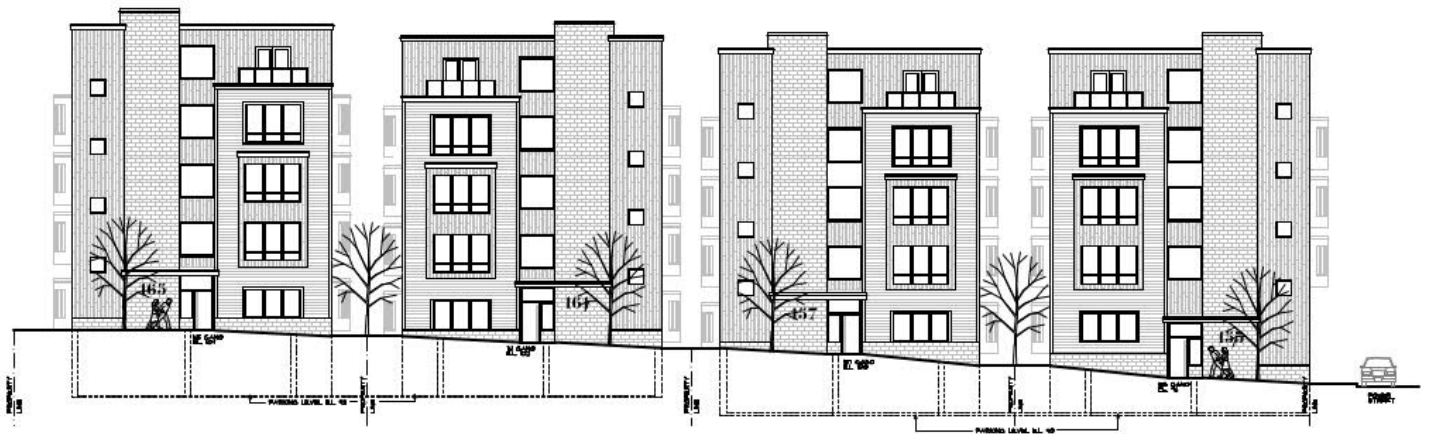


Providence, Rhode Island  
Proposed Residential Redevelopment

*December 2021*

## TRAFFIC IMPACT STUDY



**BETA**

701 George Washington Hwy  
Lincoln, Rhode Island 02865  
401.333.2382  
[www.BETA-inc.com](http://www.BETA-inc.com)

# Proposed Residential Redevelopment

## Providence, Rhode Island

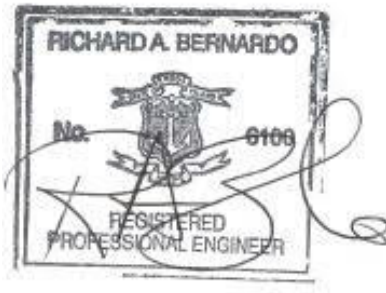
## TRAFFIC IMPACT STUDY

---

Prepared by: BETA GROUP, INC.

Prepared for: Mr. Joe Casali, P.E.  
Joe Casali Engineering, Inc.  
300 Post Road  
Warwick, Rhode Island 02888

December 2021





December 17, 2021

Mr. Joe Casali, P.E.  
Joe Casali Engineering, Inc.  
300 Post Road  
Warwick, Rhode Island 02888

Re: Proposed Residential Redevelopment  
153-165 Gano Street  
Providence, Rhode Island

Dear Mr. Casali:

BETA Group, Inc., in accordance with our scope of services, has completed a traffic impact study for a proposed residential redevelopment project in the City of Providence, Rhode Island. The site, comprised of four separate lots, is located along the easterly side of Gano Street just north of its junction with Power Street. The property immediately abuts a recreational facility, Gano Park to the east. The parcel is fully developed with three commercial buildings.

Based upon our discussions and a review of the plans provided by *Acme Architect, LLC*, it is our understanding that the residential redevelopment includes razing the three existing structures to allow construction of four, 5-story buildings accommodating 35 units each, for a total of 140 residential apartments. Access and egress to the site is proposed at a single driveway on Power Street, while eliminating three existing curb cuts along Gano Street.

The study included herein, was conducted to determine the adequacy of the existing servicing roadways to accommodate anticipated traffic to be generated by the residential redevelopment project. An analysis of potential impacts to the roadway capacity and safety has been completed and is discussed in the following report.

Very truly yours,  
BETA Group, Inc.

A handwritten signature in black ink, appearing to read "Paul J. Bannon", is written over a large, faint, stylized graphic of a leaf or petal.

Paul J. Bannon  
Associate

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## 1.0 INTRODUCTION

The objective of the following study is to assess the potential traffic impacts associated with a proposed residential redevelopment project in the City of Providence, Rhode Island. The new residential apartments will be situated on a parcel of land on the northeast corner of the intersection of Gano Street with Power Street, just west of the Seekonk River. Refer to the Figure 1, Project Vicinity Map, on the following page for the project location within the city.

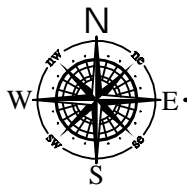
The residential redevelopment proposal consists of razing three vacant commercial structures to allow construction of four new, 5-story buildings containing 140 residential apartment units. Each building will have a lower level (basement) with 21 vehicle parking spaces. In addition, a bicycle rack for each building will be provided allowing for a total of 32 bikes for the development. Access/egress is proposed at a single driveway on Power Street at the southeast corner of the property.

The study summarized herein focused on both traffic flow efficiency and safety along Gano Street and Power Street in the immediate vicinity of the subject property, including at the proposed site driveway. The potential impacts associated with the site related traffic have been defined and evaluated in accordance with standard traffic engineering guidelines and procedures.

