72nd & Park

7145 Carlyle Avenue and 7144 Byron Avenue
Miami Beach, Florida 33141

prepared for:
KGTC, LLC

traffic evaluation

TRAFTECH ENGINEERING, INC.

June 2019

TRAFTECH
ENGINEERING, INC.

June 3, 2019

KGTC, LLC
c/o Ethan B. Wasserman
Greenberg Traurig, P.A.
333 SE 2nd Avenue
Miami Beach, Florida 33131

Re: 72nd & Park – Traffic Evaluation

Dear Ethan:

Traf Tech Engineering, Inc. is pleased to provide you with the results of the traffic evaluation undertaken for the proposed re-development of a site generally located on the south side of 72nd Street between Carlyle Avenue and Byron Avenue in the City of Miami Beach in Miami-Dade County, Florida. The traffic analysis evaluates the need for all-way stop control at the intersections of 72nd Street/Carlyle Avenue and 72nd Street/Byron Avenue. The report also addresses projected queues at these two intersections and access control for the proposed mixed-use development.

As documented in the foregoing traffic analysis, all-way stop control is not warranted at the intersection of 72nd Street/Carlyle Avenue or at the intersection of 72nd Street/Byron Avenue. Moreover, queueing is projected to be within acceptable levels at both study intersections. Ingress queueing is not anticipated to be a problem at the entrance to the parking garage of the future 72nd & Park mixed use development.

It has been a pleasure working with you on this project.

Sincerely,

TRAF TECH ENGINEERING, INC.

Joaquin E. Vargas, P.E.
Senior Transportation Engineer

72nd & Park
Traffic Evaluation

Introduction

The subject property is generally located on the south side of 72nd Street between Carlyle Avenue and Byron Avenue in the City of Miami Beach. Figure 1 illustrates the location of the project site. The purpose of this traffic evaluation is to evaluate the following[1]:

- Trip Generation Comparison Analysis
- All-way Stop Control Analysis
- Queuing

Trip Generation Comparison Analysis

The trip generation comparison analysis was performed using the trip generation equations/rates published in the Institute of Transportation Engineer's (ITE) *Trip Generation Manual* (10th Edition). The trip generation comparison analysis was undertaken for daily, AM peak hour, and PM peak hour conditions. The analysis was based on the following assumptions:

CURRENT LAND USE AND INTENSITIES

- Private School (225 students)
- Post Office (to remain)

PROPOSED LAND USES AND INTENSITIES

- High-rise residential homes (282 units)
- Retail (12,603 square feet)
- Post Office

Appendix B contains a copy of the site plan for the proposed 72nd & Park mixed-use development.

[1] The traffic methodology was provided by the City of Miami Beach and is contained in Appendix A.

ARQUITECTONICA
2900 Oak Avenue
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PREPARED FOR KGTC LLC.
PROJECT # 1001.010069.000

72nd & Park
7145 CARLYLE AVE, MIAMI BEACH FL 33141
7144 BYRON AVE, MIAMI BEACH FL 33141

LOCATION MAP

05/29/2019

A0-01

According to ITE's *Trip Generation Manual* (10th Edition), the trip generation equations/rates used for the existing and proposed land use designations are:

MULTIFAMILY HOUSING – HIGH RISE (ITE Land Use 222)

Daily Trip Generation
T = 3.94 (X) + 211.81
Where T = daily trips
X = residential units

AM Peak Hour
T = 0.28 (X) + 12.86 (24% inbound and 76% outbound)
Where T = AM peak hour trips
X = residential units

PM Peak Hour
T = 0.34 (X) + 8.56 (61% inbound and 39% outbound)
Where T = PM peak hour trips
X = residential units

PRIVATE SCHOOL (ITE Land Use 536)

Daily Trip Generation
T = 4.11 (X)
Where T = daily trips
X = number of students

AM Peak Hour
T = 0.91 (X) (55% inbound and 45% outbound)
Where T = AM peak hour trips
X = number of students

PM Peak Hour
T = 0.26 (X) (46% inbound and 54% outbound)
Where T = PM peak hour trips
X = number of students

SHOPPING CENTER (ITE Land Use 820)

Daily Trip Generation
Ln (T) = 0.68 Ln (X) + 5.57
Where T = daily trips
X = 1,000 square feet of leasable area

AM Peak Hour
T = 0.94 (X) (62% inbound and 38% outbound)
Where T = AM peak hour trips
X = 1,000 square feet of leasable area

PM Peak Hour
Ln (T) = 0.74 Ln (X) + 2.89 (48% inbound and 52% outbound)
Where T = PM peak hour trips
X = 1,000 square feet of leasable area

PM Peak Hour
Ln (T) = 0.74 Ln (X) + 2.89 (48% inbound and 52% outbound)
Where T = PM peak hour trips
X = 1,000 square feet of leasable floor area

The results of the trip generation comparison analyses are documented in Tables 1 and 2. As indicated in the tables, the proposed 72nd & Park mixed-use development is projected to generate approximately 922 new daily trips, approximately 101 less AM peak hour trips and approximately 87 new trips during the typical afternoon peak period, when compared against the existing private school at the project. It is important to note that the City of Miami Beach is in the process of changing its concurrency program to a mobility-based system resulting in less trips associated with new developments. With this new change, future mixed-use projects such as this one may result in less new trips.

The trip distribution and traffic assignment for the PM peak trips documented in the trip generation tables was based on Miami-Dade County's Cardinal Distribution information for the study area. Table 3 summarizes the County's cardinal distribution data for Traffic Analysis Zone 605, which is applicable to the project site from the latest SERPM data published by Miami-Dade County. Using the trip distribution documented in Table 3, the following traffic assignment was assumed for the proposed mixed-use project:

- 25% to and from the north via Dickens Avenue/72nd Street
- 10% to and from the north via Abbott Avenue/72nd Street
- 2% to and from the east via 72nd Street
- 63% to and from the south/west via 71st Street/Carlyle and Byron Avenues (will not impact the two study intersections)

TABLE 1
Trip Generation Summary - Existing Use
72nd & Park Project

Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
						Total Trips	Inbound	Outbound
Private School LUC 536	225 stds	925	205	113	92	59	27	32
Gross Trips		**925**	**205**	**113**	**92**	**59**	**27**	**32**

Source: ITE Trip Generation Manual (10th Edition)

TABLE 2
Trip Generation Summary - Proposed Uses
72nd & Park Project

Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
						Total Trips	Inbound	Outbound
High Rise LUC 222	282 units	1,323	92	22	70	104	63	41
Retail LUC 820	12,603 sq.ft.	1,470	12	7	5	117	56	61
Gross Trips		**2,793**	**104**	**29**	**75**	**221**	**119**	**102**
Internal Trips (see worksheet)		-542	0	0	0	-43	-21	-21
Driveway Trips		**2,251**	**104**	**29**	**75**	**178**	**98**	**81**
Pass-by Retail (1)		-404	0	0	0	-32	-17	-15
New External Trips		**1,847**	**104**	**29**	**75**	**146**	**81**	**66**

Source: ITE Trip Generation Manual (10th Edition)

Difference	**922**	**-101**	**-84**	**-17**	**87**	**54**	**34**

(1) Based on ITE Trip Generation Handbook (3rd Edition), Retail pass-by = 34%

Traf Tech
ENGINEERING, INC.

EXISTING LAND USES

Trip Generation and Internal Capture Summary

Analyst: Vargas
Date: 6-May-19
PM Peak Hour

LAND USE A:
ITE LU Code: Code 931
SIZE:

	Total	Internal	External
Enter	0	0	0
Exit	0	0	0
Total	0	0	0
%	#DIV/0!	#DIV/0!	#DIV/0!

Exit to External: 0
Enter from External: 0

41% 0 Demand → 0 Balanced → 50% 28 Demand
29% 0 Demand → 0 Balanced → 29% 18 Demand
18% 0 Demand → 0 Balanced → 16% 10 Demand
14% 0 Demand → 0 Balanced → 21% 9 Demand

1

LAND USE B: Retail
ITE LU Code: Code 820
SIZE:

	Total	Internal	External
Enter	56	6	50
Exit	61	16	45
Total	117	21	96
%	100%	18%	82%

Exit to External: 45
50 er from External

Demand 26% 16 → Balanced 16 → Demand 46% 29
Demand 10% 6 → Balanced 6 → Demand 42% 17

LAND USE C: Residential
ITE LU Code: Code 222
SIZE:

	Total	Internal	External
Enter	63	16	47
Exit	41	6	35
Total	104	21	83
%	100%	21%	79%

Enter from External: 47
35 Exit to External

Net External Trips for Multi-Use Development

	LAND USE A	LAND USE B	LAND USE C	TOTAL	
Enter	0	50	47	98	
Exit	0	45	35	81	
Total	0	96	83	178	INTERNAL CAPTURE
Single-Use Trip Gen. Est.	0	117	104	221	19%

TABLE 3 Project Trip Distribution TAZ # 605 for 72nd & Park								
Year	Movement							
	NNE	ENE	ESE	SSE	SSW	WSW	WNW	NNW
2010	12.90%	0.80%	0.00%	3.70%	27.40%	12.60%	17.50%	25.10%
2040	8.00%	3.00%	0.00%	6.40%	27.00%	13.20%	22.20%	20.20%
2022*	10.94%	1.68%	0.00%	4.78%	27.24%	12.84%	19.38%	23.14%
*Note: * Interpolated Values*								
Source: Miami-Dade County (2010 & 2040 SERPM)								

Multiway Stop-Control Warrant Analysis

A multiway stop-control warrant analysis was undertaken for the intersections of 72nd Street/Carlyle Avenue and 72nd Street Byron Avenue. For this analysis, four-day machine traffic counts were collected on 72nd Street between Carlyle Avenue and Byron Avenue. The machine traffic counts were collected on Thursday, May 16 through Sunday, May 19, 2019. The results of the 4-day machine traffic counts indicate that the peak day is Friday. Additionally, based on the 4-day machine traffic counts, 8-hour intersection turning movement counts were conducted at the two study intersections between the hours of 8:00 AM and 10:00 AM and from 1:00 PM to 7:00 PM. The 8-hour traffic counts were undertaken on Friday, May 31, 2019.

The results of the traffic counts are contained in Appendix C.

A multiway stop control warrant analysis was performed for the two study intersections following the signal warrants outlined in the Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition (Section 2B.07). The minimum volume criterion to warrant multiway stop control is summarized below:

- The minimum volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and

- The combined vehicular, pedestrian and bicycle volume entering the intersection from the minor-street approaches averages at least

200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicles during the highest hour (refer to next section for the projected delay, which is less than 30 seconds)

As indicated in Tables 4 and 5, neither intersection (72nd Street/Carlyle and 72nd Street/Byron Avenue) meets the volume criterion to warrant all-way stop control. Hence, both intersections should remain with stop signs on the minor approach.

Projected Queues at Study Intersections

In order to determine the delay and queues on the minor street approaches of the intersections of 72nd Street/Carlyle Avenue and 72nd Street/Byron Avenue, the following tasks were performed:

- Used the highest AM and PM peak hour volumes recorded for each intersection

- Converted the intersection counts to peak season conditions using a factor of 1.03, per FDOT PSCF-published factors (refer to Appendix D)

- Even though no traffic growth is anticipated at the two study intersections (intersections of two local streets), a 1% annual growth was assumed in order to project peak season traffic volumes to the year 2022.

- Added the projected impacts of the proposed mixed-use development for the PM peak hour only (a trip reduction is anticipated during the AM peak hour, however, in order to assess delay and queues with a conservative approach, no trip reduction was performed for the AM peak hour analysis). The future intersection volumes are summarized in Appendix E.

