

November 30, 2020

#### Reference: Traffic & Parking Assessment Proposed Residential Complex 127 Delaware Avenue City of Jersey City, Hudson County, New Jersey

Dear Members of the Board:

We are pleased to provide this Traffic Assessment report for the above referenced project. This Assessment identifies existing traffic operations, forecasts future traffic volumes to and from the proposed site (Trip Generation), and identifies traffic impacts, if any. In addition, the required number of parking spaces is evaluated and described.

The inset figure to the right indicates the existing building and rear garage parking structures. All building will be razed to accommodate the contemplated multi-family project. The project proposal details 32 residential units with a ground floor parking supply of 31 spaces.

Delaware Avenue in the vicinity of the subject site is designated as ONE-WAY north towards the Gautier Avenue intersection. Gautier Avenue is designated as ONE-WAY westbound at the intersection.

In addition to the subject site, Delaware Avenue provides access to Saint Aloysius Elementary Academy with pre-K through eighthgrade classes.

#### TRIP GENERATION

The test from a traffic operations perspective for the proposed site is to determine if the anticipated additional vehicle trips associated with the proposed Multi-Family Residential development would create a traffic impact. Utilizing the latest trip generation rates developed by the *Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition),* we determined the increase in anticipated peak hour site-generated traffic associated with the proposed development.

The proposed 32 unit Multi-Family Residential development would likely include up to 18, 26, and 26 additional vehicles per hour (vph) during the AM, PM, and Saturday Peak Hours, respectively. Per the ITE multifamily low rise rates for land use code 220. Although there would be an increase in traffic volumes during the Peak Hours, the net increase and the overall traffic generated would be very minor. The proposed new trips do not take in consideration the existing trip generation associated with the garages and the multifamily frame building.



#### **ACCESS / SITE CIRCULATION & PARKING**

The proposed traffic impact at the ONE-WAY configuration of Delaware Avenue at the site driveway and similarly at the intersection of Gautier Avenue where two ONE-WAY streets intersect the site's minor trip generation would have a minimal impacts at the site driveway and the next adjacent intersection.

A series of manual traffic counts where conducted at the intersection to gauge existing traffic operations while the Elementary School was in session.

- 7:00 AM to 9:00 AM
- 2:00 PM to 6:00 PM
- 4:00 PM to 6:00 PM

and to observe existing conditions that may be exacerbated by the project. Based on the counts conducted and given assignment of site trip generation the impact from a capacity perspective would be minimal. The traffic counts have been appended for review.

On-site parking provides for 31 parking spaces (including 2 ADA accessible space). Based on the small square footage of the proposed residential units, and the current Jersey City vehicle ownership, the proposed 31 parking spaces would be sufficient for the proposed Multi- Family Residential development site.

RSIS requires 1.8 spaces per unit, for a 1-bedroom unit, which is excessive for this site based on the US Census Vehicle ownership data for this tract of Jersey City (13% do not own a vehicle), and 25% utilize public transportation or other means to get to work. There are three NJ TRANSIT Bus Route (#1, and #80 proving access to places in NJ and NYC within walking distance from the proposed site along West Side Avenue.

#### CONCLUSION

In summary, the proposed project would not result in a significant increase in traffic, and can operate efficiently with 31 parking spaces based on the size of the units, percentage of public transportation utilization, and vehicle ownership in this section of Jersey City.

The site would be safe and efficient from a traffic operation standpoint and would not create any significant traffic impact at the proposed driveways, nor create significant queuing on-site.

If you should have any questions or comments, please do not hesitate to contact our office should you have any questions or comments.

Very truly yours, Neglia Engineering Associates

Brian Intindola

Brian A. Intindola, P.E., C.M.E. Project Traffic Engineer Attached Traffic Counts

# **Turn Count Summary**

Location:	Delaware Ave at Gautier Ave, Jersey City
<b>GPS Coordinates</b>	: Lat=40.725587, Lon=-74.078545
Date:	2020-09-29
Day of week:	Tuesday
Weather:	Cloudy
Analyst:	JJL

### **Total vehicle traffic**

Interval starts	Sc	outhBou	Ind	We	estboun	d	No	orthbour	nd	Ea	astbour	nd	Total
intervar starts	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOLAI
07:04	0	0	0	0	1	2	2	1	0	0	0	0	6
07:15	0	0	0	0	1	6	2	2	0	0	0	0	11
07:30	0	0	0	0	7	3	1	2	0	0	0	0	13
07:45	0	1	0	0	4	5	1	4	0	0	0	0	15
08:00	0	0	0	0	6	1	1	4	0	0	0	0	12
08:15	0	0	0	1	3	6	2	19	0	0	0	0	31
08:30	0	0	0	0	5	3	2	2	0	0	1	0	13
08:45	0	0	0	0	3	7	0	2	0	0	0	0	12
09:00	0	0	0	0	1	3	0	0	0	0	0	0	4

