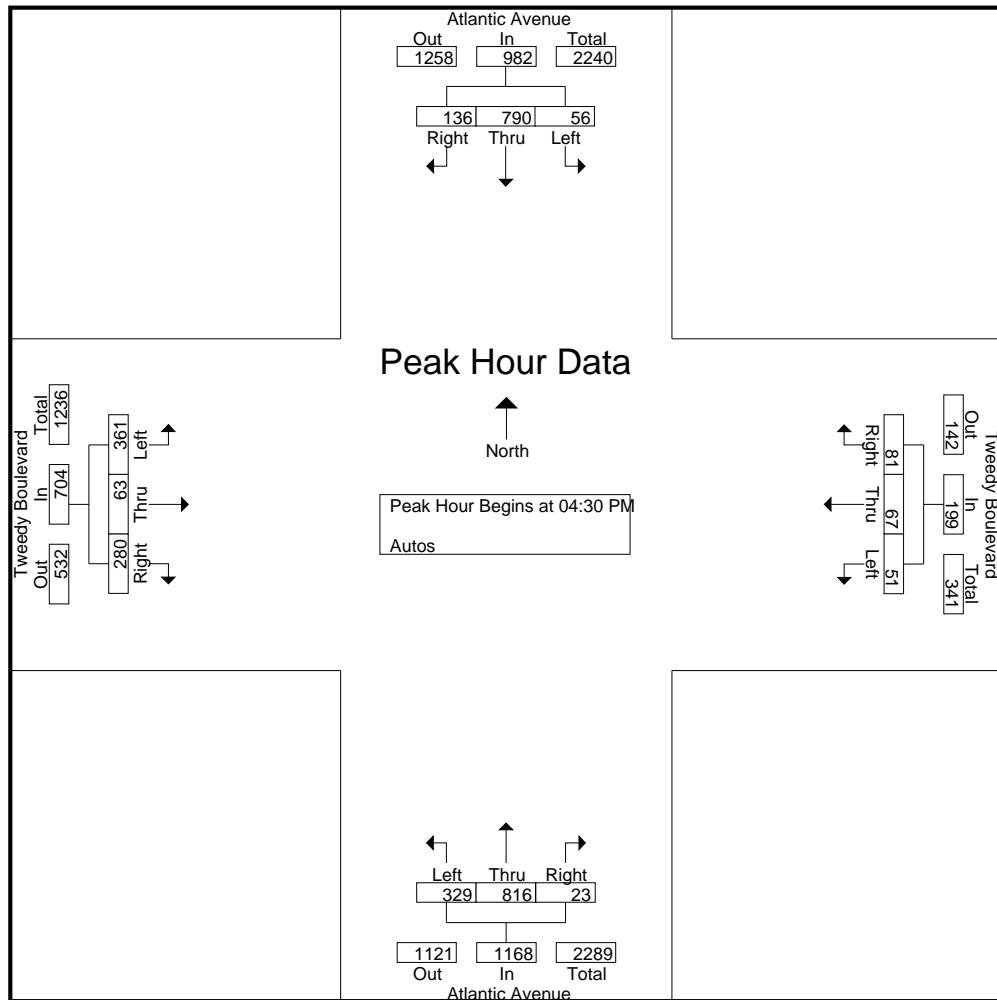
	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	14	165	32	211	26	23	36	85	90	168	5	263	88	13	75	176	735
04:15 PM	17	159	33	209	12	18	16	46	88	195	7	290	70	23	66	159	704
04:30 PM	18	207	39	264	17	14	13	44	67	211	5	283	87	14	62	163	754
04:45 PM	16	185	35	236	9	12	21	42	74	195	5	274	95	14	74	183	735
Total	65	716	139	920	64	67	86	217	319	769	22	1110	340	64	277	681	2928
05:00 PM	16	211	31	258	13	17	26	56	86	198	8	292	89	21	67	177	783
05:15 PM	6	187	31	224	12	24	21	57	102	212	5	319	90	14	77	181	781
05:30 PM	16	185	28	229	14	20	21	55	74	183	8	265	99	15	80	194	743
05:45 PM	23	177	46	246	8	8	16	32	90	195	11	296	72	21	88	181	755
Total	61	760	136	957	47	69	84	200	352	788	32	1172	350	71	312	733	3062
Grand Total	126	1476	275	1877	111	136	170	417	671	1557	54	2282	690	135	589	1414	5990
Apprch %	6.7	78.6	14.7		26.6	32.6	40.8		29.4	68.2	2.4		48.8	9.5	41.7		
Total %	2.1	24.6	4.6	31.3	1.9	2.3	2.8	7	11.2	26	0.9	38.1	11.5	2.3	9.8		23.6

	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	18	207	39	264	17	14	13	44	67	211	5	283	87	14	62	163	754
04:45 PM	16	185	35	236	9	12	21	42	74	195	5	274	95	14	74	183	735
05:00 PM	16	211	31	258	13	17	26	56	86	198	8	292	89	21	67	177	783
05:15 PM	6	187	31	224	12	24	21	57	102	212	5	319	90	14	77	181	781
Total Volume	56	790	136	982	51	67	81	199	329	816	23	1168	361	63	280	704	3053
% App. Total	5.7	80.4	13.8		25.6	33.7	40.7		28.2	69.9	2		51.3	8.9	39.8		
PHF	.778	.936	.872	.930	.750	.698	.779	.873	.806	.962	.719	.915	.950	.750	.909	.962	.975

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City of South Gate
 N/S: Atlantic Avenue
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 Weather: Clear

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 Site Code : 04119797
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	18	207	39	264	17	14	13	44	67	211	5	283	87	14	62	163
+15 mins.	16	185	35	236	9	12	21	42	74	195	5	274	95	14	74	183
+30 mins.	16	211	31	258	13	17	26	56	86	198	8	292	89	21	67	177
+45 mins.	6	187	31	224	12	24	21	57	102	212	5	319	90	14	77	181
Total Volume	56	790	136	982	51	67	81	199	329	816	23	1168	361	63	280	704
% App. Total	5.7	80.4	13.8		25.6	33.7	40.7		28.2	69.9	2		51.3	8.9	39.8	
PHF	.778	.936	.872	.930	.750	.698	.779	.873	.806	.962	.719	.915	.950	.750	.909	.962

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Tweedy Boulevard
 Weather: Clear

File Name : 09_SGE_Atlantic_Tweedy PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Heavy Trucks

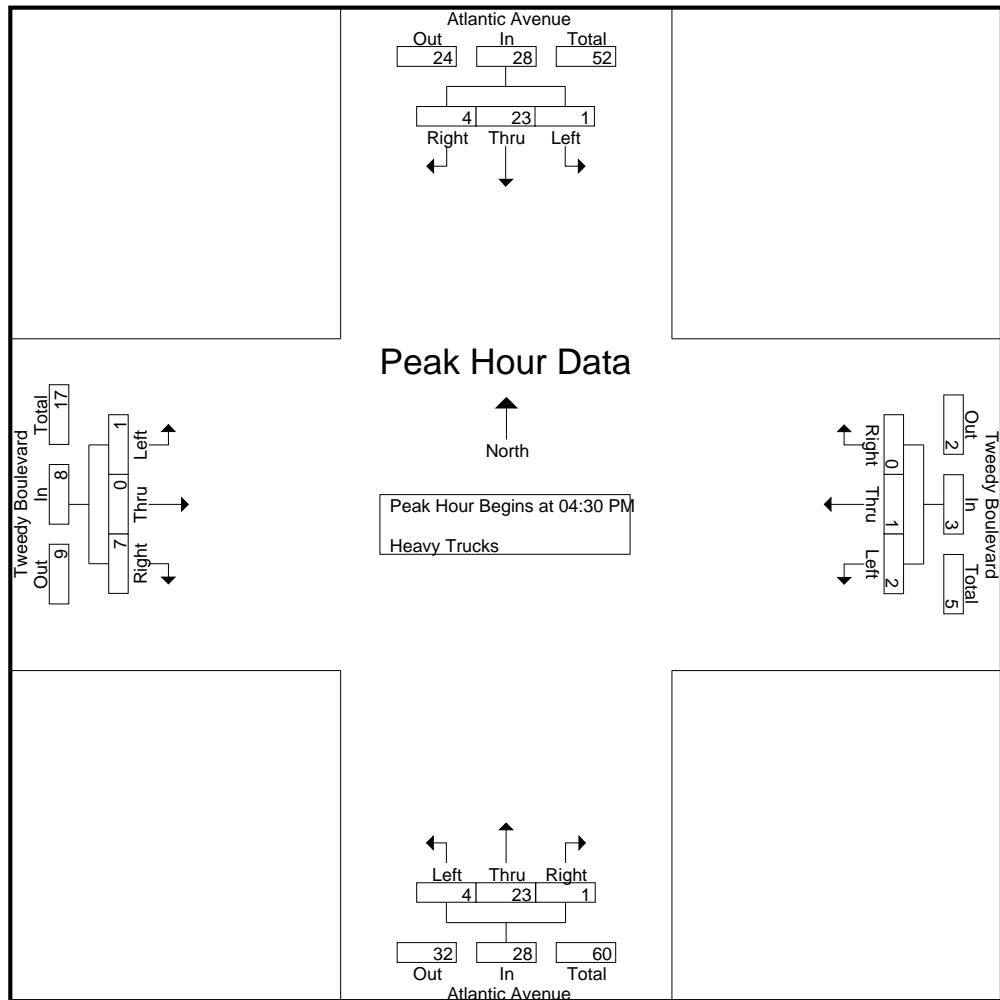
	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	3	2	5	2	0	0	2	1	13	0	14	2	0	1	3	24
04:15 PM	0	6	1	7	0	0	0	0	1	6	0	7	0	0	1	1	15
04:30 PM	1	8	1	10	2	0	0	2	1	4	0	5	0	0	1	1	18
04:45 PM	0	4	1	5	0	0	0	0	0	5	0	5	0	0	2	2	12
Total	1	21	5	27	4	0	0	4	3	28	0	31	2	0	5	7	69
05:00 PM	0	7	1	8	0	1	0	1	2	9	0	11	0	0	2	2	22
05:15 PM	0	4	1	5	0	0	0	0	1	5	1	7	1	0	2	3	15
05:30 PM	0	4	1	5	0	0	0	0	0	3	0	3	0	0	1	1	9
05:45 PM	1	6	0	7	0	0	0	0	1	1	0	2	0	0	0	0	9
Total	1	21	3	25	0	1	0	1	4	18	1	23	1	0	5	6	55
Grand Total	2	42	8	52	4	1	0	5	7	46	1	54	3	0	10	13	124
Apprch %	3.8	80.8	15.4		80	20	0		13	85.2	1.9		23.1	0	76.9		
Total %	1.6	33.9	6.5	41.9	3.2	0.8	0	4	5.6	37.1	0.8	43.5	2.4	0	8.1	10.5	

	Atlantic Avenue Southbound				Tweedy Boulevard Westbound				Atlantic Avenue Northbound				Tweedy Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	8	1	10	2	0	0	2	1	4	0	5	0	0	1	1	18
04:45 PM	0	4	1	5	0	0	0	0	0	5	0	5	0	0	2	2	12
05:00 PM	0	7	1	8	0	1	0	1	2	9	0	11	0	0	2	2	22
05:15 PM	0	4	1	5	0	0	0	0	1	5	1	7	1	0	2	3	15
Total Volume	1	23	4	28	2	1	0	3	4	23	1	28	1	0	7	8	67
% App. Total	3.6	82.1	14.3		66.7	33.3	0		14.3	82.1	3.6		12.5	0	87.5		
PHF	.250	.719	1.00	.700	.250	.250	.000	.375	.500	.639	.250	.636	.250	.000	.875	.667	.761

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City of South Gate
 N/S: Atlantic Avenue
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 Weather: Clear

File Name : 09_SGE_Atlantic_Tweedy PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	1	8	1	10	2	0	0	2	1	4	0	5	0	0	1	1
+15 mins.	0	4	1	5	0	0	0	0	0	5	0	5	0	0	2	2
+30 mins.	0	7	1	8	0	1	0	1	2	9	0	11	0	0	2	2
+45 mins.	0	4	1	5	0	0	0	0	1	5	1	7	1	0	2	3
Total Volume	1	23	4	28	2	1	0	3	4	23	1	28	1	0	7	8
% App. Total	3.6	82.1	14.3		66.7	33.3	0		14.3	82.1	3.6		12.5	0	87.5	
PHF	.250	.719	1.000	.700	.250	.250	.000	.375	.500	.639	.250	.636	.250	.000	.875	.667

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Michigan Avenue
 Weather: Clear

File Name : 10_SGE_Atlantic_Michigan AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

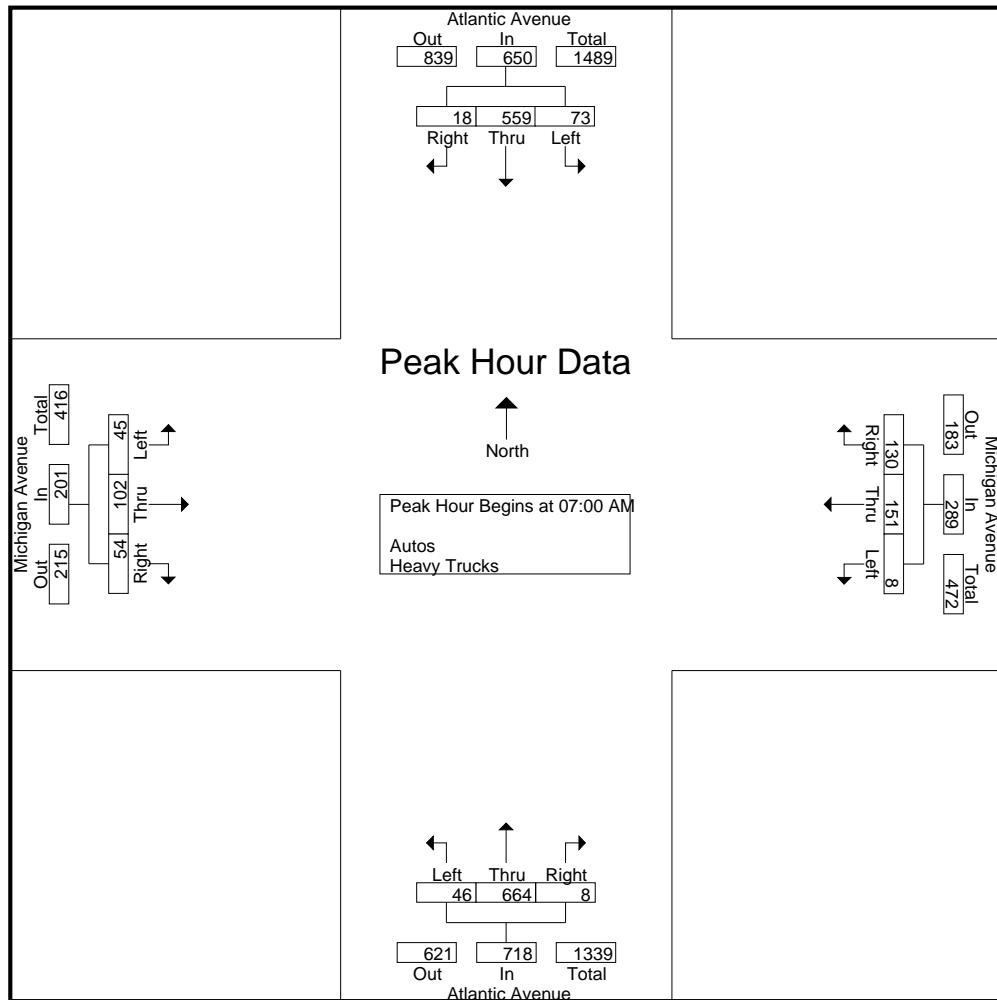
	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	13	120	1	134	4	33	31	68	2	176	2	180	12	19	12	43	425
07:15 AM	19	126	9	154	1	41	41	83	13	182	3	198	15	34	16	65	500
07:30 AM	20	150	5	175	0	39	26	65	18	177	3	198	11	26	12	49	487
07:45 AM	21	163	3	187	3	38	32	73	13	129	0	142	7	23	14	44	446
Total	73	559	18	650	8	151	130	289	46	664	8	718	45	102	54	201	1858
08:00 AM	9	145	5	159	1	16	22	39	7	133	3	143	6	17	7	30	371
08:15 AM	7	127	4	138	3	15	21	39	5	167	4	176	15	11	7	33	386
08:30 AM	2	95	2	99	0	6	18	24	4	116	6	126	5	12	8	25	274
08:45 AM	4	93	1	98	1	5	29	35	6	144	8	158	4	8	2	14	305
Total	22	460	12	494	5	42	90	137	22	560	21	603	30	48	24	102	1336
Grand Total	95	1019	30	1144	13	193	220	426	68	1224	29	1321	75	150	78	303	3194
Apprch %	8.3	89.1	2.6		3.1	45.3	51.6		5.1	92.7	2.2		24.8	49.5	25.7		
Total %	3	31.9	0.9	35.8	0.4	6	6.9	13.3	2.1	38.3	0.9	41.4	2.3	4.7	2.4	9.5	
Autos	95	956	29	1080	13	193	217	423	68	1137	27	1232	74	150	78	302	3037
% Autos	100	93.8	96.7	94.4	100	100	98.6	99.3	100	92.9	93.1	93.3	98.7	100	100	99.7	95.1
Heavy Trucks	0	63	1	64	0	0	3	3	0	87	2	89	1	0	0	1	157
% Heavy Trucks	0	6.2	3.3	5.6	0	0	1.4	0.7	0	7.1	6.9	6.7	1.3	0	0	0.3	4.9

	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	13	120	1	134	4	33	31	68	2	176	2	180	12	19	12	43	425
07:15 AM	19	126	9	154	1	41	41	83	13	182	3	198	15	34	16	65	500
07:30 AM	20	150	5	175	0	39	26	65	18	177	3	198	11	26	12	49	487
07:45 AM	21	163	3	187	3	38	32	73	13	129	0	142	7	23	14	44	446
Total Volume	73	559	18	650	8	151	130	289	46	664	8	718	45	102	54	201	1858
% App. Total	11.2	86	2.8		2.8	52.2	45		6.4	92.5	1.1		22.4	50.7	26.9		
PHF	.869	.857	.500	.869	.500	.921	.793	.870	.639	.912	.667	.907	.750	.750	.844	.773	.929

Counts Unlimited
 PO Box 1178
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City of South Gate
 N/S: Atlantic Avenue
 E/W: Michigan Avenue
 Weather: Clear

File Name : 10_SGE_Atlantic_Michigan AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	19	126	9	154	4	33	31	68	2	176	2	180	12	19	12	43
+15 mins.	20	150	5	175	1	41	41	83	13	182	3	198	15	34	16	65
+30 mins.	21	163	3	187	0	39	26	65	18	177	3	198	11	26	12	49
+45 mins.	9	145	5	159	3	38	32	73	13	129	0	142	7	23	14	44
Total Volume	69	584	22	675	8	151	130	289	46	664	8	718	45	102	54	201
% App. Total	10.2	86.5	3.3		2.8	52.2	45		6.4	92.5	1.1		22.4	50.7	26.9	
PHF	.821	.896	.611	.902	.500	.921	.793	.870	.639	.912	.667	.907	.750	.750	.844	.773

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Michigan Avenue
 Weather: Clear

File Name : 10_SGE_Atlantic_Michigan AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos

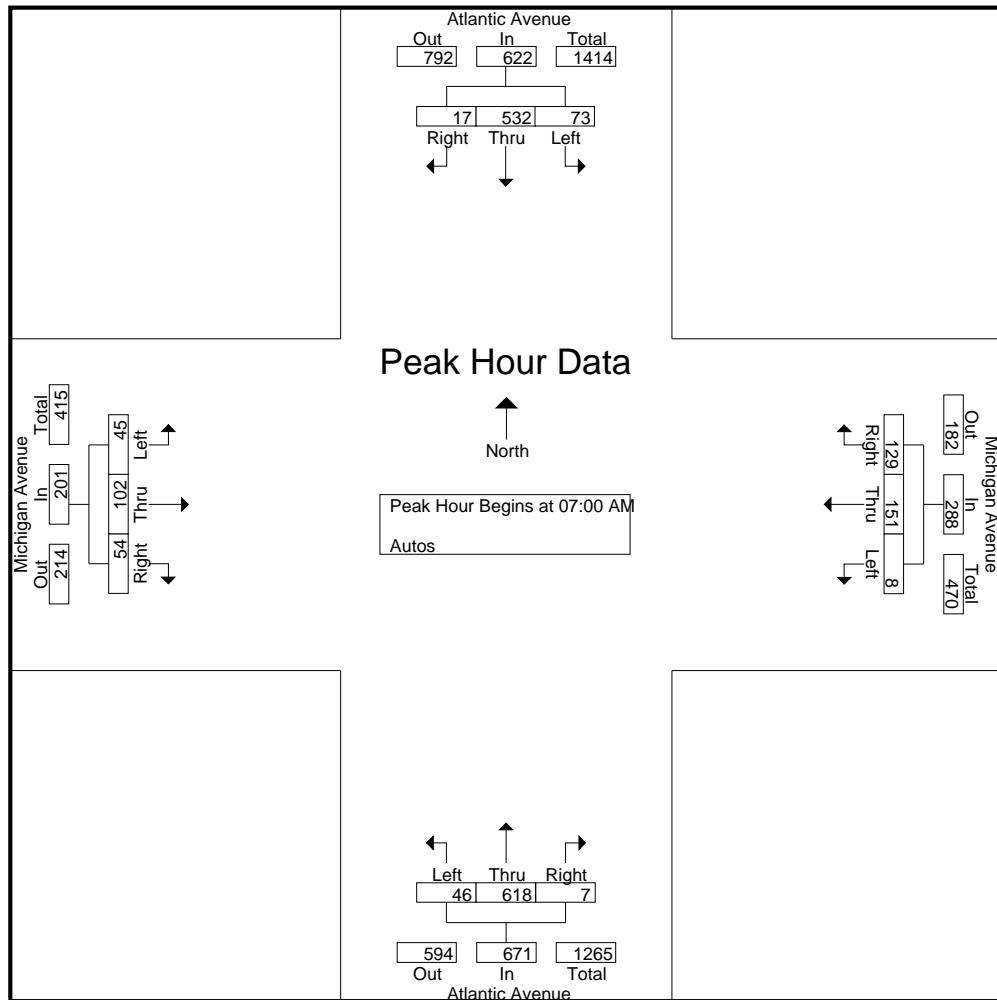
	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				Int. Total	
	Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	13	111	1	125	4	33	31	68	2	165	1	168	12	19	12	43	404	
07:15 AM	19	121	8	148	1	41	40	82	13	168	3	184	15	34	16	65	479	
07:30 AM	20	142	5	167	0	39	26	65	18	169	3	190	11	26	12	49	471	
07:45 AM	21	158	3	182	3	38	32	73	13	116	0	129	7	23	14	44	428	
Total		73	532	17	622	8	151	129	288	46	618	7	671	45	102	54	201	1782
08:00 AM	9	135	5	149	1	16	22	39	7	128	3	138	6	17	7	30	356	
08:15 AM	7	116	4	127	3	15	21	39	5	151	4	160	14	11	7	32	358	
08:30 AM	2	90	2	94	0	6	18	24	4	106	5	115	5	12	8	25	258	
08:45 AM	4	83	1	88	1	5	27	33	6	134	8	148	4	8	2	14	283	
Total		22	424	12	458	5	42	88	135	22	519	20	561	29	48	24	101	1255
Grand Total		95	956	29	1080	13	193	217	423	68	1137	27	1232	74	150	78	302	3037
Apprch %		8.8	88.5	2.7		3.1	45.6	51.3		5.5	92.3	2.2		24.5	49.7	25.8		
Total %		3.1	31.5	1	35.6	0.4	6.4	7.1	13.9	2.2	37.4	0.9	40.6	2.4	4.9	2.6	9.9	

	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				Int. Total	
	Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 07:00 AM																		
07:00 AM	13	111	1	125	4	33	31	68	2	165	1	168	12	19	12	43	404	
07:15 AM	19	121	8	148	1	41	40	82	13	168	3	184	15	34	16	65	479	
07:30 AM	20	142	5	167	0	39	26	65	18	169	3	190	11	26	12	49	471	
07:45 AM	21	158	3	182	3	38	32	73	13	116	0	129	7	23	14	44	428	
Total Volume		73	532	17	622	8	151	129	288	46	618	7	671	45	102	54	201	1782
% App. Total		11.7	85.5	2.7		2.8	52.4	44.8		6.9	92.1	1		22.4	50.7	26.9		
PHF		.869	.842	.531	.854	.500	.921	.806	.878	.639	.914	.583	.883	.750	.750	.844	.773	.930

Counts Unlimited
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City of South Gate
 N/S: Atlantic Avenue
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File Name : 10_SGE_Atlantic_Michigan AM
 Site Code : 04119797
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	13	111	1	125	4	33	31	68	2	165	1	168	12	19	12	43
+15 mins.	19	121	8	148	1	41	40	82	13	168	3	184	15	34	16	65
+30 mins.	20	142	5	167	0	39	26	65	18	169	3	190	11	26	12	49
+45 mins.	21	158	3	182	3	38	32	73	13	116	0	129	7	23	14	44
Total Volume	73	532	17	622	8	151	129	288	46	618	7	671	45	102	54	201
% App. Total	11.7	85.5	2.7		2.8	52.4	44.8		6.9	92.1	1		22.4	50.7	26.9	
PHF	.869	.842	.531	.854	.500	.921	.806	.878	.639	.914	.583	.883	.750	.750	.844	.773