The traffic engineering study completed for this project included the following:

- A traffic counting program to define the existing traffic patterns and operational characteristics along the servicing roadways. The data collection included review of record traffic information available from the Rhode Island Department of Transportation (RIDOT), an Automatic Traffic Recorder (ATR) count on Gano Street along the property frontage and a manual Turning Movement Count (TMC) at the intersection of Gano Street with Power Street.
- An inventory of the physical roadway characteristics of Gano Street and Power Street in the project area to determine the adequacy of the existing roadway geometric features in reference to safety and operations.
- An analysis of crash records obtained from the Providence Police Department to determine if there are any safety concerns relative to the frequency, severity, or pattern of crashes in the project area.
- An estimate of future traffic volumes for the proposed residential redevelopment was calculated using data from the "Trip Generation" Manual, an informational report published by the Institute of Transportation Engineers (ITE).
- Evaluation and analysis of the traffic safety and operational issues for existing and future traffic conditions.
- Development of recommendations where necessary, that would be required to maintain safe and efficient traffic flow in the project area.

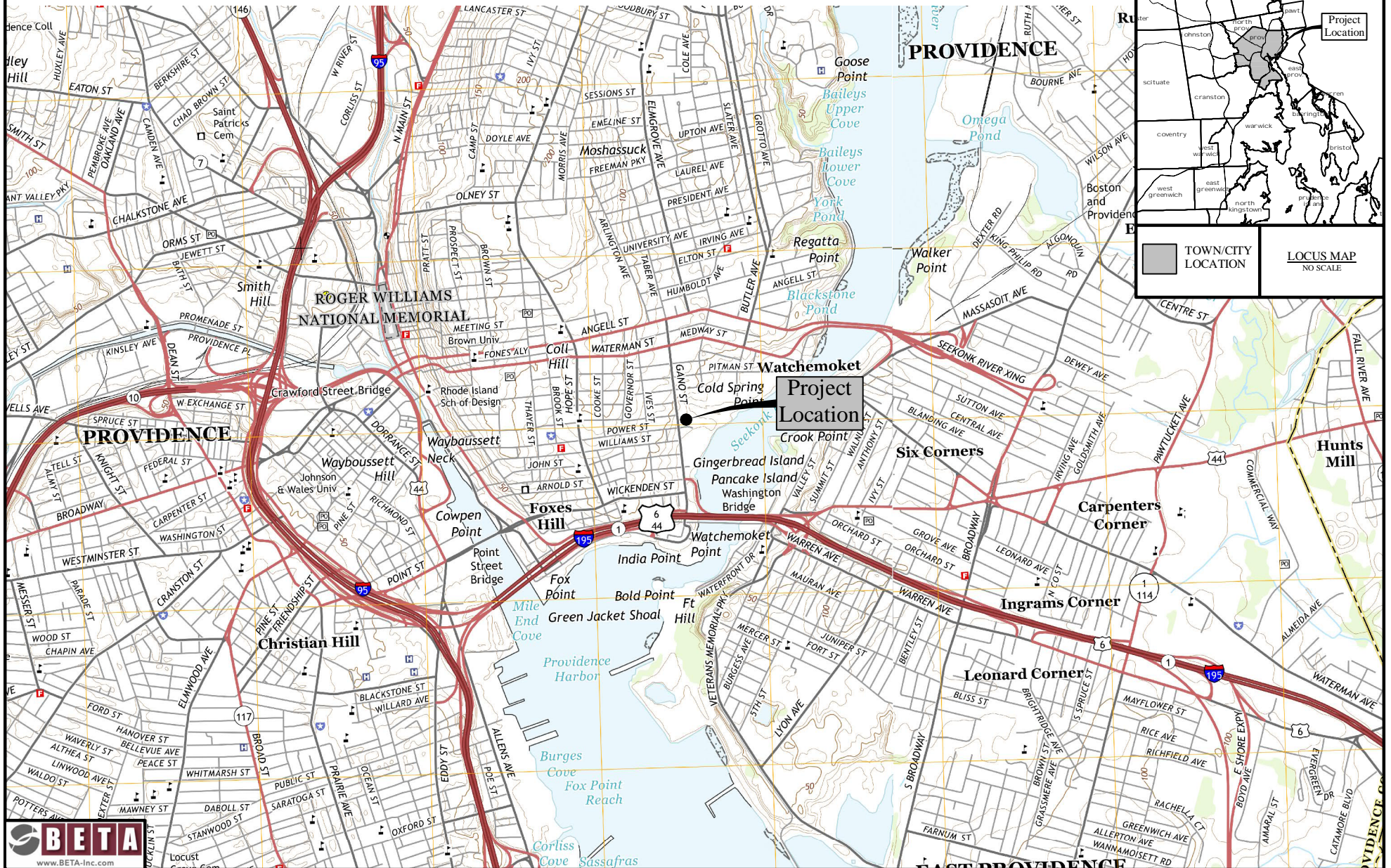




# Proposed Residential Redevelopment

PROVIDENCE, RHODE ISLAND

## Figure 1 - Project Vicinity Map





## 2.0 PROJECT AREA

As noted in the previous section, the proposed residential apartment project is situated on a parcel of land at the northeast corner of the intersection of Gano Street with Power Street within the Fox Point neighborhood. The 0.76 acre site is fully developed with three commercial structures and associated paved parking lots and is defined by Assessor's Plat 14, Lots 272, 273, 296, and 576. Figure 2 on the following page depicts the general project area, and the boundary lines of the subject property.

Land use in the immediate area can be defined as predominantly high-density residential properties along the westerly side of Gano Street including off intersecting side streets with commercial properties along the easterly side of the Gano Street. Immediately abutting the subject site to the north and south are commercial properties, to the east is the Gano Park and Seekonk River, and to the west across Gano Street are residential properties. Further to the northeast within the College Hill neighborhood is the Brown University campus. Further south is the I-195 corridor and India Point Park.

Gano Street will serve as the primary access route to the redeveloped property, with Power Street providing immediate local access. Based upon the operating characteristics along the servicing roadways, and the low estimated volume and type of traffic associated with the residential redevelopment, a study impact area was defined for the project. The limits of our analysis focused on Gano Street between Pitman Street southerly to Route 195 and Power Street east of Gano Street and specifically at the site driveway intersection.