## Car traffic

Interval starts	Sc	outhBou	Ind	We	estboun	d	No	orthbour	nd	Ea	astbour	d	Total
Interval Starts	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Iotai
07:04	0	0	0	0	1	2	2	1	0	0	0	0	6
07:15	0	0	0	0	1	6	2	2	0	0	0	0	11
07:30	0	0	0	0	7	3	1	1	0	0	0	0	12
07:45	0	0	0	0	4	5	1	3	0	0	0	0	13
08:00	0	0	0	0	5	1	1	4	0	0	0	0	11
08:15	0	0	0	1	3	6	2	19	0	0	0	0	31
08:30	0	0	0	0	5	3	2	2	0	0	0	0	12
08:45	0	0	0	0	3	7	0	2	0	0	0	0	12
09:00	0	0	0	0	1	3	0	0	0	0	0	0	4

## **Bicycle traffic**

Interval starts	Sc	outhBou	nd	We	estboun	d	Nc	orthbour	nd	Ea	astbour	ld	Total
Interval Starts	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOLAI
07:04	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	1	0	0	0	0	1
07:45	0	1	0	0	0	0	0	1	0	0	0	0	2
08:00	0	0	0	0	1	0	0	0	0	0	0	0	1
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	1	0	1
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0

### **Pedestrian volumes**

Interval starts		NE			NW	_		SW			SE		Total
interval starts	Left	Right	Total	TOTAL									
07:04	3	0	3	0	2	2	0	0	0	0	3	3	8
07:15	3	0	3	0	4	4	2	0	2	0	1	1	10
07:30	5	0	5	0	1	1	3	0	3	0	0	0	9
07:45	2	0	2	0	3	3	0	0	0	0	0	0	5
08:00	3	0	3	0	6	6	10	0	10	0	1	1	20
08:15	4	0	4	0	2	2	7	0	7	0	3	3	16
08:30	6	0	6	0	1	1	1	0	1	0	1	1	9
08:45	2	0	2	0	3	3	4	0	4	0	3	3	12
09:00	3	0	3	0	0	0	0	0	0	0	0	0	3

# 07:45 - 08:45

	Sc	outhBou	Ind	We	estboun	d	Nc	orthbour	nd	Ea	astboun	d	Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
Vehicle Total	0	1	0	1	18	15	6	29	0	0	1	0	71
Factor	0.00	0.25	0.00	0.25	0.75	0.62	0.75	0.38	0.00	0.00	0.25	0.00	0.57
Approach Factor		0.25			0.85			0.42			0.25		

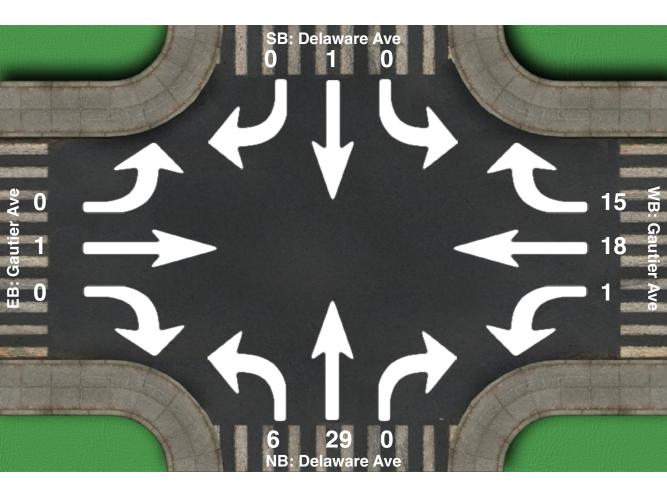
## **Peak Hour Vehicle Summary**

Vehicle	Sc	outhBou	nd	We	estboun	d	Nc	orthbour	nd	Ea	astboun	d	Total
venicie	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	0	0	0	1	17	15	6	28	0	0	0	0	67
Bicycle	0	1	0	0	1	0	0	1	0	0	1	0	4

## **Peak Hour Pedestrians**

		NE			NW	_		SW	_		SE		Total
	Left	Right	Total	Total									
Pedestrians	15	0	15	0	12	12	18	0	18	0	5	5	50