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City of South Gate
 N/S: Atlantic Avenue
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 Weather: Clear

File Name : 10_SGE_Atlantic_Michigan AM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Heavy Trucks

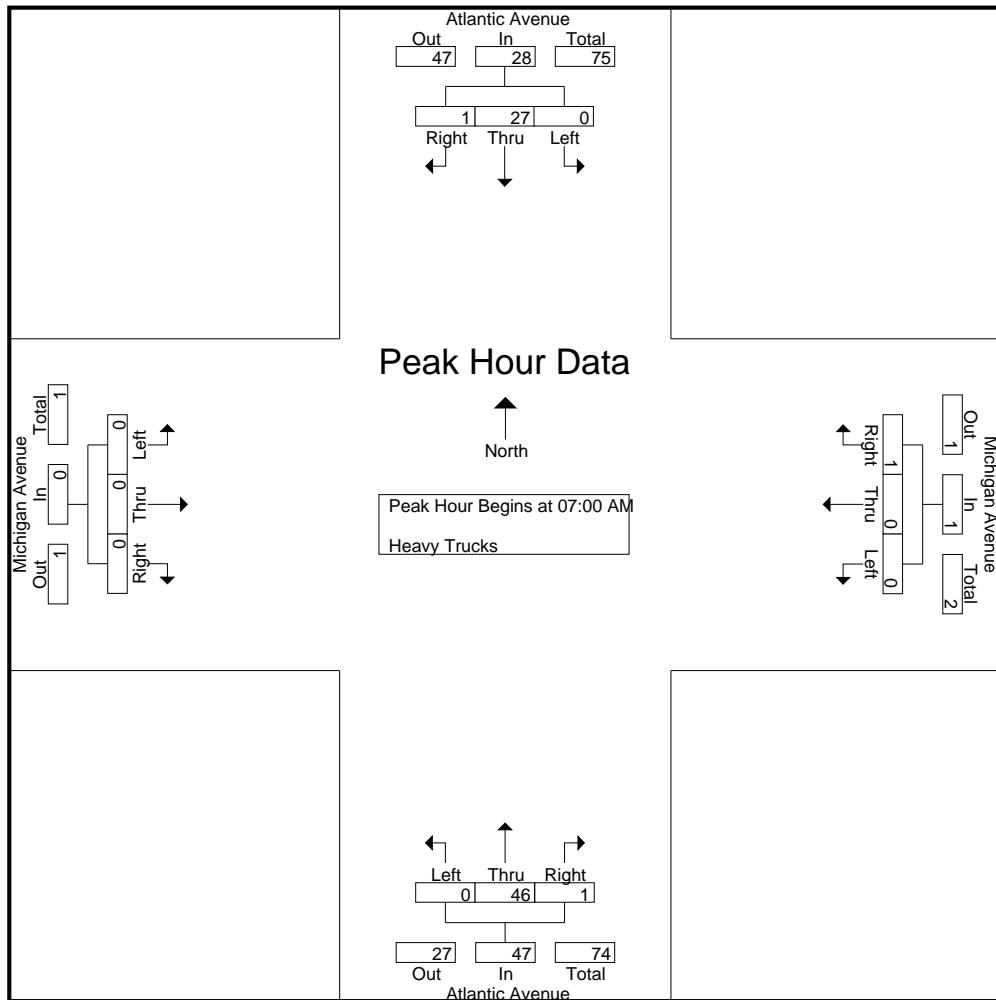
	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	9	0	9	0	0	0	0	0	11	1	12	0	0	0	0	21
07:15 AM	0	5	1	6	0	0	1	1	0	14	0	14	0	0	0	0	21
07:30 AM	0	8	0	8	0	0	0	0	0	8	0	8	0	0	0	0	16
07:45 AM	0	5	0	5	0	0	0	0	0	13	0	13	0	0	0	0	18
Total	0	27	1	28	0	0	1	1	0	46	1	47	0	0	0	0	76
08:00 AM	0	10	0	10	0	0	0	0	0	5	0	5	0	0	0	0	15
08:15 AM	0	11	0	11	0	0	0	0	0	16	0	16	1	0	0	1	28
08:30 AM	0	5	0	5	0	0	0	0	0	10	1	11	0	0	0	0	16
08:45 AM	0	10	0	10	0	0	2	2	0	10	0	10	0	0	0	0	22
Total	0	36	0	36	0	0	2	2	0	41	1	42	1	0	0	1	81
Grand Total	0	63	1	64	0	0	3	3	0	87	2	89	1	0	0	1	157
Apprch %	0	98.4	1.6		0	0	100		0	97.8	2.2		100	0	0		
Total %	0	40.1	0.6	40.8	0	0	1.9	1.9	0	55.4	1.3	56.7	0.6	0	0	0.6	

	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	9	0	9	0	0	0	0	0	11	1	12	0	0	0	0	21
07:15 AM	0	5	1	6	0	0	1	1	0	14	0	14	0	0	0	0	21
07:30 AM	0	8	0	8	0	0	0	0	0	8	0	8	0	0	0	0	16
07:45 AM	0	5	0	5	0	0	0	0	0	13	0	13	0	0	0	0	18
Total Volume	0	27	1	28	0	0	1	1	0	46	1	47	0	0	0	0	76
% App. Total	0	96.4	3.6		0	0	100		0	97.9	2.1		0	0	0		
PHF	.000	.750	.250	.778	.000	.000	.250	.250	.000	.821	.250	.839	.000	.000	.000	.000	.905

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 Site Code : 04119797
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Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	9	0	9	0	0	0	0	0	11	1	12	0	0	0	0
+15 mins.	0	5	1	6	0	0	1	1	0	14	0	14	0	0	0	0
+30 mins.	0	8	0	8	0	0	0	0	0	8	0	8	0	0	0	0
+45 mins.	0	5	0	5	0	0	0	0	0	13	0	13	0	0	0	0
Total Volume	0	27	1	28	0	0	1	1	0	46	1	47	0	0	0	0
% App. Total	0	96.4	3.6	0	0	100	0	0	0	97.9	2.1	0	0	0	0	0
PHF	.000	.750	.250	.778	.000	.000	.250	.250	.000	.821	.250	.839	.000	.000	.000	.000

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Michigan Avenue
 Weather: Clear

File Name : 10_SGE_Atlantic_Michigan PM
 Site Code : 04119797
 Start Date : 11/19/2019
 Page No : 1

Groups Printed- Autos - Heavy Trucks

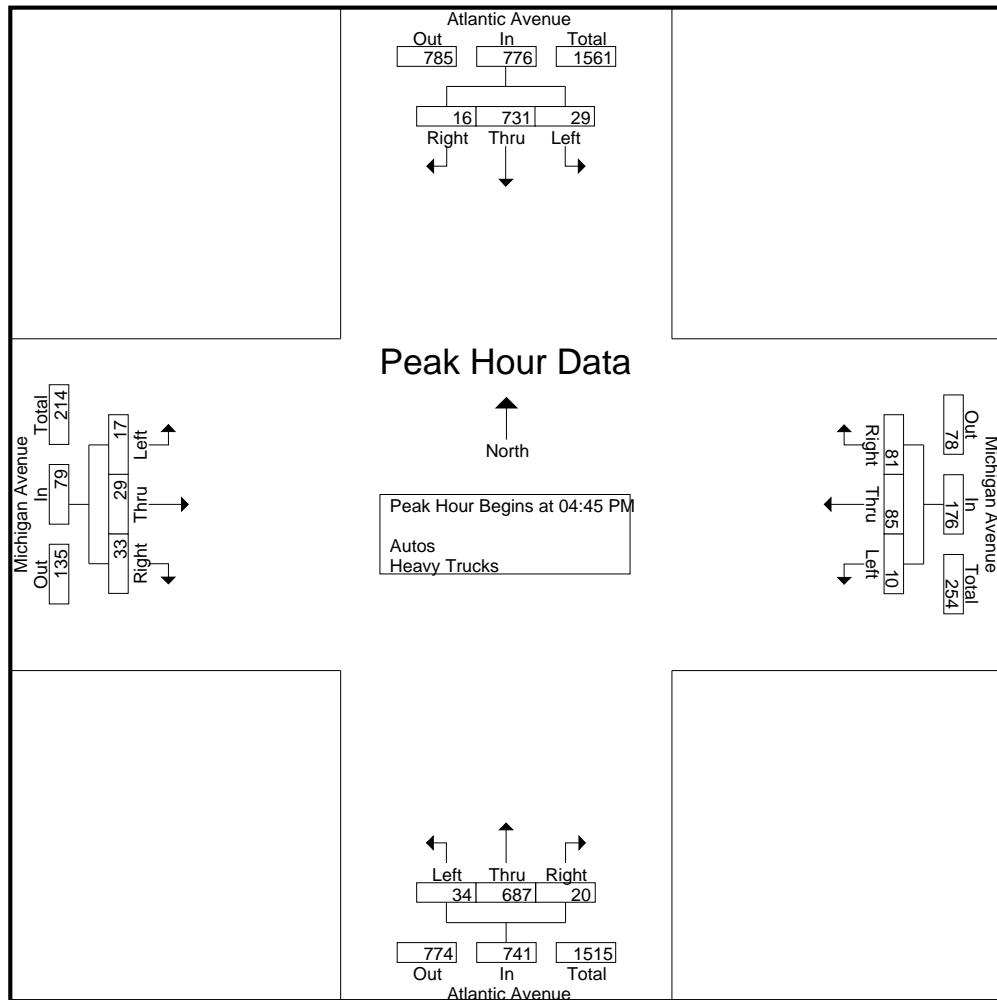
	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	4	156	2	162	3	31	18	52	5	125	3	133	8	4	9	21	368
04:15 PM	4	135	3	142	5	19	26	50	8	145	3	156	4	8	11	23	371
04:30 PM	4	157	6	167	3	14	18	35	5	152	4	161	5	6	11	22	385
04:45 PM	3	205	1	209	3	23	14	40	5	164	2	171	4	7	7	18	438
Total	15	653	12	680	14	87	76	177	23	586	12	621	21	25	38	84	1562
05:00 PM	6	172	6	184	3	22	24	49	7	173	6	186	5	10	9	24	443
05:15 PM	8	168	4	180	3	22	20	45	16	167	10	193	5	7	11	23	441
05:30 PM	12	186	5	203	1	18	23	42	6	183	2	191	3	5	6	14	450
05:45 PM	4	166	3	173	2	5	24	31	7	161	5	173	9	7	10	26	403
Total	30	692	18	740	9	67	91	167	36	684	23	743	22	29	36	87	1737
Grand Total	45	1345	30	1420	23	154	167	344	59	1270	35	1364	43	54	74	171	3299
Apprch %	3.2	94.7	2.1		6.7	44.8	48.5		4.3	93.1	2.6		25.1	31.6	43.3		
Total %	1.4	40.8	0.9	43	0.7	4.7	5.1	10.4	1.8	38.5	1.1	41.3	1.3	1.6	2.2	5.2	
Autos	44	1302	30	1376	23	154	167	344	58	1215	34	1307	42	54	72	168	3195
% Autos	97.8	96.8	100	96.9	100	100	100	100	98.3	95.7	97.1	95.8	97.7	100	97.3	98.2	96.8
Heavy Trucks	1	43	0	44	0	0	0	0	1	55	1	57	1	0	2	3	104
% Heavy Trucks	2.2	3.2	0	3.1	0	0	0	0	1.7	4.3	2.9	4.2	2.3	0	2.7	1.8	3.2

	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	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	3	205	1	209	3	23	14	40	5	164	2	171	4	7	7	18	438
05:00 PM	6	172	6	184	3	22	24	49	7	173	6	186	5	10	9	24	443
05:15 PM	8	168	4	180	3	22	20	45	16	167	10	193	5	7	11	23	441
05:30 PM	12	186	5	203	1	18	23	42	6	183	2	191	3	5	6	14	450
Total Volume	29	731	16	776	10	85	81	176	34	687	20	741	17	29	33	79	1772
% App. Total	3.7	94.2	2.1		5.7	48.3	46		4.6	92.7	2.7		21.5	36.7	41.8		
PHF	.604	.891	.667	.928	.833	.924	.844	.898	.531	.939	.500	.960	.850	.725	.750	.823	.984

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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:00 PM				05:00 PM				04:15 PM			
+0 mins.	3	205	1	209	3	31	18	52	7	173	6	186	4	8	11	23
+15 mins.	6	172	6	184	5	19	26	50	16	167	10	193	5	6	11	22
+30 mins.	8	168	4	180	3	14	18	35	6	183	2	191	4	7	7	18
+45 mins.	12	186	5	203	3	23	14	40	7	161	5	173	5	10	9	24
Total Volume	29	731	16	776	14	87	76	177	36	684	23	743	18	31	38	87
% App. Total	3.7	94.2	2.1		7.9	49.2	42.9		4.8	92.1	3.1		20.7	35.6	43.7	
PHF	.604	.891	.667	.928	.700	.702	.731	.851	.563	.934	.575	.962	.900	.775	.864	.906

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Groups Printed- Autos

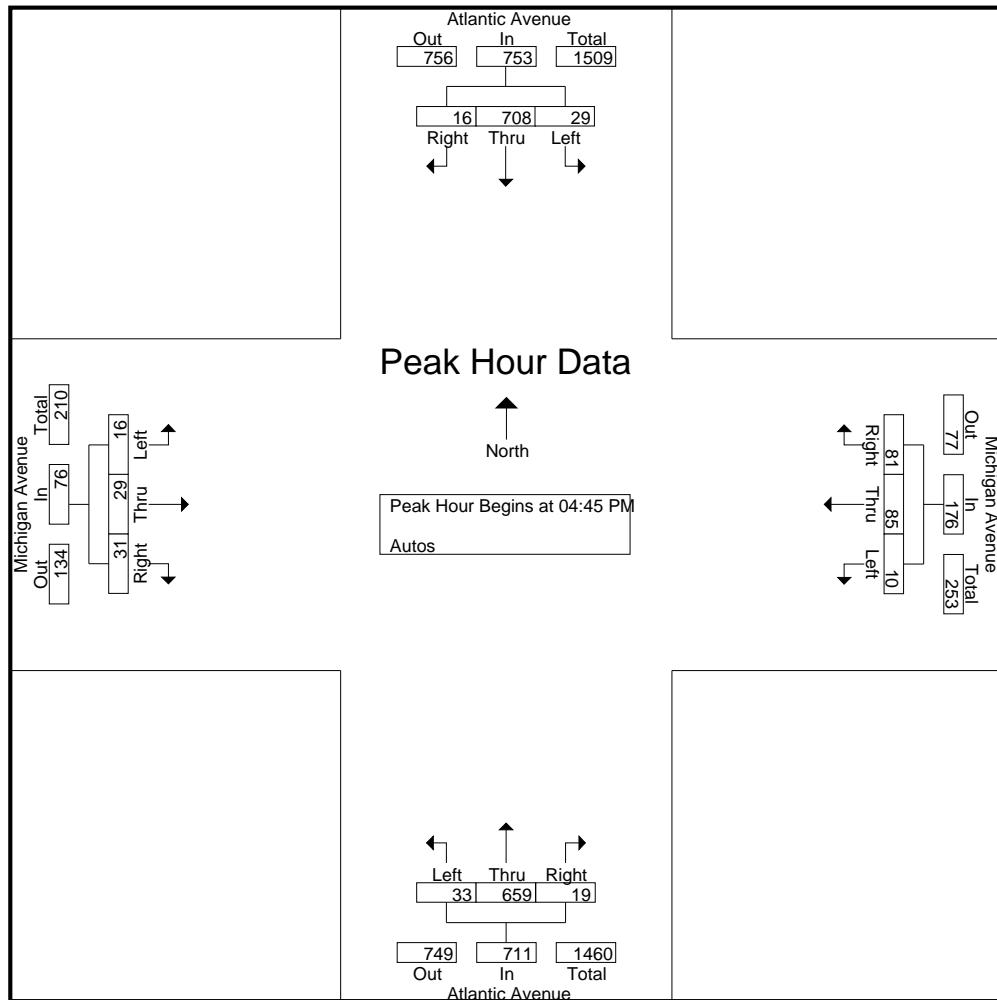
	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				Int. Total
	Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
04:00 PM	3	149	2	154	3	31	18	52	5	115	3	123	8	4	9	21	350
04:15 PM	4	133	3	140	5	19	26	50	8	142	3	153	4	8	11	23	366
04:30 PM	4	151	6	161	3	14	18	35	5	143	4	152	5	6	11	22	370
04:45 PM	3	198	1	202	3	23	14	40	5	157	1	163	4	7	7	18	423
Total	14	631	12	657	14	87	76	177	23	557	11	591	21	25	38	84	1509
05:00 PM	6	165	6	177	3	22	24	49	6	166	6	178	5	10	9	24	428
05:15 PM	8	164	4	176	3	22	20	45	16	160	10	186	5	7	10	22	429
05:30 PM	12	181	5	198	1	18	23	42	6	176	2	184	2	5	5	12	436
05:45 PM	4	161	3	168	2	5	24	31	7	156	5	168	9	7	10	26	393
Total	30	671	18	719	9	67	91	167	35	658	23	716	21	29	34	84	1686
Grand Total	44	1302	30	1376	23	154	167	344	58	1215	34	1307	42	54	72	168	3195
Apprch %	3.2	94.6	2.2		6.7	44.8	48.5		4.4	93	2.6		25	32.1	42.9		
Total %	1.4	40.8	0.9	43.1	0.7	4.8	5.2	10.8	1.8	38	1.1	40.9	1.3	1.7	2.3	5.3	

	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				Int. Total
	Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	3	198	1	202	3	23	14	40	5	157	1	163	4	7	7	18	423
05:00 PM	6	165	6	177	3	22	24	49	6	166	6	178	5	10	9	24	428
05:15 PM	8	164	4	176	3	22	20	45	16	160	10	186	5	7	10	22	429
05:30 PM	12	181	5	198	1	18	23	42	6	176	2	184	2	5	5	12	436
Total Volume	29	708	16	753	10	85	81	176	33	659	19	711	16	29	31	76	1716
% App. Total	3.9	94	2.1		5.7	48.3	46		4.6	92.7	2.7		21.1	38.2	40.8		
PHF	.604	.894	.667	.932	.833	.924	.844	.898	.516	.936	.475	.956	.800	.725	.775	.792	.984

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City of South Gate
 N/S: Atlantic Avenue
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File Name : 10_SGE_Atlantic_Michigan PM
 Site Code : 04119797
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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	3	198	1	202	3	23	14	40	5	157	1	163	4	7	7	18
+15 mins.	6	165	6	177	3	22	24	49	6	166	6	178	5	10	9	24
+30 mins.	8	164	4	176	3	22	20	45	16	160	10	186	5	7	10	22
+45 mins.	12	181	5	198	1	18	23	42	6	176	2	184	2	5	5	12
Total Volume	29	708	16	753	10	85	81	176	33	659	19	711	16	29	31	76
% App. Total	3.9	94	2.1		5.7	48.3	46		4.6	92.7	2.7		21.1	38.2	40.8	
PHF	.604	.894	.667	.932	.833	.924	.844	.898	.516	.936	.475	.956	.800	.725	.775	.792

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City of South Gate
 N/S: Atlantic Avenue
 E/W: Michigan Avenue
 Weather: Clear

File Name : 10_SGE_Atlantic_Michigan PM
 Site Code : 04119797
 Start Date : 11/19/2019
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Groups Printed- Heavy Trucks

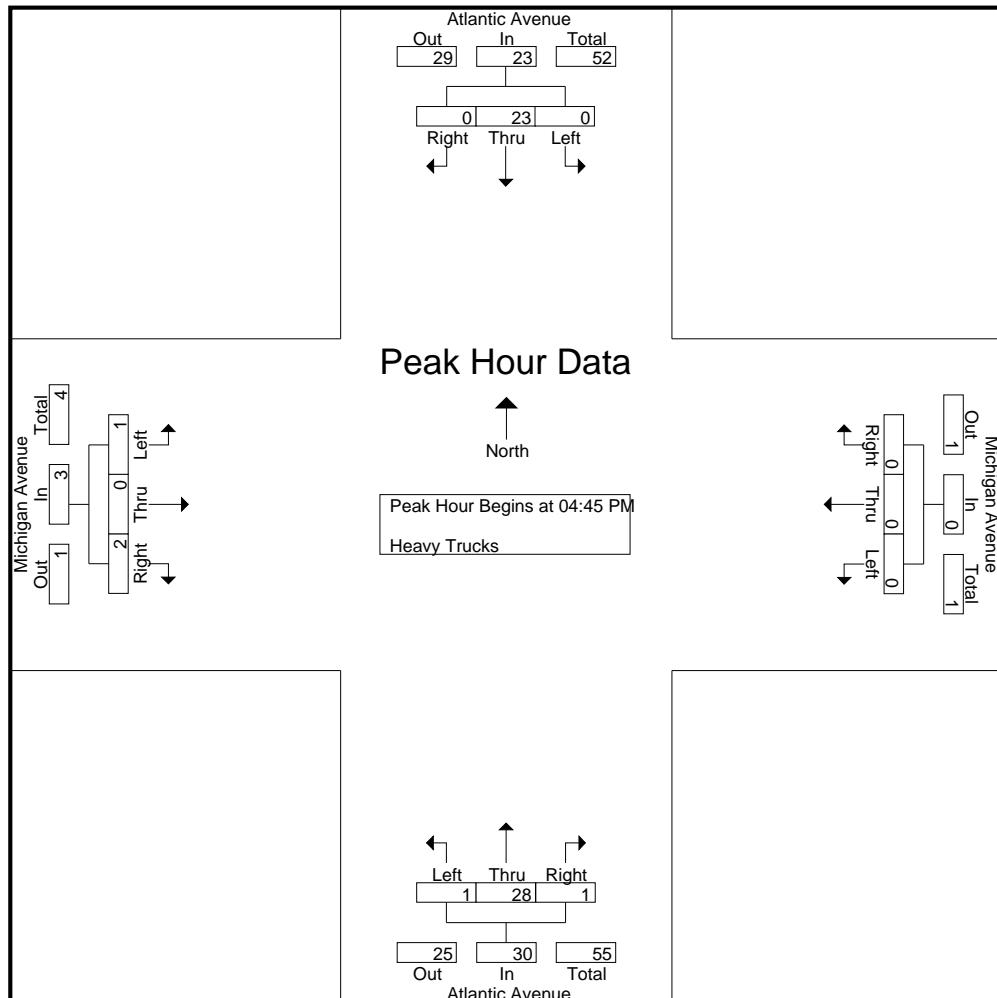
	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	7	0	8	0	0	0	0	0	10	0	10	0	0	0	0	18
04:15 PM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
04:30 PM	0	6	0	6	0	0	0	0	0	9	0	9	0	0	0	0	15
04:45 PM	0	7	0	7	0	0	0	0	0	7	1	8	0	0	0	0	15
Total	1	22	0	23	0	0	0	0	0	29	1	30	0	0	0	0	53
05:00 PM	0	7	0	7	0	0	0	0	1	7	0	8	0	0	0	0	15
05:15 PM	0	4	0	4	0	0	0	0	0	7	0	7	0	0	1	1	12
05:30 PM	0	5	0	5	0	0	0	0	0	7	0	7	1	0	1	2	14
05:45 PM	0	5	0	5	0	0	0	0	0	5	0	5	0	0	0	0	10
Total	0	21	0	21	0	0	0	0	1	26	0	27	1	0	2	3	51
Grand Total	1	43	0	44	0	0	0	0	1	55	1	57	1	0	2	3	104
Apprch %	2.3	97.7	0	0	0	0	0	0	1.8	96.5	1.8	33.3	0	66.7			
Total %	1	41.3	0	42.3	0	0	0	0	1	52.9	1	54.8	1	0	1.9	2.9	

	Atlantic Avenue Southbound				Michigan Avenue Westbound				Atlantic Avenue Northbound				Michigan Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	7	0	7	0	0	0	0	0	7	1	8	0	0	0	0	15
05:00 PM	0	7	0	7	0	0	0	0	1	7	0	8	0	0	0	0	15
05:15 PM	0	4	0	4	0	0	0	0	0	7	0	7	0	0	1	1	12
05:30 PM	0	5	0	5	0	0	0	0	0	7	0	7	1	0	1	2	14
Total Volume	0	23	0	23	0	0	0	0	1	28	1	30	1	0	2	3	56
% App. Total	0	100	0	0	0	0	0	0	3.3	93.3	3.3	3.3	33.3	0	66.7		
PHF	.000	.821	.000	.821	.000	.000	.000	.000	.250	1.00	.250	.938	.250	.000	.500	.375	.933

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Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:45 PM				04:45 PM			
+0 mins.	0	7	0	7	0	0	0	0	0	7	1	8	0	0	0	0
+15 mins.	0	7	0	7	0	0	0	0	1	7	0	8	0	0	0	0
+30 mins.	0	4	0	4	0	0	0	0	0	7	0	7	0	0	1	1
+45 mins.	0	5	0	5	0	0	0	0	0	7	0	7	1	0	1	2
Total Volume	0	23	0	23	0	0	0	0	1	28	1	30	1	0	2	3
% App. Total	0	100	0	100	0	0	0	0	3.3	93.3	3.3	3.3	33.3	0	66.7	
PHF	.000	.821	.000	.821	.000	.000	.000	.000	.250	1.000	.250	.938	.250	.000	.500	.375