## 3.0 EXISTING CONDITIONS

### 3.1 ROADWAYS

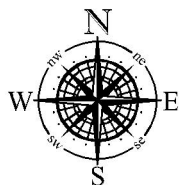
#### Gano Street

Gano Street is a north/south urban principal arterial between Angell Street to the north and India Street to the south. The roadway provides immediate local access to abutting properties but also links to higher order facilities including I-195 to the south. In the project area, the roadway is generally thirty (30) feet wide consisting of an 11-foot travel lane in each direction with an eight foot parking lane along the southbound side.

Granite curbing and a mix of cement and bituminous concrete sidewalks are provided on both sides of the road.

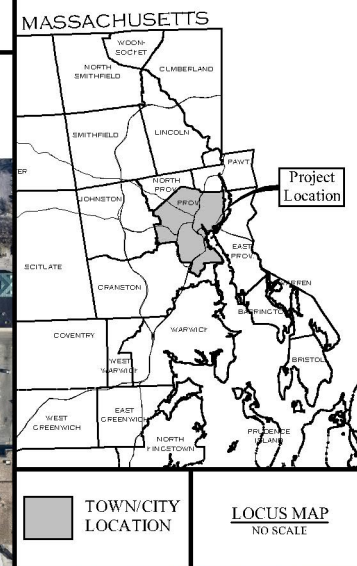
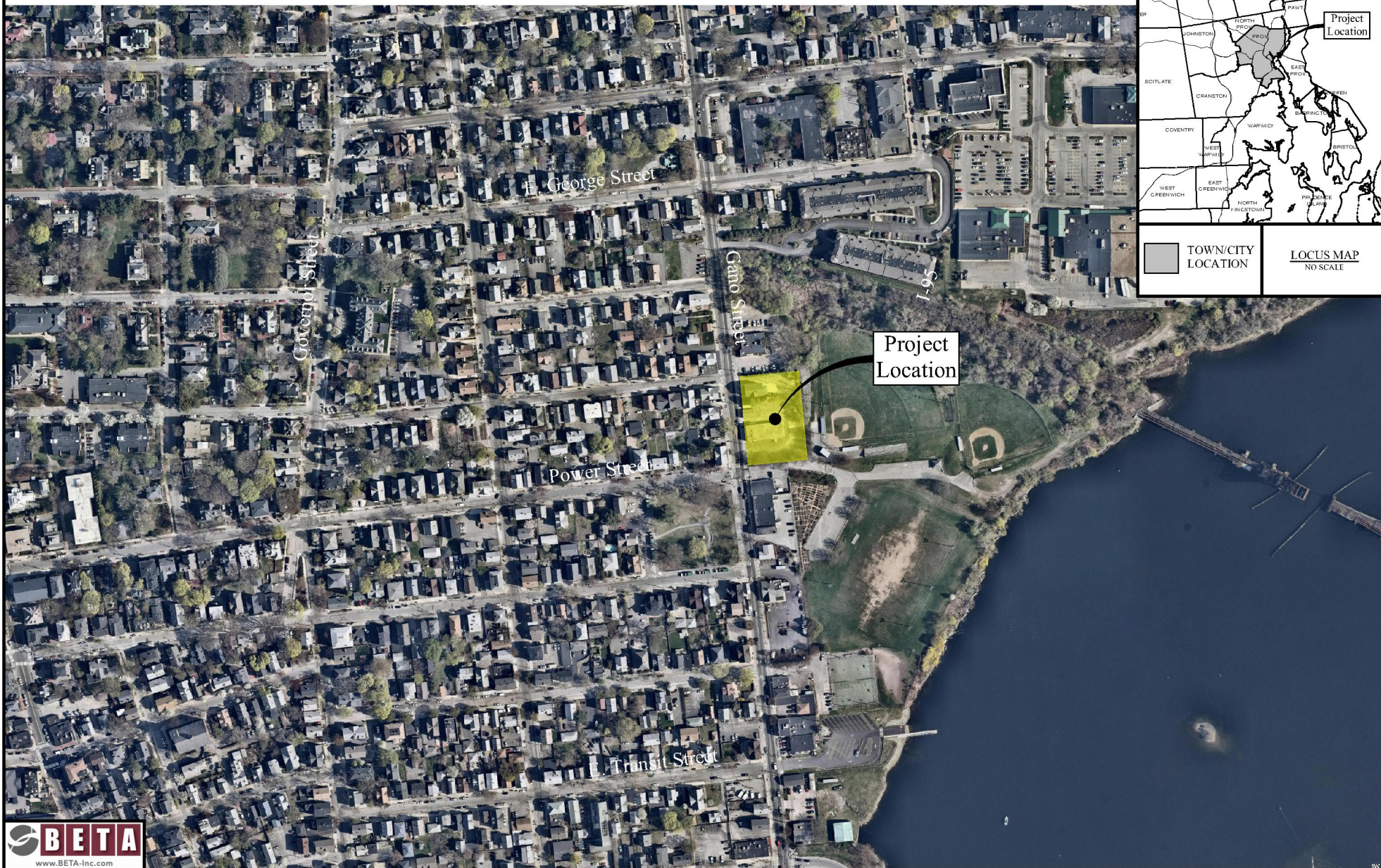






# Proposed Residential Redevelopment PROVIDENCE, RHODE ISLAND

## Figure 2 - Project Area Map





The pavement surface can be classified as being in fair condition with visible minor rutting and crack sealing. Cobra head lighting is provided for night time visibility in the area. The speed limit is posted at 25 mph. The photograph on Page 3 depicts the typical roadway characteristics of Gano Street looking northwest with the subject property on the right side.

#### Power Street

Power Street is a major collector road running in an east/west direction between South Main Street to the west to Gano Street to the east where it then becomes a short, 500 foot long local, dead-end street. The short section of Power Street services two commercial properties including the subject site, baseball fields, and Gano Park. Along the property frontage, the roadway is generally eighteen (18) feet wide consisting of undelineated single lanes in each direction with 90-degree marked parking on the southerly side of the roadway as seen in the adjacent photograph looking west towards the Gano Street intersection with the subject property on the right side.



There is no curbing or sidewalks provided along the roadway. The pavement can be classified as being in fair condition with no visible major pavement distress. There was no observed posted speed limit and was assumed at 25 mph due to the urban and local nature of the area. There is no lighting provided along this short section of Power Street.