Location:Delaware Ave at Gautier Ave, Jersey CityGPS Coordinates:Lat=40.725587, Lon=-74.078545Date:2020-09-29Day of week:TuesdayWeather:CloudyAnalyst:JJL



# **Intersection Peak Hour**

07:45 - 08:45

	Sc	outhBou	nd	We	estboun	d	Nc	rthbour	nd	Ea	astboun	d	Total
	Left	Thru	Right	IUlai									
Vehicle Total	0	1	0	1	18	15	6	29	0	0	1	0	71
Factor	0.00	0.25	0.00	0.25	0.75	0.62	0.75	0.38	0.00	0.00	0.25	0.00	0.57
Approach Factor		0.25			0.85			0.42			0.25		

# **Turn Count Summary**

Location:	Gautier Ave at Delaware Ave, Jersey City, NJ
<b>GPS Coordinates</b>	: Lat=40.725649, Lon=-74.078514
Date:	2020-09-29
Day of week:	Tuesday
Weather:	Light Drizzle
Analyst:	JJL

## **Total vehicle traffic**

Interval starts	Sc	outhBou	Ind	We	estboun	d	No	orthbour	nd	Ea	astbour	ıd	Total
interval starts	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
14:04	0	0	0	0	0	0	0	6	4	0	3	0	13
14:15	0	0	0	0	0	0	0	10	11	2	0	0	23
14:30	0	0	0	0	1	0	0	3	2	2	3	0	11
14:45	0	0	0	0	1	0	0	7	5	3	10	0	26
15:00	0	0	0	0	0	0	1	13	8	0	9	0	31
15:15	0	0	1	0	0	0	0	9	4	3	3	0	20
15:30	0	0	0	0	0	0	0	10	1	0	3	0	14
15:45	0	0	0	0	0	0	0	14	5	1	3	0	23
16:00	0	0	0	0	0	0	0	8	11	1	5	0	25
16:15	0	0	0	0	0	1	0	7	8	2	3	0	21
16:30	0	0	0	0	0	0	0	5	7	1	1	0	14
16:45	0	0	0	0	1	0	0	6	9	2	3	0	21
17:00	1	1	0	1	0	0	0	10	9	1	2	1	26
17:15	0	0	0	0	0	0	0	13	14	5	4	0	36
17:30	0	0	0	2	0	0	0	12	8	2	7	0	31
17:45	0	0	0	0	0	0	0	8	9	2	2	0	21

# Car traffic

Interval starts	Sc	outhBou	Ind	We	estboun	d	No	orthbour	nd	Ea	astbour	nd	Total
interval starts	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
14:04	0	0	0	0	0	0	0	6	4	0	3	0	13
14:15	0	0	0	0	0	0	0	9	10	2	0	0	21
14:30	0	0	0	0	0	0	0	3	2	2	3	0	10
14:45	0	0	0	0	0	0	0	6	5	3	10	0	24
15:00	0	0	0	0	0	0	1	13	8	0	8	0	30
15:15	0	0	1	0	0	0	0	9	4	3	2	0	19
15:30	0	0	0	0	0	0	0	10	1	0	3	0	14
15:45	0	0	0	0	0	0	0	14	5	1	3	0	23
16:00	0	0	0	0	0	0	0	8	11	1	4	0	24
16:15	0	0	0	0	0	1	0	7	8	2	3	0	21
16:30	0	0	0	0	0	0	0	5	7	1	1	0	14
16:45	0	0	0	0	0	0	0	6	9	2	3	0	20
17:00	0	0	0	0	0	0	0	10	8	1	2	0	21
17:15	0	0	0	0	0	0	0	13	14	5	3	0	35
17:30	0	0	0	0	0	0	0	11	8	2	5	0	26
17:45	0	0	0	0	0	0	0	8	8	2	1	0	19

# **Bicycle traffic**

Interval starts	Sc	outhBou	ind	We	estboun	d	No	orthbour	nd	Ea	astbour	nd	Total
interval starts	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOTAL
14:04	0	0	0	0	0	0	0	0	0	0	0	0	0
14:15	0	0	0	0	0	0	0	1	1	0	0	0	2
14:30	0	0	0	0	1	0	0	0	0	0	0	0	1
14:45	0	0	0	0	1	0	0	1	0	0	0	0	2
15:00	0	0	0	0	0	0	0	0	0	0	1	0	1
15:15	0	0	0	0	0	0	0	0	0	0	1	0	1
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	1	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	1	0	0	0	0	0	0	0	1
17:00	1	1	0	1	0	0	0	0	1	0	0	1	5
17:15	0	0	0	0	0	0	0	0	0	0	1	0	1
17:30	0	0	0	2	0	0	0	1	0	0	2	0	5
17:45	0	0	0	0	0	0	0	0	1	0	1	0	2