- Conducted SYNCHRO analyses (refer to Appendix F) for both study intersections for future conditions. As indicated in the SYNCHRO analyses, the following delay and queue-length projections were obtained:

  - The northbound approach of the intersection of 72nd Street and Carlyle Avenue is projected to have a maximum length of queue of one (1) vehicle with a maximum delay of 13.2 seconds

(this is the more-critical intersection since the entrance to the parking garage is off of Carlyle Avenue)

- The northbound approach of the intersection of 72nd Street and Byron Avenue is projected to have a maximum length of queue of three (3) vehicles with a maximum delay 19.5 seconds

Gate Control for Parking Garage

The specifications for the gate-control system has not been established. However, it is anticipated that it will be automated via a transponder which results in several seconds of delay at the entrance. Based on the trip generation table, the maximum inbound trips is 98 during the PM peak hour. Automated gate system can process over 300 vehicles in a one-hour period and therefore, queueing is not anticipated to be a problem for the project.

Impacts to On-Street Parking Spaces

There is space to allow up to seven (7) vehicles to park on the east side of Carlyle Avenue within the frontage of this project. However, this area is not designated as a parking area with signs and pavement markings. With the development of this project, the subject area will not be available for parking purposes. Coordination with the City's Parking Department will be held as a result of this project. On the west side of Byron Avenue, there is a school loading zone designation. Since the school will be eliminated as part of this project, the driveways proposed on Byron Avenue should not impact existing on-street parking spaces.

Table 4
8-HOUR TRAFFIC COUNTS
72nd Street and Carlyle Avenue (All-Way Stop Control Warrant)

	HOURLY TRAFFIC COUNTS						MUTCD Thresholds	
	Friday, May 31, 2019			Friday, May 31, 2019				
	72nd Street			Carlyle Avenue			Main Street	Side Street
Start Time	EB	WB	EB & WB	NB Traffic	NB Peds (1)	Total NB	Both Directions	Approach
8:00 AM	125	103	228	66	18	84	300	200
9:00 AM	86	79	165	46	16	62	300	200
1:00 PM	58	138	196	50	9	59	300	200
2:00 PM	88	217	**305**	91	8	99	300	200
3:00 PM	94	262	**356**	86	4	90	300	200
4:00 PM	77	394	**471**	86	13	99	300	200
5:00 PM	96	353	**449**	77	11	88	300	200
6:00 PM	62	222	**284**	62	14	76	300	200

Source: Traffic Survey Specialists, Inc.

(1) Peds and bicycles crossing on the west leg (from East) and the east leg (from West) are documented in the traffic count sheets

Bold Number shaded indicates volume threshold is met.

Table 5
8-HOUR TRAFFIC COUNTS
72nd Street and Byron Avenue (All-Way Stop Control Warrant)

	HOURLY TRAFFIC COUNTS						MUTCD Thresholds	
	Friday, May 31, 2019			Friday, May 31, 2019				
	72nd Street			Carlyle Avenue			Main Street	Side Street
Start Time	EB	WB	EB & WB	NB Traffic	NB Peds (1)	Total NB	Both Directions	Approach
8:00 AM	131	112	243	164	9	173	300	200
9:00 AM	86	81	167	113	8	121	300	200
1:00 PM	68	138	206	101	8	109	300	200
2:00 PM	101	165	266	130	2	132	300	200
3:00 PM	97	236	**333**	151	4	155	300	200
4:00 PM	94	391	**485**	212	5	**217**	300	200
5:00 PM	99	343	**442**	211	11	**222**	300	200
6:00 PM	61	165	226	170	18	188	300	200

Source: Traffic Survey Specialists, Inc.

(1) Peds and bicycles crossing on the west leg (from East) and the east leg (from West) are documented in the traffic count sheets

Bold Number shaded indicates volume threshold is met.

APPENDIX A

Traffic Tasks per Miami Beach

Joaquin@traftech.biz

From: Akcay, Firat <FiratAkcay@miamibeachfl.gov>
Sent: Tuesday, May 14, 2019 4:36 PM
To: Ferrer, Josiel; wassermane@gtlaw.com; mc@kahunah.net; Joaquin@traftech.biz
Subject: 72 Park Methodology
Attachments: Transportation Check List 05-13-19.pdf

Dear All,

Please see attached the traffic study contents checklist. This is a guide for a complete traffic study specific to this application. In addition to the items in the checklist, please see additional requests below.

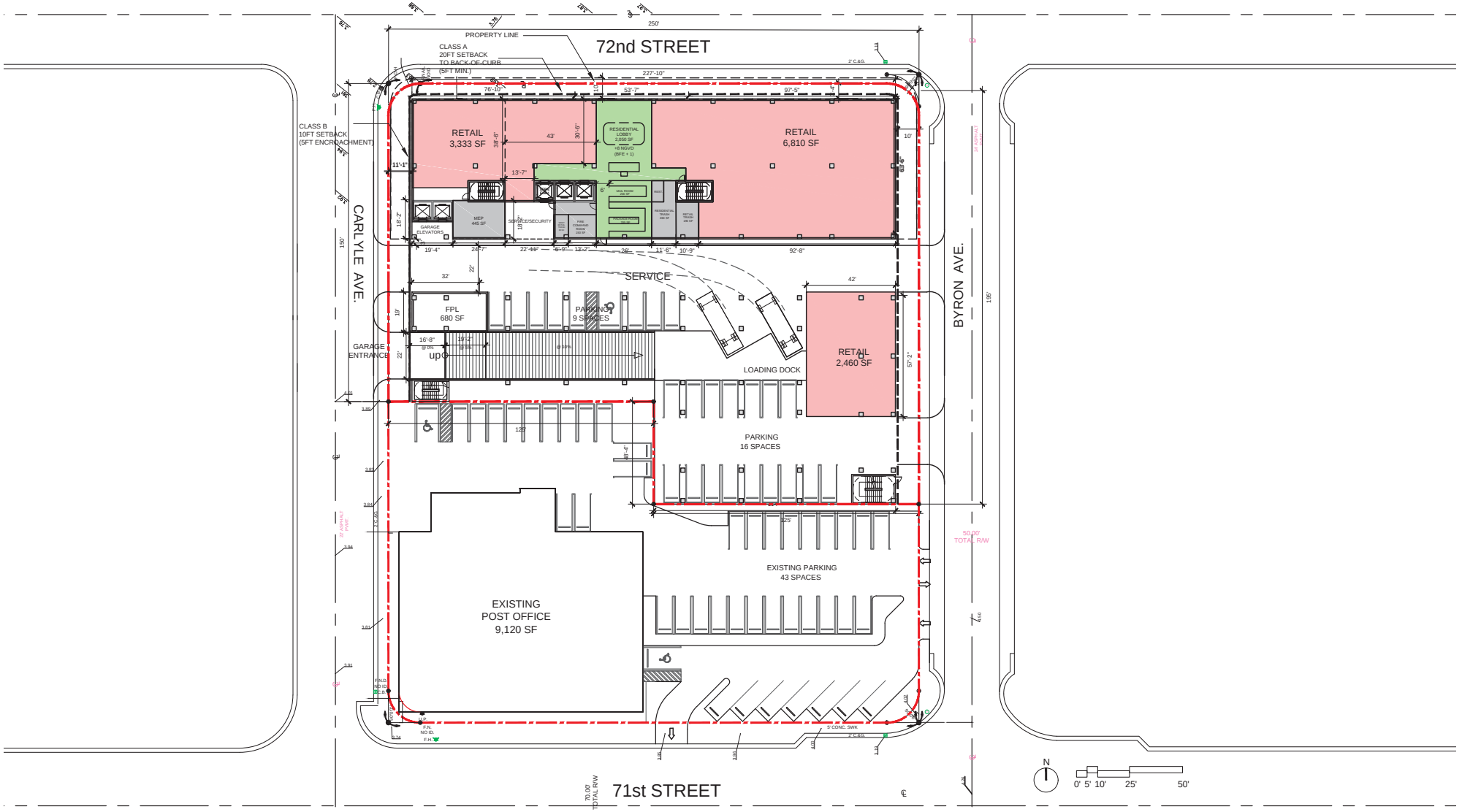
- The analysis of a midblock crosswalk on 72nd Street. The analysis must be performed with traffic counts collected on 72nd Street between Carlyle Avenue and Byron Avenue by using 96 hour speed and volume counts Thursday thru Sunday to determine the peak hours. Once peak travel period are determined 8 hour TMC counts at the intersections of Byron Avenue and Carlyle Avenue with 72nd Street will be collected. Data collection will also account for the north and south jaywalking activity.
- The data collected on the two intersections will be utilized to analyze queueing at these intersections, as well as an all way stop control warrant analysis will be performed.
- A garage driveway queueing analysis shall be conducted.
- The type of gate and operation specifics shall be included in the study.
- The on-street parking loss/gain examination must be included in the study.

Please let me know if you have any questions.
Thank you

Firat Akcay, M.S.C.E. MBA
Transportation Analyst
Transportation Department
1688 Meridian Avenue, Suite 801, Miami Beach, FL 33139
Tel: 305-673-7000, ext 6839

APPENDIX B

Site Plan



ARQUITECTONICA
2900 Oak Avenue
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305.372.1175 F

PREPARED FOR KGTC LLC.
PROJECT # 1001.010069.000

72nd & Park
7145 CARLYLE AVE, MIAMI BEACH FL 33141
7144 BYRON AVE, MIAMI BEACH FL 33141

GROUND LEVEL

05/29/2019

A1-00A

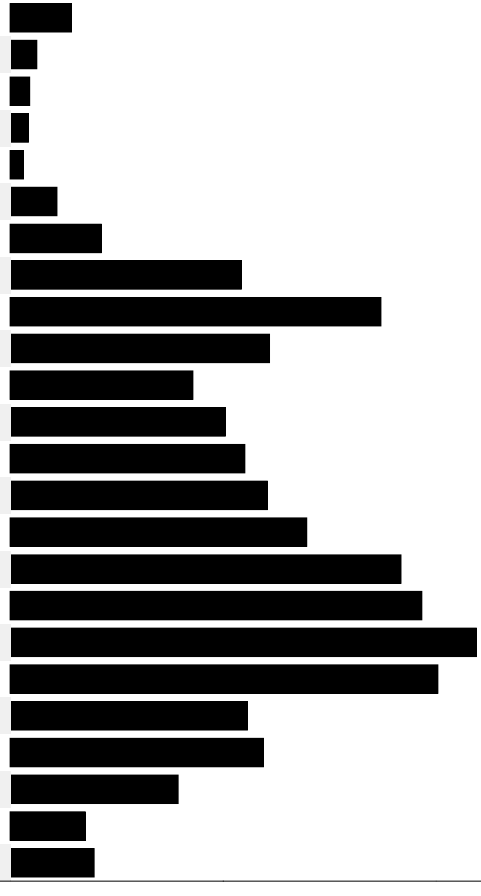
APPENDIX C

Traffic Counts

Traf Tech Engineering Inc.

Date Start: 16-May-19
72nd Street West of Byron Ave

Start Time	16-May-19 Thu	Eastbound	Westbound	Combined Total
12:00 AM		25	25	50
01:00		11	11	22
02:00		9	7	16
03:00		8	7	15
04:00		5	6	11
05:00		21	17	38
06:00		55	19	74
07:00		107	80	187
08:00		180	120	300
09:00		126	84	210
10:00		73	75	148
11:00		86	88	174
12:00 PM		88	102	190
01:00		92	116	208
02:00		81	159	240
03:00		86	230	316
04:00		75	258	333
05:00		103	274	377
06:00		108	238	346
07:00		72	120	192
08:00		78	127	205
09:00		45	91	136
10:00		29	32	61
11:00		31	37	68
Total		1594	2323	3917
Percent		40.7%	59.3%	



Traf Tech Engineering Inc.