APPENDIX C
Existing LOS Worksheets

South Gate Amazon DAX7 Rayo Ave

Vistro File: J:\...\Dax7_v10_with_drivethrough_int.vistro

Scenario 1 Existing AM

Report File: J:\...\EXAM.pdf

3/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Atlantic Avenue and Salt Lake Avenue/Patata Street	Signalized	ICU 1	NB Thru	0.962	-	E
2	Hildreth Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	0.512	-	A
3	Atlantic Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	0.792	-	C
4	Rayo Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	1.114	-	F
5	Garfield Avenue/Firestone Boulevard	Signalized	ICU 1	SB Right	0.843	-	D
6	Atlantic Avenue/Southern Avenue	Signalized	ICU 1	NB Thru	0.624	-	B
7	Hildreth Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.788	-	C
8	Pinehurst Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.753	-	C
9	Atlantic Avenue/Tweedy Boulevard	Signalized	ICU 1	NB Thru	0.845	-	D
10	Atlantic Avenue/Michigan Avenue	Signalized	ICU 1	NB Thru	0.596	-	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Atlantic Avenue and Salt Lake Avenue/Patata Street**

Control Type:
Signalized
Analysis Method:
ICU 1
Analysis Period:
15 minutes

Delay (sec / veh): -
Level Of Service: E
Volume to Capacity (v/c): 0.962

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	137.00	100.00	100.00	100.00	100.00	70.00	103.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Base Volume Input [veh/h]	384	861	118	5	826	5	7	5	736	140	4	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	384	861	118	5	826	5	7	5	736	140	4	16
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	96	215	30	1	207	1	2	1	184	35	1	4
Total Analysis Volume [veh/h]	384	861	118	5	826	5	7	5	736	140	4	16
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	0	6	3	5	2	0
Auxiliary Signal Groups									3,6			
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.24	0.28	0.28	0.00	0.26	0.26	0.00	0.01	0.22	0.09	0.01	0.01
Intersection LOS	E											
Intersection V/C	0.962											

Intersection Level Of Service Report**Intersection 2: Hildreth Avenue/Firestone Boulevard**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 15 minutes

Delay (sec / veh): -
 Level Of Service: A
 Volume to Capacity (v/c): 0.512

Intersection Setup

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	2	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	88.00	275.00	100.00	100.00	110.0	100.0	100.0	100.0
Speed [mph]	25.00			25.00			35.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Base Volume Input [veh/h]	0	0	75	46	0	29	101	1571	27	5	0	1326	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	75	46	0	29	101	1571	27	5	0	1326	56
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	19	12	0	7	25	393	7	1	0	332	14
Total Analysis Volume [veh/h]	0	0	75	46	0	29	101	1571	27	5	0	1326	56
Pedestrian Volume [ped/h]	0			0			0			0			
Bicycle Volume [bicycles/h]	0			0			0			0			

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Permiss	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Prote	Prote	Permi	Permi
Signal Group	0	0	3	4	0	0	1	6	0	5	5	2	0
Auxiliary Signal Groups													
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.01	0.00	0.02	0.02	0.33	0.33	0.00	0.00	0.29	0.29
Intersection LOS	A												
Intersection V/C	0.512												

Intersection Level Of Service Report**Intersection 3: Atlantic Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: C
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.792

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	190.00	100.00	100.00	753.00	100.00	189.00	318.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	163	745	53	872	652	103	206	1403	113	76	1174	244
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	163	745	53	872	652	103	206	1403	113	76	1174	244
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	186	13	218	163	26	52	351	28	19	294	61
Total Analysis Volume [veh/h]	163	745	53	872	652	103	206	1403	113	76	1174	244
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss									
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.17	0.17	0.15	0.20	0.06	0.04	0.32	0.32	0.05	0.30	0.30
Intersection LOS	C											
Intersection V/C	0.792											

Intersection Level Of Service Report
Intersection 4: Rayo Avenue/Firestone Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.114

Intersection Setup

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	1	0	0	2	0	0
Pocket Length [ft]	100.00	100.00	152.00	180.00	100.00	180.00	134.60	100.00	100.00	606.00	100.00	100.00
Speed [mph]	30.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	6	39	811	36	13	7	29	2291	14	327	1588	118
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	39	811	36	13	7	29	2291	14	327	1588	118
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	10	203	9	3	2	7	573	4	82	397	30
Total Analysis Volume [veh/h]	6	39	811	36	13	7	29	2291	14	327	1588	118
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	5	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups			3.5									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.45	0.01	0.02	0.00	0.02	0.48	0.48	0.06	0.36	0.36
Intersection LOS	F											
Intersection V/C	1.114											

Intersection Level Of Service Report**Intersection 5: Garfield Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.843

Intersection Setup

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	2	0	0	2	0	0	2	0	1
Pocket Length [ft]	440.00	100.00	100.00	218.00	100.00	100.00	382.00	100.00	100.00	204.00	100.00	147.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	765	1164	49	150	597	628	761	877	488	50	991	215
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	765	1164	49	150	597	628	761	877	488	50	991	215
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	191	291	12	38	149	157	190	219	122	13	248	54
Total Analysis Volume [veh/h]	765	1164	49	150	597	628	761	877	488	50	991	215
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	1	1	6	3	5	2	7
Auxiliary Signal Groups						1,4			3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.25	0.25	0.03	0.19	0.26	0.13	0.18	0.17	0.01	0.21	0.11
Intersection LOS	D											
Intersection V/C	0.843											

Intersection Level Of Service Report
Intersection 6: Atlantic Avenue/Southern Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.624

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	135.00	100.00	100.00	132.00	100.00	100.00	115.00	100.00	100.00	99.00	100.00	100.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Base Volume Input [veh/h]	92	854	24	27	707	29	112	240	227	121	154	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	854	24	27	707	29	112	240	227	121	154	60
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	214	6	7	177	7	28	60	57	30	39	15
Total Analysis Volume [veh/h]	92	854	24	27	707	29	112	240	227	121	154	60
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss							
Signal Group	3	8	0	7	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.27	0.27	0.02	0.23	0.23	0.07	0.15	0.15	0.08	0.13	0.13
Intersection LOS	B											
Intersection V/C	0.624											

Intersection Level Of Service Report**Intersection 7: Hildreth Avenue/Tweedy Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: C
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.788

Intersection Setup

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00	92.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	88	17	7	108	14	49	63	812	33	5	719	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	17	7	108	14	49	63	812	33	5	719	89
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	4	2	27	4	12	16	203	8	1	180	22
Total Analysis Volume [veh/h]	88	17	7	108	14	49	63	812	33	5	719	89
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.07	0.07	0.07	0.11	0.11	0.04	0.27	0.02	0.00	0.23	0.06
Intersection LOS	C											
Intersection V/C	0.788											

Intersection Level Of Service Report**Intersection 8: Pinehurst Avenue/Tweedy Boulevard**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 15 minutes

Delay (sec / veh): -
 Level Of Service: C
 Volume to Capacity (v/c): 0.753

Intersection Setup

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	94.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	53	117	54	61	16	104	63	717	12	3	461	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	53	117	54	61	16	104	63	717	12	3	461	89
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	29	14	15	4	26	16	179	3	1	115	22
Total Analysis Volume [veh/h]	53	117	54	61	16	104	63	717	12	3	461	89
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.14	0.14	0.04	0.11	0.11	0.04	0.24	0.01	0.00	0.15	0.06
Intersection LOS	C											
Intersection V/C	0.753											

Intersection Level Of Service Report**Intersection 9: Atlantic Avenue/Tweedy Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.845

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	250.00	100.00	93.00	137.00	100.00	100.00	100.00	100.00	172.00	100.00	100.00	85.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	162	836	25	180	613	108	381	163	299	93	185	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	162	836	25	180	613	108	381	163	299	93	185	130
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	209	6	45	153	27	95	41	75	23	46	33
Total Analysis Volume [veh/h]	162	836	25	180	613	108	381	163	299	93	185	130
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.26	0.02	0.11	0.23	0.23	0.12	0.17	0.19	0.06	0.17	0.08
Intersection LOS	D											
Intersection V/C	0.845											

Intersection Level Of Service Report
Intersection 10: Atlantic Avenue/Michigan Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.596

Intersection Setup

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	9.00	9.00	9.00	15.00	15.00	15.00
No. of Lanes in Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	93.00	100.00	102.00	97.00	100.00	240.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Base Volume Input [veh/h]	46	733	10	73	600	20	45	102	54	8	151	132
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	733	10	73	600	20	45	102	54	8	151	132
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	183	3	18	150	5	11	26	14	2	38	33
Total Analysis Volume [veh/h]	46	733	10	73	600	20	45	102	54	8	151	132
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

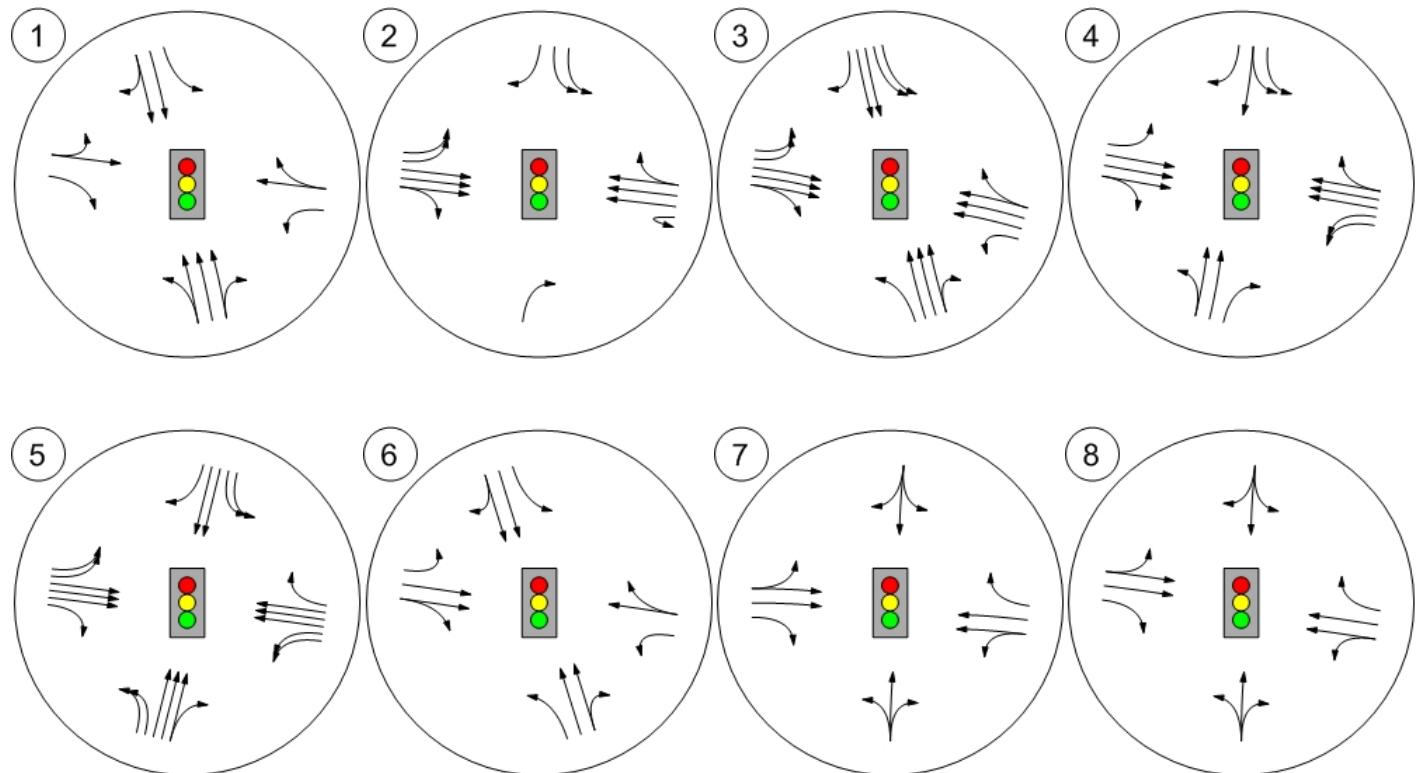
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.23	0.01	0.05	0.19	0.01	0.03	0.13	0.13	0.01	0.18	0.18
Intersection LOS	A											
Intersection V/C	0.596											

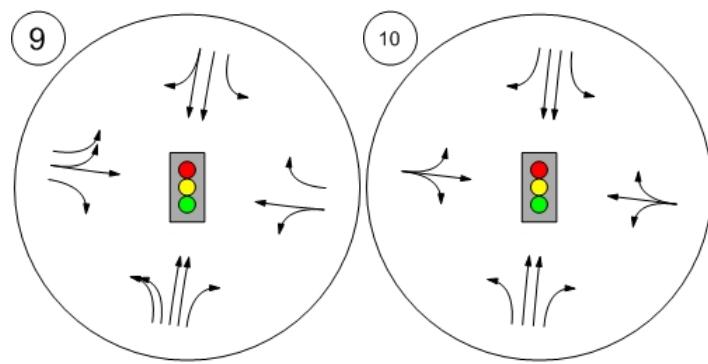
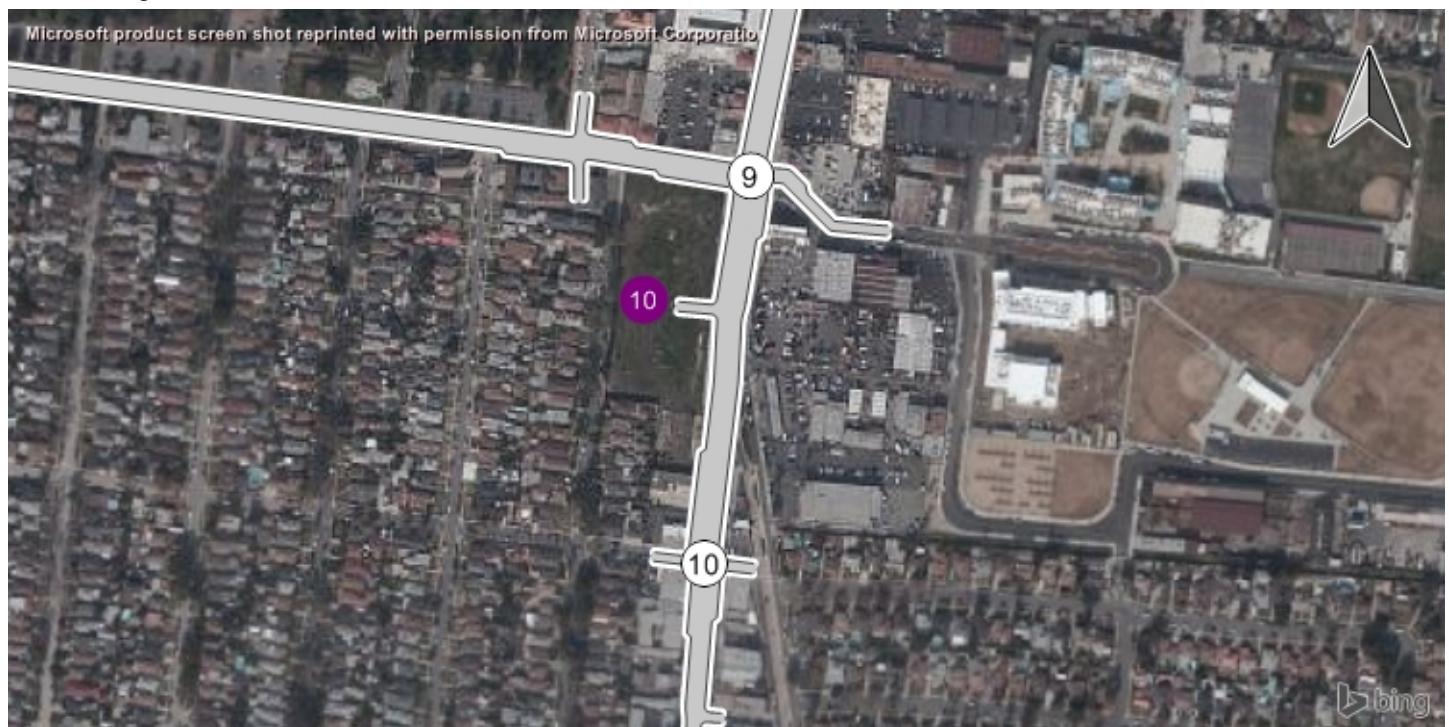
Study Intersections



Lane Configuration and Traffic Control



Lane Configuration and Traffic Control



South Gate Amazon DAX7 Rayo Ave

Vistro File: J:\...\Dax7_v10_with_drivethrough_int.vistro

Scenario 1 Existing AM

Report File: J:\...\EXAM.pdf

3/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Atlantic Avenue and Salt Lake Avenue/Patata Street	Signalized	ICU 1	NB Thru	0.962	-	E
2	Hildreth Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	0.512	-	A
3	Atlantic Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	0.792	-	C
4	Rayo Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	1.114	-	F
5	Garfield Avenue/Firestone Boulevard	Signalized	ICU 1	SB Right	0.843	-	D
6	Atlantic Avenue/Southern Avenue	Signalized	ICU 1	NB Thru	0.624	-	B
7	Hildreth Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.788	-	C
8	Pinehurst Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.753	-	C
9	Atlantic Avenue/Tweedy Boulevard	Signalized	ICU 1	NB Thru	0.845	-	D
10	Atlantic Avenue/Michigan Avenue	Signalized	ICU 1	NB Thru	0.596	-	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Atlantic Avenue and Salt Lake Avenue/Patata Street**

Control Type:
Signalized
Analysis Method:
ICU 1
Analysis Period:
15 minutes

Delay (sec / veh): -
Level Of Service: E
Volume to Capacity (v/c): 0.962

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	137.00	100.00	100.00	100.00	100.00	70.00	103.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Base Volume Input [veh/h]	384	861	118	5	826	5	7	5	736	140	4	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	384	861	118	5	826	5	7	5	736	140	4	16
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	96	215	30	1	207	1	2	1	184	35	1	4
Total Analysis Volume [veh/h]	384	861	118	5	826	5	7	5	736	140	4	16
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	0	6	3	5	2	0
Auxiliary Signal Groups									3,6			
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.24	0.28	0.28	0.00	0.26	0.26	0.00	0.01	0.22	0.09	0.01	0.01
Intersection LOS	E											
Intersection V/C	0.962											

Intersection Level Of Service Report**Intersection 2: Hildreth Avenue/Firestone Boulevard**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 15 minutes

Delay (sec / veh): -
 Level Of Service: A
 Volume to Capacity (v/c): 0.512

Intersection Setup

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	2	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	88.00	275.00	100.00	100.00	110.0	100.0	100.0	100.0
Speed [mph]	25.00			25.00			35.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Base Volume Input [veh/h]	0	0	75	46	0	29	101	1571	27	5	0	1326	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	75	46	0	29	101	1571	27	5	0	1326	56
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	19	12	0	7	25	393	7	1	0	332	14
Total Analysis Volume [veh/h]	0	0	75	46	0	29	101	1571	27	5	0	1326	56
Pedestrian Volume [ped/h]	0			0			0			0			
Bicycle Volume [bicycles/h]	0			0			0			0			

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Permiss	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Prote	Prote	Permi	Permi
Signal Group	0	0	3	4	0	0	1	6	0	5	5	2	0
Auxiliary Signal Groups													
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.01	0.00	0.02	0.02	0.33	0.33	0.00	0.00	0.29	0.29
Intersection LOS	A												
Intersection V/C	0.512												

Intersection Level Of Service Report**Intersection 3: Atlantic Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: C
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.792

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	190.00	100.00	100.00	753.00	100.00	189.00	318.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	163	745	53	872	652	103	206	1403	113	76	1174	244
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	163	745	53	872	652	103	206	1403	113	76	1174	244
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	186	13	218	163	26	52	351	28	19	294	61
Total Analysis Volume [veh/h]	163	745	53	872	652	103	206	1403	113	76	1174	244
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss									
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.17	0.17	0.15	0.20	0.06	0.04	0.32	0.32	0.05	0.30	0.30
Intersection LOS	C											
Intersection V/C	0.792											

Intersection Level Of Service Report
Intersection 4: Rayo Avenue/Firestone Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.114

Intersection Setup

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	1	0	0	2	0	0
Pocket Length [ft]	100.00	100.00	152.00	180.00	100.00	180.00	134.60	100.00	100.00	606.00	100.00	100.00
Speed [mph]	30.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	6	39	811	36	13	7	29	2291	14	327	1588	118
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	39	811	36	13	7	29	2291	14	327	1588	118
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	10	203	9	3	2	7	573	4	82	397	30
Total Analysis Volume [veh/h]	6	39	811	36	13	7	29	2291	14	327	1588	118
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	5	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups			3.5									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.45	0.01	0.02	0.00	0.02	0.48	0.48	0.06	0.36	0.36
Intersection LOS	F											
Intersection V/C	1.114											

Intersection Level Of Service Report**Intersection 5: Garfield Avenue/Firestone Boulevard**

Control Type:

Signalized

Delay (sec / veh):

-

Analysis Method:

ICU 1

Level Of Service:

D

Analysis Period:

15 minutes

Volume to Capacity (v/c):

0.843

Intersection Setup

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	2	0	0	2	0	0	2	0	1
Pocket Length [ft]	440.00	100.00	100.00	218.00	100.00	100.00	382.00	100.00	100.00	204.00	100.00	147.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	765	1164	49	150	597	628	761	877	488	50	991	215
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	765	1164	49	150	597	628	761	877	488	50	991	215
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	191	291	12	38	149	157	190	219	122	13	248	54
Total Analysis Volume [veh/h]	765	1164	49	150	597	628	761	877	488	50	991	215
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	1	1	6	3	5	2	7
Auxiliary Signal Groups						1,4			3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.25	0.25	0.03	0.19	0.26	0.13	0.18	0.17	0.01	0.21	0.11
Intersection LOS	D											
Intersection V/C	0.843											

Intersection Level Of Service Report
Intersection 6: Atlantic Avenue/Southern Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.624

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right									
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	135.00	100.00	100.00	132.00	100.00	100.00	115.00	100.00	100.00	99.00	100.00	100.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Base Volume Input [veh/h]	92	854	24	27	707	29	112	240	227	121	154	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	854	24	27	707	29	112	240	227	121	154	60
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	214	6	7	177	7	28	60	57	30	39	15
Total Analysis Volume [veh/h]	92	854	24	27	707	29	112	240	227	121	154	60
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss							
Signal Group	3	8	0	7	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.27	0.27	0.02	0.23	0.23	0.07	0.15	0.15	0.08	0.13	0.13
Intersection LOS	B											
Intersection V/C	0.624											

Intersection Level Of Service Report**Intersection 7: Hildreth Avenue/Tweedy Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: C
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.788

Intersection Setup

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00	92.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	88	17	7	108	14	49	63	812	33	5	719	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	17	7	108	14	49	63	812	33	5	719	89
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	4	2	27	4	12	16	203	8	1	180	22
Total Analysis Volume [veh/h]	88	17	7	108	14	49	63	812	33	5	719	89
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.07	0.07	0.07	0.11	0.11	0.04	0.27	0.02	0.00	0.23	0.06
Intersection LOS	C											
Intersection V/C	0.788											

Intersection Level Of Service Report**Intersection 8: Pinehurst Avenue/Tweedy Boulevard**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 15 minutes

Delay (sec / veh): -
 Level Of Service: C
 Volume to Capacity (v/c): 0.753

Intersection Setup

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	94.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	53	117	54	61	16	104	63	717	12	3	461	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	53	117	54	61	16	104	63	717	12	3	461	89
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	29	14	15	4	26	16	179	3	1	115	22
Total Analysis Volume [veh/h]	53	117	54	61	16	104	63	717	12	3	461	89
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.14	0.14	0.04	0.11	0.11	0.04	0.24	0.01	0.00	0.15	0.06
Intersection LOS	C											
Intersection V/C	0.753											

Intersection Level Of Service Report
Intersection 9: Atlantic Avenue/Tweedy Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.845

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	250.00	100.00	93.00	137.00	100.00	100.00	100.00	100.00	172.00	100.00	100.00	85.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	162	836	25	180	613	108	381	163	299	93	185	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	162	836	25	180	613	108	381	163	299	93	185	130
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	209	6	45	153	27	95	41	75	23	46	33
Total Analysis Volume [veh/h]	162	836	25	180	613	108	381	163	299	93	185	130
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.26	0.02	0.11	0.23	0.23	0.12	0.17	0.19	0.06	0.17	0.08
Intersection LOS	D											
Intersection V/C	0.845											

Intersection Level Of Service Report
Intersection 10: Atlantic Avenue/Michigan Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.596

Intersection Setup

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	9.00	9.00	9.00	15.00	15.00	15.00
No. of Lanes in Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	93.00	100.00	102.00	97.00	100.00	240.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Base Volume Input [veh/h]	46	733	10	73	600	20	45	102	54	8	151	132
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	733	10	73	600	20	45	102	54	8	151	132
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	183	3	18	150	5	11	26	14	2	38	33
Total Analysis Volume [veh/h]	46	733	10	73	600	20	45	102	54	8	151	132
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