### **Pedestrian volumes**

Interval starts		NE	_		NW	_		SW	_		SE		Total
interval starts	Left	Right	Total	TOLAI									
14:04	2	0	2	0	2	2	2	0	2	0	7	7	13
14:15	0	0	0	0	3	3	3	0	3	0	0	0	6
14:30	1	0	1	0	2	2	1	0	1	0	8	8	12
14:45	2	0	2	0	10	10	1	0	1	0	3	3	16
15:00	3	0	3	0	5	5	4	0	4	0	17	17	29
15:15	1	0	1	0	6	6	0	0	0	0	8	8	15
15:30	1	0	1	0	2	2	4	0	4	0	7	7	14
15:45	3	0	3	0	4	4	1	0	1	0	10	10	18
16:00	3	0	3	0	2	2	6	0	6	0	4	4	15
16:15	6	0	6	0	0	0	7	0	7	0	2	2	15
16:30	3	0	3	0	2	2	3	0	3	0	11	11	19
16:45	3	0	3	0	5	5	3	0	3	0	11	11	22
17:00	4	0	4	0	3	3	4	0	4	0	8	8	19
17:15	1	0	1	0	6	6	5	0	5	0	10	10	22
17:30	4	0	4	0	2	2	8	0	8	0	12	12	26
17:45	4	0	4	0	4	4	4	0	4	0	5	5	17

# 17:00 - 18:00

	Sc	outhBou	Ind	We	estboun	d	Nc	orthbour	nd	Ea	astboun	d	Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
Vehicle Total	1	1	0	3	0	0	0	43	40	10	15	1	114
Factor	0.25	0.25	0.00	0.38	0.00	0.00	0.00	0.83	0.71	0.50	0.54	0.25	0.79
Approach Factor		0.25			0.38			0.77			0.72		

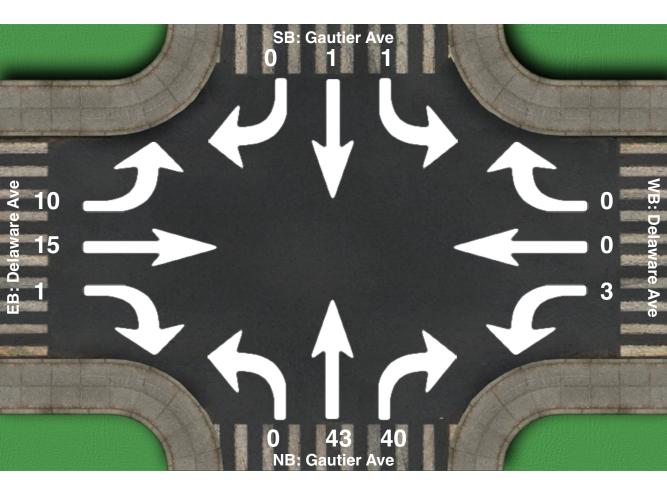
## **Peak Hour Vehicle Summary**

Vehicle	Sc	outhBou	nd	We	estboun	d	Nc	orthbour	nd	Ea	astboun	d	Total
venicie	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	0	0	0	0	0	0	0	42	38	10	11	0	101
Bicycle	1	1	0	3	0	0	0	1	2	0	4	1	13

## **Peak Hour Pedestrians**

		NE			NW	_		SW	_		SE		Total
	Left	Right	Total	Total									
Pedestrians	13	0	13	0	15	15	21	0	21	0	35	35	84

Location:Gautier Ave at Delaware Ave, Jersey City, NJGPS Coordinates:Lat=40.725649, Lon=-74.078514Date:2020-09-29Day of week:TuesdayWeather:Light DrizzleAnalyst:JJL



# **Intersection Peak Hour**

17:00 - 18:00

	Sc	outhBou	nd	We	estboun	d	Nc	rthbour	nd	Ea	astboun	d	Total
	Left	Thru	Right	TOLAI									
Vehicle Total	1	1	0	3	0	0	0	43	40	10	15	1	114
Factor	0.25	0.25	0.00	0.38	0.00	0.00	0.00	0.83	0.71	0.50	0.54	0.25	0.79
Approach Factor		0.25			0.38			0.77			0.72		