### 3.2 INTERSECTIONS

#### Gano Street at Power Street

Power Street intersects Gano Street to form an unsignalized, four-way junction with stop control on the minor Power Street eastbound and westbound approaches. Mast arm mounted flashing beacons are provided at the intersection to enhance safety by emphasizing the traffic control and increasing visibility of the intersection. Flashing yellow beacons are provided on the Gano Street northbound and southbound approaches while flashing red beacons are provided on the minor Power Street eastbound and westbound approaches. A Stop sign and stop line are present on both the Power Street eastbound and westbound approaches to the intersection. All approaches to the intersection provide a single shared lane.

Curb ramps are provided on all corners of the intersection, though they are not ADA-compliant. Marked crosswalks are available on all legs of the intersection except across the eastern leg as can be seen in the adjacent photograph.



An enhanced visibility crosswalk is also provided across the southern leg of the intersection where pedestal mounted yellow flashing signal heads with pushbuttons, though not ADA-compliant, are available for pedestrians to utilize before crossing Gano Street. Pedestrian crossing signs are also mounted on the flasher pedestal poles. A Cobra-head light fixture on a utility pole is available for nighttime illumination of the intersection.

### 3.3 TRAFFIC DATA

Existing traffic flow characteristics for this area were developed from a traffic counting program conducted by BETA and review of record data available from RIDOT in the immediate area. The data collection included Manual Turning Movement Counts (TMC) at the unsignalized intersection of Gano Street with Power Street during the weekday morning and afternoon peak periods between 7 and 9 AM and 4 to 6 PM, respectively, and Automatic Traffic Recorder (ATR) counts along Gano Street in November 2021. Complete count information can be found in the Appendix.

It is important to note that COVID-19-related restrictions have been lifted in Rhode Island since the end of May 2021 with businesses and schools generally running under normal conditions. Rhode Island, for the most part, specifically along Gano Street, has seen traffic volumes return to typical conditions based upon a comparison of the record RIDOT data from 2019. Therefore, the traffic data collected in November 2021 specifically for this study has been utilized as a basis of analysis. In addition, BETA reviewed the RIDOT seasonal adjustment factors and determined that urban principal arterials in the month of November typically experience higher than average daily traffic volumes during the weekday. To be conservative in the analysis, the November 2021 traffic volumes were not reduced to reflect average traffic conditions.

Based upon the ATR data collected, Gano Street in the project area was found to service an Average Daily Traffic (ADT) volume of approximately 16,500 vehicles per day. On a typical weekday along Gano Street, traffic volumes begin to increase at 6:00 AM with the morning commuter peak hour occurring between 8:00 and 9:00 AM. During this hour, an average volume of approximately 1,300 vehicles was recorded. After 9:00 AM, volumes decrease slightly to between 975 and 1,150 vehicles per hour, until the later afternoon peak of 1,250 vehicles serviced between 5:00 and 6:00 PM.



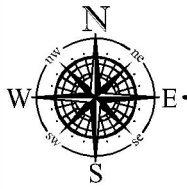
The November 2021 intersection turning movement count data found Gano Street at the site frontage services approximately 1,350 vehicles during the weekday morning peak hour between 7:30 and 8:30 AM with approximately 740 vehicles northbound and 610 vehicles southbound. During the same time period, Power Street along the property frontage was found to service 20 vehicles with 10 vehicles eastbound and 10 vehicles westbound. During the weekday afternoon peak hour between 4:30 and 5:30 PM, Gano Street serviced 1,250 vehicles with approximately 585 vehicles northbound and 665 vehicles southbound. During the same time period, Power Street was found to service 40 vehicles with 20 vehicles eastbound and 20 vehicles westbound. Figure 3 on the following page depicts the daily peak hour turning movement volumes at the study intersection. Complete count information can be found in the Appendix.

## 4.0 SAFETY ANALYSIS

To determine if there are any limiting factors affecting safety relating to access to the proposed residential project, the physical characteristics of Gano Street and Power Street in the project area were investigated. These limiting factors would potentially include horizontal or vertical alignment changes or roadside obstructions that limit sight distances for vehicles traveling along the road or entering the road from a side street or driveway location. In this instance, the sight distance standard is necessary to permit turning vehicles to safely enter and exit the site driveway.