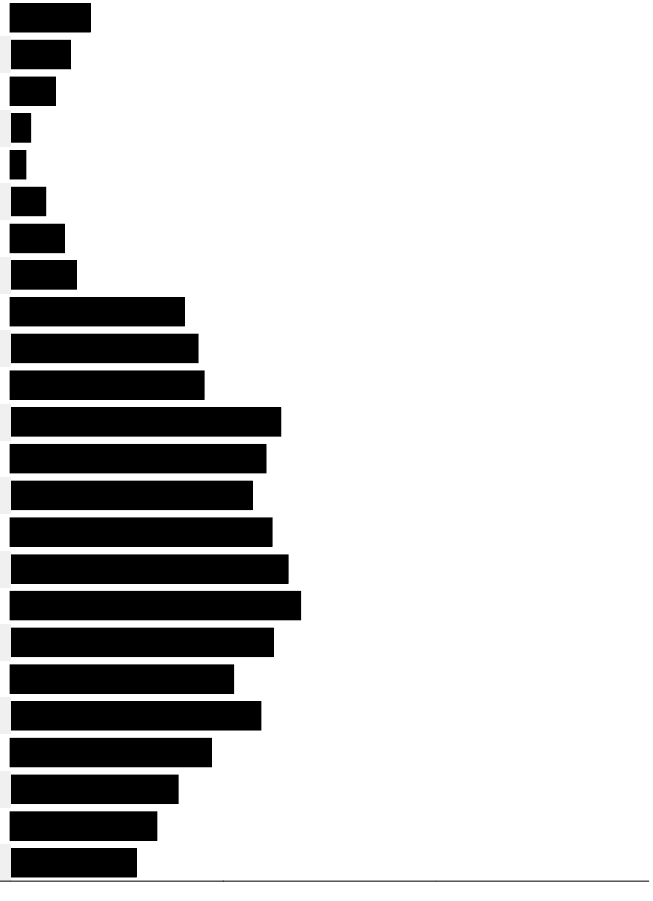
Date Start: 16-May-19
72nd Street West of Byron Ave

Start Time	17-May-19 Fri	Eastbound	Westbound	Combined Total
12:00 AM		19	29	48
01:00		13	17	30
02:00		0	9	9
03:00		8	7	15
04:00		3	6	9
05:00		15	10	25
06:00		45	14	59
07:00		103	59	162
08:00		141	121	262
09:00		131	94	225
10:00		111	80	191
11:00		93	105	198
12:00 PM		99	124	223
01:00		91	149	240
02:00		74	172	246
03:00		98	270	368
04:00		124	392	516
05:00		86	270	356
06:00		91	228	319
07:00		73	151	224
08:00		56	109	165
09:00		64	79	143
10:00		43	83	126
11:00		27	44	71
Total		1608	2622	4230
Percent		38.0%	62.0%	

Traf Tech Engineering Inc.

Date Start: 16-May-19
72nd Street West of Byron Ave

Start Time	18-May-19 Sat	Eastbound	Westbound	Combined Total
12:00 AM		30	35	65
01:00		20	29	49
02:00		15	22	37
03:00		7	10	17
04:00		2	11	13
05:00		18	11	29
06:00		29	15	44
07:00		30	24	54
08:00		92	49	141
09:00		76	76	152
10:00		78	79	157
11:00		109	110	219
12:00 PM		94	113	207
01:00		85	111	196
02:00		86	126	212
03:00		68	157	225
04:00		76	159	235
05:00		58	155	213
06:00		63	118	181
07:00		60	143	203
08:00		54	109	163
09:00		41	95	136
10:00		43	76	119
11:00		41	61	102
Total		1275	1894	3169
Percent		40.2%	59.8%	



Traf Tech Engineering Inc.

Date Start: 16-May-19
72nd Street West of Byron Ave

Start Time	19-May-19 Sun	Eastbound	Westbound	Combined Total
12:00 AM		43	82	125
01:00		18	36	54
02:00		12	18	30
03:00		11	18	29
04:00		9	12	21
05:00		20	9	29
06:00		21	11	32
07:00		34	19	53
08:00		58	53	111
09:00		87	84	171
10:00		83	82	165
11:00		88	76	164
12:00 PM		85	106	191
01:00		74	114	188
02:00		79	98	177
03:00		95	119	214
04:00		98	146	244
05:00		94	127	221
06:00		83	162	245
07:00		69	147	216
08:00		61	132	193
09:00		40	94	134
10:00		37	70	107
11:00		29	48	77
Total		1328	1863	3191
Percent		41.6%	58.4%	
Grand Total		5805	8702	
Percentage		40.0%	60.0%	
ADT		ADT 3,627		AADT 3,627

Traf Tech Engineering Inc.

File Name : 1-Carlyle Ave & 72nd Street
Site Code : 00000000
Start Date : 5/31/2019
Page No : 1

Groups Printed- Autos - Heavy Vehicles

	Carlyle Ave From North					72nd Street From East					Carlyle Ave From South					72nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
08:00	0	0	0	0	0	0	22	6	0	28	6	0	18	0	24	3	26	0	0	29	81
08:15	0	0	0	0	0	0	19	6	0	25	9	0	10	0	19	4	27	0	0	31	75
08:30	0	0	0	0	0	0	22	10	0	32	9	0	4	0	13	4	30	0	0	34	79
08:45	0	0	0	0	0	0	14	4	0	18	4	0	6	0	10	3	28	0	0	31	59
Total	0	0	0	0	0	0	77	26	0	103	28	0	38	0	66	14	111	0	0	125	294
09:00	0	0	0	0	0	0	15	6	0	21	8	0	7	0	15	3	20	0	0	23	59
09:15	0	0	0	0	0	0	15	5	0	20	7	0	3	0	10	5	14	0	0	19	49
09:30	0	0	0	0	0	0	10	6	0	16	6	0	5	0	11	3	26	0	0	29	56
09:45	0	0	0	0	0	0	16	6	0	22	5	0	5	0	10	1	14	0	0	15	47
Total	0	0	0	0	0	0	56	23	0	79	26	0	20	0	46	12	74	0	0	86	211
*** BREAK ***																					
13:00	0	0	0	0	0	0	26	5	0	31	7	0	4	0	11	1	16	0	1	18	60
13:15	0	0	0	0	0	0	17	13	0	30	7	0	6	0	13	2	8	0	0	10	53
13:30	0	0	0	0	0	0	24	9	0	33	6	0	9	0	15	1	10	0	0	11	59
13:45	0	0	0	0	0	0	32	12	0	44	6	0	5	0	11	4	15	0	0	19	74
Total	0	0	0	0	0	0	99	39	0	138	26	0	24	0	50	8	49	0	1	58	246
14:00	0	0	0	0	0	0	28	7	0	35	4	0	11	1	16	3	12	0	0	15	66
14:15	0	0	0	0	0	0	28	9	0	37	13	0	8	0	21	2	15	0	0	17	75
14:30	0	0	0	0	0	0	72	22	0	94	13	0	15	1	29	4	32	0	0	36	159
14:45	0	0	0	0	0	0	35	16	0	51	9	0	16	0	25	3	17	0	0	20	96
Total	0	0	0	0	0	0	163	54	0	217	39	0	50	2	91	12	76	0	0	88	396
15:00	0	0	0	0	0	0	35	16	0	51	9	0	15	0	24	6	17	0	0	23	98
15:15	0	0	0	0	0	0	36	24	0	60	8	0	14	0	22	4	25	0	0	29	111
15:30	0	0	0	0	0	0	52	21	0	73	6	0	17	0	23	4	21	0	0	25	121
15:45	0	0	0	0	0	0	49	29	0	78	9	0	8	0	17	3	14	0	0	17	112
Total	0	0	0	0	0	0	172	90	0	262	32	0	54	0	86	17	77	0	0	94	442
16:00	0	0	0	0	0	0	74	31	0	105	13	0	9	0	22	6	16	0	0	22	149
16:15	0	0	0	0	0	0	68	38	0	106	20	0	9	0	29	7	10	0	0	17	152
16:30	0	0	0	0	0	0	53	25	1	79	9	0	9	0	18	6	14	0	0	20	117
16:45	0	0	0	0	0	0	61	43	0	104	10	0	7	0	17	3	15	0	0	18	139
Total	0	0	0	0	0	0	256	137	1	394	52	0	34	0	86	22	55	0	0	77	557
17:00	0	0	0	0	0	0	63	31	0	94	4	0	18	0	22	5	13	0	0	18	134
17:15	0	0	0	0	0	0	51	29	0	80	9	0	10	0	19	3	22	0	0	25	124
17:30	0	0	0	0	0	0	75	30	0	105	6	0	7	0	13	9	24	0	0	33	151
17:45	0	0	0	0	0	0	51	23	0	74	10	0	13	0	23	1	19	0	0	20	117
Total	0	0	0	0	0	0	240	113	0	353	29	0	48	0	77	18	78	0	0	96	526
18:00	0	0	0	0	0	0	63	24	0	87	3	1	16	0	20	4	13	0	0	17	124
18:15	0	0	0	0	0	0	34	15	0	49	6	0	14	0	20	6	12	0	0	18	87
18:30	0	0	0	0	0	0	37	10	0	47	5	0	11	0	16	0	17	0	1	18	81
18:45	0	0	0	0	0	0	32	5	2	39	3	0	3	0	6	1	8	0	0	9	54
Total	0	0	0	0	0	0	166	54	2	222	17	1	44	0	62	11	50	0	1	62	346
Grand Total	0	0	0	0	0	0	1229	536	3	1768	249	1	312	2	564	114	570	0	2	686	3018
Apprch %	0	0	0	0		0	69.5	30.3	0.2		44.1	0.2	55.3	0.4		16.6	83.1	0	0.3		
Total %	0	0	0	0	0	0	40.7	17.8	0.1	58.6	8.3	0	10.3	0.1	18.7	3.8	18.9	0	0.1	22.7	
Autos	0	0	0	0	0	0	1206														
% Autos	0	0	0	0	0	0	98.1	97.9	100	98.1	97.6	100	97.4	50	97.3	99.1	98.6	0	100	98.7	98.1
Heavy Vehicles																					
% Heavy Vehicles	0	0	0	0	0	0	1.9	2.1	0	1.9	2.4	0	2.6	50	2.7	0.9	1.4	0	0	1.3	1.9

Traf Tech Engineering Inc.