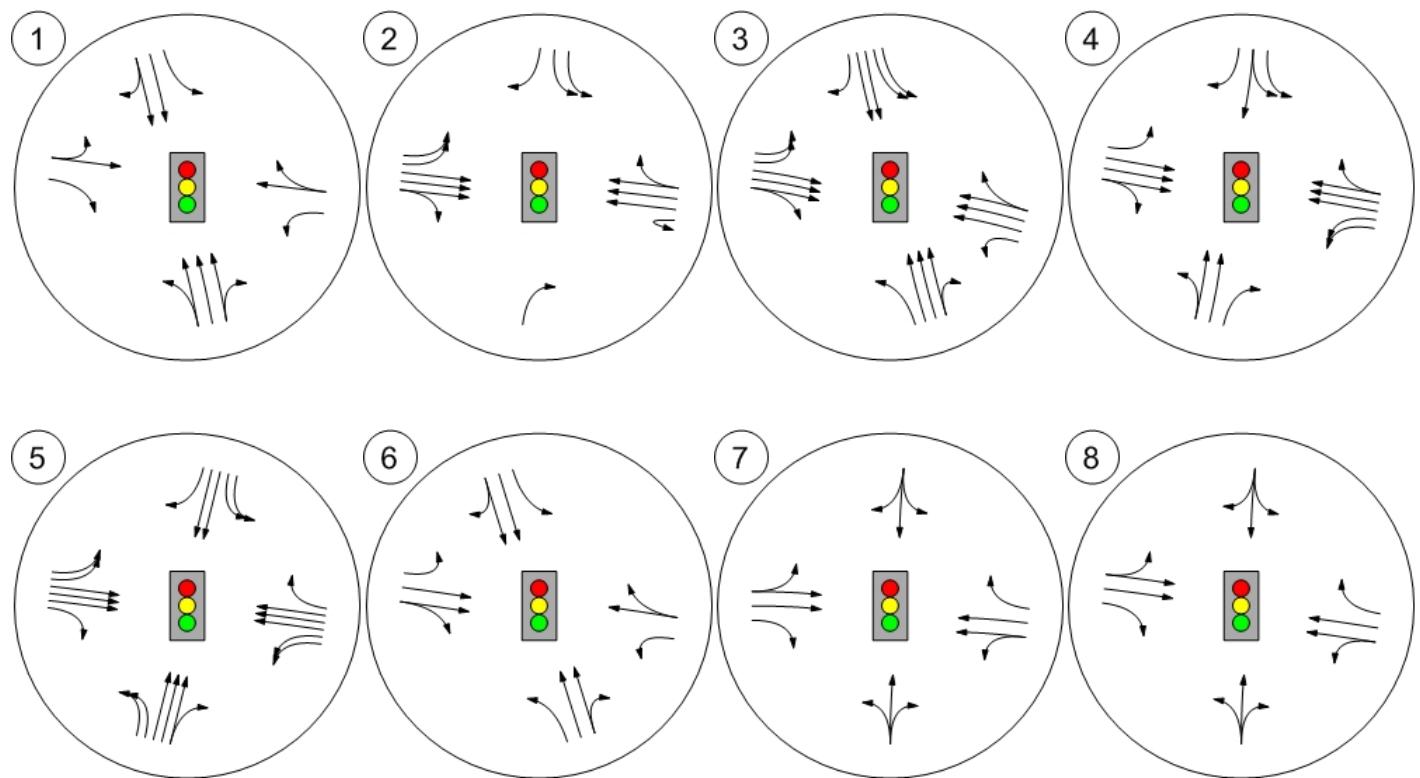
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.23	0.01	0.05	0.19	0.01	0.03	0.13	0.13	0.01	0.18	0.18
Intersection LOS	A											
Intersection V/C	0.596											

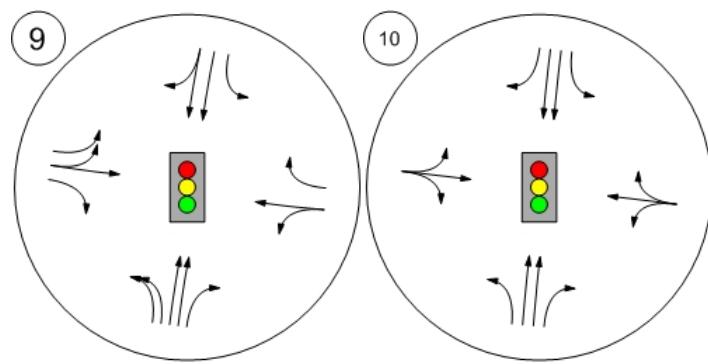
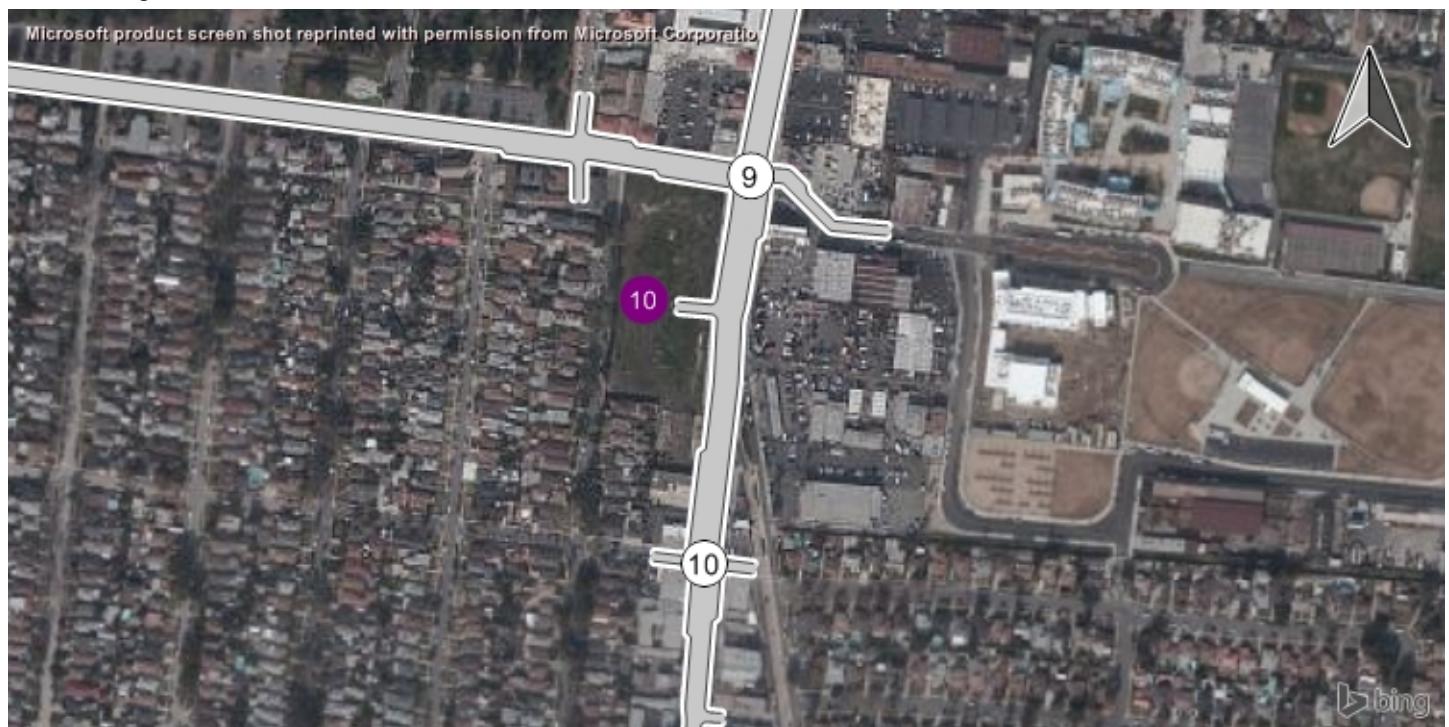
Study Intersections



Lane Configuration and Traffic Control



Lane Configuration and Traffic Control



APPENDIX D
Existing With-Project LOS Worksheets

South Gate Amazon DAX7 Rayo Ave

Vistro File: J:\...\Dax7_v10_with_drivethrough_int.vistro

Scenario 3 Existing With Project AM

Report File: J:\...\EX_PROJ_AM.pdf

3/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Atlantic Avenue and Salt Lake Avenue/Patata Street	Signalized	ICU 1	NB Thru	0.963	-	E
2	Hildreth Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	0.513	-	A
3	Atlantic Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	0.793	-	C
4	Rayo Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	1.116	-	F
5	Garfield Avenue/Firestone Boulevard	Signalized	ICU 1	SB Right	0.843	-	D
6	Atlantic Avenue/Southern Avenue	Signalized	ICU 1	NB Thru	0.624	-	B
7	Hildreth Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.788	-	C
8	Pinehurst Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.753	-	C
9	Atlantic Avenue/Tweedy Boulevard	Signalized	ICU 1	NB Thru	0.846	-	D
10	Atlantic Avenue/Michigan Avenue	Signalized	ICU 1	NB Thru	0.596	-	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Atlantic Avenue and Salt Lake Avenue/Patata Street**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: E
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.963

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	137.00	100.00	100.00	100.00	100.00	70.00	103.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Base Volume Input [veh/h]	384	861	118	5	826	5	7	5	736	140	4	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	0	1	0	0	0	1	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	385	861	118	5	827	5	7	5	737	140	4	16
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	96	215	30	1	207	1	2	1	184	35	1	4
Total Analysis Volume [veh/h]	385	861	118	5	827	5	7	5	737	140	4	16
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	0	6	3	5	2	0
Auxiliary Signal Groups									3,6			
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.24	0.28	0.28	0.00	0.26	0.26	0.00	0.01	0.22	0.09	0.01	0.01
Intersection LOS	E											
Intersection V/C	0.963											

Intersection Level Of Service Report**Intersection 2: Hildreth Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: A
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.513

Intersection Setup

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	2	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	88.00	275.00	100.00	100.00	110.0	100.0	100.0	100.0
Speed [mph]	25.00			25.00			35.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Base Volume Input [veh/h]	0	0	75	46	0	29	101	1571	27	5	0	1326	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	3	0	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	75	46	0	29	101	1574	27	5	0	1327	56
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	19	12	0	7	25	394	7	1	0	332	14
Total Analysis Volume [veh/h]	0	0	75	46	0	29	101	1574	27	5	0	1327	56
Pedestrian Volume [ped/h]	0			0			0			0			
Bicycle Volume [bicycles/h]	0			0			0			0			

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Permiss	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Prote	Prote	Permi	Permi
Signal Group	0	0	3	4	0	0	1	6	0	5	5	2	0
Auxiliary Signal Groups													
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.01	0.00	0.02	0.02	0.33	0.33	0.00	0.00	0.29	0.29
Intersection LOS	A												
Intersection V/C	0.513												

Intersection Level Of Service Report**Intersection 3: Atlantic Avenue/Firestone Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.793

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	190.00	100.00	100.00	753.00	100.00	189.00	318.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	163	745	53	872	652	103	206	1403	113	76	1174	244
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	1	1	0	0	2	1	0	1	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	163	745	53	873	653	103	206	1405	114	76	1175	245
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	186	13	218	163	26	52	351	29	19	294	61
Total Analysis Volume [veh/h]	163	745	53	873	653	103	206	1405	114	76	1175	245
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss									
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.17	0.17	0.15	0.20	0.06	0.04	0.32	0.32	0.05	0.30	0.30
Intersection LOS	C											
Intersection V/C	0.793											

Intersection Level Of Service Report
Intersection 4: Rayo Avenue/Firestone Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.116

Intersection Setup

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	1	0	0	2	0	0
Pocket Length [ft]	100.00	100.00	152.00	180.00	100.00	180.00	134.60	100.00	100.00	606.00	100.00	100.00
Speed [mph]	30.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	6	39	811	36	13	7	29	2291	14	327	1588	118
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	2	0	0	0	0	0	4	7	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	39	813	36	13	7	29	2291	18	334	1588	118
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	10	203	9	3	2	7	573	5	84	397	30
Total Analysis Volume [veh/h]	7	39	813	36	13	7	29	2291	18	334	1588	118
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	5	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups			3.5									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.45	0.01	0.02	0.00	0.02	0.48	0.48	0.06	0.36	0.36
Intersection LOS	F											
Intersection V/C	1.116											

Intersection Level Of Service Report**Intersection 5: Garfield Avenue/Firestone Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.843

Intersection Setup

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	2	0	0	2	0	0	2	0	1
Pocket Length [ft]	440.00	100.00	100.00	218.00	100.00	100.00	382.00	100.00	100.00	204.00	100.00	147.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	765	1164	49	150	597	628	761	877	488	50	991	215
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	765	1164	49	150	597	628	761	877	488	50	991	215
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	191	291	12	38	149	157	190	219	122	13	248	54
Total Analysis Volume [veh/h]	765	1164	49	150	597	628	761	877	488	50	991	215
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	1	1	6	3	5	2	7
Auxiliary Signal Groups						1,4			3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.25	0.25	0.03	0.19	0.26	0.13	0.18	0.17	0.01	0.21	0.11
Intersection LOS	D											
Intersection V/C	0.843											

Intersection Level Of Service Report
Intersection 6: Atlantic Avenue/Southern Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.624

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	135.00	100.00	100.00	132.00	100.00	100.00	115.00	100.00	100.00	99.00	100.00	100.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Base Volume Input [veh/h]	92	854	24	27	707	29	112	240	227	121	154	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	1	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	854	24	27	708	29	112	240	227	121	154	60
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	214	6	7	177	7	28	60	57	30	39	15
Total Analysis Volume [veh/h]	92	854	24	27	708	29	112	240	227	121	154	60
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss							
Signal Group	3	8	0	7	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.27	0.27	0.02	0.23	0.23	0.07	0.15	0.15	0.08	0.13	0.13
Intersection LOS	B											
Intersection V/C	0.624											

Intersection Level Of Service Report**Intersection 7: Hildreth Avenue/Tweedy Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.788

Intersection Setup

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00	92.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	88	17	7	108	14	49	63	812	33	5	719	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	88	17	7	108	14	49	63	812	33	5	719	89
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	4	2	27	4	12	16	203	8	1	180	22
Total Analysis Volume [veh/h]	88	17	7	108	14	49	63	812	33	5	719	89
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.07	0.07	0.07	0.11	0.11	0.04	0.27	0.02	0.00	0.23	0.06
Intersection LOS	C											
Intersection V/C	0.788											

Intersection Level Of Service Report**Intersection 8: Pinehurst Avenue/Tweedy Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.753

Intersection Setup

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	94.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	53	117	54	61	16	104	63	717	12	3	461	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	53	117	54	61	16	104	63	717	12	3	461	89
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	29	14	15	4	26	16	179	3	1	115	22
Total Analysis Volume [veh/h]	53	117	54	61	16	104	63	717	12	3	461	89
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.14	0.14	0.04	0.11	0.11	0.04	0.24	0.01	0.00	0.15	0.06
Intersection LOS	C											
Intersection V/C	0.753											

Intersection Level Of Service Report
Intersection 9: Atlantic Avenue/Tweedy Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.846

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	250.00	100.00	93.00	137.00	100.00	100.00	100.00	100.00	172.00	100.00	100.00	85.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	162	836	25	180	613	108	381	163	299	93	185	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	0	1	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	162	837	25	180	614	108	381	163	299	93	185	130
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	209	6	45	154	27	95	41	75	23	46	33
Total Analysis Volume [veh/h]	162	837	25	180	614	108	381	163	299	93	185	130
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.26	0.02	0.11	0.23	0.23	0.12	0.17	0.19	0.06	0.17	0.08
Intersection LOS	D											
Intersection V/C	0.846											

Intersection Level Of Service Report**Intersection 10: Atlantic Avenue/Michigan Avenue**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.596

Intersection Setup

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	9.00	9.00	9.00	15.00	15.00	15.00
No. of Lanes in Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	93.00	100.00	102.00	97.00	100.00	240.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Base Volume Input [veh/h]	46	733	10	73	600	20	45	102	54	8	151	132
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	0	1	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	734	10	73	601	20	45	102	54	8	151	132
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	184	3	18	150	5	11	26	14	2	38	33
Total Analysis Volume [veh/h]	46	734	10	73	601	20	45	102	54	8	151	132
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.23	0.01	0.05	0.19	0.01	0.03	0.13	0.13	0.01	0.18	0.18
Intersection LOS	A											
Intersection V/C	0.596											

South Gate Amazon DAX7 Rayo Ave

Vistro File: J:\...\Dax7_v10_with_drivethrough_int.vistro

Scenario 3 Existing With Project AM

Report File: J:\...\EX_PROJ_AM.pdf

3/2/2020

Trip Generation summary

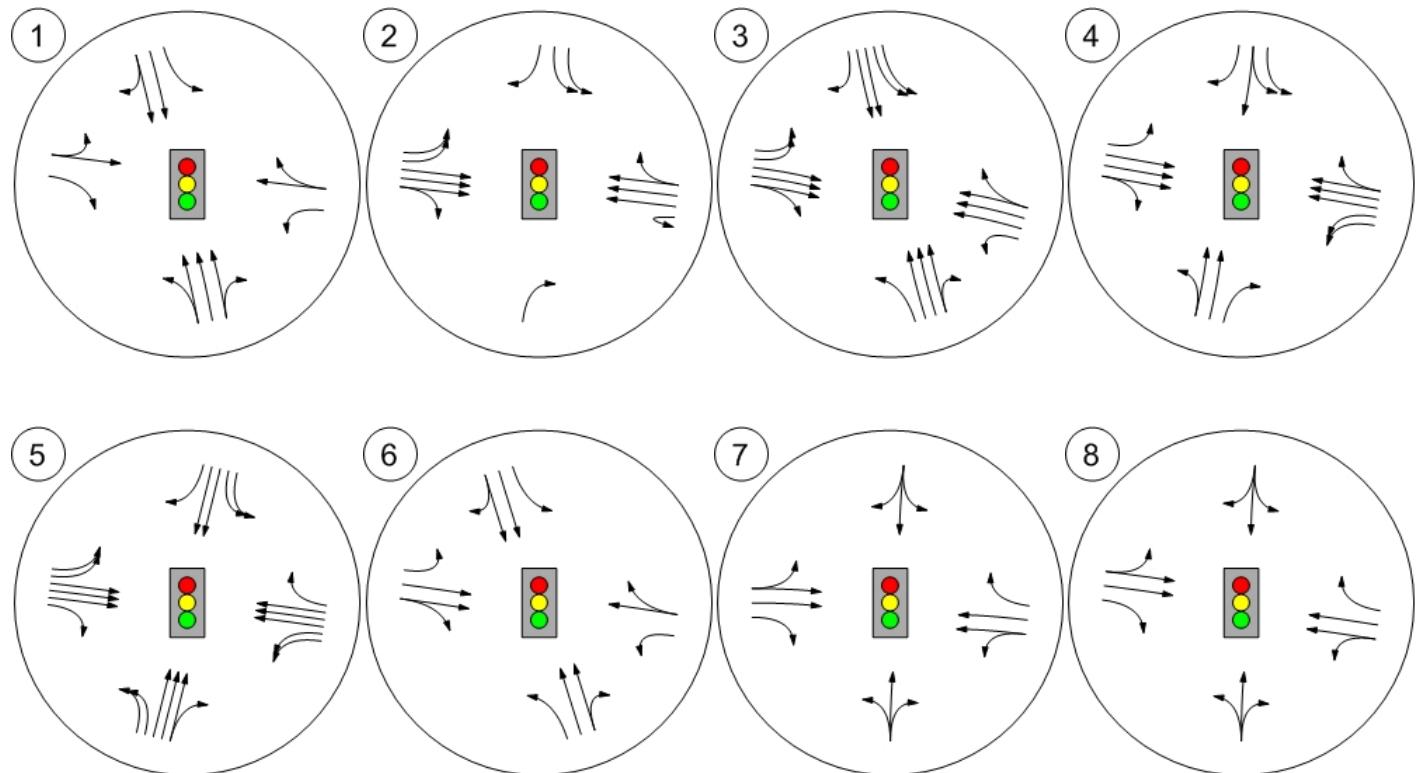
Added Trips

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: Zone				1.000	0.000	50.00	50.00	14	5	19	100.00
Added Trips Total										14	5

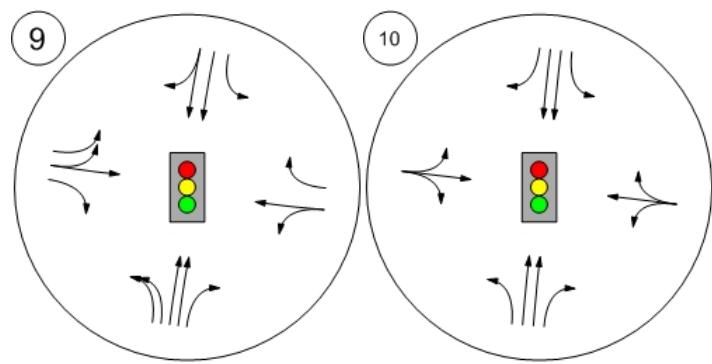
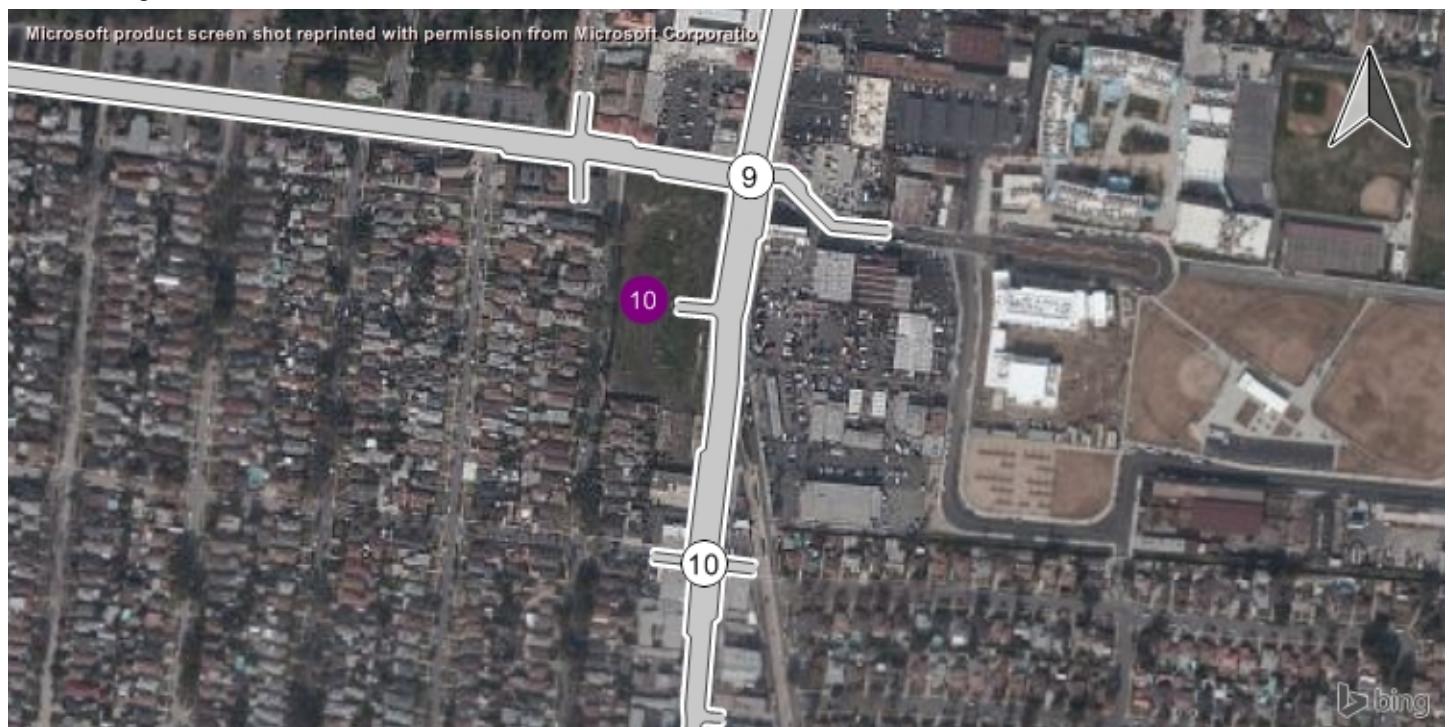
Study Intersections