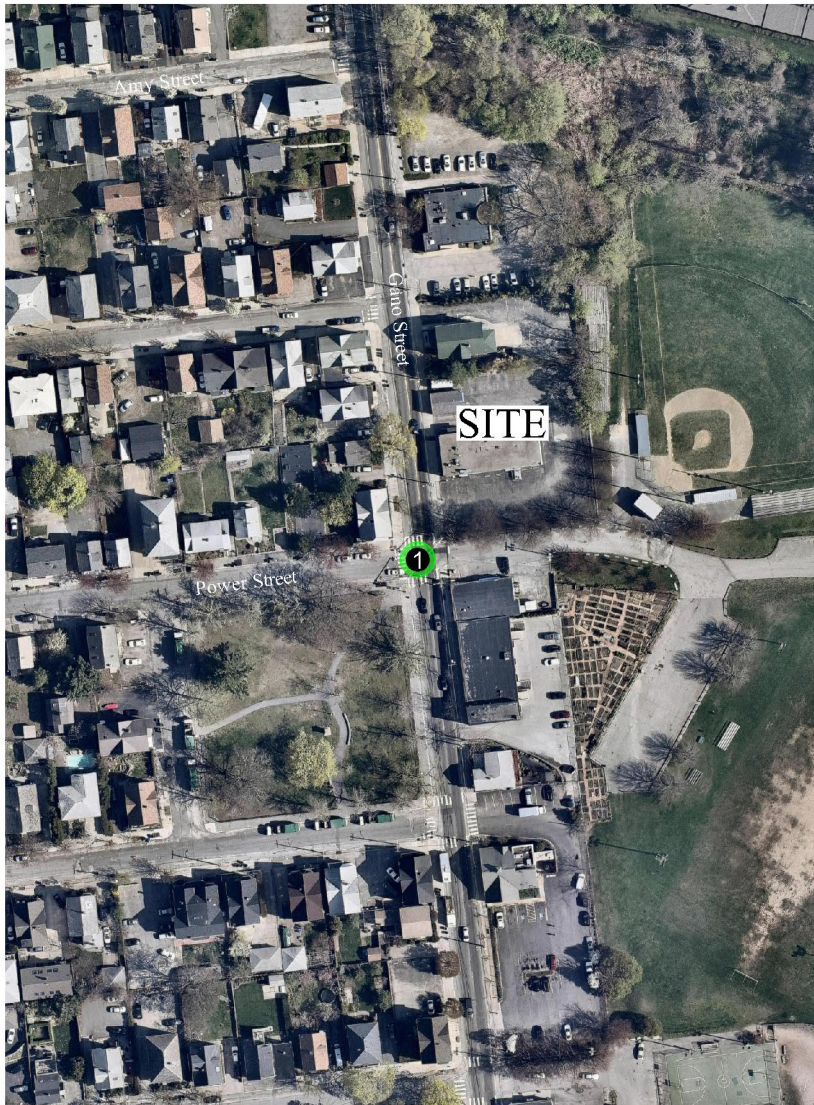
The horizontal and vertical alignment of Gano Street in the project area can be described as generally straight with a vertical decline from north to south, with no limiting factors for sight distances. Based upon the existing roadway geometry as described, the available stopping sight distances at the Power Street junction are greater than 500 feet to the north and south. The value to the north is in excess of AASHTO's recommended minimum sight distance of 158 feet based on the posted speed limit of 25 mph and greater than 186 feet based on the measured 85<sup>th</sup> percentile vehicle speed of 28 mph with a 3% downgrade. The available sight distance to the south is greater than the AASHTO's recommended minimum sight distance of 147 feet based on the posted speed limit of 25 mph and the measured 85<sup>th</sup> percentile vehicle speed of 25 mph with a 3% upgrade. However, it should be noted that on occasion, parking on the westerly side of Gano Street creates obstructions that can limit sight distances for vehicles exiting from eastbound Power Street. In an effort to enhance safety and limit vehicles parking in the vicinity of the Power Street intersection, it is recommended that parking restriction signs be placed a minimum of 25 feet north and south of the Power Street junction, prohibiting parking on the westerly side of Gano Street in this area.

The vertical and horizontal alignment of Power Street between Gano Street and its eastern terminus can be described as generally level with a gradual "S" curve just east of the site. These physical features of Power Street described provide stopping sight distances greater than 250 feet to the east and in excess of 150 feet through the unsignalized junction with Gano Street to the west. These values are greater than AASHTO's recommended minimum sight distance of 115 feet based on the low travel speeds of between 15 to 20 mph. It should be noted that the speeds are very low due to the controlled

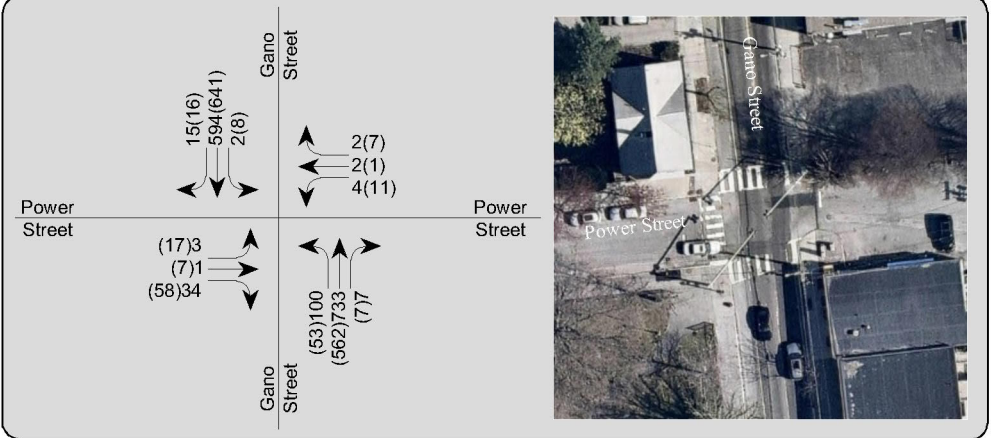


# Proposed Residential Redevelopment PROVIDENCE, RHODE ISLAND

## Figure 3 - Existing Traffic Volumes



### 1 Gano Street at Power Street



#### LEGEND:

- TURN LANE
- XXX AM PEAK VOLUMES (7:30 TO 8:30)
- (XXX) PM PEAK VOLUMES (4:30 TO 5:30)
- 1 STUDY INTERSECTION
- TRAFFIC SIGNAL



junction with Gano Street, where vehicles are turning off or on to Gano Street at a very low speed, or are slowing to the stop line.

Also, as part of our analysis, a review of crash statistics at the study intersection of Gano Street with Power Street was completed. Data was reviewed from the City of Providence Police Department for the latest full three-year period (2017-2019) to determine if any location in the immediate vicinity of the development experienced a high frequency or pattern of crashes.

A total of two crashes (avg. 1 per year) occurred at the study intersection of Gano Street with Power Street over the three-year study period, with one involving an injury. Both crashes were angle collisions that can be attributed to roadway conditions (snow/ice).

Based upon the historical accident data obtained from the local police, and a review of existing roadway geometry and operations, roadway or traffic related safety improvements, other than the no parking signs, are currently not warranted to improve operations or safety within the immediate project area.