# **Turn Count Summary**

Location:Gautier Ave at Delaware Ave, New JerseyGPS Coordinates:2020-09-24Date:2020-09-24Day of week:ThursdayWeather:CloudyAnalyst:JJL

### **Total vehicle traffic**

Interval starts	Sc	outhBou	ind	We	estboun	d	No	orthbour	nd	Ea	astbour	d	Total
interval starts	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
16:00	0	0	0	0	0	0	0	9	9	0	2	0	20
16:15	0	0	0	0	0	0	0	10	11	2	6	0	29
16:30	0	0	0	0	0	0	0	13	7	3	7	0	30
16:45	0	0	0	0	0	0	0	9	8	4	0	0	21
17:00	0	0	0	0	0	0	1	7	8	0	3	0	19
17:15	0	0	0	0	0	0	0	6	7	2	2	0	17
17:30	0	0	0	0	0	0	0	12	4	2	4	0	22
17:45	0	0	0	0	0	0	0	11	4	0	3	0	18

### Car traffic

Interval starts	Sc	outhBou	ind	We	estboun	d	No	orthbour	nd	Ea	astbour	d	Total
interval starts	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOLAI
16:00	0	0	0	0	0	0	0	9	9	0	2	0	20
16:15	0	0	0	0	0	0	0	10	11	2	6	0	29
16:30	0	0	0	0	0	0	0	13	7	3	7	0	30
16:45	0	0	0	0	0	0	0	9	8	4	0	0	21
17:00	0	0	0	0	0	0	1	7	8	0	3	0	19
17:15	0	0	0	0	0	0	0	6	7	2	2	0	17
17:30	0	0	0	0	0	0	0	12	4	2	4	0	22
17:45	0	0	0	0	0	0	0	11	4	0	3	0	18

### **Truck traffic**

Interval starts	Sc	outhBou	Ind	We	estboun	d	No	orthbour	nd	Ea	astbour	d	Total
interval starts	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOLAI
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0

### **Pedestrian volumes**

Interval starts		NE			NW	_		SW			SE		Total
interval starts	Left	Right	Total	TOLAI									
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0

# 16:00 - 17:00

	Sc	outhBou	Ind	We	estboun	d	Nc	orthbour	nd	Ea	astboun	ıd	Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Total
Vehicle Total	0	0	0	0	0	0	0	41	35	9	15	0	100
Factor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.80	0.56	0.54	0.00	0.83
Approach Factor		0.00			0.00			0.90			0.60		

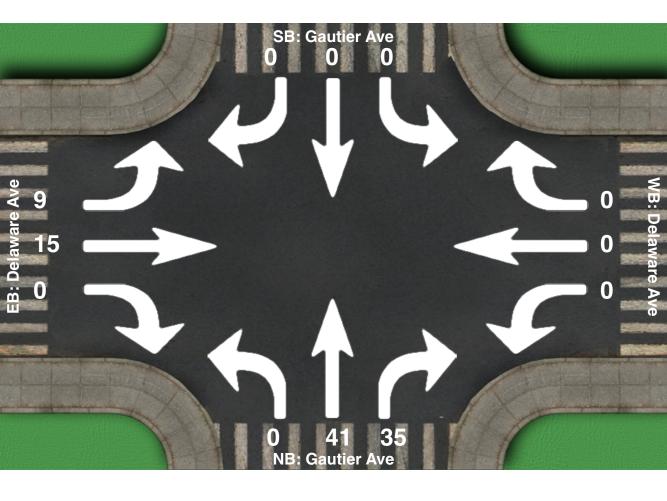
## **Peak Hour Vehicle Summary**

Vehicle	Sc	outhBou	ind	We	estboun	d	Nc	orthbour	nd	Ea	astboun	d	Total
venicie	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	0	0	0	0	0	0	0	41	35	9	15	0	100
Truck	0	0	0	0	0	0	0	0	0	0	0	0	0

## **Peak Hour Pedestrians**

	NE			NW			SW			SE			Total
	Left	Right	Total	Iotai									
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0

Location: Gautier Ave at Delaware Ave, New Jersey GPS Coordinates: Date: 2020-09-24 Day of week: Thursday Weather: Cloudy Analyst: JJL



# **Intersection Peak Hour**

16:00 - 17:00

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	TOLAI
Vehicle Total	0	0	0	0	0	0	0	41	35	9	15	0	100
Factor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.80	0.56	0.54	0.00	0.83
Approach Factor		0.00			0.00			0.90			0.60		