File Name : 1-Carlyle Ave & 72nd Street
Site Code : 00000000
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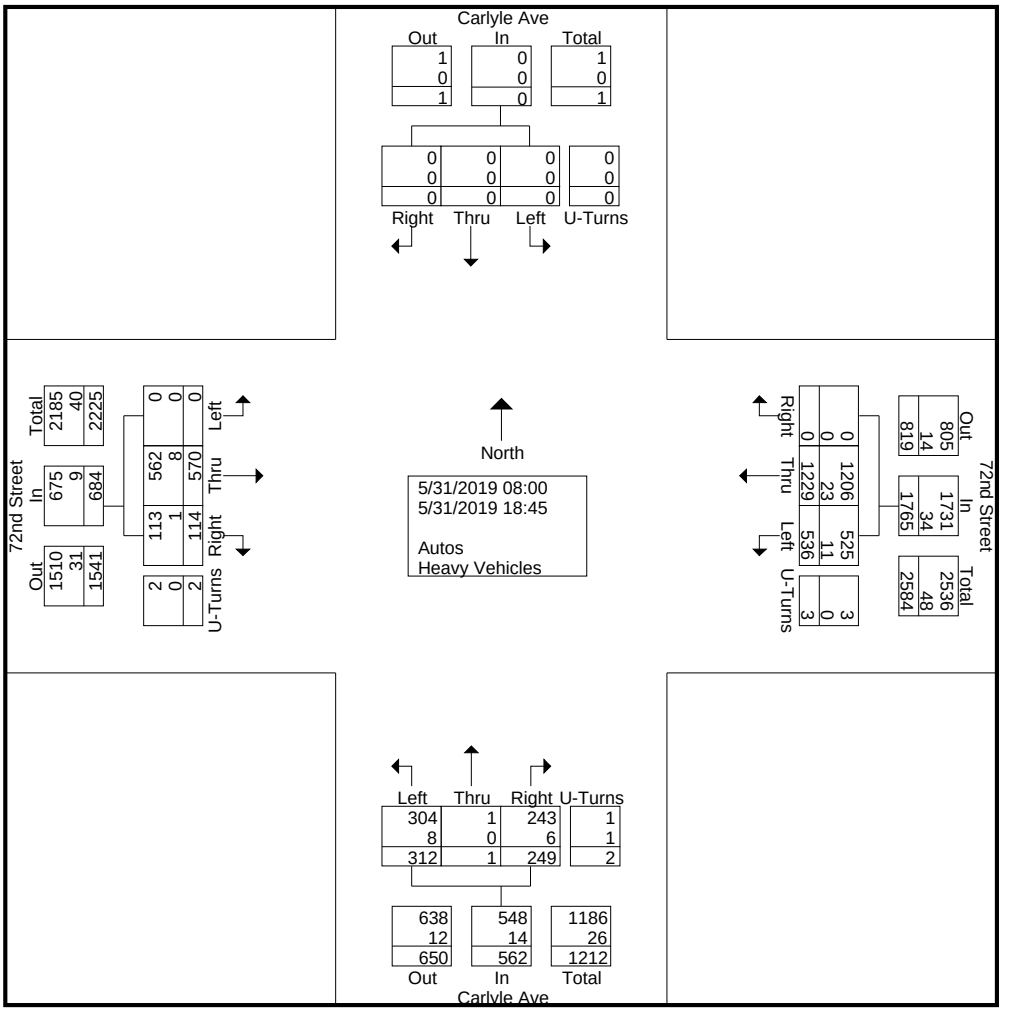
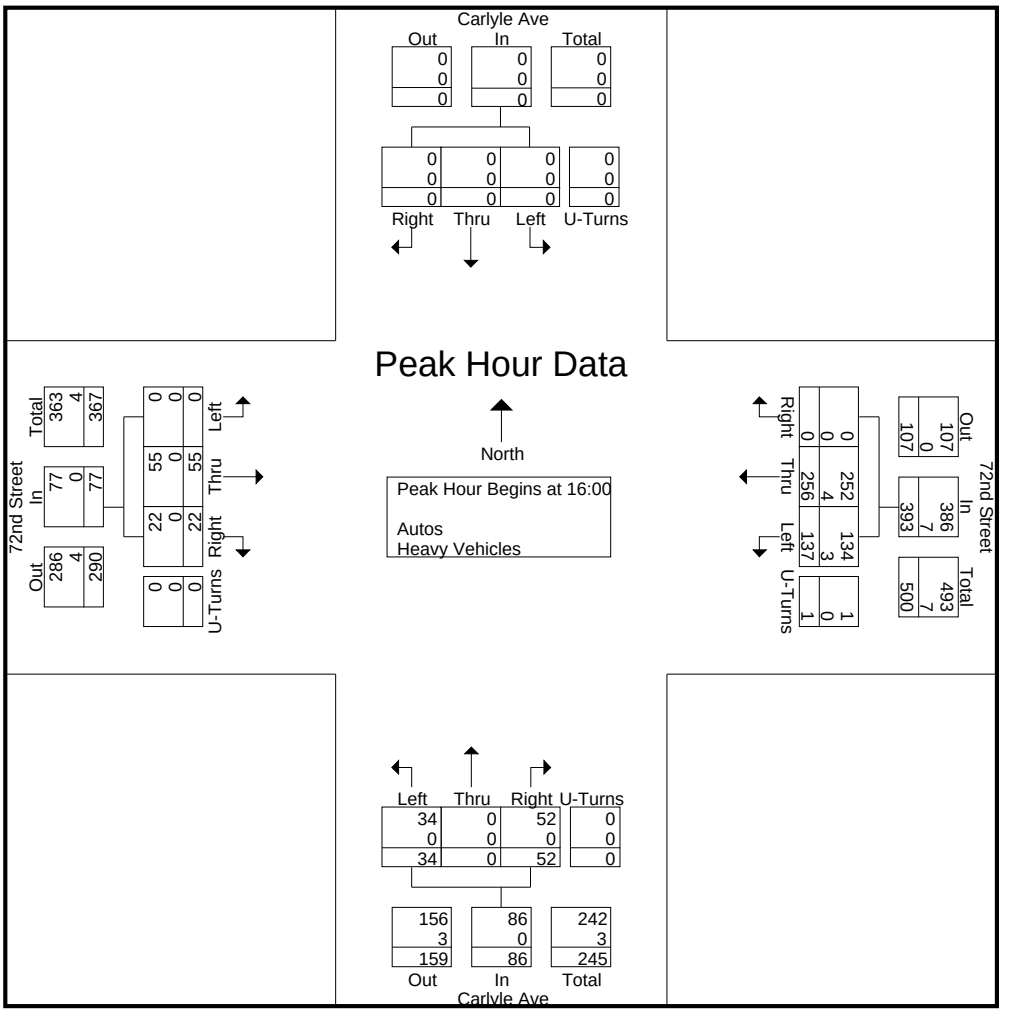


Traf Tech Engineering Inc.

File Name : 1-Carlyle Ave & 72nd Street
Site Code : 00000000
Start Date : 5/31/2019
Page No : 3

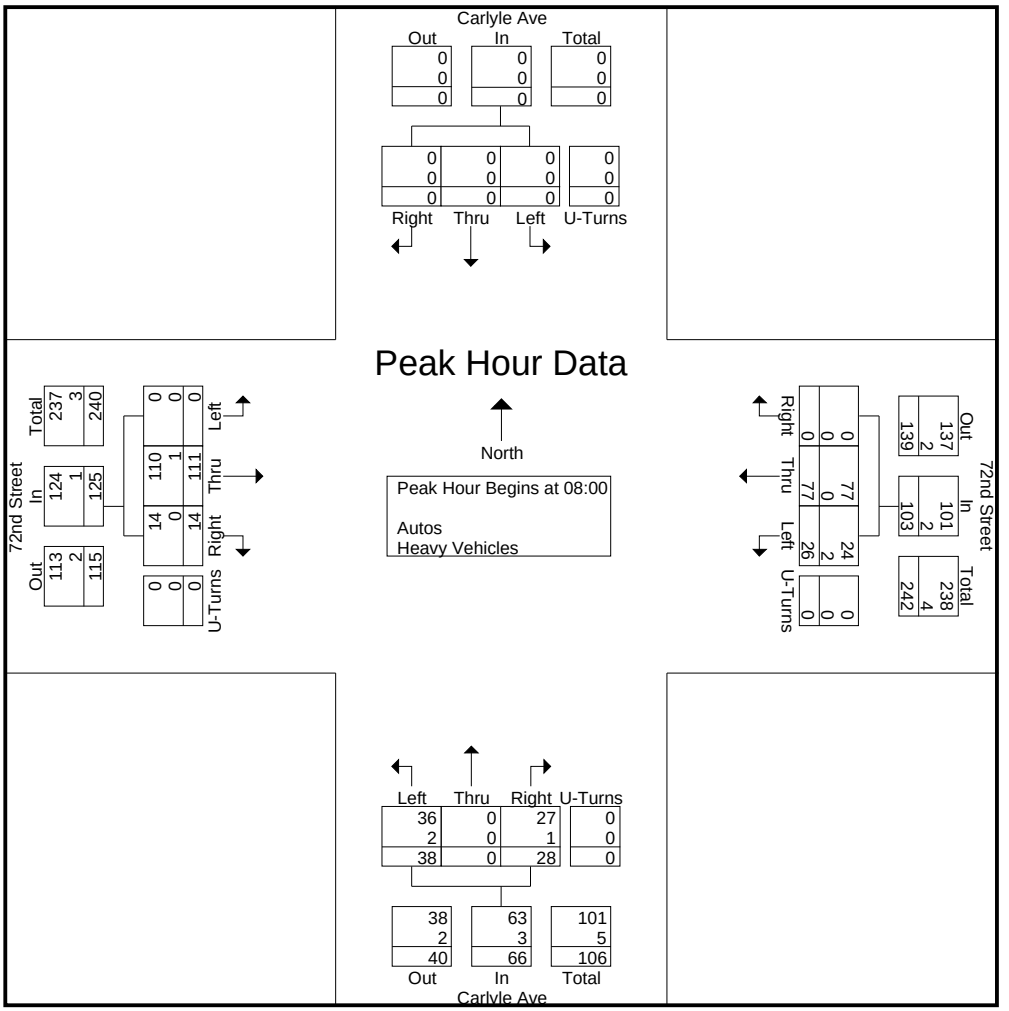
	Carlyle Ave From North					72nd Street From East					Carlyle Ave From South					72nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 08:00 to 18:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	0	0	0	0	0	74	31	0	105	13	0	9	0	22	6	16	0	0	22	149
16:15	0	0	0	0	0	0	68	38	0	106	20	0	9	0	29	7	10	0	0	17	152
16:30	0	0	0	0	0	0	53	25	1	79	9	0	9	0	18	6	14	0	0	20	117
16:45	0	0	0	0	0	0	61	43	0	104	10	0	7	0	17	3	15	0	0	18	139
Total Volume	0	0	0	0	0	0	256	137	1	394	52	0	34	0	86	22	55	0	0	77	557
% App. Total	0	0	0	0		0	65	34.8	0.3		60.5	0	39.5	0		28.6	71.4	0	0		
PHF	.000	.000	.000	.000	.000	.000	.865	.797	.250	.929	.650	.000	.944	.000	.741	.786	.859	.000	.000	.875	.916
Autos	0	0	0	0	0	0	252	134	1	387	52	0	34	0	86	22	55	0	0	77	550
% Autos	0	0	0	0	0	0	98.4	97.8	100	98.2	100	0	100	0	100	100	100	0	0	100	98.7
Heavy Vehicles																					
% Heavy Vehicles	0	0	0	0	0	0	1.6	2.2	0	1.8	0	0	0	0	0	0	0	0	0	0	1.3



Traf Tech Engineering Inc.

File Name : 1-Carlyle Ave & 72nd Street
Site Code : 00000000
Start Date : 5/31/2019
Page No : 4

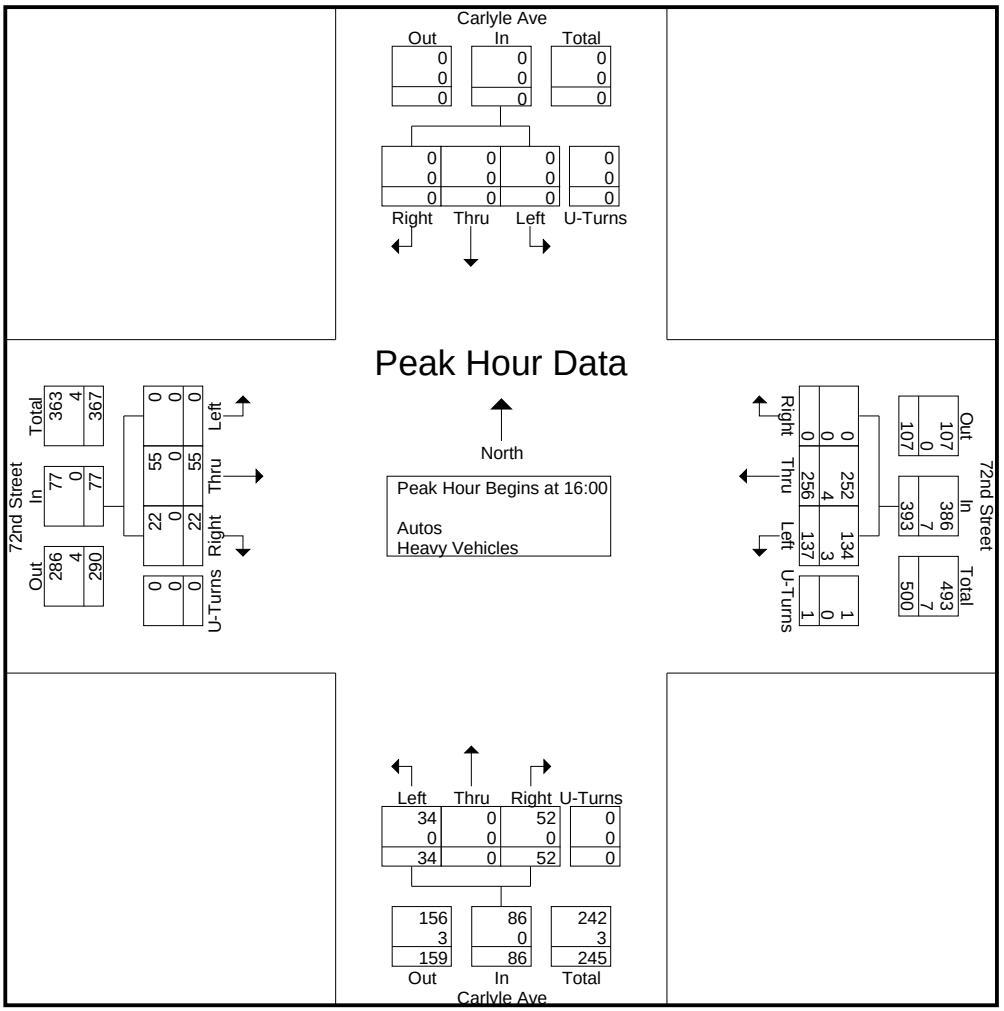
	Carlyle Ave From North					72nd Street From East					Carlyle Ave From South					72nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 08:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	0	0	0	0	0	0	22	6	0	28	6	0	18	0	24	3	26	0	0	29	81
08:15	0	0	0	0	0	0	19	6	0	25	9	0	10	0	19	4	27	0	0	31	75
08:30	0	0	0	0	0	0	22	10	0	32	9	0	4	0	13	4	30	0	0	34	79
08:45	0	0	0	0	0	0	14	4	0	18	4	0	6	0	10	3	28	0	0	31	59
Total Volume	0	0	0	0	0	0	77	26	0	103	28	0	38	0	66	14	111	0	0	125	294
% App. Total	0	0	0	0		0	74.8	25.2	0		42.4	0	57.6	0		11.2	88.8	0	0		
PHF	.000	.000	.000	.000	.000	.000	.875	.650	.000	.805	.778	.000	.528	.000	.688	.875	.925	.000	.000	.919	.907
Autos	0	0	0	0	0	0	77	24	0	101	27	0	36	0	63	14	110	0	0	124	288
% Autos	0	0	0	0	0	0	100	92.3	0	98.1	96.4	0	94.7	0	95.5	100	99.1	0	0	99.2	98.0
Heavy Vehicles																					
% Heavy Vehicles	0	0	0	0	0	0	0	7.7	0	1.9	3.6	0	5.3	0	4.5	0	0.9	0	0	0.8	2.0