## 5.0 IMPACT ANALYSIS

### 5.1 TRIP GENERATION

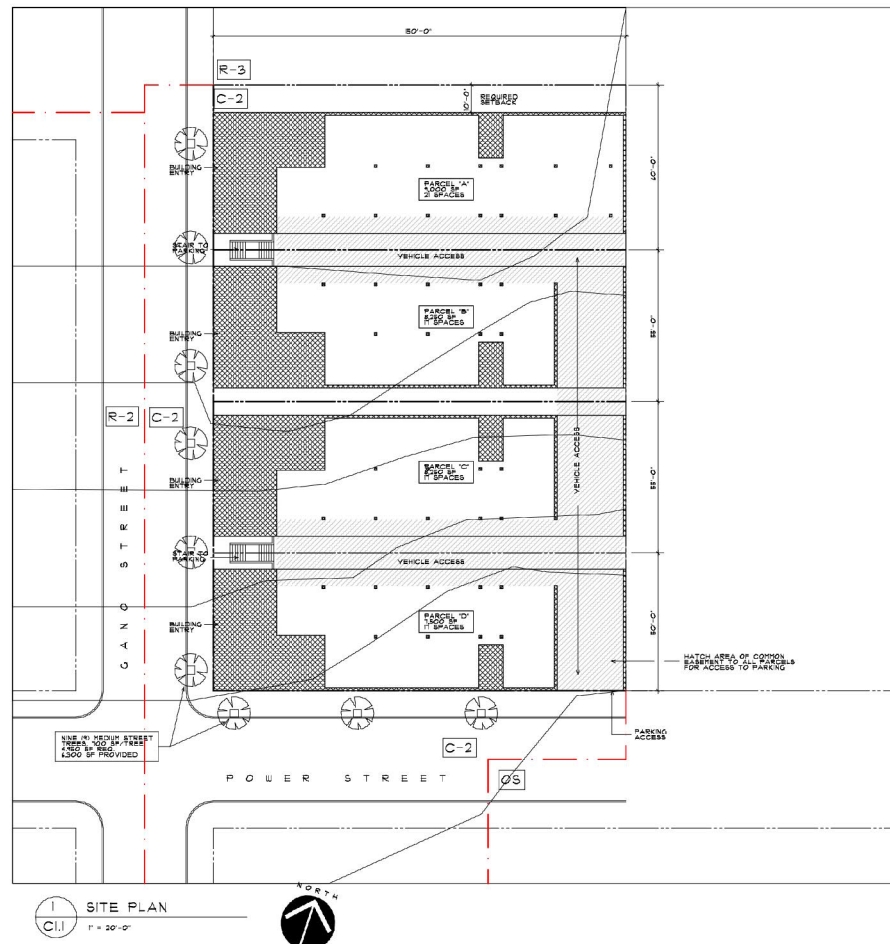
To determine the traffic impact of a proposed development, estimates of anticipated traffic to be generated by a particular land use must be calculated. As previously discussed, the development proposal consists of the construction of four, 5-story buildings with 35 residential units in each building for a total of 140 apartment units. Access will be provided at a new driveway on Power Street. Figure 4 on the following page depicts the site layout and access plan provided by *Acme Architect, LLC*.

For this development, estimated traffic volumes for the residential apartment project were based on use of trip generation factors. These factors are taken from the "Trip Generation" manual, an informational report published by the Institute of Transportation Engineers (ITE), a national professional organization for traffic and transportation engineers. The data provided in the ITE report are based on extensive traffic studies for various types of land uses (residential, commercial, industrial, etc.). This data has been found to be very reliable and provides a sound basis for estimating future trips to new development projects.

For the proposed residential project, Land Use Code (LUC) 221 Multifamily Housing (Mid-Rise) was reviewed for applicability in developing an estimate of site related vehicles trips. Table 1 on Page 11 summarizes the peak hour site trips for the residential use that have been estimated utilizing the land use code data available from the ITE manual. The appropriate worksheets from the manual are included in the Appendix, along with the trip estimate calculations.

## PROVIDENCE, RHODE ISLAND

### Figure 4 - Site Layout



Conceptual Site Plan provided by Acme Architect, LLC



TABLE 1 – Trip Generation Estimate

<u>Description</u>		<u>Enter</u>	<u>Exit</u>	<u>Total</u>
<u>Weekday AM Peak Hour</u>				
ITE Land Use Code 221	Multifamily Housing (Mid-Rise)	12	40	52
<u>Weekday PM Peak Hour</u>				
ITE Land Use Code 221	Multifamily Housing (Mid-Rise)	33	22	55

## 5.2 FUTURE TRAFFIC CONDITIONS

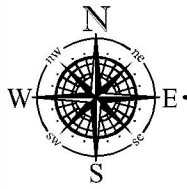
In order to properly assess the impacts of a development, future traffic conditions of area roadways should be estimated for the period when the development is constructed and fully occupied. Typically, the expansion of base traffic is calculated when a project is to be constructed over an extended period (+3 to 5 years). In all instances, area growth that may affect capacity results should be considered. For this project, a conservative annual growth rate of 0.5 percent was utilized for the future background traffic growth of Gano Street based upon little to no traffic growth experienced over the last 5 years along this segment of road as the area is in a heavily developed section of the community. This is in combination with the annual population growth rate of less than 0.25 percent per year within the city over the past two decades.

In addition to a base background growth, coordination with the city was completed to determine if there were any site-specific development/redevelopment projects in the area currently under board/commission review or have recently been approved that would impact existing traffic conditions. Based upon this coordination it was determined that a residential development containing 61 apartment units has been approved at the northeast corner of the intersection of Gano Street with Trenton Street and the I-195 westbound off-ramp. Therefore, to establish a Future 2026 Build traffic condition the subject 140 unit residential development project and the known future residential development were added to the expanded base volumes as previously defined. Figure 5 on the following page depicts the estimated future traffic volumes at the study intersection of Gano Street with Power Street.

In developing the intersection volumes to be analyzed under build conditions, a directional distribution of the site traffic was estimated. The distribution was based on current traffic patterns in the area including proximity to Interstate 195. It is estimated that 70% of the site trips will arrive from and depart to the south, 20% will arrive from and depart to the north, and 10% will arrive from and depart to the west during both the morning and afternoon peak hours.