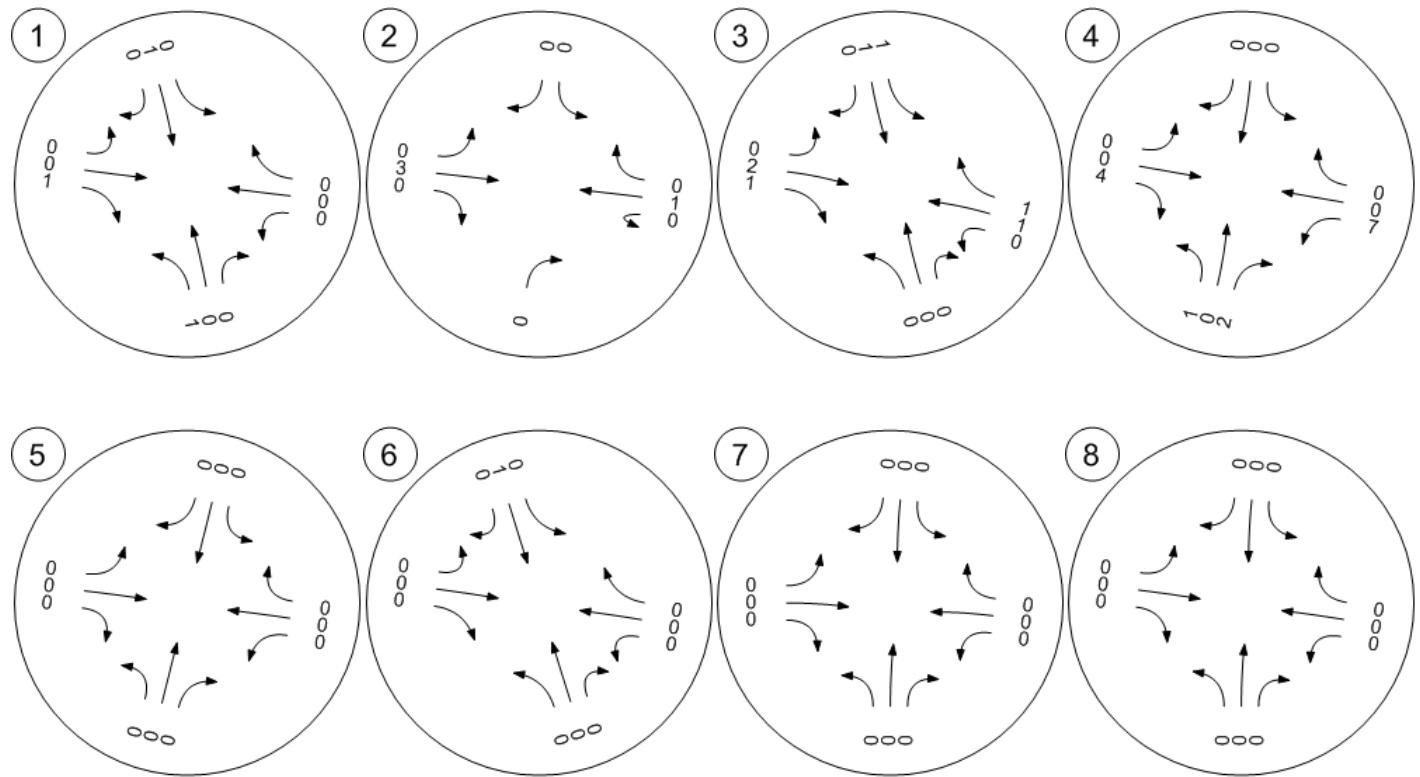
Lane Configuration and Traffic Control



Lane Configuration and Traffic Control



Traffic Volume - Net New Site Trips



South Gate Amazon DAX7 Rayo Ave

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Scenario 4 Existing With Project PM

Report File: J:\...\EX_PROJ_PM.pdf

3/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Atlantic Avenue and Salt Lake Avenue/Patata Street	Signalized	ICU 1	SB Thru	1.059	-	F
2	Hildreth Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	0.586	-	A
3	Atlantic Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	0.804	-	D
4	Rayo Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	1.016	-	F
5	Garfield Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	0.824	-	D
6	Atlantic Avenue/Southern Avenue	Signalized	ICU 1	SB Thru	0.636	-	B
7	Hildreth Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.695	-	B
8	Pinehurst Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.695	-	B
9	Atlantic Avenue/Tweedy Boulevard	Signalized	ICU 1	SB Right	0.746	-	C
10	Atlantic Avenue/Michigan Avenue	Signalized	ICU 1	SB Thru	0.495	-	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Atlantic Avenue and Salt Lake Avenue/Patata Street**

Control Type:
Signalized
Analysis Method:
ICU 1
Analysis Period:
15 minutes

Delay (sec / veh): -
Level Of Service: F
Volume to Capacity (v/c): 1.059

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	137.00	100.00	100.00	100.00	100.00	70.00	103.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Base Volume Input [veh/h]	416	804	196	3	843	447	3	12	640	176	13	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	417	804	196	3	843	447	3	12	640	176	13	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	104	201	49	1	211	112	1	3	160	44	3	4
Total Analysis Volume [veh/h]	417	804	196	3	843	447	3	12	640	176	13	17
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	0	6	3	5	2	0
Auxiliary Signal Groups									3,6			
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.26	0.30	0.30	0.00	0.40	0.40	0.00	0.01	0.14	0.11	0.02	0.02
Intersection LOS	F											
Intersection V/C	1.059											

Intersection Level Of Service Report**Intersection 2: Hildreth Avenue/Firestone Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.586

Intersection Setup

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	2	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	88.00	275.00	100.00	100.00	110.0	100.0	100.0	100.0
Speed [mph]	25.00			25.00			35.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Base Volume Input [veh/h]	0	0	28	168	0	170	378	1382	29	2	0	1266	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	28	168	0	170	378	1382	29	2	0	1267	103
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	7	42	0	43	95	346	7	1	0	317	26
Total Analysis Volume [veh/h]	0	0	28	168	0	170	378	1382	29	2	0	1267	103
Pedestrian Volume [ped/h]	0			0			0			0			
Bicycle Volume [bicycles/h]	0			0			0			0			

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Permiss	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Prote	Prote	Permi	Permi
Signal Group	0	0	3	4	0	0	1	6	0	5	5	2	0
Auxiliary Signal Groups													
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.03	0.00	0.11	0.07	0.29	0.29	0.00	0.00	0.29	0.29
Intersection LOS	A												
Intersection V/C	0.586												

Intersection Level Of Service Report**Intersection 3: Atlantic Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.804

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	190.00	100.00	100.00	753.00	100.00	189.00	318.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	189	539	67	778	635	137	124	1376	146	95	1028	333
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	1	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	189	539	67	778	635	137	124	1376	146	95	1029	334
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	135	17	195	159	34	31	344	37	24	257	84
Total Analysis Volume [veh/h]	189	539	67	778	635	137	124	1376	146	95	1029	334
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss									
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.13	0.13	0.14	0.20	0.09	0.02	0.32	0.32	0.06	0.28	0.28
Intersection LOS	D											
Intersection V/C	0.804											

Intersection Level Of Service Report
Intersection 4: Rayo Avenue/Firestone Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.016

Intersection Setup

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	1	0	0	2	0	0
Pocket Length [ft]	100.00	100.00	152.00	180.00	100.00	180.00	134.60	100.00	100.00	606.00	100.00	100.00
Speed [mph]	30.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	8	39	650	135	22	9	52	2119	27	530	1486	100
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	4	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	39	654	135	22	9	52	2119	27	530	1486	100
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	10	164	34	6	2	13	530	7	133	372	25
Total Analysis Volume [veh/h]	9	39	654	135	22	9	52	2119	27	530	1486	100
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	5	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups			3.5									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.32	0.04	0.05	0.01	0.03	0.45	0.45	0.09	0.33	0.33
Intersection LOS	F											
Intersection V/C	1.016											

Intersection Level Of Service Report**Intersection 5: Garfield Avenue/Firestone Boulevard**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 15 minutes

Delay (sec / veh): -
 Level Of Service: D
 Volume to Capacity (v/c): 0.824

Intersection Setup

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	2	0	0	2	0	0	2	0	1
Pocket Length [ft]	440.00	100.00	100.00	218.00	100.00	100.00	382.00	100.00	100.00	204.00	100.00	147.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	569	843	86	140	801	534	648	1435	705	128	110	218
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	569	843	86	140	801	534	648	1435	705	128	110	218
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	142	211	22	35	200	134	162	359	176	32	28	55
Total Analysis Volume [veh/h]	569	843	86	140	801	534	648	1435	705	128	110	218
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	1	1	6	3	5	2	7
Auxiliary Signal Groups						1,4			3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.19	0.19	0.02	0.25	0.22	0.11	0.30	0.34	0.02	0.02	0.11
Intersection LOS	D											
Intersection V/C	0.824											

Intersection Level Of Service Report
Intersection 6: Atlantic Avenue/Southern Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.636

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	135.00	100.00	100.00	132.00	100.00	100.00	115.00	100.00	100.00	99.00	100.00	100.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Base Volume Input [veh/h]	90	736	36	23	734	42	41	168	126	215	240	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	90	736	36	23	734	42	41	168	126	215	240	48
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	184	9	6	184	11	10	42	32	54	60	12
Total Analysis Volume [veh/h]	90	736	36	23	734	42	41	168	126	215	240	48
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss							
Signal Group	3	8	0	7	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.24	0.24	0.01	0.24	0.24	0.03	0.09	0.09	0.13	0.18	0.18
Intersection LOS	B											
Intersection V/C	0.636											

Intersection Level Of Service Report**Intersection 7: Hildreth Avenue/Tweedy Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.695

Intersection Setup

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00	92.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	40	6	18	65	15	59	53	757	20	0	654	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	6	18	65	15	59	53	757	20	0	654	80
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	2	5	16	4	15	13	189	5	0	164	20
Total Analysis Volume [veh/h]	40	6	18	65	15	59	53	757	20	0	654	80
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.04	0.04	0.04	0.09	0.09	0.03	0.25	0.01	0.00	0.20	0.05
Intersection LOS	B											
Intersection V/C	0.695											

Intersection Level Of Service Report**Intersection 8: Pinehurst Avenue/Tweedy Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.695

Intersection Setup

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	94.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	22	25	11	36	10	152	62	751	25	8	536	72
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	25	11	36	10	152	62	751	25	8	536	72
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	6	3	9	3	38	16	188	6	2	134	18
Total Analysis Volume [veh/h]	22	25	11	36	10	152	62	751	25	8	536	72
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.04	0.02	0.12	0.12	0.04	0.25	0.02	0.01	0.17	0.05
Intersection LOS	B											
Intersection V/C	0.695											

Intersection Level Of Service Report**Intersection 9: Atlantic Avenue/Tweedy Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: C
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.746

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	250.00	100.00	93.00	137.00	100.00	100.00	100.00	100.00	172.00	100.00	100.00	85.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	339	874	26	59	848	146	364	63	298	56	70	81
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	1	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	339	874	26	59	849	146	364	63	298	56	70	81
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	219	7	15	212	37	91	16	75	14	18	20
Total Analysis Volume [veh/h]	339	874	26	59	849	146	364	63	298	56	70	81
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.27	0.02	0.04	0.31	0.31	0.11	0.13	0.19	0.04	0.08	0.05
Intersection LOS	C											
Intersection V/C	0.746											

Intersection Level Of Service Report**Intersection 10: Atlantic Avenue/Michigan Avenue**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: A
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.495

Intersection Setup

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	9.00	9.00	9.00	15.00	15.00	15.00
No. of Lanes in Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	93.00	100.00	102.00	97.00	100.00	240.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Base Volume Input [veh/h]	36	729	22	29	766	16	19	29	36	10	85	81
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	1	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	36	729	22	29	767	16	19	29	36	10	85	81
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	182	6	7	192	4	5	7	9	3	21	20
Total Analysis Volume [veh/h]	36	729	22	29	767	16	19	29	36	10	85	81
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.23	0.01	0.02	0.24	0.01	0.01	0.05	0.05	0.01	0.11	0.11
Intersection LOS	A											
Intersection V/C	0.495											

South Gate Amazon DAX7 Rayo Ave

Vistro File: J:\...\Dax7_v10_with_drivethrough_int.vistro

Scenario 4 Existing With Project PM

Report File: J:\...\EX_PROJ_PM.pdf

3/2/2020

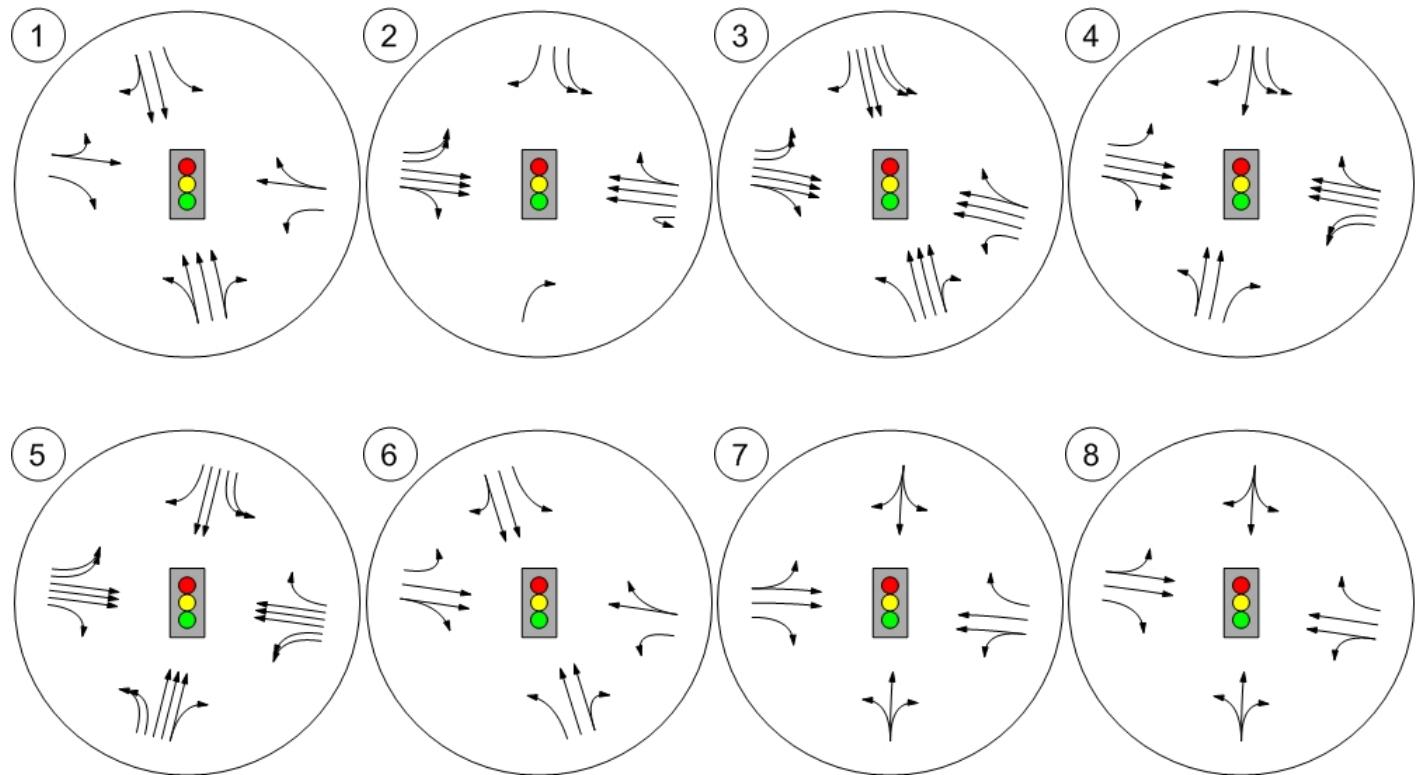
Trip Generation summary**Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips
1: Zone				1.000	0.000	50.00	50.00	0	7	7	100.00
Added Trips Total										0	7

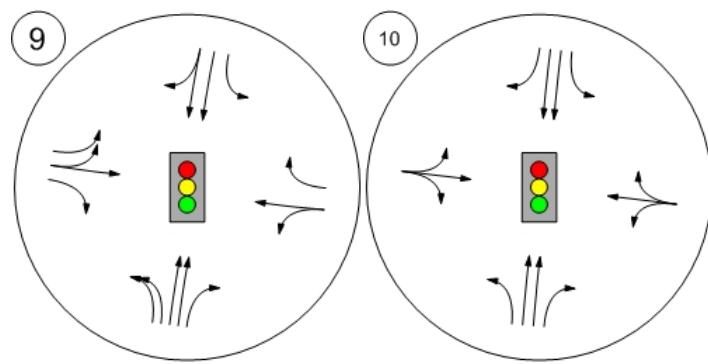
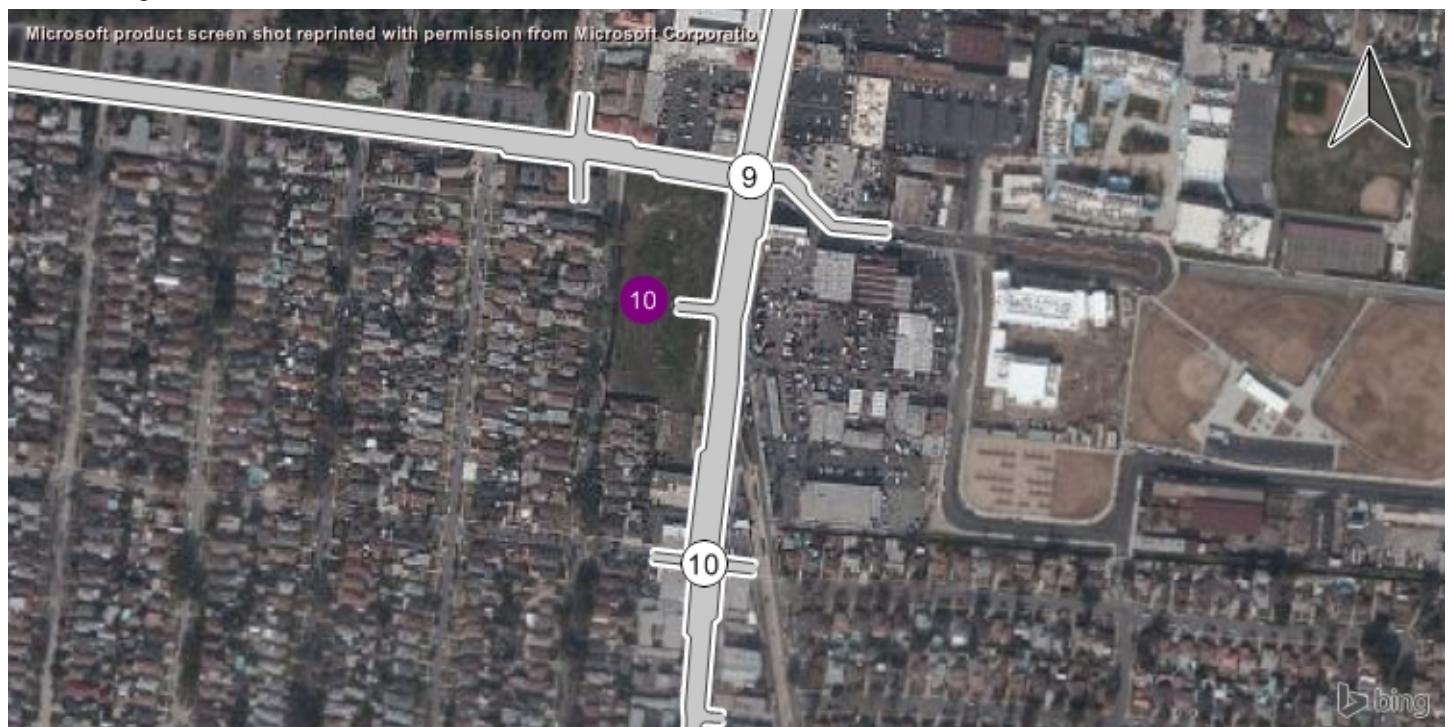
Study Intersections



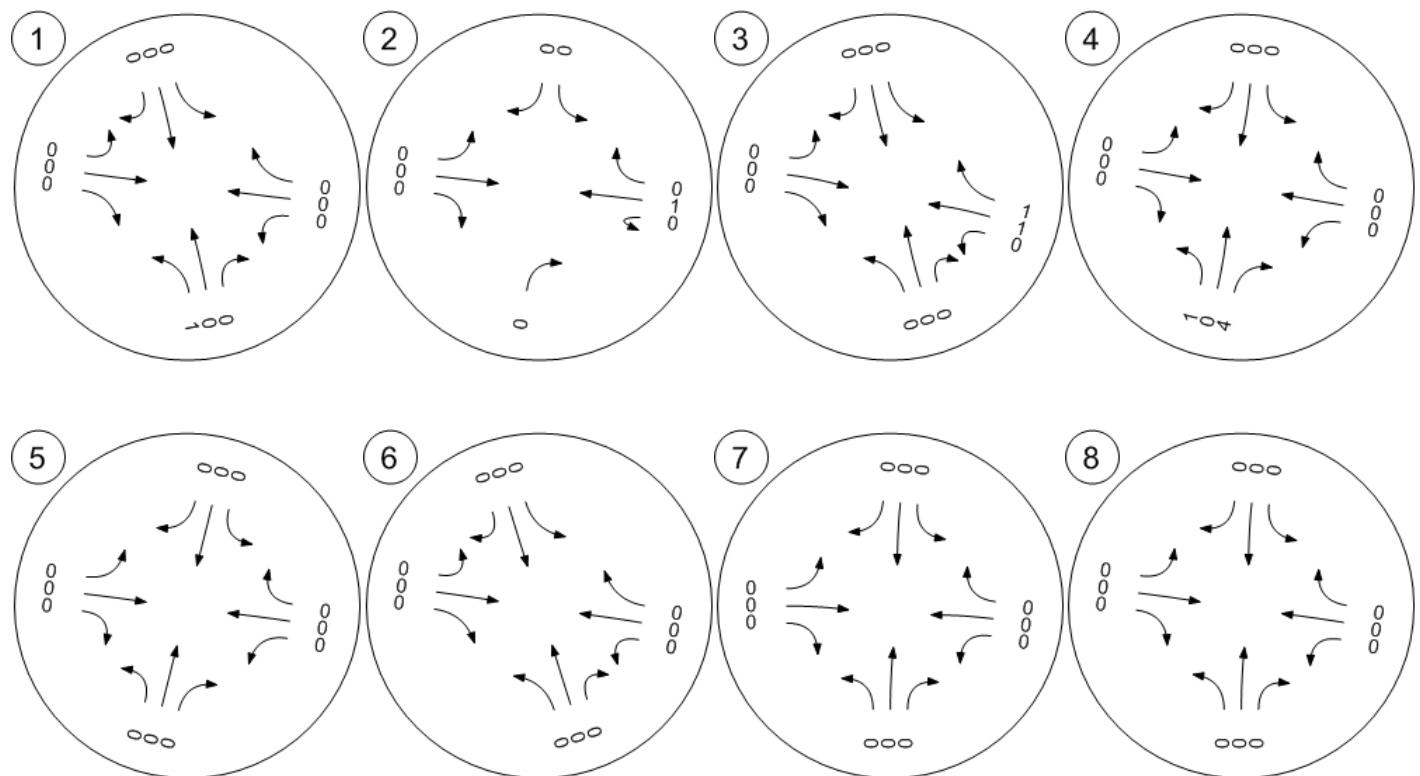
Lane Configuration and Traffic Control



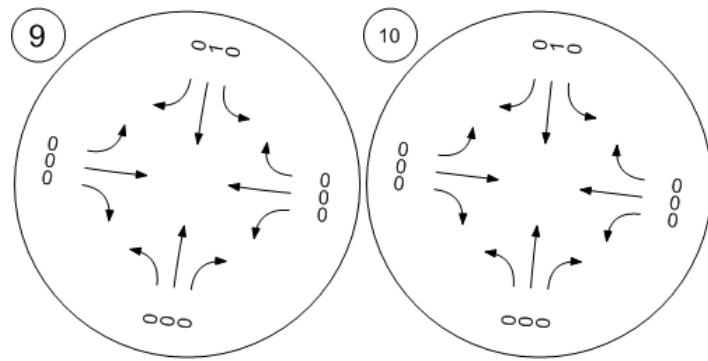
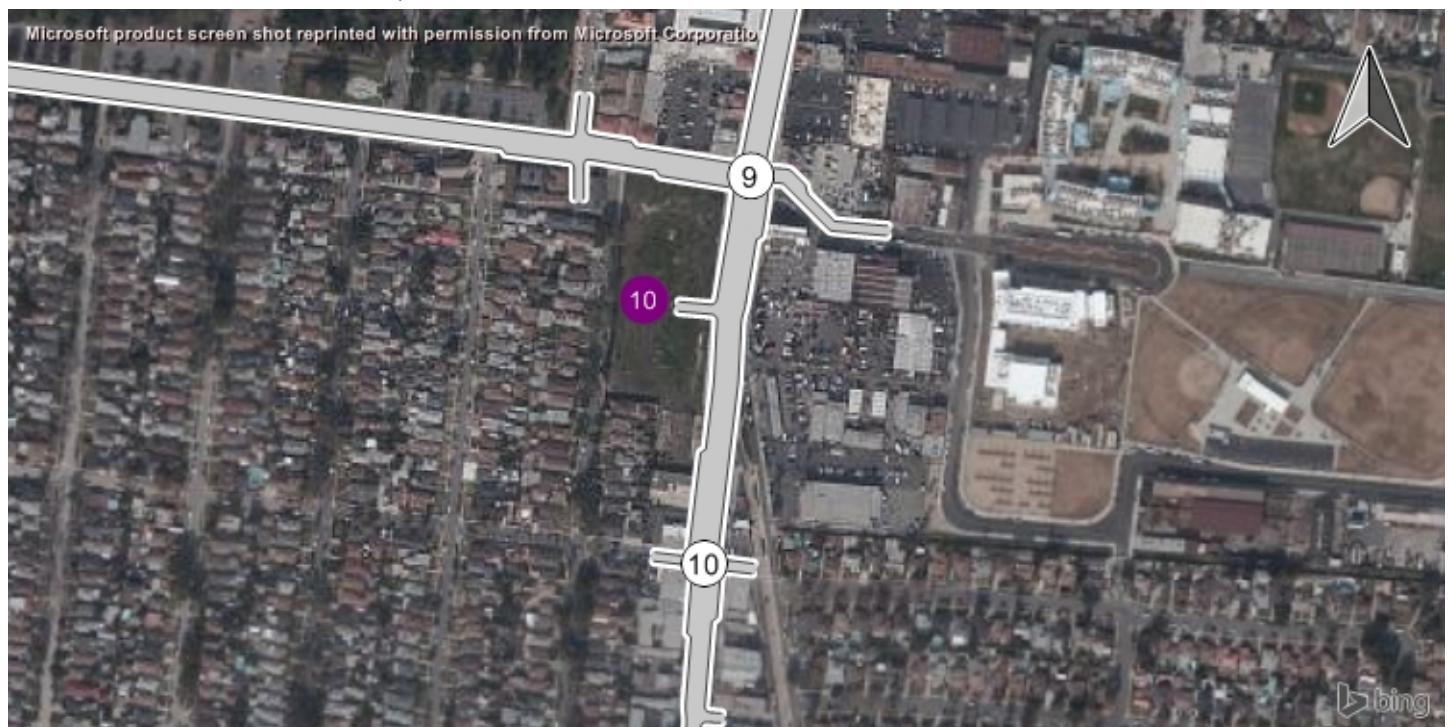
Lane Configuration and Traffic Control