Traf Tech Engineering Inc.

File Name : 1-Carlyle Ave & 72nd Street
Site Code : 00000000
Start Date : 5/31/2019
Page No : 5

	Carlyle Ave From North					72nd Street From East					Carlyle Ave From South					72nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 13:00 to 18:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	0	0	0	0	0	74	31	0	105	13	0	9	0	22	6	16	0	0	22	149
16:15	0	0	0	0	0	0	68	38	0	106	20	0	9	0	29	7	10	0	0	17	152
16:30	0	0	0	0	0	0	53	25	1	79	9	0	9	0	18	6	14	0	0	20	117
16:45	0	0	0	0	0	0	61	43	0	104	10	0	7	0	17	3	15	0	0	18	139
Total Volume	0	0	0	0	0	0	256	137	1	394	52	0	34	0	86	22	55	0	0	77	557
% App. Total	0	0	0	0		0	65	34.8	0.3		60.5	0	39.5	0		28.6	71.4	0	0		
PHF	.000	.000	.000	.000	.000	.000	.865	.797	.250	.929	.650	.000	.944	.000	.741	.786	.859	.000	.000	.875	.916
Autos	0	0	0	0	0	0	252	134	1	387	52	0	34	0	86	22	55	0	0	77	550
% Autos	0	0	0	0	0	0	98.4	97.8	100	98.2	100	0	100	0	100	100	100	0	0	100	98.7
Heavy Vehicles																					
% Heavy Vehicles	0	0	0	0	0	0	1.6	2.2	0	1.8	0	0	0	0	0	0	0	0	0	0	1.3



Traf Tech Engineering Inc.

File Name : 1-Carlyle Ave & 72nd Street
Site Code : 00000000
Start Date : 5/31/2019
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Groups Printed- Peds & Bikes

	Carlyle Ave From North				72nd Street From East				Carlyle Ave From South				72nd Street From West				
Start Time	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	Int. Total
08:00	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	3
08:15	0	0	0	0	0	0	0	4	0	0	0	1	0	0	0	0	5
08:30	0	0	0	0	0	0	0	6	0	0	0	1	0	0	0	0	7
08:45	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	6
Total	0	0	0	0	0	0	0	18	0	0	0	3	0	0	0	0	21
09:00	0	0	0	0	0	0	0	6	0	0	0	4	0	0	0	0	10
09:15	0	0	0	0	1	0	0	7	1	0	0	7	0	0	0	0	16
09:30	0	0	0	0	1	0	0	2	0	0	0	3	0	0	0	0	6
09:45	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	4
Total	0	0	0	0	2	0	0	16	2	0	0	16	0	0	0	0	36
*** BREAK ***																	
13:00	0	0	0	0	0	0	0	1	0	0	0	6	0	0	0	0	7
13:15	0	0	0	0	0	0	0	4	2	0	0	3	0	0	0	1	10
13:30	0	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	3
13:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
Total	0	0	0	0	0	0	0	7	2	0	0	11	0	0	0	2	22
14:00	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	4
14:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
14:30	0	0	0	0	2	0	0	5	2	0	0	2	0	0	0	2	13
14:45	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	4
Total	0	0	0	0	2	0	0	6	4	0	0	8	0	0	0	2	22
15:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
15:15	0	0	0	0	2	0	0	1	1	0	0	3	0	0	0	1	8
15:30	0	0	0	0	0	0	0	1	1	0	0	4	0	0	0	0	6
15:45	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	0	5
Total	0	0	0	0	2	0	0	3	2	0	0	13	0	0	0	1	21
16:00	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
16:15	0	0	0	0	0	0	0	1	0	0	0	3	0	0	0	0	4
16:30	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	1	6
16:45	0	0	0	0	0	0	0	4	0	0	0	3	0	0	0	1	8
Total	0	0	0	0	0	0	0	11	0	0	0	7	0	0	0	2	20
17:00	0	0	0	0	1	0	0	4	1	0	0	5	0	0	0	0	11
17:15	0	0	0	0	0	0	0	1	0	0	0	5	0	0	0	1	7
17:30	0	0	0	0	0	0	0	1	1	0	0	3	0	0	0	0	5
17:45	0	0	0	0	0	0	0	4	1	0	0	0	0	0	0	0	5
Total	0	0	0	0	1	0	0	10	3	0	0	13	0	0	0	1	28
18:00	0	0	0	0	3	0	0	4	3	0	0	9	0	0	0	0	19
18:15	0	0	0	0	1	0	0	1	1	0	0	2	0	0	0	1	6
18:30	0	0	0	0	0	0	0	5	1	0	0	1	0	0	0	0	7
18:45	0	0	0	0	0	0	0	3	2	0	0	3	0	0	0	0	8
Total	0	0	0	0	4	0	0	13	7	0	0	15	0	0	0	1	40
Grand Total	0	0	0	0	11	0	0	84	20	0	0	86	0	0	0	9	210
Apprch %	0	0	0	0	11.6	0	0	88.4	18.9	0	0	81.1	0	0	0	100	
Total %	0	0	0	0	5.2	0	0	40	9.5	0	0	41	0	0	0	4.3	

Traf Tech Engineering Inc.

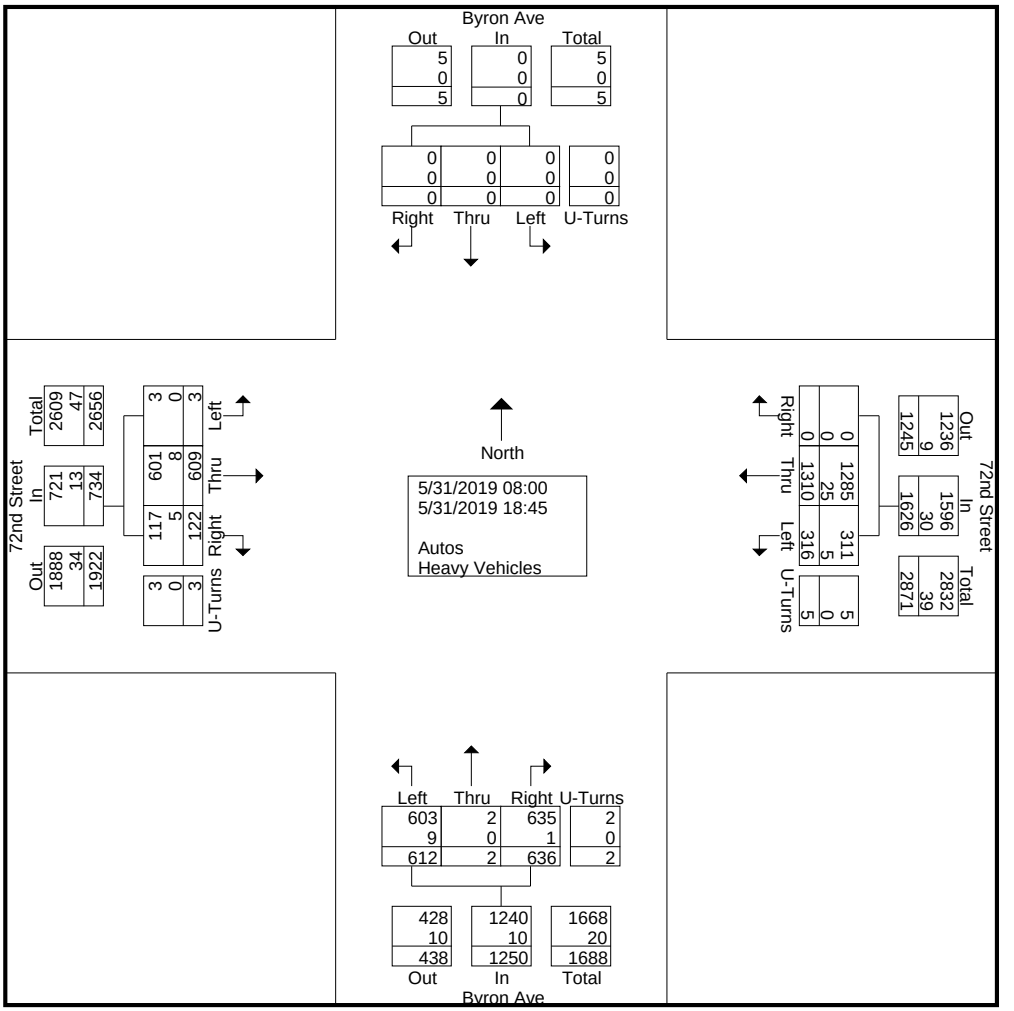
File Name : 2-Byron Ave & 72nd Street
Site Code : 00000000
Start Date : 5/31/2019
Page No : 1