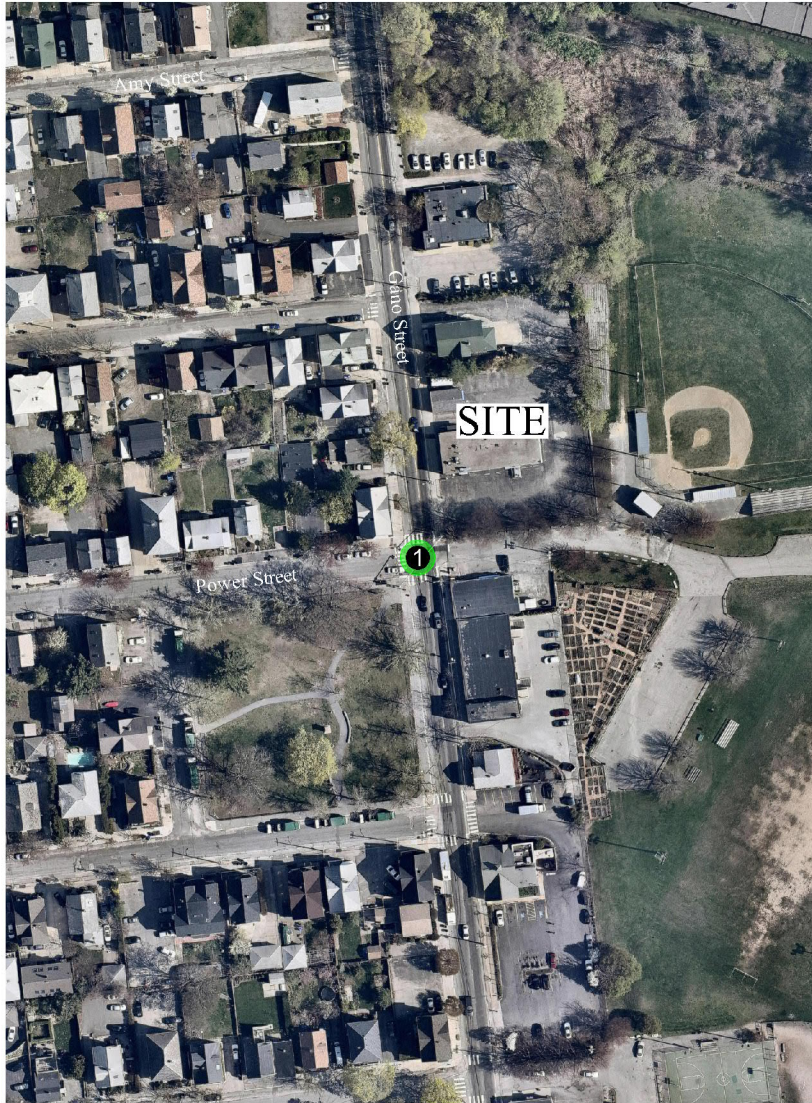
## 5.3 OPERATION ANALYSIS

The key to any traffic impact analysis is the evaluation of roadway operations during peak traffic periods on the servicing roadway system. This situation would occur when the site-generated traffic, combined with the traffic volumes on the main roadway, result in the highest one-hour volume serviced along a

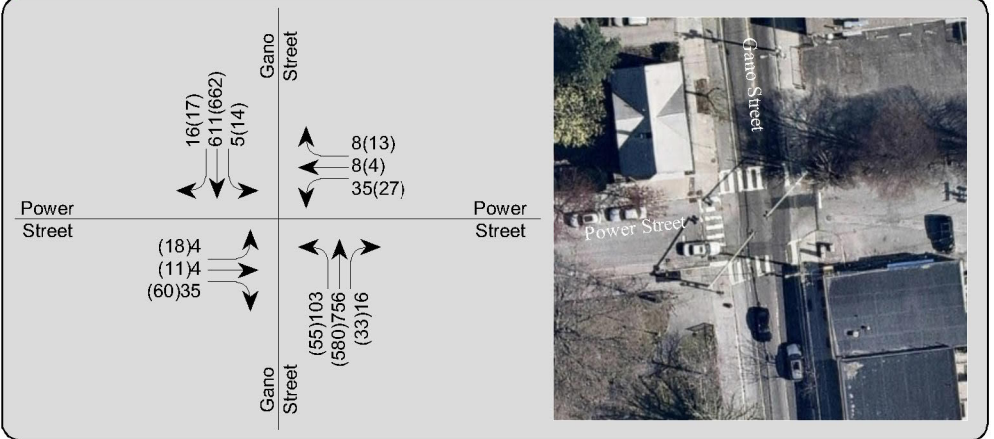


# Proposed Residential Redevelopment PROVIDENCE, RHODE ISLAND

## Figure 5 - Future Traffic Volumes



### 1 Gano Street at Power Street



#### LEGEND:

- TURN LANE
- XXX AM PEAK VOLUMES (7:30 TO 8:30)
- (XXX) PM PEAK VOLUMES (4:30 TO 5:30)
- ① STUDY INTERSECTION
- ⬮ TRAFFIC SIGNAL



roadway segment, or through an intersection. Review of record traffic data found that the weekday morning and afternoon peak hours would represent this worst-case combination of site-generated traffic with the servicing roadway peak traffic period.

The Highway Capacity Manual methodology provides the most accurate means of evaluating traffic capacity and delays for roadways and intersections. The results of these procedures are expressed in terms of Level of Service (LOS). Level of Service is a qualitative measure of traffic flow efficiency based on anticipated vehicle delays. For example, LOS "A" represents the best condition with little or no delay, while LOS "F" indicates that the roadway/intersection is at full capacity resulting in extended vehicle delays and potential queuing. Table 2 outlines the Level of Service delay criteria presented in the Highway Capacity Manual for signalized and unsignalized intersections.

TABLE 2 – Highway Capacity Manual Criteria

Level of Service	Unsignalized Delay Per Vehicle (sec)	Signalized Delay Per Vehicle (sec)
A	<10	<10
B	>10 and <15	>10 and <20
C	>15 and <25	>20 and <35
D	>25 and <35	>35 and <55
E	>35 and <50	>55 and <80
F	>50	>80

The Power Street intersections with Gano Street and the site driveway were analyzed for the weekday morning and afternoon peak hours. The capacity analysis worksheets are included in the Appendix and Tables 3 and 4 summarize the results of the analyses.