Traffic Volume - Net New Site Trips



Traffic Volume - Net New Site Trips



APPENDIX E
Future Without-Project LOS Worksheets

South Gate Amazon DAX7 Rayo Ave

Vistro File: J:\...\Dax7_v10_with_drivethrough_int.vistro

Scenario 7 Future Without Project AM

Report File: J:\...\FUT__NO_PROJ_AM.pdf

3/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Atlantic Avenue and Salt Lake Avenue/Patata Street	Signalized	ICU 1	NB Thru	0.980	-	E
2	Hildreth Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	0.521	-	A
3	Atlantic Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	0.816	-	D
4	Rayo Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	1.153	-	F
5	Garfield Avenue/Firestone Boulevard	Signalized	ICU 1	SB Right	0.860	-	D
6	Atlantic Avenue/Southern Avenue	Signalized	ICU 1	NB Right	0.644	-	B
7	Hildreth Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.801	-	D
8	Pinehurst Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.765	-	C
9	Atlantic Avenue/Tweedy Boulevard	Signalized	ICU 1	NB Thru	0.878	-	D
10	Atlantic Avenue/Michigan Avenue	Signalized	ICU 1	NB Thru	0.620	-	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Atlantic Avenue and Salt Lake Avenue/Patata Street**

Control Type:
Signalized
Analysis Method:
ICU 1
Analysis Period:
15 minutes

Delay (sec / veh): -
Level Of Service: E
Volume to Capacity (v/c): 0.980

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	137.00	100.00	100.00	100.00	100.00	70.00	103.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Base Volume Input [veh/h]	384	861	118	5	826	5	7	5	736	140	4	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	2	0	0	2	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	394	880	120	5	845	5	7	5	751	143	4	16
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	99	220	30	1	211	1	2	1	188	36	1	4
Total Analysis Volume [veh/h]	394	880	120	5	845	5	7	5	751	143	4	16
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	0	6	3	5	2	0
Auxiliary Signal Groups									3,6			
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.25	0.29	0.29	0.00	0.27	0.27	0.00	0.01	0.22	0.09	0.01	0.01
Intersection LOS	E											
Intersection V/C	0.980											

Intersection Level Of Service Report**Intersection 2: Hildreth Avenue/Firestone Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.521

Intersection Setup

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	2	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	88.00	275.00	100.00	100.00	110.0	100.0	100.0	100.0
Speed [mph]	25.00			25.00			35.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Base Volume Input [veh/h]	0	0	75	46	0	29	101	1571	27	5	0	1326	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0200	1.0200	1.0000	1.0200	1.0200	1.0200	1.0200	1.020	1.000	1.020	1.020
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	2	0	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	77	47	0	30	103	1604	28	5	0	1358	57
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	19	12	0	8	26	401	7	1	0	340	14
Total Analysis Volume [veh/h]	0	0	77	47	0	30	103	1604	28	5	0	1358	57
Pedestrian Volume [ped/h]	0			0			0			0			
Bicycle Volume [bicycles/h]	0			0			0			0			

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Permiss	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Prote	Prote	Permi	Permi
Signal Group	0	0	3	4	0	0	1	6	0	5	5	2	0
Auxiliary Signal Groups													
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.01	0.00	0.02	0.02	0.34	0.34	0.00	0.00	0.29	0.29
Intersection LOS	A												
Intersection V/C	0.521												

Intersection Level Of Service Report**Intersection 3: Atlantic Avenue/Firestone Boulevard**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 15 minutes

Delay (sec / veh): -
 Level Of Service: D
 Volume to Capacity (v/c): 0.816

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	190.00	100.00	100.00	753.00	100.00	189.00	318.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	163	745	53	872	652	103	206	1403	113	76	1174	244
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	4	21	0	2	0	0	0	2	8	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	171	764	75	889	667	105	210	1431	117	86	1197	249
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	43	191	19	222	167	26	53	358	29	22	299	62
Total Analysis Volume [veh/h]	171	764	75	889	667	105	210	1431	117	86	1197	249
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss									
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.17	0.17	0.15	0.21	0.07	0.04	0.32	0.32	0.05	0.30	0.30
Intersection LOS	D											
Intersection V/C	0.816											

Intersection Level Of Service Report
Intersection 4: Rayo Avenue/Firestone Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.153

Intersection Setup

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	1	0	0	2	0	0
Pocket Length [ft]	100.00	100.00	152.00	180.00	100.00	180.00	134.60	100.00	100.00	606.00	100.00	100.00
Speed [mph]	30.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	6	39	811	36	13	7	29	2291	14	327	1588	118
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	25	0	0	0	0	21	0	9	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	40	852	37	13	7	30	2358	14	343	1628	120
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	10	213	9	3	2	8	590	4	86	407	30
Total Analysis Volume [veh/h]	6	40	852	37	13	7	30	2358	14	343	1628	120
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	5	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups			3.5									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.47	0.01	0.02	0.00	0.02	0.49	0.49	0.06	0.36	0.36
Intersection LOS	F											
Intersection V/C	1.153											

Intersection Level Of Service Report**Intersection 5: Garfield Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.860

Intersection Setup

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	2	0	0	2	0	0	2	0	1
Pocket Length [ft]	440.00	100.00	100.00	218.00	100.00	100.00	382.00	100.00	100.00	204.00	100.00	147.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	765	1164	49	150	597	628	761	877	488	50	991	215
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	2	5	6	13	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	785	1187	50	153	609	643	781	901	511	51	1013	219
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	196	297	13	38	152	161	195	225	128	13	253	55
Total Analysis Volume [veh/h]	785	1187	50	153	609	643	781	901	511	51	1013	219
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	1	1	6	3	5	2	7
Auxiliary Signal Groups						1,4			3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.26	0.26	0.03	0.19	0.27	0.14	0.19	0.18	0.01	0.21	0.11
Intersection LOS	D											
Intersection V/C	0.860											

Intersection Level Of Service Report
Intersection 6: Atlantic Avenue/Southern Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.644

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	135.00	100.00	100.00	132.00	100.00	100.00	115.00	100.00	100.00	99.00	100.00	100.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Base Volume Input [veh/h]	92	854	24	27	707	29	112	240	227	121	154	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	30	0	0	12	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	95	901	24	28	733	30	114	245	232	123	157	61
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	225	6	7	183	8	29	61	58	31	39	15
Total Analysis Volume [veh/h]	95	901	24	28	733	30	114	245	232	123	157	61
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss							
Signal Group	3	8	0	7	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.29	0.29	0.02	0.24	0.24	0.07	0.15	0.15	0.08	0.14	0.14
Intersection LOS	B											
Intersection V/C	0.644											

Intersection Level Of Service Report**Intersection 7: Hildreth Avenue/Tweedy Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.801

Intersection Setup

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00	92.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	88	17	7	108	14	49	63	812	33	5	719	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	90	17	7	110	14	50	64	828	34	5	735	91
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	4	2	28	4	13	16	207	9	1	184	23
Total Analysis Volume [veh/h]	90	17	7	110	14	50	64	828	34	5	735	91
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.07	0.07	0.07	0.11	0.11	0.04	0.28	0.02	0.00	0.23	0.06
Intersection LOS	D											
Intersection V/C	0.801											

Intersection Level Of Service Report**Intersection 8: Pinehurst Avenue/Tweedy Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.765

Intersection Setup

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	94.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	53	117	54	61	16	104	63	717	12	3	461	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	54	119	55	62	16	106	64	731	12	3	472	91
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	30	14	16	4	27	16	183	3	1	118	23
Total Analysis Volume [veh/h]	54	119	55	62	16	106	64	731	12	3	472	91
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.14	0.14	0.04	0.12	0.12	0.04	0.25	0.01	0.00	0.15	0.06
Intersection LOS	C											
Intersection V/C	0.765											

Intersection Level Of Service Report
Intersection 9: Atlantic Avenue/Tweedy Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.878

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	250.00	100.00	93.00	137.00	100.00	100.00	100.00	100.00	172.00	100.00	100.00	85.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	162	836	25	180	613	108	381	163	299	93	185	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	56	0	0	21	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	167	909	26	184	646	110	389	166	305	95	189	133
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	227	7	46	162	28	97	42	76	24	47	33
Total Analysis Volume [veh/h]	167	909	26	184	646	110	389	166	305	95	189	133
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.28	0.02	0.12	0.24	0.24	0.12	0.17	0.19	0.06	0.18	0.08
Intersection LOS	D											
Intersection V/C	0.878											

Intersection Level Of Service Report**Intersection 10: Atlantic Avenue/Michigan Avenue**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: B
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.620

Intersection Setup

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	9.00	9.00	9.00	15.00	15.00	15.00
No. of Lanes in Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	93.00	100.00	102.00	97.00	100.00	240.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Base Volume Input [veh/h]	46	733	10	73	600	20	45	102	54	8	151	132
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	47	0	0	27	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	795	10	74	639	20	46	104	55	8	154	135
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	199	3	19	160	5	12	26	14	2	39	34
Total Analysis Volume [veh/h]	47	795	10	74	639	20	46	104	55	8	154	135
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

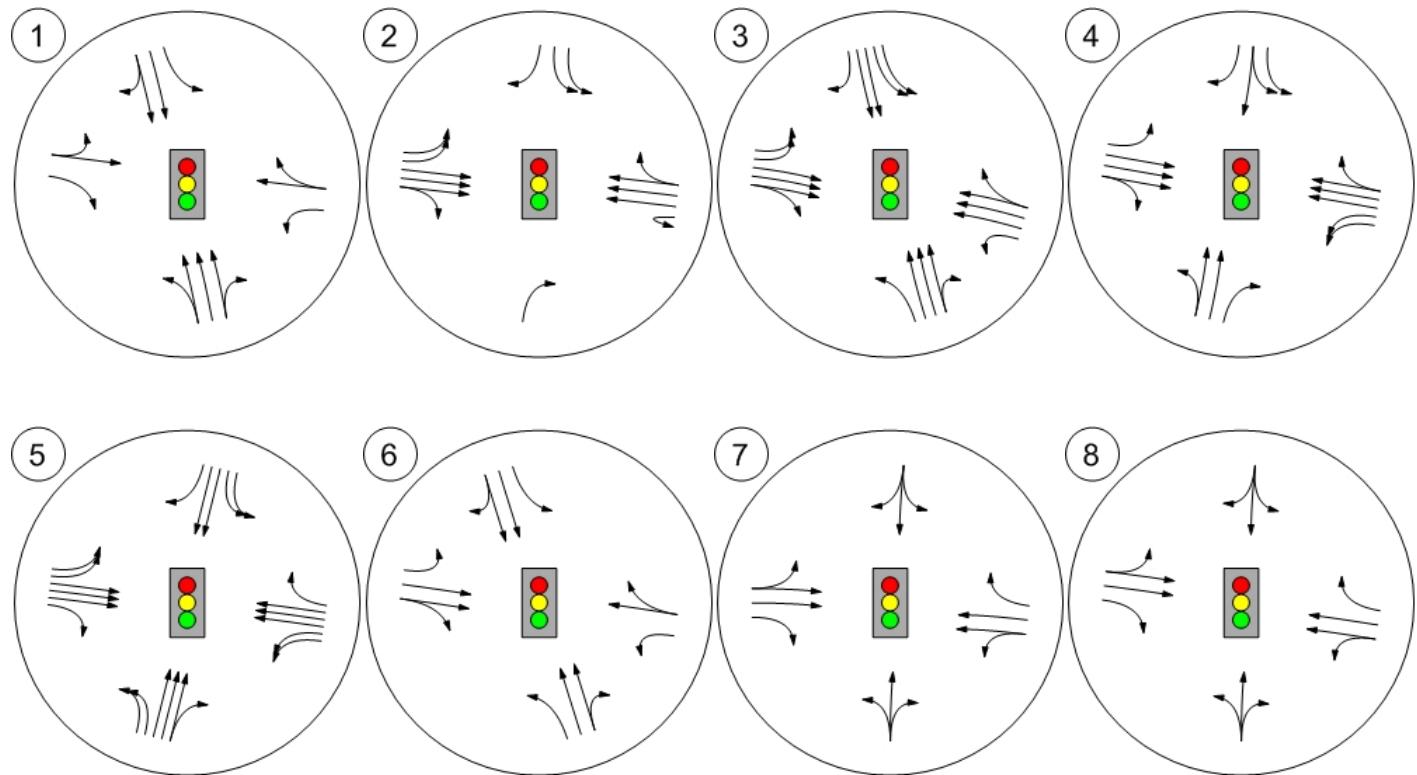
V/C, Movement V/C Ratio	0.03	0.25	0.01	0.05	0.20	0.01	0.03	0.13	0.13	0.01	0.19	0.19
Intersection LOS	B											
Intersection V/C	0.620											

Study Intersections

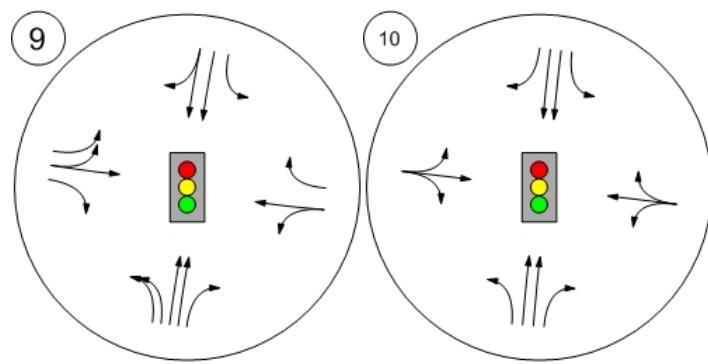
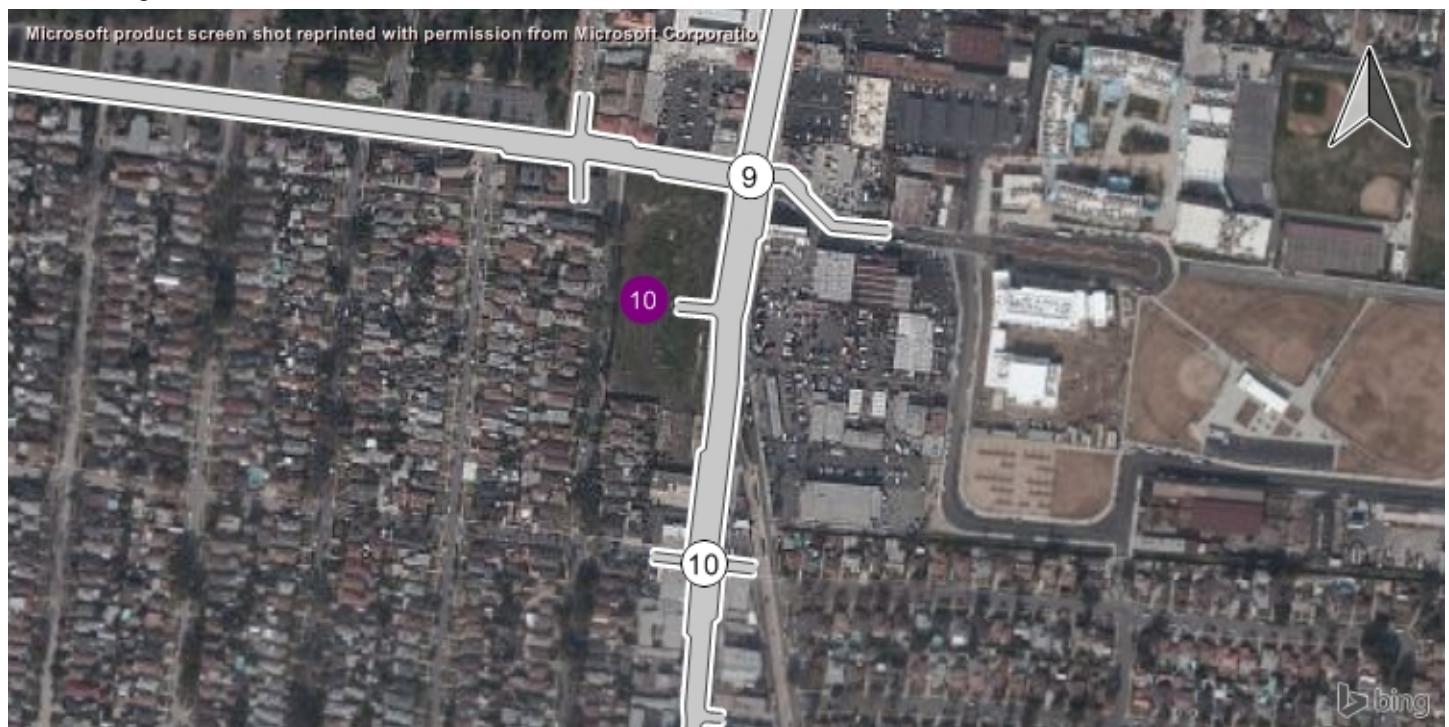
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Lane Configuration and Traffic Control



Lane Configuration and Traffic Control



South Gate Amazon DAX7 Rayo Ave

Vistro File: J:\...\Dax7_v10_with_drivethrough_int.vistro

Scenario 8 Future Without Project PM

Report File: J:\...\FUT__NO_PROJ_PM.pdf

3/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Atlantic Avenue and Salt Lake Avenue/Patata Street	Signalized	ICU 1	SB Thru	1.081	-	F
2	Hildreth Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	0.596	-	A
3	Atlantic Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	0.836	-	D
4	Rayo Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	1.046	-	F
5	Garfield Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	0.844	-	D
6	Atlantic Avenue/Southern Avenue	Signalized	ICU 1	SB Thru	0.657	-	B
7	Hildreth Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.707	-	C
8	Pinehurst Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.708	-	C
9	Atlantic Avenue/Tweedy Boulevard	Signalized	ICU 1	SB Thru	0.778	-	C
10	Atlantic Avenue/Michigan Avenue	Signalized	ICU 1	SB Thru	0.519	-	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Atlantic Avenue and Salt Lake Avenue/Patata Street**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: F
 Analysis Period: 15 minutes Volume to Capacity (v/c): 1.081

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	137.00	100.00	100.00	100.00	100.00	70.00	103.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Base Volume Input [veh/h]	416	804	196	3	843	447	3	12	640	176	13	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	2	0	0	2	0	0	0	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	425	822	200	3	862	456	3	12	655	180	13	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	106	206	50	1	216	114	1	3	164	45	3	4
Total Analysis Volume [veh/h]	425	822	200	3	862	456	3	12	655	180	13	17
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	0	6	3	5	2	0
Auxiliary Signal Groups									3,6			
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.27	0.30	0.30	0.00	0.41	0.41	0.00	0.01	0.14	0.11	0.02	0.02
Intersection LOS	F											
Intersection V/C	1.081											

Intersection Level Of Service Report**Intersection 2: Hildreth Avenue/Firestone Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.596

Intersection Setup

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	2	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	88.00	275.00	100.00	100.00	110.0	100.0	100.0	100.0
Speed [mph]	25.00			25.00			35.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Base Volume Input [veh/h]	0	0	28	168	0	170	378	1382	29	2	0	1266	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0200	1.0200	1.0000	1.0200	1.0200	1.0200	1.0200	1.020	1.000	1.020	1.020
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	5	0	0	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	29	171	0	173	386	1415	30	2	0	1294	105
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	7	43	0	43	97	354	8	1	0	324	26
Total Analysis Volume [veh/h]	0	0	29	171	0	173	386	1415	30	2	0	1294	105
Pedestrian Volume [ped/h]	0			0			0			0			
Bicycle Volume [bicycles/h]	0			0			0			0			

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Permiss	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Prote	Prote	Permi	Permi
Signal Group	0	0	3	4	0	0	1	6	0	5	5	2	0
Auxiliary Signal Groups													
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.03	0.00	0.11	0.07	0.30	0.30	0.00	0.00	0.29	0.29
Intersection LOS	A												
Intersection V/C	0.596												

Intersection Level Of Service Report**Intersection 3: Atlantic Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.836

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	190.00	100.00	100.00	753.00	100.00	189.00	318.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	189	539	67	778	635	137	124	1376	146	95	1028	333
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	15	0	4	0	0	0	5	22	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	196	553	83	794	652	140	126	1404	154	119	1049	340
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	138	21	199	163	35	32	351	39	30	262	85
Total Analysis Volume [veh/h]	196	553	83	794	652	140	126	1404	154	119	1049	340
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss									
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.13	0.13	0.14	0.20	0.09	0.02	0.32	0.32	0.07	0.29	0.29
Intersection LOS	D											
Intersection V/C	0.836											

Intersection Level Of Service Report**Intersection 4: Rayo Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: F
 Analysis Period: 15 minutes Volume to Capacity (v/c): 1.046

Intersection Setup

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	1	0	0	2	0	0
Pocket Length [ft]	100.00	100.00	152.00	180.00	100.00	180.00	134.60	100.00	100.00	606.00	100.00	100.00
Speed [mph]	30.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	8	39	650	135	22	9	52	2119	27	530	1486	100
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	18	0	0	0	0	15	0	26	22	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	40	681	138	22	9	53	2176	28	567	1538	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	10	170	35	6	2	13	544	7	142	385	26
Total Analysis Volume [veh/h]	8	40	681	138	22	9	53	2176	28	567	1538	102
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	5	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups			3.5									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.33	0.04	0.05	0.01	0.03	0.46	0.46	0.10	0.34	0.34
Intersection LOS	F											
Intersection V/C	1.046											

Intersection Level Of Service Report**Intersection 5: Garfield Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.844

Intersection Setup

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	2	0	0	2	0	0	2	0	1
Pocket Length [ft]	440.00	100.00	100.00	218.00	100.00	100.00	382.00	100.00	100.00	204.00	100.00	147.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	569	843	86	140	801	534	648	1435	705	128	110	218
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	0	0	0	0	5	3	4	9	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	594	860	88	143	817	550	664	1468	728	131	118	222
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	215	22	36	204	138	166	367	182	33	30	56
Total Analysis Volume [veh/h]	594	860	88	143	817	550	664	1468	728	131	118	222
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	1	1	6	3	5	2	7
Auxiliary Signal Groups						1,4			3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.20	0.20	0.02	0.26	0.23	0.12	0.31	0.35	0.02	0.02	0.11
Intersection LOS	D											
Intersection V/C	0.844											

Intersection Level Of Service Report
Intersection 6: Atlantic Avenue/Southern Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.657

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	135.00	100.00	100.00	132.00	100.00	100.00	115.00	100.00	100.00	99.00	100.00	100.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Base Volume Input [veh/h]	90	736	36	23	734	42	41	168	126	215	240	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	21	0	0	31	0	0	0	1	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	772	37	23	780	43	42	171	130	219	245	49
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	193	9	6	195	11	11	43	33	55	61	12
Total Analysis Volume [veh/h]	92	772	37	23	780	43	42	171	130	219	245	49
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss							
Signal Group	3	8	0	7	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.25	0.25	0.01	0.26	0.26	0.03	0.09	0.09	0.14	0.18	0.18
Intersection LOS	B											
Intersection V/C	0.657											

Intersection Level Of Service Report**Intersection 7: Hildreth Avenue/Tweedy Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.707

Intersection Setup

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00	92.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	40	6	18	65	15	59	53	757	20	0	654	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	2	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	41	6	18	66	15	60	54	774	20	0	668	82
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	2	5	17	4	15	14	194	5	0	167	21
Total Analysis Volume [veh/h]	41	6	18	66	15	60	54	774	20	0	668	82
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.04	0.04	0.04	0.09	0.09	0.03	0.26	0.01	0.00	0.21	0.05
Intersection LOS	C											
Intersection V/C	0.707											

Intersection Level Of Service Report**Intersection 8: Pinehurst Avenue/Tweedy Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.708

Intersection Setup

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	94.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	22	25	11	36	10	152	62	751	25	8	536	72
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	2	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	26	11	37	10	155	63	768	26	8	548	73
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	7	3	9	3	39	16	192	7	2	137	18
Total Analysis Volume [veh/h]	22	26	11	37	10	155	63	768	26	8	548	73
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.04	0.02	0.13	0.13	0.04	0.26	0.02	0.01	0.17	0.05
Intersection LOS	C											
Intersection V/C	0.708											

Intersection Level Of Service Report**Intersection 9: Atlantic Avenue/Tweedy Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: C
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.778