Groups Printed- Autos - Heavy Vehicles

	Byron Ave From North					72nd Street From East					Byron Ave From South					72nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
08:00	0	0	0	0	0	0	16	8	0	24	22	0	14	0	36	6	25	0	0	31	91
08:15	0	0	0	0	0	0	18	9	1	28	41	0	15	0	56	6	30	0	0	36	120
08:30	0	0	0	0	0	0	20	16	0	36	31	0	10	0	41	8	29	2	0	39	116
08:45	0	0	0	0	0	0	19	5	0	24	25	0	5	1	31	4	21	0	0	25	80
Total	0	0	0	0	0	0	73	38	1	112	119	0	44	1	164	24	105	2	0	131	407
09:00	0	0	0	0	0	0	15	6	0	21	22	0	7	0	29	5	20	0	0	25	75
09:15	0	0	0	0	0	0	17	4	0	21	21	0	4	0	25	5	15	0	0	20	66
09:30	0	0	0	0	0	0	13	3	0	16	20	0	5	0	25	3	25	0	0	28	69
09:45	0	0	0	0	0	0	18	5	0	23	23	0	11	0	34	2	10	0	1	13	70
Total	0	0	0	0	0	0	63	18	0	81	86	0	27	0	113	15	70	0	1	86	280
*** BREAK ***																					
13:00	0	0	0	0	0	0	29	0	0	29	27	0	7	0	34	2	18	0	0	20	83
13:15	0	0	0	0	0	0	33	1	0	34	8	0	7	0	15	1	13	0	0	14	63
13:30	0	0	0	0	0	0	26	6	0	32	16	0	7	0	23	0	15	0	0	15	70
13:45	0	0	0	0	0	0	38	5	0	43	21	0	8	0	29	4	15	0	0	19	91
Total	0	0	0	0	0	0	126	12	0	138	72	0	29	0	101	7	61	0	0	68	307
14:00	0	0	0	0	0	0	25	5	0	30	10	0	10	0	20	4	12	0	0	16	66
14:15	0	0	0	0	0	0	26	6	0	32	22	0	14	0	36	4	23	0	0	27	95
14:30	0	0	0	0	0	0	61	4	0	65	20	0	10	0	30	2	29	0	1	32	127
14:45	0	0	0	0	0	0	34	4	0	38	25	0	19	0	44	2	24	0	0	26	108
Total	0	0	0	0	0	0	146	19	0	165	77	0	53	0	130	12	88	0	1	101	396
15:00	0	0	0	0	0	0	45	8	0	53	22	0	16	0	38	3	18	0	0	21	112
15:15	0	0	0	0	0	0	42	14	0	56	16	0	20	0	36	8	25	0	0	33	125
15:30	0	0	0	0	0	0	44	9	1	54	12	0	19	0	31	5	11	0	0	16	101
15:45	0	0	0	0	0	0	64	8	1	73	15	0	31	0	46	3	24	0	0	27	146
Total	0	0	0	0	0	0	195	39	2	236	65	0	86	0	151	19	78	0	0	97	484
16:00	0	0	0	0	0	0	72	27	0	99	20	1	45	0	66	6	19	1	0	26	191
16:15	0	0	0	0	0	0	71	17	0	88	13	0	48	0	61	8	14	0	0	22	171
16:30	0	0	0	0	0	0	64	25	0	89	16	0	24	0	40	4	18	0	0	22	151
16:45	0	0	0	0	0	0	94	20	1	115	19	1	25	0	45	5	19	0	0	24	184
Total	0	0	0	0	0	0	301	89	1	391	68	2	142	0	212	23	70	1	0	94	697
17:00	0	0	0	0	0	0	73	20	0	93	18	0	42	0	60	4	13	0	0	17	170
17:15	0	0	0	0	0	0	63	20	0	83	13	0	23	0	36	5	25	0	0	30	149
17:30	0	0	0	0	0	0	81	24	0	105	20	0	32	0	52	3	23	0	0	26	183
17:45	0	0	0	0	0	0	44	17	1	62	27	0	35	1	63	6	20	0	0	26	151
Total	0	0	0	0	0	0	261	81	1	343	78	0	132	1	211	18	81	0	0	99	653
18:00	0	0	0	0	0	0	50	10	0	60	22	0	44	0	66	1	14	0	0	15	141
18:15	0	0	0	0	0	0	36	2	0	38	19	0	21	0	40	2	14	0	0	16	94
18:30	0	0	0	0	0	0	33	5	0	38	13	0	19	0	32	0	21	0	0	21	91
18:45	0	0	0	0	0	0	26	3	0	29	17	0	15	0	32	1	7	0	1	9	70
Total	0	0	0	0	0	0	145	20	0	165	71	0	99	0	170	4	56	0	1	61	396
Grand Total	0	0	0	0	0	0	1310	316	5	1631	636	2	612	2	1252	122	609	3	3	737	3620
Apprch %	0	0	0	0		0	80.3	19.4	0.3		50.8	0.2	48.9	0.2		16.6	82.6	0.4	0.4		
Total %	0	0	0	0	0	0	36.2	8.7	0.1	45.1	17.6	0.1	16.9	0.1	34.6	3.4	16.8	0.1	0.1	20.4	
Autos	0	0	0	0	0	0	1285														
% Autos	0	0	0	0	0	0	98.1	98.4	100	98.2	99.8	100	98.5	100	99.2	95.9	98.7	100	100	98.2	98.5
Heavy Vehicles																					
% Heavy Vehicles	0	0	0	0	0	0	1.9	1.6	0	1.8	0.2	0	1.5	0	0.8	4.1	1.3	0	0	1.8	1.5

Traf Tech Engineering Inc.

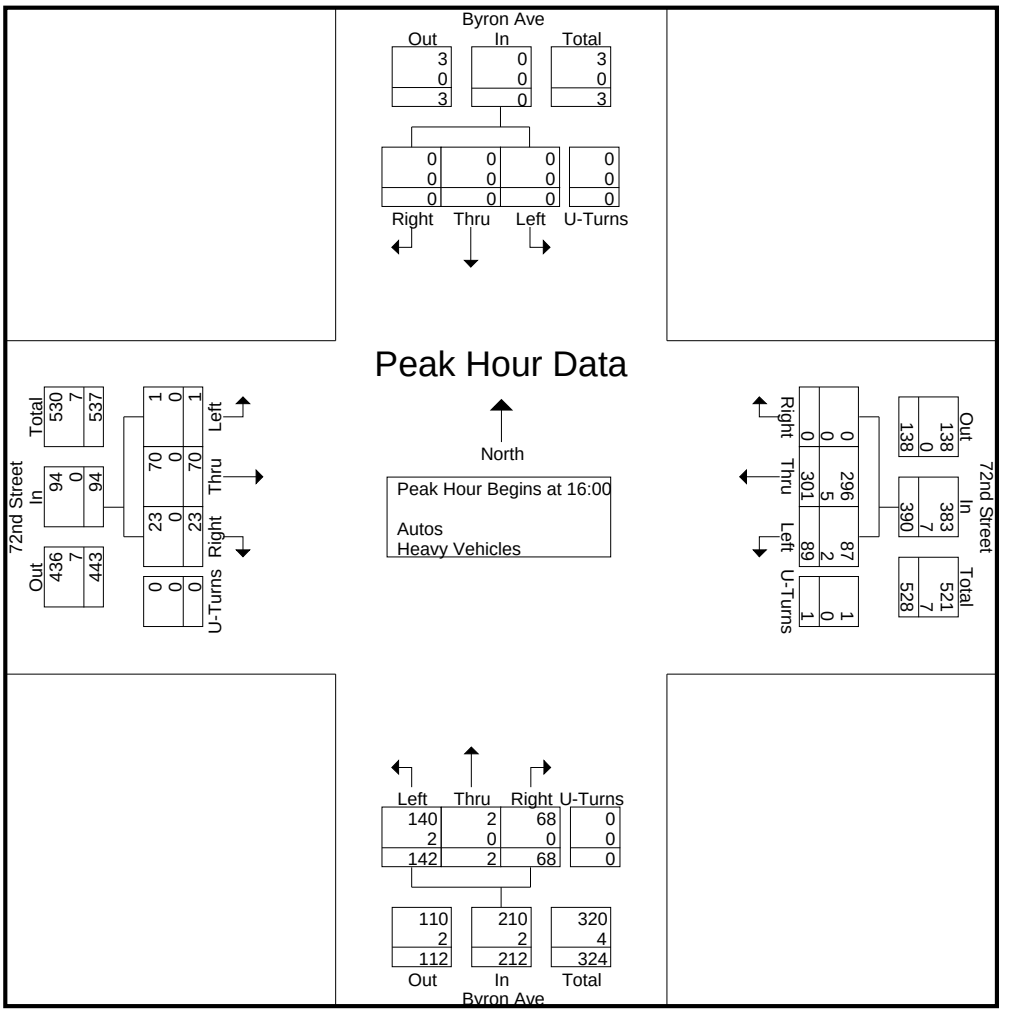
File Name : 2-Byron Ave & 72nd Street
Site Code : 00000000
Start Date : 5/31/2019
Page No : 2



Traf Tech Engineering Inc.

File Name : 2-Byron Ave & 72nd Street
Site Code : 00000000
Start Date : 5/31/2019
Page No : 3

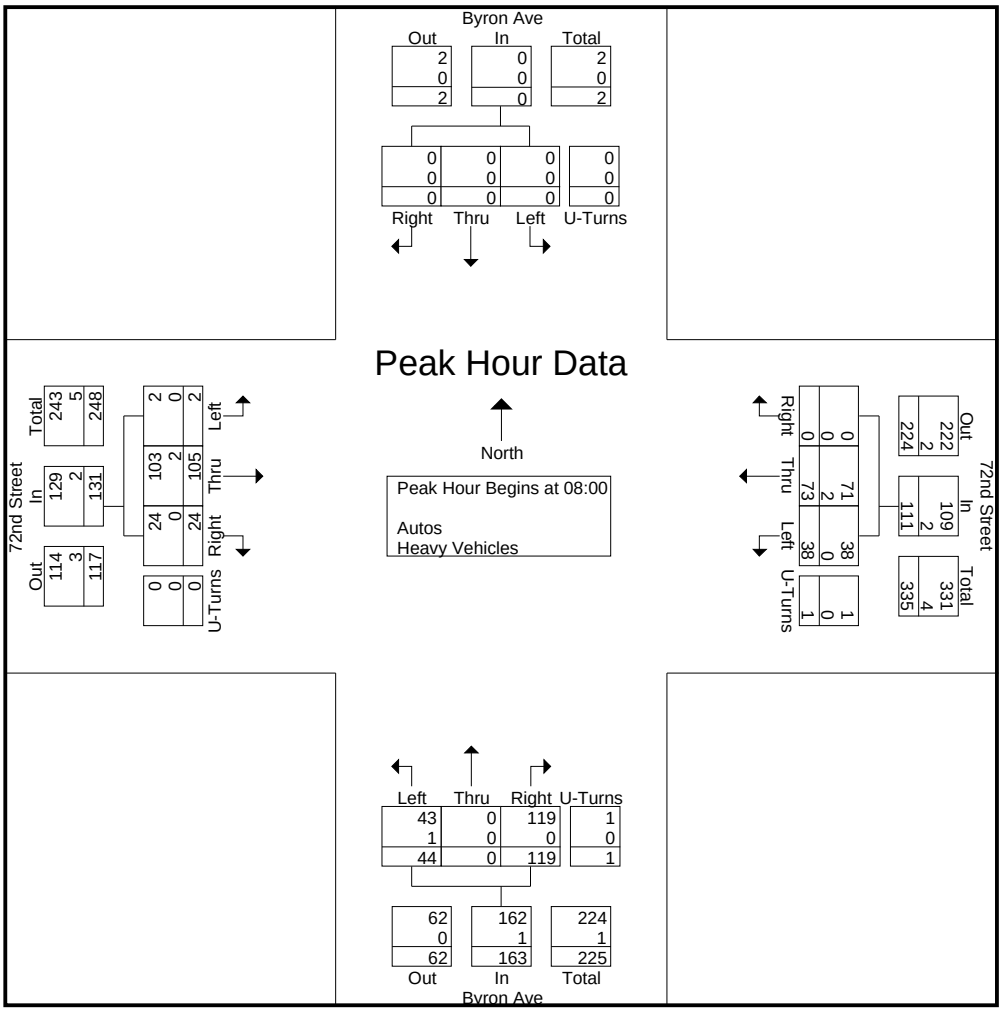
	Byron Ave From North					72nd Street From East					Byron Ave From South					72nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 08:00 to 18:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	0	0	0	0	0	72	27	0	99	20	1	45	0	66	6	19	1	0	26	191
16:15	0	0	0	0	0	0	71	17	0	88	13	0	48	0	61	8	14	0	0	22	171
16:30	0	0	0	0	0	0	64	25	0	89	16	0	24	0	40	4	18	0	0	22	151
16:45	0	0	0	0	0	0	94	20	1	115	19	1	25	0	45	5	19	0	0	24	184
Total Volume	0	0	0	0	0	0	301	89	1	391	68	2	142	0	212	23	70	1	0	94	697
% App. Total	0	0	0	0		0	77	22.8	0.3		32.1	0.9	67	0		24.5	74.5	1.1	0		
PHF	.000	.000	.000	.000	.000	.000	.801	.824	.250	.850	.850	.500	.740	.000	.803	.719	.921	.250	.000	.904	.912
Autos	0	0	0	0	0	0	296	87	1	384	68	2	140	0	210	23	70	1	0	94	688
% Autos	0	0	0	0	0	0	98.3	97.8	100	98.2	100	100	98.6	0	99.1	100	100	100	0	100	98.7
Heavy Vehicles																					
% Heavy Vehicles	0	0	0	0	0	0	1.7	2.2	0	1.8	0	0	1.4	0	0.9	0	0	0	0	0	1.3



Traf Tech Engineering Inc.

File Name : 2-Byron Ave & 72nd Street
Site Code : 00000000
Start Date : 5/31/2019
Page No : 4

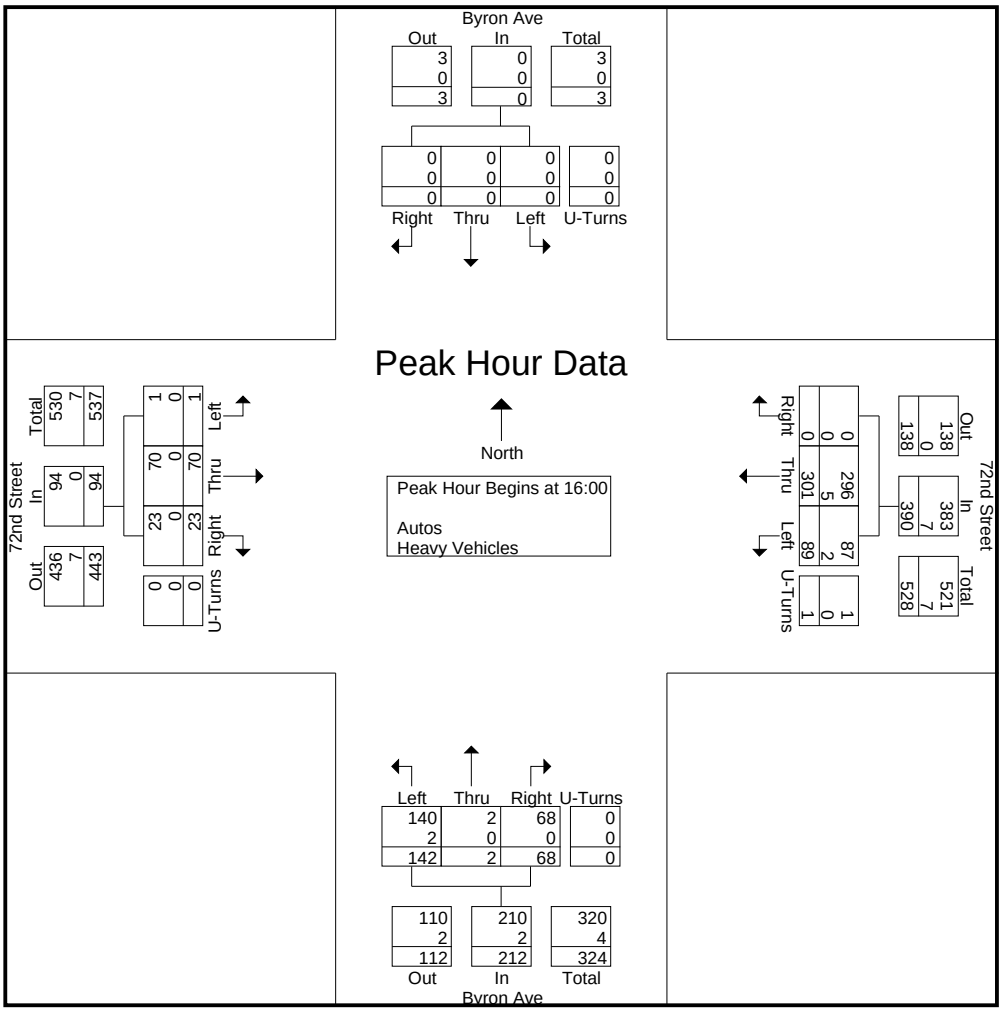
	Byron Ave From North					72nd Street From East					Byron Ave From South					72nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 08:00 to 09:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00																					
08:00	0	0	0	0	0	0	16	8	0	24	22	0	14	0	36	6	25	0	0	31	91
08:15	0	0	0	0	0	0	18	9	1	28	41	0	15	0	56	6	30	0	0	36	120
08:30	0	0	0	0	0	0	20	16	0	36	31	0	10	0	41	8	29	2	0	39	116
08:45	0	0	0	0	0	0	19	5	0	24	25	0	5	1	31	4	21	0	0	25	80
Total Volume	0	0	0	0	0	0	73	38	1	112	119	0	44	1	164	24	105	2	0	131	407
% App. Total	0	0	0	0		0	65.2	33.9	0.9		72.6	0	26.8	0.6		18.3	80.2	1.5	0		
PHF	.000	.000	.000	.000	.000	.000	.913	.594	.250	.778	.726	.000	.733	.250	.732	.750	.875	.250	.000	.840	.848
Autos	0	0	0	0	0	0	71	38	1	110	119	0	43	1	163	24	103	2	0	129	402
% Autos	0	0	0	0	0	0	97.3	100	100	98.2	100	0	97.7	100	99.4	100	98.1	100	0	98.5	98.8
Heavy Vehicles																					
% Heavy Vehicles	0	0	0	0	0	0	2.7	0	0	1.8	0	0	2.3	0	0.6	0	1.9	0	0	1.5	1.2



Traf Tech Engineering Inc.

File Name : 2-Byron Ave & 72nd Street
Site Code : 00000000
Start Date : 5/31/2019
Page No : 5

	Byron Ave From North					72nd Street From East					Byron Ave From South					72nd Street From West					
Start Time	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Right	Thru	Left	U-Turns	App. Total	Int. Total
Peak Hour Analysis From 13:00 to 18:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	0	0	0	0	0	72	27	0	99	20	1	45	0	66	6	19	1	0	26	191
16:15	0	0	0	0	0	0	71	17	0	88	13	0	48	0	61	8	14	0	0	22	171
16:30	0	0	0	0	0	0	64	25	0	89	16	0	24	0	40	4	18	0	0	22	151
16:45	0	0	0	0	0	0	94	20	1	115	19	1	25	0	45	5	19	0	0	24	184
Total Volume	0	0	0	0	0	0	301	89	1	391	68	2	142	0	212	23	70	1	0	94	697
% App. Total	0	0	0	0		0	77	22.8	0.3		32.1	0.9	67	0		24.5	74.5	1.1	0		
PHF	.000	.000	.000	.000	.000	.000	.801	.824	.250	.850	.850	.500	.740	.000	.803	.719	.921	.250	.000	.904	.912
Autos	0	0	0	0	0	0	296	87	1	384	68	2	140	0	210	23	70	1	0	94	688
% Autos	0	0	0	0	0	0	98.3	97.8	100	98.2	100	100	98.6	0	99.1	100	100	100	0	100	98.7
Heavy Vehicles																					
% Heavy Vehicles	0	0	0	0	0	0	1.7	2.2	0	1.8	0	0	1.4	0	0.9	0	0	0	0	0	1.3



Traf Tech Engineering Inc.

File Name : 2-Byron Ave & 72nd Street
Site Code : 00000000
Start Date : 5/31/2019
Page No : 1

Groups Printed- Peds & Bikes

	Byron Ave From North				72nd Street From East				Byron Ave From South				72nd Street From West				
Start Time	Bikes			Peds	Bikes			Peds	Bikes			Peds	Bikes			Peds	Int. Total
08:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
08:15	0	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	4
08:30	0	0	0	0	0	0	0	5	0	0	0	6	0	0	0	0	11
08:45	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
Total	0	0	0	0	0	0	0	9	0	0	0	9	0	0	0	0	18
09:00	0	0	0	0	0	0	0	4	0	0	0	4	0	0	0	2	10
09:15	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
09:30	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2
09:45	0	0	0	0	0	0	0	1	2	0	0	2	0	0	0	0	5
Total	0	0	0	0	0	0	0	6	2	0	0	12	0	0	0	2	22
*** BREAK ***																	
13:00	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	5
13:15	0	0	0	0	0	0	0	1	2	0	0	2	0	0	0	1	6
13:30	0	0	0	0	0	0	0	2	0	0	0	5	0	0	0	0	7
13:45	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0	0	5
Total	0	0	0	0	0	0	0	5	2	0	0	13	0	0	0	3	23
14:00	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
14:15	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	3
14:30	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2
14:45	0	0	0	0	0	0	0	1	2	0	0	1	0	0	0	0	4
Total	0	0	0	0	0	0	0	2	3	0	0	9	0	0	0	0	14
15:00	0	0	0	0	1	0	0	0	0	0	0	8	0	0	0	0	9
15:15	0	0	0	0	0	0	0	1	0	0	0	4	0	0	0	2	7
15:30	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	1	4
15:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
Total	0	0	0	0	1	0	0	1	1	0	0	19	0	0	0	3	25
16:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
16:30	0	0	0	0	0	0	0	2	0	0	0	5	0	0	0	1	8
16:45	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	6
Total	0	0	0	0	0	0	0	3	0	0	0	14	0	0	0	2	19
17:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
17:15	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	2	5
17:30	0	0	0	0	0	0	0	1	0	0	0	7	0	0	0	3	11
17:45	0	0	0	0	0	0	0	2	0	0	0	3	0	0	0	1	6
Total	0	0	0	0	0	0	0	4	0	0	0	13	0	0	0	7	24
18:00	0	0	0	0	0	0	0	3	0	0	0	9	0	0	0	2	14
18:15	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	1	5
18:30	0	0	0	0	0	0	0	2	1	0	0	3	0	0	0	2	8
18:45	0	0	0	0	0	0	0	6	2	0	0	1	0	0	0	0	9
Total	0	0	0	0	0	0	0	13	3	0	0	15	0	0	0	5	36
Grand Total	0	0	0	0	1	0	0	43	11	0	0	104	0	0	0	22	181
Apprch %	0	0	0	0	2.3	0	0	97.7	9.6	0	0	90.4	0	0	0	100	
Total %	0	0	0	0	0.6	0	0	23.8	6.1	0	0	57.5	0	0	0	12.2	

APPENDIX D

PSCF

2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: COUNTY
CATEGORY: 8700 MIAMI-DADE NORTH

MOCF: 0.98

WEEK	DATES	SF	PSCF
1	01/01/2018 - 01/06/2018	1.03	1.05
2	01/07/2018 - 01/13/2018	1.03	1.05
3	01/14/2018 - 01/20/2018	1.04	1.06
4	01/21/2018 - 01/27/2018	1.02	1.04
5	01/28/2018 - 02/03/2018	1.01	1.03
* 6	02/04/2018 - 02/10/2018	0.99	1.01
* 7	02/11/2018 - 02/17/2018	0.98	1.00
* 8	02/18/2018 - 02/24/2018	0.98	1.00
* 9	02/25/2018 - 03/03/2018	0.98	1.00
*10	03/04/2018 - 03/10/2018	0.97	0.99
*11	03/11/2018 - 03/17/2018	0.97	0.99
*12	03/18/2018 - 03/24/2018	0.97	0.99
*13	03/25/2018 - 03/31/2018	0.97	0.99
*14	04/01/2018 - 04/07/2018	0.97	0.99
*15	04/08/2018 - 04/14/2018	0.97	0.99
*16	04/15/2018 - 04/21/2018	0.97	0.99
*17	04/22/2018 - 04/28/2018	0.98	1.00
*18	04/29/2018 - 05/05/2018	0.99	1.01
19	05/06/2018 - 05/12/2018	1.00	1.02
20	05/13/2018 - 05/19/2018	1.01	1.03
21	05/20/2018 - 05/26/2018	1.01	1.03
22	05/27/2018 - 06/02/2018	1.01	1.03
23	06/03/2018 - 06/09/2018	1.01	1.03
24	06/10/2018 - 06/16/2018	1.01	1.03
25	06/17/2018 - 06/23/2018	1.01	1.03
26	06/24/2018 - 06/30/2018	1.02	1.04
27	07/01/2018 - 07/07/2018	1.02	1.04
28	07/08/2018 - 07/14/2018	1.02	1.04
29	07/15/2018 - 07/21/2018	1.02	1.04
30	07/22/2018 - 07/28/2018	1.02	1.04
31	07/29/2018 - 08/04/2018	1.01	1.03
32	08/05/2018 - 08/11/2018	1.01	1.03
33	08/12/2018 - 08/18/2018	1.00	1.02
34	08/19/2018 - 08/25/2018	1.00	1.02
35	08/26/2018 - 09/01/2018	1.00	1.02
36	09/02/2018 - 09/08/2018	1.01	1.03
37	09/09/2018 - 09/15/2018	1.01	1.03
38	09/16/2018 - 09/22/2018	1.00	1.02
39	09/23/2018 - 09/29/2018	1.00	1.02
40	09/30/2018 - 10/06/2018	1.00	1.02
41	10/07/2018 - 10/13/2018	0.99	1.01
42	10/14/2018 - 10/20/2018	0.99	1.01
43	10/21/2018 - 10/27/2018	1.00	1.02
44	10/28/2018 - 11/03/2018	1.00	1.02
45	11/04/2018 - 11/10/2018	1.01	1.03
46	11/11/2018 - 11/17/2018	1.01	1.03
47	11/18/2018 - 11/24/2018	1.02	1.04
48	11/25/2018 - 12/01/2018	1.02	1.04
49	12/02/2018 - 12/08/2018	1.02	1.04
50	12/09/2018 - 12/15/2018	1.03	1.05
51	12/16/2018 - 12/22/2018	1.03	1.05
52	12/23/2018 - 12/29/2018	1.03	1.05
53	12/30/2018 - 12/31/2018	1.04	1.06