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	250.00	100.00	93.00	137.00	100.00	100.00	100.00	100.00	172.00	100.00	100.00	85.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	339	874	26	59	848	146	364	63	298	56	70	81
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	39	0	0	58	0	0	0	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	347	930	27	60	923	149	371	64	306	57	71	83
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	233	7	15	231	37	93	16	77	14	18	21
Total Analysis Volume [veh/h]	347	930	27	60	923	149	371	64	306	57	71	83
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.29	0.02	0.04	0.34	0.34	0.12	0.14	0.19	0.04	0.08	0.05
Intersection LOS	C											
Intersection V/C	0.778											

Intersection Level Of Service Report**Intersection 10: Atlantic Avenue/Michigan Avenue**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.519

Intersection Setup

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	9.00	9.00	9.00	15.00	15.00	15.00
No. of Lanes in Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	93.00	100.00	102.00	97.00	100.00	240.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Base Volume Input [veh/h]	36	729	22	29	766	16	19	29	36	10	85	81
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	39	0	0	53	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	783	22	30	834	16	19	30	37	10	87	83
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	196	6	8	209	4	5	8	9	3	22	21
Total Analysis Volume [veh/h]	37	783	22	30	834	16	19	30	37	10	87	83
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

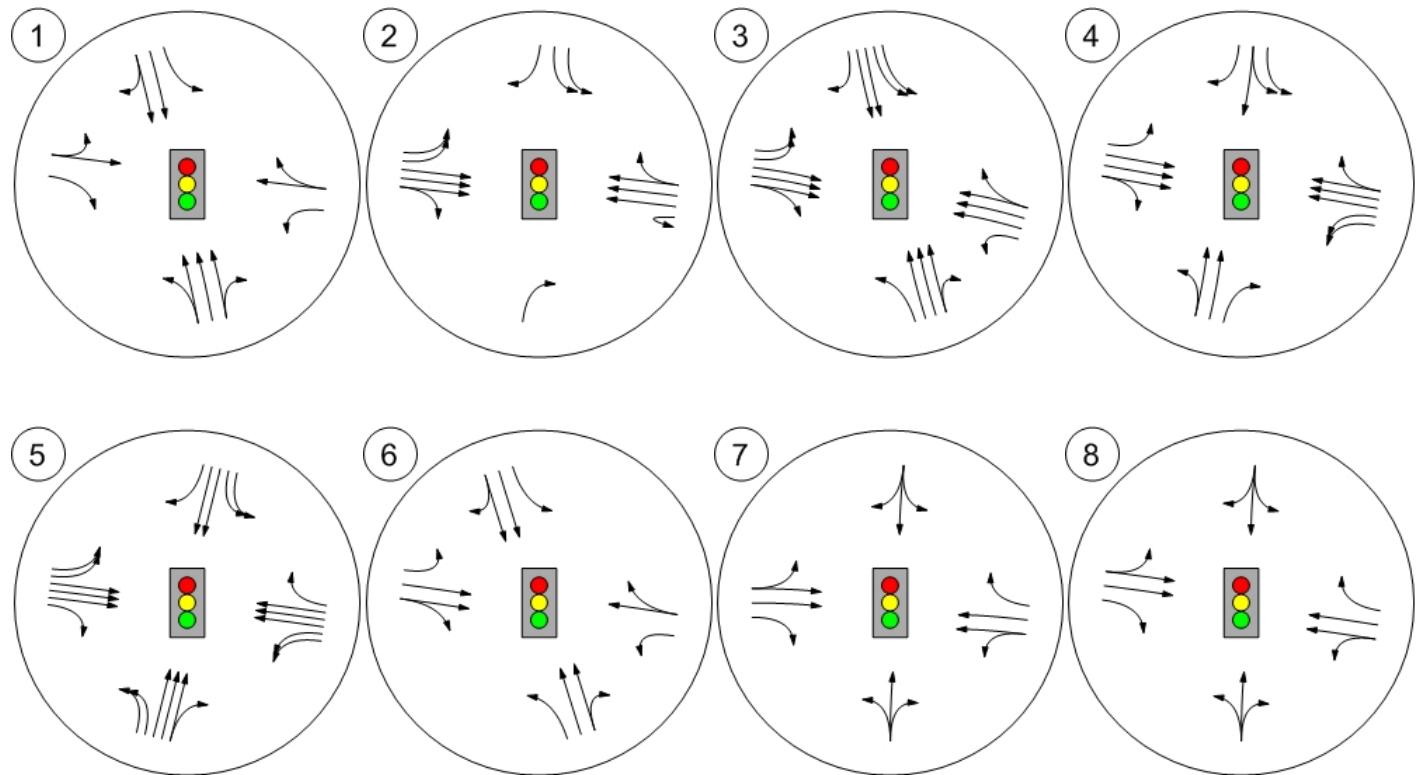
Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.24	0.01	0.02	0.26	0.01	0.01	0.05	0.05	0.01	0.11	0.11
Intersection LOS	A											
Intersection V/C	0.519											

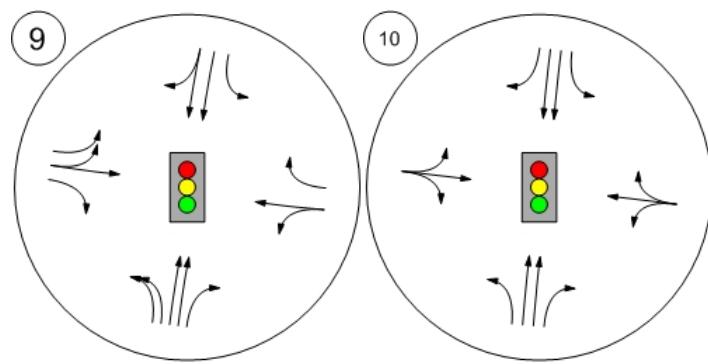
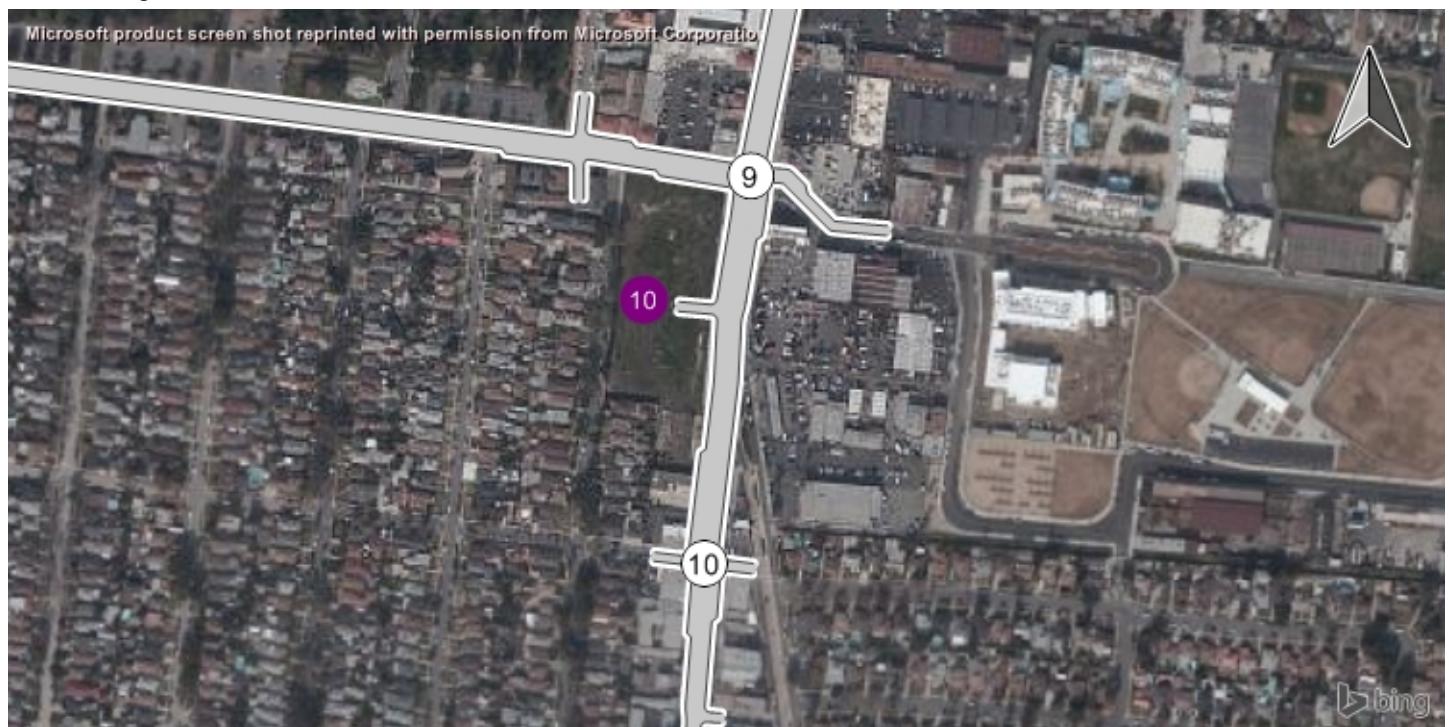
Study Intersections



Lane Configuration and Traffic Control



Lane Configuration and Traffic Control



APPENDIX F
Future With-Project LOS Worksheets

South Gate Amazon DAX7 Rayo Ave

Vistro File: J:\...\Dax7_v10_with_drivethrough_int.vistro

Scenario 5 Future With Project AM

Report File: J:\...\FUT_PROJ_AM.pdf

3/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Atlantic Avenue and Salt Lake Avenue/Patata Street	Signalized	ICU 1	NB Thru	0.980	-	E
2	Hildreth Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	0.522	-	A
3	Atlantic Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	0.817	-	D
4	Rayo Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	1.155	-	F
5	Garfield Avenue/Firestone Boulevard	Signalized	ICU 1	SB Right	0.860	-	D
6	Atlantic Avenue/Southern Avenue	Signalized	ICU 1	NB Right	0.644	-	B
7	Hildreth Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.801	-	D
8	Pinehurst Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.765	-	C
9	Atlantic Avenue/Tweedy Boulevard	Signalized	ICU 1	NB Thru	0.879	-	D
10	Atlantic Avenue/Michigan Avenue	Signalized	ICU 1	NB Thru	0.620	-	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Atlantic Avenue and Salt Lake Avenue/Patata Street**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.980

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	137.00	100.00	100.00	100.00	100.00	70.00	103.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Base Volume Input [veh/h]	384	861	118	5	826	5	7	5	736	140	4	16
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	2	0	0	3	0	0	0	1	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	395	880	120	5	846	5	7	5	752	143	4	16
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	99	220	30	1	212	1	2	1	188	36	1	4
Total Analysis Volume [veh/h]	395	880	120	5	846	5	7	5	752	143	4	16
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	0	6	3	5	2	0
Auxiliary Signal Groups									3,6			
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.25	0.29	0.29	0.00	0.27	0.27	0.00	0.01	0.22	0.09	0.01	0.01
Intersection LOS	E											
Intersection V/C	0.980											

Intersection Level Of Service Report**Intersection 2: Hildreth Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: A
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.522

Intersection Setup

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	2	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	88.00	275.00	100.00	100.00	110.0	100.0	100.0	100.0
Speed [mph]	25.00			25.00			35.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Base Volume Input [veh/h]	0	0	75	46	0	29	101	1571	27	5	0	1326	56
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0200	1.0200	1.0000	1.0200	1.0200	1.0200	1.0200	1.020	1.000	1.020	1.020
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	5	0	0	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	77	47	0	30	103	1607	28	5	0	1359	57
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	19	12	0	8	26	402	7	1	0	340	14
Total Analysis Volume [veh/h]	0	0	77	47	0	30	103	1607	28	5	0	1359	57
Pedestrian Volume [ped/h]	0			0			0			0			
Bicycle Volume [bicycles/h]	0			0			0			0			

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Permiss	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Prote	Prote	Permi	Permi
Signal Group	0	0	3	4	0	0	1	6	0	5	5	2	0
Auxiliary Signal Groups													
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.05	0.01	0.00	0.02	0.02	0.34	0.34	0.00	0.00	0.30	0.30
Intersection LOS	A												
Intersection V/C	0.522												

Intersection Level Of Service Report**Intersection 3: Atlantic Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.817

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	190.00	100.00	100.00	753.00	100.00	189.00	318.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	163	745	53	872	652	103	206	1403	113	76	1174	244
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	4	21	1	3	0	0	2	3	8	1	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	171	764	75	890	668	105	210	1433	118	86	1198	250
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	43	191	19	223	167	26	53	358	30	22	300	63
Total Analysis Volume [veh/h]	171	764	75	890	668	105	210	1433	118	86	1198	250
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss									
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.17	0.17	0.15	0.21	0.07	0.04	0.32	0.32	0.05	0.30	0.30
Intersection LOS	D											
Intersection V/C	0.817											

Intersection Level Of Service Report
Intersection 4: Rayo Avenue/Firestone Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.155

Intersection Setup

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	1	0	0	2	0	0
Pocket Length [ft]	100.00	100.00	152.00	180.00	100.00	180.00	134.60	100.00	100.00	606.00	100.00	100.00
Speed [mph]	30.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	6	39	811	36	13	7	29	2291	14	327	1588	118
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	27	0	0	0	0	21	4	16	8	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	40	854	37	13	7	30	2358	18	350	1628	120
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	10	214	9	3	2	8	590	5	88	407	30
Total Analysis Volume [veh/h]	7	40	854	37	13	7	30	2358	18	350	1628	120
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	5	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups			3.5									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.47	0.01	0.02	0.00	0.02	0.50	0.50	0.06	0.36	0.36
Intersection LOS	F											
Intersection V/C	1.155											

Intersection Level Of Service Report**Intersection 5: Garfield Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.860

Intersection Setup

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	2	0	0	2	0	0	2	0	1
Pocket Length [ft]	440.00	100.00	100.00	218.00	100.00	100.00	382.00	100.00	100.00	204.00	100.00	147.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	765	1164	49	150	597	628	761	877	488	50	991	215
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	2	5	6	13	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	785	1187	50	153	609	643	781	901	511	51	1013	219
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	196	297	13	38	152	161	195	225	128	13	253	55
Total Analysis Volume [veh/h]	785	1187	50	153	609	643	781	901	511	51	1013	219
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	1	1	6	3	5	2	7
Auxiliary Signal Groups						1,4			3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.26	0.26	0.03	0.19	0.27	0.14	0.19	0.18	0.01	0.21	0.11
Intersection LOS	D											
Intersection V/C	0.860											

Intersection Level Of Service Report
Intersection 6: Atlantic Avenue/Southern Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.644

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	135.00	100.00	100.00	132.00	100.00	100.00	115.00	100.00	100.00	99.00	100.00	100.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Base Volume Input [veh/h]	92	854	24	27	707	29	112	240	227	121	154	60
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	30	0	0	13	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	95	901	24	28	734	30	114	245	232	123	157	61
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	225	6	7	184	8	29	61	58	31	39	15
Total Analysis Volume [veh/h]	95	901	24	28	734	30	114	245	232	123	157	61
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss							
Signal Group	3	8	0	7	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.29	0.29	0.02	0.24	0.24	0.07	0.15	0.15	0.08	0.14	0.14
Intersection LOS	B											
Intersection V/C	0.644											

Intersection Level Of Service Report**Intersection 7: Hildreth Avenue/Tweedy Boulevard**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 15 minutes

Delay (sec / veh): -
 Level Of Service: D
 Volume to Capacity (v/c): 0.801

Intersection Setup

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00	92.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	88	17	7	108	14	49	63	812	33	5	719	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	90	17	7	110	14	50	64	828	34	5	735	91
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	4	2	28	4	13	16	207	9	1	184	23
Total Analysis Volume [veh/h]	90	17	7	110	14	50	64	828	34	5	735	91
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.07	0.07	0.07	0.11	0.11	0.04	0.28	0.02	0.00	0.23	0.06
Intersection LOS	D											
Intersection V/C	0.801											

Intersection Level Of Service Report**Intersection 8: Pinehurst Avenue/Tweedy Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: C
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.765

Intersection Setup

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	94.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	53	117	54	61	16	104	63	717	12	3	461	89
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	54	119	55	62	16	106	64	731	12	3	472	91
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	30	14	16	4	27	16	183	3	1	118	23
Total Analysis Volume [veh/h]	54	119	55	62	16	106	64	731	12	3	472	91
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.14	0.14	0.04	0.12	0.12	0.04	0.25	0.01	0.00	0.15	0.06
Intersection LOS	C											
Intersection V/C	0.765											

Intersection Level Of Service Report**Intersection 9: Atlantic Avenue/Tweedy Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.879

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	250.00	100.00	93.00	137.00	100.00	100.00	100.00	100.00	172.00	100.00	100.00	85.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	162	836	25	180	613	108	381	163	299	93	185	130
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	57	0	0	22	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	167	910	26	184	647	110	389	166	305	95	189	133
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	42	228	7	46	162	28	97	42	76	24	47	33
Total Analysis Volume [veh/h]	167	910	26	184	647	110	389	166	305	95	189	133
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.28	0.02	0.12	0.24	0.24	0.12	0.17	0.19	0.06	0.18	0.08
Intersection LOS	D											
Intersection V/C	0.879											

Intersection Level Of Service Report**Intersection 10: Atlantic Avenue/Michigan Avenue**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: B
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.620

Intersection Setup

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	9.00	9.00	9.00	15.00	15.00	15.00
No. of Lanes in Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	93.00	100.00	102.00	97.00	100.00	240.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Base Volume Input [veh/h]	46	733	10	73	600	20	45	102	54	8	151	132
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	48	0	0	28	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	796	10	74	640	20	46	104	55	8	154	135
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	199	3	19	160	5	12	26	14	2	39	34
Total Analysis Volume [veh/h]	47	796	10	74	640	20	46	104	55	8	154	135
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.25	0.01	0.05	0.20	0.01	0.03	0.13	0.13	0.01	0.19	0.19
Intersection LOS	B											
Intersection V/C	0.620											

South Gate Amazon DAX7 Rayo Ave

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Scenario 5 Future With Project AM

Report File: J:\...\FUT_PROJ_AM.pdf

3/2/2020

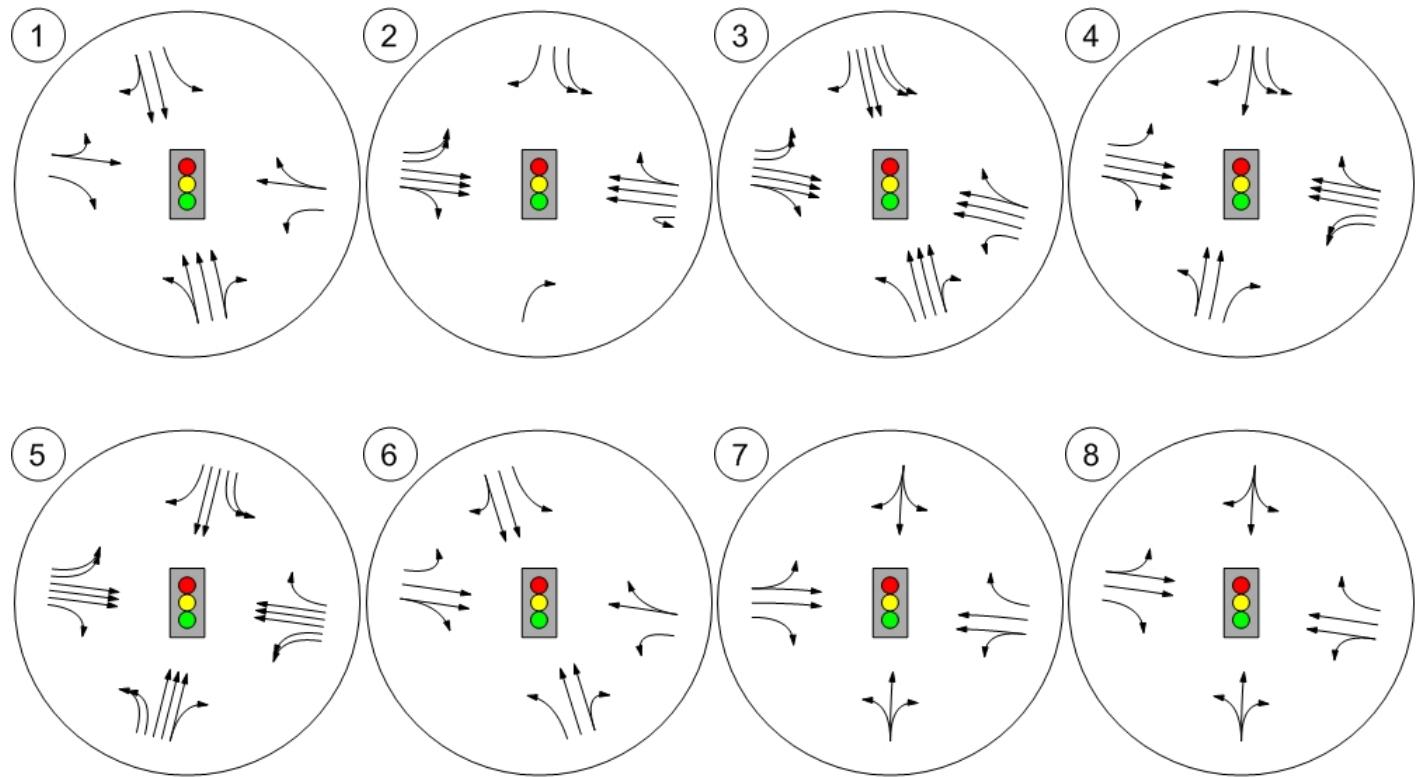
Trip Generation summary**Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips	
1: Zone				1.000	0.000	50.00	50.00	14	5	19	13.19	
10: Zone				1.000	0.000	50.00	50.00	9	24	33	22.92	
11: Zone				1.000	0.000	50.00	50.00	25	67	92	63.89	
Added Trips Total									48	96	144	100.00

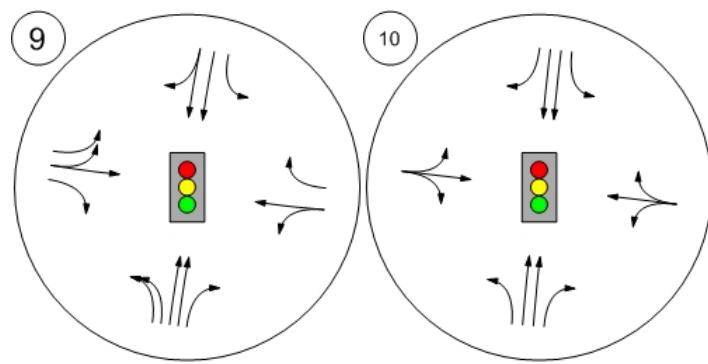
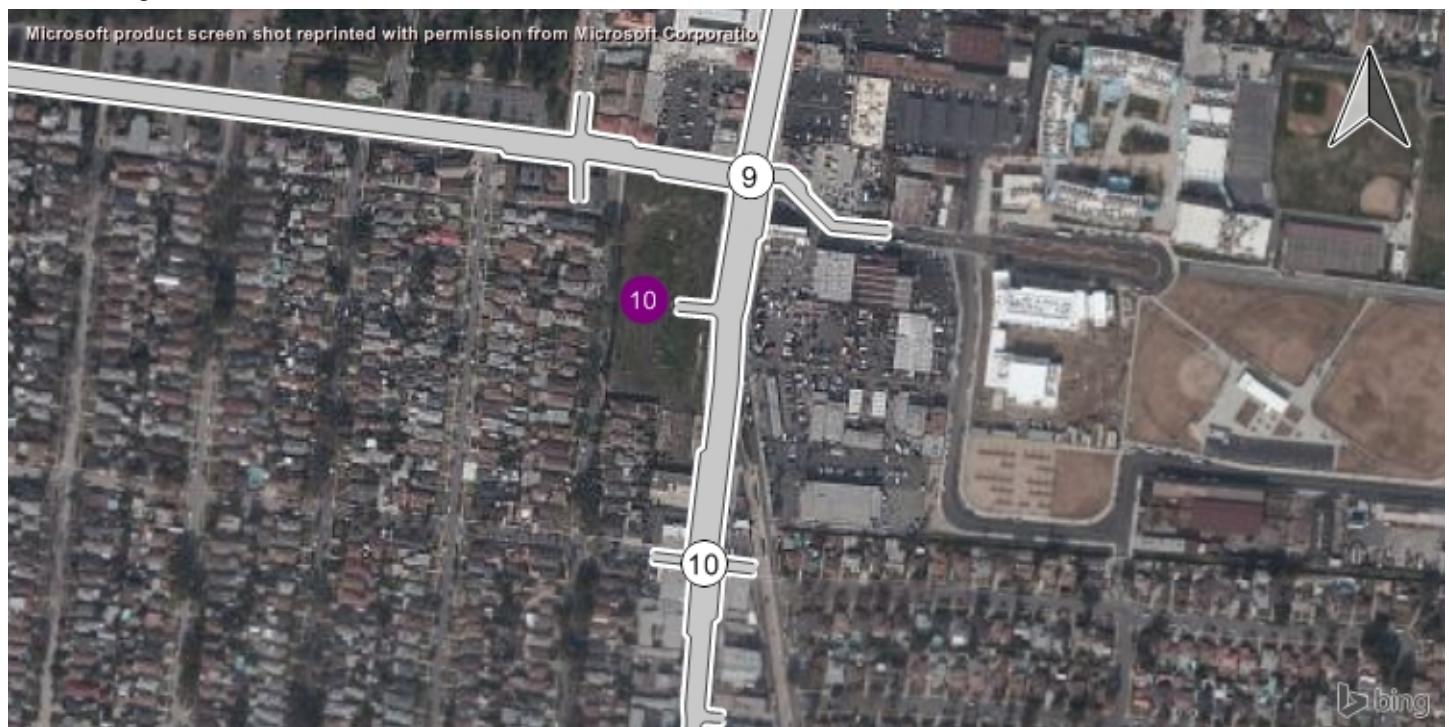
Study Intersections



Lane Configuration and Traffic Control



Lane Configuration and Traffic Control



South Gate Amazon DAX7 Rayo Ave

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Scenario 6 Future With Project PM

Report File: J:\...\FUT_PROJ_PM.pdf

3/2/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Atlantic Avenue and Salt Lake Avenue/Patata Street	Signalized	ICU 1	SB Thru	1.080	-	F
2	Hildreth Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	0.596	-	A
3	Atlantic Avenue/Firestone Boulevard	Signalized	ICU 1	EB Thru	0.836	-	D
4	Rayo Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	1.048	-	F
5	Garfield Avenue/Firestone Boulevard	Signalized	ICU 1	EB Right	0.844	-	D
6	Atlantic Avenue/Southern Avenue	Signalized	ICU 1	SB Thru	0.657	-	B
7	Hildreth Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.707	-	C
8	Pinehurst Avenue/Tweedy Boulevard	Signalized	ICU 1	EB Thru	0.708	-	C
9	Atlantic Avenue/Tweedy Boulevard	Signalized	ICU 1	SB Thru	0.778	-	C
10	Atlantic Avenue/Michigan Avenue	Signalized	ICU 1	SB Thru	0.520	-	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**Intersection 1: Atlantic Avenue and Salt Lake Avenue/Patata Street**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: F
 Analysis Period: 15 minutes Volume to Capacity (v/c): 1.080

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	137.00	100.00	100.00	100.00	100.00	70.00	103.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Salt Lake Avenue			Patata Street		
Base Volume Input [veh/h]	416	804	196	3	843	447	3	12	640	176	13	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	2	0	0	2	0	0	0	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	426	822	200	3	862	456	3	12	655	180	13	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	107	206	50	1	216	114	1	3	164	45	3	4
Total Analysis Volume [veh/h]	426	822	200	3	862	456	3	12	655	180	13	17
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Split	Split	Split	Split	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	0	3	0	0	4	0	0	6	3	5	2	0
Auxiliary Signal Groups									3,6			
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.27	0.30	0.30	0.00	0.41	0.41	0.00	0.01	0.14	0.11	0.02	0.02
Intersection LOS	F											
Intersection V/C	1.080											

Intersection Level Of Service Report**Intersection 2: Hildreth Avenue/Firestone Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.596

Intersection Setup

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Approach	Northbound			Southbound			Eastbound			Westbound			
Lane Configuration													
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	1	2	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	88.00	275.00	100.00	100.00	110.0	100.0	100.0	100.0
Speed [mph]	25.00			25.00			35.00			35.00			
Grade [%]	0.00			0.00			0.00			0.00			
Crosswalk	Yes			Yes			Yes			Yes			

Volumes

Name	Hildreth Avenue			Az Sh			Firestone Boulevard			Firestone Boulevard			
Base Volume Input [veh/h]	0	0	28	168	0	170	378	1382	29	2	0	1266	103
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0200	1.0200	1.0000	1.0200	1.0200	1.0200	1.0200	1.020	1.000	1.020	1.020
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	5	0	0	0	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	29	171	0	173	386	1415	30	2	0	1295	105
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	7	43	0	43	97	354	8	1	0	324	26
Total Analysis Volume [veh/h]	0	0	29	171	0	173	386	1415	30	2	0	1295	105
Pedestrian Volume [ped/h]	0			0			0			0			
Bicycle Volume [bicycles/h]	0			0			0			0			

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Permiss	Split	Split	Permiss	Split	Protecte	Permiss	Permiss	Prote	Prote	Permi	Permi
Signal Group	0	0	3	4	0	0	1	6	0	5	5	2	0
Auxiliary Signal Groups													
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	Lead	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.03	0.00	0.11	0.07	0.30	0.30	0.00	0.00	0.29	0.29
Intersection LOS	A												
Intersection V/C	0.596												

Intersection Level Of Service Report**Intersection 3: Atlantic Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.836

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	2	0	1	2	0	0	1	0	0
Pocket Length [ft]	190.00	100.00	100.00	753.00	100.00	189.00	318.00	100.00	100.00	205.00	100.00	100.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	189	539	67	778	635	137	124	1376	146	95	1028	333
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	15	0	4	0	0	0	5	22	1	1
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	196	553	83	794	652	140	126	1404	154	119	1050	341
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	138	21	199	163	35	32	351	39	30	263	85
Total Analysis Volume [veh/h]	196	553	83	794	652	140	126	1404	154	119	1050	341
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss									
Signal Group	3	8	0	7	4	0	1	6	0	5	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-									

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.13	0.13	0.14	0.20	0.09	0.02	0.32	0.32	0.07	0.29	0.29
Intersection LOS	D											
Intersection V/C	0.836											

Intersection Level Of Service Report
Intersection 4: Rayo Avenue/Firestone Boulevard

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.048

Intersection Setup

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	1	0	0	2	0	0
Pocket Length [ft]	100.00	100.00	152.00	180.00	100.00	180.00	134.60	100.00	100.00	606.00	100.00	100.00
Speed [mph]	30.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			No		

Volumes

Name				Rayo Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	8	39	650	135	22	9	52	2119	27	530	1486	100
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	22	0	0	0	0	15	0	26	22	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	40	685	138	22	9	53	2176	28	567	1538	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	10	171	35	6	2	13	544	7	142	385	26
Total Analysis Volume [veh/h]	9	40	685	138	22	9	53	2176	28	567	1538	102
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split	Split	Overlap	Split	Split	Split	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	3	5	0	4	0	1	6	0	5	2	0
Auxiliary Signal Groups			3.5									
Lead / Lag	-	-	-	-	-	-	Lead	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.02	0.33	0.04	0.05	0.01	0.03	0.46	0.46	0.10	0.34	0.34
Intersection LOS	F											
Intersection V/C	1.048											

Intersection Level Of Service Report**Intersection 5: Garfield Avenue/Firestone Boulevard**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: D
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.844

Intersection Setup

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	0	2	0	0	2	0	0	2	0	1
Pocket Length [ft]	440.00	100.00	100.00	218.00	100.00	100.00	382.00	100.00	100.00	204.00	100.00	147.00
Speed [mph]	35.00			35.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Garfield Avenue			Garfield Avenue			Firestone Boulevard			Firestone Boulevard		
Base Volume Input [veh/h]	569	843	86	140	801	534	648	1435	705	128	110	218
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	0	0	0	0	5	3	4	9	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	594	860	88	143	817	550	664	1468	728	131	118	222
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	149	215	22	36	204	138	166	367	182	33	30	56
Total Analysis Volume [veh/h]	594	860	88	143	817	550	664	1468	728	131	118	222
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap	Protecte	Permiss	Overlap
Signal Group	3	8	0	7	4	1	1	6	3	5	2	7
Auxiliary Signal Groups						1,4			3,6			2,7
Lead / Lag	Lead	-	-	Lead	-	-	Lag	-	-	Lead	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.10	0.20	0.20	0.02	0.26	0.23	0.12	0.31	0.35	0.02	0.02	0.11
Intersection LOS	D											
Intersection V/C	0.844											

Intersection Level Of Service Report
Intersection 6: Atlantic Avenue/Southern Avenue

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.657

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	135.00	100.00	100.00	132.00	100.00	100.00	115.00	100.00	100.00	99.00	100.00	100.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Southern Avenue			Southern Avenue		
Base Volume Input [veh/h]	90	736	36	23	734	42	41	168	126	215	240	48
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	21	0	0	31	0	0	0	1	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	92	772	37	23	780	43	42	171	130	219	245	49
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	193	9	6	195	11	11	43	33	55	61	12
Total Analysis Volume [veh/h]	92	772	37	23	780	43	42	171	130	219	245	49
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss							
Signal Group	3	8	0	7	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.25	0.25	0.01	0.26	0.26	0.03	0.09	0.09	0.14	0.18	0.18
Intersection LOS	B											
Intersection V/C	0.657											

Intersection Level Of Service Report**Intersection 7: Hildreth Avenue/Tweedy Boulevard**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 15 minutes

Delay (sec / veh): -
 Level Of Service: C
 Volume to Capacity (v/c): 0.707

Intersection Setup

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	92.00	100.00	100.00	92.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Hildreth Avenue			Hildreth Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	40	6	18	65	15	59	53	757	20	0	654	80
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	2	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	41	6	18	66	15	60	54	774	20	0	668	82
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	2	5	17	4	15	14	194	5	0	167	21
Total Analysis Volume [veh/h]	41	6	18	66	15	60	54	774	20	0	668	82
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.04	0.04	0.04	0.09	0.09	0.03	0.26	0.01	0.00	0.21	0.05
Intersection LOS	C											
Intersection V/C	0.707											

Intersection Level Of Service Report**Intersection 8: Pinehurst Avenue/Tweedy Boulevard**

Control Type: Signalized
 Analysis Method: ICU 1
 Analysis Period: 15 minutes

Delay (sec / veh): -
 Level Of Service: C
 Volume to Capacity (v/c): 0.708

Intersection Setup

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	100.00	94.00
Speed [mph]	25.00			25.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Pinehurst Avenue			Pinehurst Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	22	25	11	36	10	152	62	751	25	8	536	72
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	2	0	0	1	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	26	11	37	10	155	63	768	26	8	548	73
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	7	3	9	3	39	16	192	7	2	137	18
Total Analysis Volume [veh/h]	22	26	11	37	10	155	63	768	26	8	548	73
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Split											
Signal Group	0	3	0	0	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.04	0.02	0.13	0.13	0.04	0.26	0.02	0.01	0.17	0.05
Intersection LOS	C											
Intersection V/C	0.708											

Intersection Level Of Service Report**Intersection 9: Atlantic Avenue/Tweedy Boulevard**

Control Type:	Signalized	Delay (sec / veh):	-
Analysis Method:	ICU 1	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.778

Intersection Setup

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	250.00	100.00	93.00	137.00	100.00	100.00	100.00	100.00	172.00	100.00	100.00	85.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Atlantic Avenue			Atlantic Avenue			Tweedy Boulevard			Tweedy Boulevard		
Base Volume Input [veh/h]	339	874	26	59	848	146	364	63	298	56	70	81
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	39	0	0	59	0	0	0	2	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	347	930	27	60	924	149	371	64	306	57	71	83
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	87	233	7	15	231	37	93	16	77	14	18	21
Total Analysis Volume [veh/h]	347	930	27	60	924	149	371	64	306	57	71	83
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal Group	3	8	0	7	4	0	0	1	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.29	0.02	0.04	0.34	0.34	0.12	0.14	0.19	0.04	0.08	0.05
Intersection LOS	C											
Intersection V/C	0.778											

Intersection Level Of Service Report**Intersection 10: Atlantic Avenue/Michigan Avenue**

Control Type: Signalized Delay (sec / veh): -
 Analysis Method: ICU 1 Level Of Service: A
 Analysis Period: 15 minutes Volume to Capacity (v/c): 0.520

Intersection Setup

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	9.00	9.00	9.00	15.00	15.00	15.00
No. of Lanes in Pocket	1	0	1	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	93.00	100.00	102.00	97.00	100.00	240.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name				Atlantic Avenue			Michigan Avenue			Michigan Avenue		
Base Volume Input [veh/h]	36	729	22	29	766	16	19	29	36	10	85	81
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200	1.0200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	39	0	0	54	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	783	22	30	835	16	19	30	37	10	87	83
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	196	6	8	209	4	5	8	9	3	22	21
Total Analysis Volume [veh/h]	37	783	22	30	835	16	19	30	37	10	87	83
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Cycle Length [s]	90											
Lost time [s]	10.00											

Phasing & Timing

Control Type	Permiss											
Signal Group	0	8	0	0	4	0	0	6	0	0	2	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.24	0.01	0.02	0.26	0.01	0.01	0.05	0.05	0.01	0.11	0.11
Intersection LOS	A											
Intersection V/C	0.520											

South Gate Amazon DAX7 Rayo Ave

Vistro File: J:\...\Dax7_v10_with_drivethrough_int.vistro

Scenario 6 Future With Project PM

Report File: J:\...\FUT_PROJ_PM.pdf

3/2/2020

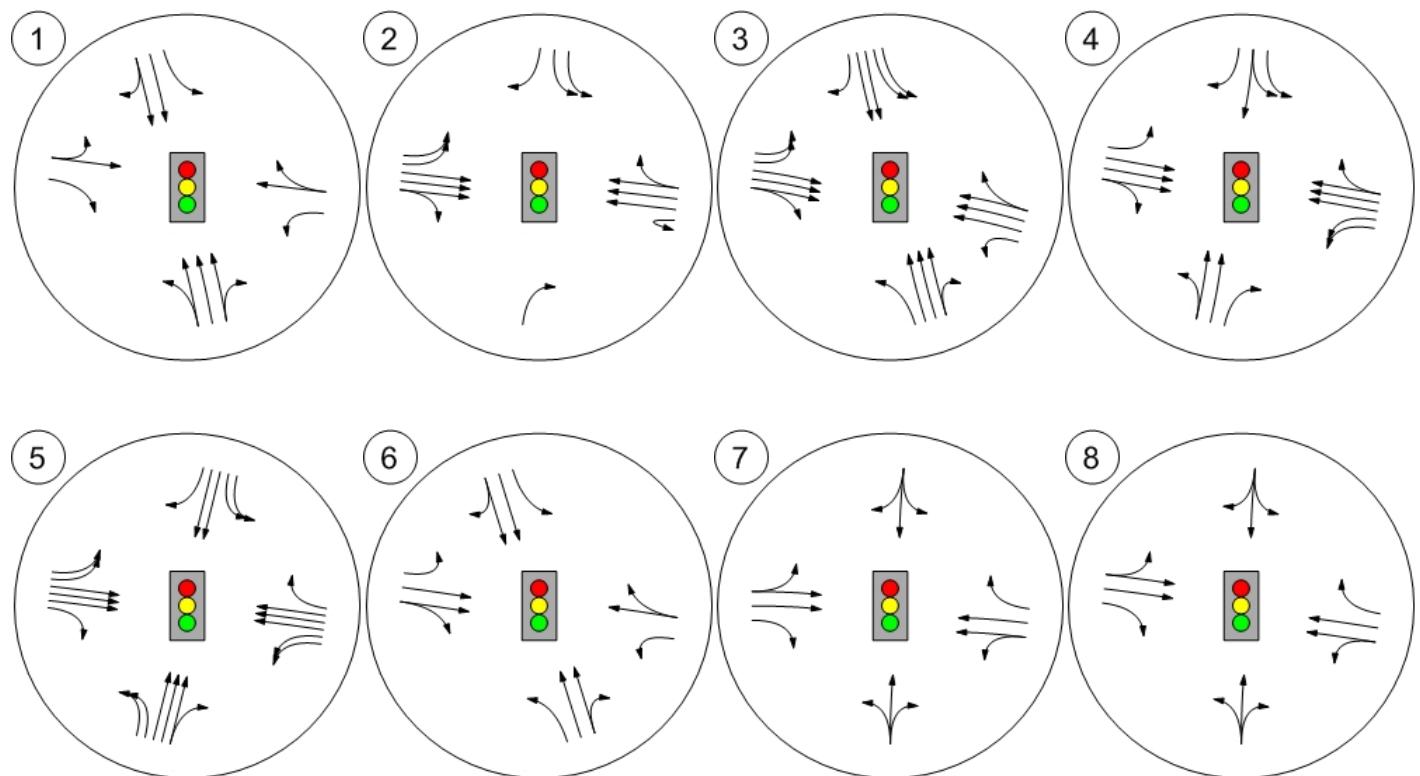
Trip Generation summary**Added Trips**

Zone ID: Name	Land Use variables	Code	Ind. Var.	Rate	Quantity	% In	% Out	Trips In	Trips Out	Total Trips	% of Total Trips	
1: Zone				1.000	0.000	50.00	50.00	0	7	7	4.24	
10: Zone				1.000	0.000	50.00	50.00	24	16	40	24.24	
11: Zone				1.000	0.000	50.00	50.00	71	47	118	71.52	
Added Trips Total									95	70	165	100.00

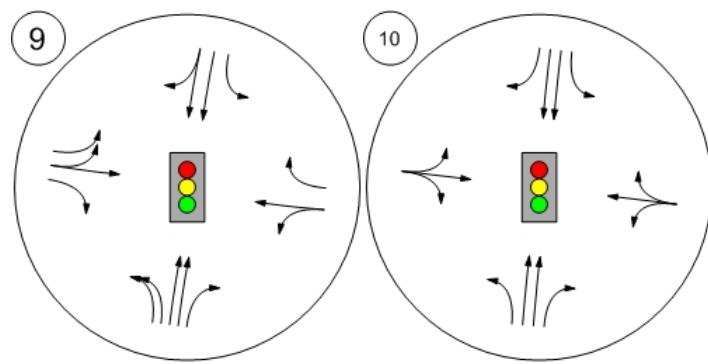
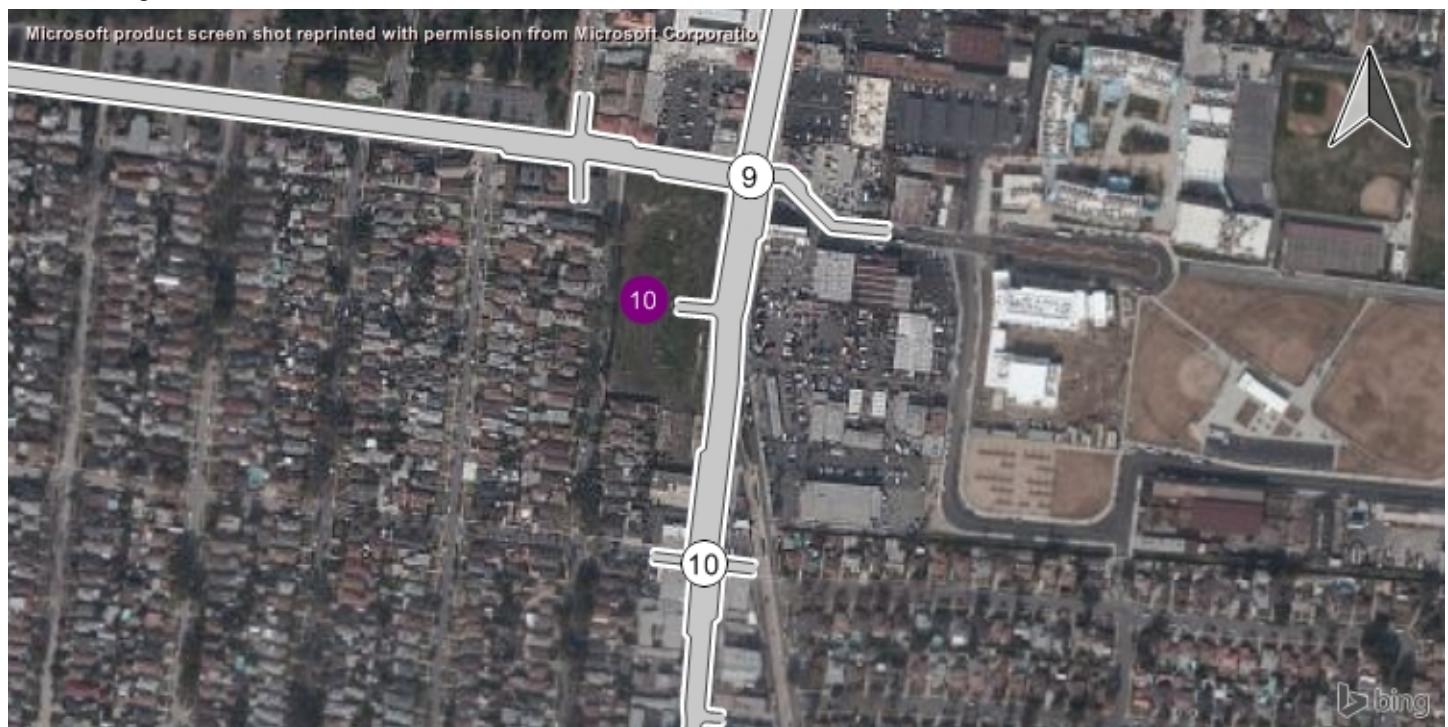
Study Intersections



Lane Configuration and Traffic Control



Lane Configuration and Traffic Control



APPENDIX G
Transportation Index (TI) Calculations for Rayo Avenue

Project: Amazon DAX7 Distribution Facility
 Location: 9350 Rayo Avenue, South Gate, CA
 Client: Amazon.com

Date: 1/23/2020
 Prepared by: RML

Traffic Index (TI) Calculations

Vehicle Classifications														Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	
North Bound														
Tuesday 11/19/19 24-hour Counts	6	7635	1236	5	215	252	1	18	295	11	1	0	0	9675 0
South Bound														
* Tuesday 11/19/19 24-hour Counts	5	4672	782	3	149	185	0	25	338	2	2	0	0	6163 0
* Worst Case	6	7635	1236	5	215	252	1	18	295	11	1	0	0	9675

Vehicle Type (by Axle Classification)	Counts		10-Year TI			20-Year TI			
	Existing Counts	Project Counts	ESAL Constant	Existing ESAL	ESAL with Project	ESAL Constant	Existing ESAL	ESAL with Project	
	2-axle trucks or buses	1456	258	690	1004640	1182660	1380	2009280	2365320
	3-axle trucks or buses	252		1840	463680	463680	3680	927360	927360
	4-axle trucks	19		2940	55860	55860	5880	111720	111720
	5 or more-axle trucks	307	49 Changed	6890	2115230	2452840	13780	4230460	4905680
				ESAL Total:	3639410	4155040	ESAL Total:	7278820	8310080
				Calculated TI:	10.496	10.662	Calculated TI:	11.398	11.579
				Existing 10-yr TI With Project			Existing 20-yr TI With Project		
				nearest 0.5	10.5	10.5	nearest 0.5	11.5	11.5



TECHNICAL MEMORANDUM

Date: April 29, 2029

To: Candida Neal – City of South Gate

From: Brian Marchetti, AICP

Subject: Supplemental Addendum to Draft Traffic Impact Study – Amazon DAX7 Facility

This is a Supplemental Addendum to the Draft Traffic Impact Study for the proposed Amazon DAX7 distribution facility at 9350 Rayo Avenue, dated February 2020.

The traffic impact study report addresses potential project impacts of the proposed facility, and the separate project environmental documentation evaluates the project against the current guidelines of the State of California Environmental Quality Act (CEQA). Traffic impacts of the project at the defined study intersections would not occur, per the analysis that has been provided in that document and reviewed by the City.

A particular area of the guidelines addresses potential new hazardous conditions that may be introduced by a project. That area is summarized here based on information from the traffic study for the main project site, in terms of potential queuing of traffic into and out of the site, line of sight issues at the proposed driveway locations, and pedestrian travel to and from the site.

Traffic Queuing

The traffic study provides a review of the project trip generation for weekday daily, hourly, and peak conditions. The proposed site will have two access driveway locations on Rayo Avenue, in the same locations as the existing site but with some modifications to meet current standards.

The peak conditions analysis of the driveway locations provided in the traffic study, based on traffic volume counts on Rayo Avenue and the calculated volumes at the project driveways, indicates that no major queuing issues would be created by the project-generated trips. Queuing could potentially occur with inbound left-turn movements where vehicles must wait for a gap in opposing thru traffic before turning into the site. Based on the analyzed volumes, any significant queuing would not occur and therefore hazardous conditions would not result.

The northern project site driveway would primarily be accessed by line-haul trucks that would deliver products to the site for processing and distribution. The southern project site driveway would be accessed by Amazon delivery vans, personal-vehicle FLEX delivery drivers, and distribution center employee vehicles. Vans and personal vehicles would enter the site and either enter a queuing area for delivery or park within the on-site employee parking lot.



Vehicles entering the site during peak activity times of the site would primarily be movements from the remote parking lot to the main site. These movements will be controlled by Amazon staff so that the site can process each wave of vehicles without creating queuing onto Rayo Avenue

Line of Sight at Driveways

On Rayo Avenue between Firestone Boulevard on the north and Southern Avenue on the south, on-street parking is prohibited on both sides of the roadway. Therefore, vehicles or trucks that would otherwise be parked in on-street parking areas would not be present and would not affect sight distance from the driveways for safe traffic movements. There are also not any major visual barriers within the site boundary or adjacent sidewalk area to obstruct the sight distance lines. Project operations at the driveways would not create any new significant hazardous conditions.

Pedestrian Volumes

Travel between the remote parking area and the main project site will be via delivery vehicles, as the operating plan provides for personal vehicles of delivery drivers to be parked in the remote lot and then delivery vans are driven to the main site directly by the drivers. Therefore, employees would not be parking in the remote lot and then walking to the main site.

For the occasional pedestrian trip that might be required due to personal emergencies or forgotten person items, employees will be shuttled between the locations and pedestrian trips along and across Rayo Avenue will not be required.