* PEAK SEASON

APPENDIX E

Projected Turning Movement Volumes

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

72nd Street and Carlyle Avenue
AM Peak Hour

Description	Carlyle Avenue Northbound			Southbound			72nd Street Eastbound			72nd Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (5/31/2019)	38		28					111	14	26	77	
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2019 Peak Season Traffic	39	0	29	0	0	0	0	114	14	27	79	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
2022 Background Traffic	40	0	30	0	0	0	0	118	15	28	82	0
Park & 72Trips												
- Percentages (Ins/Out)	25%		10%						25%	10%		
- Trips	0		0						0	0		
2022 Total Traffic	**40**	**0**	**30**	**0**	**0**	**0**	**0**	**118**	**15**	**28**	**82**	**0**

Monterra	AM Peak			PM Peak		
	INS	OUT	Total	INS	OUT	Total
Driveway Volumes	**0**	**0**	**0**	**54**	**34**	**88**

Traf Tech
ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

72nd Street and Carlyle Avenue
PM Peak Hour

Description	Carlyle Avenue Northbound			Southbound			72nd Street Eastbound			72nd Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (5/31/2019)	34		52					55	22	137	256	
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2019 Peak Season Traffic	35	0	54	0	0	0	0	57	23	141	264	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
2022 Background Traffic	36	0	55	0	0	0	0	58	23	145	272	0
Park & 72Trips												
- Percentages (Ins/Out)	25%		10%						25%	10%		
- Trips	9		3						14	5		
2022 Total Traffic	**45**	**0**	**58**	**0**	**0**	**0**	**0**	**58**	**37**	**150**	**272**	**0**

Monterra	AM Peak INS	AM Peak OUT	AM Peak Total	PM Peak INS	PM Peak OUT	PM Peak Total
Driveway Volumes	**0**	**0**	**0**	**54**	**34**	**88**

Traf Tech
ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

72nd Street and Byron Avenue
AM Peak Hour

Description	Byron Avenue Northbound			Southbound			72nd Street Eastbound			72nd Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (5/31/2019)	44		119					105	24	38	73	
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2019 Peak Season Traffic	45	0	123	0	0	0	0	108	25	39	75	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
2022 Background Traffic	47	0	126	0	0	0	0	111	25	40	77	0
Park & 72Trips												
- Percentages (Ins/Out)			2%					10%		2%	10%	
- Trips			0					0		0	0	
2022 Total Traffic	**47**	**0**	**126**	**0**	**0**	**0**	**0**	**111**	**25**	**40**	**77**	**0**

Monterra	AM Peak INS	AM Peak OUT	AM Peak Total	PM Peak INS	PM Peak OUT	PM Peak Total
Driveway Volumes	**0**	**0**	**0**	**54**	**34**	**88**

Traf Tech
ENGINEERING, INC.

FUTURE TURNING MOVEMENT VOLUME ANALYSIS

72nd Street and Byron Avenue
PM Peak Hour

Description	Byron Avenue Northbound			Southbound			72nd Street Eastbound			72nd Street Westbound		
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right
Existing Traffic (5/31/2019)	142		68					70	23	89	301	
Season Adjustment Factor	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
2019 Peak Season Traffic	146	0	70	0	0	0	0	72	24	92	310	0
Annual Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
2022 Background Traffic	151	0	72	0	0	0	0	74	24	94	319	0
Park & 72Trips												
- Percentages (Ins/Out)			2%					10%		2%	10%	
- Trips			1					3		1	5	
2022 Total Traffic	**151**	**0**	**73**	**0**	**0**	**0**	**0**	**77**	**24**	**95**	**324**	**0**

Monterra	AM Peak INS	AM Peak OUT	AM Peak Total	PM Peak INS	PM Peak OUT	PM Peak Total
Driveway Volumes	**0**	**0**	**0**	**54**	**34**	**88**

Traf Tech
ENGINEERING, INC.

APPENDIX F

SYNCHRO Output

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	118	15	28	82	40	30
Future Volume (vph)	118	15	28	82	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.985				0.941	
Flt Protected				0.988	0.972	
Satd. Flow (prot)	1835	0	0	1840	1704	0
Flt Permitted				0.988	0.972	
Satd. Flow (perm)	1835	0	0	1840	1704	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	692			332	364	
Travel Time (s)	15.7			7.5	8.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	128	16	30	89	43	33
Shared Lane Traffic (%)						
Lane Group Flow (vph)	144	0	0	119	76	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	27.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	118	15	28	82	40	30
Future Vol, veh/h	118	15	28	82	40	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	128	16	30	89	43	33

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	144	0	285	136
Stage 1	-	-	-	-	136	-
Stage 2	-	-	-	-	149	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1438	-	705	913
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	879	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1438	-	689	913
Mov Cap-2 Maneuver	-	-	-	-	689	-
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	860	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	770	-	-	1438	-
HCM Lane V/C Ratio	0.099	-	-	0.021	-
HCM Control Delay (s)	10.2	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	118	15	28	82	40	30
Future Vol, veh/h	118	15	28	82	40	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	128	16	30	89	43	33

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	144	0	285	136
Stage 1	-	-	-	-	136	-
Stage 2	-	-	-	-	149	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1438	-	705	913
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	879	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1438	-	689	913
Mov Cap-2 Maneuver	-	-	-	-	689	-
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	860	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	770	-	-	1438	-
HCM Lane V/C Ratio	0.099	-	-	0.021	-
HCM Control Delay (s)	10.2	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	111	25	40	77	47	126
Future Volume (vph)	111	25	40	77	47	126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.975				0.902	
Flt Protected				0.983	0.987	
Satd. Flow (prot)	1816	0	0	1831	1658	0
Flt Permitted				0.983	0.987	
Satd. Flow (perm)	1816	0	0	1831	1658	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	332			702	344	
Travel Time (s)	7.5			16.0	7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	121	27	43	84	51	137
Shared Lane Traffic (%)						
Lane Group Flow (vph)	148	0	0	127	188	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	34.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	111	25	40	77	47	126
Future Vol, veh/h	111	25	40	77	47	126
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	27	43	84	51	137

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	148	0	305	135
Stage 1	-	-	-	-	135	-
Stage 2	-	-	-	-	170	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1434	-	687	914
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	860	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1434	-	666	914
Mov Cap-2 Maneuver	-	-	-	-	666	-
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	833	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	830	-	-	1434	-
HCM Lane V/C Ratio	0.227	-	-	0.03	-
HCM Control Delay (s)	10.6	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-

Intersection	
Int Delay, s/veh	5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	111	25	40	77	47	126
Future Vol, veh/h	111	25	40	77	47	126
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	27	43	84	51	137

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	148	0	305	135
Stage 1	-	-	-	-	135	-
Stage 2	-	-	-	-	170	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1434	-	687	914
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	860	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1434	-	666	914
Mov Cap-2 Maneuver	-	-	-	-	666	-
Stage 1	-	-	-	-	891	-
Stage 2	-	-	-	-	833	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.6	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	830	-	-	1434	-
HCM Lane V/C Ratio	0.227	-	-	0.03	-
HCM Control Delay (s)	10.6	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	58	37	150	272	45	58
Future Volume (vph)	58	37	150	272	45	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.948				0.924	
Flt Protected				0.983	0.979	
Satd. Flow (prot)	1766	0	0	1831	1685	0
Flt Permitted				0.983	0.979	
Satd. Flow (perm)	1766	0	0	1831	1685	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	692			332	364	
Travel Time (s)	15.7			7.5	8.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	63	40	163	296	49	63
Shared Lane Traffic (%)						
Lane Group Flow (vph)	103	0	0	459	112	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization	42.0%	ICU Level of Service	A
Analysis Period (min)	15		

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	58	37	150	272	45	58
Future Vol, veh/h	58	37	150	272	45	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	40	163	296	49	63

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	103	0	705	83
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	622	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1489	-	403	976
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1489	-	350	976
Mov Cap-2 Maneuver	-	-	-	-	350	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	465	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	13.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	548	-	-	1489	-
HCM Lane V/C Ratio	0.204	-	-	0.109	-
HCM Control Delay (s)	13.2	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.4	-

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	58	37	150	272	45	58
Future Vol, veh/h	58	37	150	272	45	58
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	40	163	296	49	63

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	103	0	705	83
Stage 1	-	-	-	-	83	-
Stage 2	-	-	-	-	622	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1489	-	403	976
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1489	-	350	976
Mov Cap-2 Maneuver	-	-	-	-	350	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	465	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.7	13.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	548	-	-	1489	-
HCM Lane V/C Ratio	0.204	-	-	0.109	-
HCM Control Delay (s)	13.2	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.8	-	-	0.4	-

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	77	24	95	324	151	73
Future Volume (vph)	77	24	95	324	151	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.968				0.956	
Flt Protected				0.989	0.967	
Satd. Flow (prot)	1803	0	0	1842	1722	0
Flt Permitted				0.989	0.967	
Satd. Flow (perm)	1803	0	0	1842	1722	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	332			702	344	
Travel Time (s)	7.5			16.0	7.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	84	26	103	352	164	79
Shared Lane Traffic (%)						
Lane Group Flow (vph)	110	0	0	455	243	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	0			0	12	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)		9	15		15	9
Sign Control	Free			Free	Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	6.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	77	24	95	324	151	73
Future Vol, veh/h	77	24	95	324	151	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	26	103	352	164	79

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	110	0	655	97
Stage 1	-	-	-	-	97	-
Stage 2	-	-	-	-	558	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1480	-	431	959
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	573	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1480	-	394	959
Mov Cap-2 Maneuver	-	-	-	-	394	-
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	523	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	19.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	488	-	-	1480	-
HCM Lane V/C Ratio	0.499	-	-	0.07	-
HCM Control Delay (s)	19.5	-	-	7.6	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2.7	-	-	0.2	-

Intersection	
Int Delay, s/veh	6.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	77	24	95	324	151	73
Future Vol, veh/h	77	24	95	324	151	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	84	26	103	352	164	79

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	110	0	655	97
Stage 1	-	-	-	-	97	-
Stage 2	-	-	-	-	558	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1480	-	431	959
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	573	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1480	-	394	959
Mov Cap-2 Maneuver	-	-	-	-	394	-
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	523	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	19.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	488	-	-	1480	-
HCM Lane V/C Ratio	0.499	-	-	0.07	-
HCM Control Delay (s)	19.5	-	-	7.6	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2.7	-	-	0.2	-