TABLE 3 – Level of Service Summary (Existing Conditions)

Location / Movement	EXISTING CONDITIONS							
	AM Peak Hour				PM Peak Hour			
	LOS	Delay	95 <sup>th</sup> % Queue Length (veh.)	v/c	LOS	Delay	95 <sup>th</sup> % Queue Length (veh.)	v/c
<i>Gano Street at Power Street (U)</i>								
Gano Street NB Left	A	9.2	1	0.11	A	9.2	1	0.06
Gano Street SB Left	A	9.2	1	0.01	A	8.7	1	0.01
Power Street EB	C	18.5	1	0.13	D	27.8	2	0.35
Power Street WB	E	49.6	1	0.09	E	38.2	1	0.16

(S) – Signalized

(U) – Unsignalized

Table 3 depicts the current conditions at the study intersection. As can be seen in the table, all critical movements at the unsignalized junction of Gano Street with Power Street currently operate at LOS D or better except for the Power Street westbound approach where it experiences average delays of greater than 35 seconds during both the morning and afternoon peak periods. This is attributed to the greater delays of left turning traffic across the heavy Gano Street through traffic stream and available gaps, though this delay typically results in only one vehicle waiting to turn onto Gano Street at any one time and no traffic congestion at the intersection.

One condition that does have a positive impact on the available gaps in traffic on Gano Street is the adjacent signalized intersections at Pitman Street to the north and Trenton Street/I-195 WB off-ramp to the south. The traffic signals help create gaps in Gano Street traffic during the minor approach through traffic phases and the change intervals that driveway and side street traffic can utilize to access the main road. The positive effect of the adjacent signals cannot be sufficiently modeled into the HCS analysis, resulting in a conservative estimate of delays.

Table 4 below presents the future design period analysis taking into consideration base traffic growth including the known future development, along with the proposed 140 unit residential development on the servicing roadways. The results of the analysis found that the unsignalized intersection of Gano Street with Power Street will operate in an acceptable manner at LOS D or better except for the Power Street eastbound approach during the afternoon peak hour and the Power Street westbound approach during the morning and afternoon peak hours, where it will continue to experience greater delays as defined under existing conditions.

TABLE 4 – Level of Service Summary (Future Build Conditions)

Location / Movement	2026 BUILD CONDITIONS							
	AM Peak Hour				PM Peak Hour			
	LOS	Delay	95 <sup>th</sup> % Queue Length (veh.)	v/c	LOS	Delay	95 <sup>th</sup> % Queue Length (veh.)	v/c
<i>Gano Street at Power Street (U)</i>								
Gano Street NB Left	A	9.3	1	0.11	A	9.3	1	0.06
Gano Street SB Left	A	9.4	1	0.01	A	8.8	1	0.02
Power Street EB	D	25.5	1	0.20	E	36.0	2	0.45
Power Street WB	F	153.8	4	0.78	F	66.4	2	0.45

(S) – Signalized

(U) – Unsignalized

The unsignalized capacity analysis results for the minor approach delays are consistent with most unsignalized driveways and side street intersections along this section of Gano Street due to the high main street volumes and limitations of the unsignalized analysis as previously discussed. The signalization of the adjacent intersections will provide the benefit of additional gaps in main street

traffic, reducing delays and allowing the intersection to operate in an acceptable manner with no traffic congestion.

The unsignalized intersection of the proposed site driveway with Power Street was reviewed and is anticipated to operate efficiently during both the morning and afternoon peak conditions due to the combination of low traffic volumes on Power Street and the proposed site driveway where negligible delays associated with vehicle conflicts will be realized. The only delay realized will be the delays associated with vehicles required to stop at the stop sign in advance of entering the main road, or to make the turn into the driveway, resulting in a good LOS A.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

In summary, the study has shown that the proposed residential development project access and circulation plan has been designed to provide a level of traffic safety and efficiency on the servicing roadway system with the recommended improvements. As previously referenced, parking restriction signs could be placed along the westerly side of Gano Street a minimum of 25 feet north and south of the Power Street intersection prohibiting parking in this area to enhance sight distance for vehicles exiting eastbound Power Street. The safety of Gano Street and Power Street and specifically its intersection and at the site driveway were also reviewed for geometry and sight distances. The intersections reviewed were determined to provide adequate sight distances in accordance with AASHTO criteria for visibility and decision making of drivers attempting to enter/exit main street traffic from a side street or driveway location.

The results of the operational analysis determined that the estimated minor increase in traffic during the peak periods resulting from the proposed residential project will have a minor impact on overall traffic operations along the servicing roadways, particularly during the daily morning and afternoon peak hours when the new residential apartments would generate their highest daily traffic volumes.

Therefore, based upon the data collected on the servicing roadways, and the analysis completed as part of this study, it can be concluded that the future traffic conditions resulting from the proposed residential development will provide for adequate and safe access to a public street, and will not have a detrimental effect on public safety and welfare in the study area.



# APPENDIX

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- A. Traffic Volume Data
- B. Traffic Crash Data
- C. Trip Generation
- D. Operational Analysis

## APPENDIX A – Traffic Volume Data

---

Automatic Traffic Recorder Count

Gano Street

Intersection Turning Movement Count

Gano Street at Power Street

# A

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Automatic Traffic Recorder Count

Gano Street



Gano Street

Traffic Volumes

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20

Start Date: 11/18/2021  
End Date: 11/28/2021

Time	11/15/21 Mon	11/16/21 Tue	11/17/21 Wed	11/18/21 Thu	11/19/21 Fri	Weekday Average	11/20/21 Sat	11/21/21 Sun
12:00 AM	*	*	*	*	123	123	205	214
01:00	*	*	*	*	83	83	143	129
02:00	*	*	*	*	104	104	146	85
03:00	*	*	*	*	48	48	71	97
04:00	*	*	*	*	54	54	39	90
05:00	*	*	*	*	146	146	93	60
06:00	*	*	*	*	487	487	231	164
07:00	*	*	*	*	1086	1086	390	278
08:00	*	*	*	*	1160	1160	648	442
09:00	*	*	*	*	1079	1079	875	686
10:00	*	*	*	*	1076	1076	989	861
11:00	*	*	*	*	1143	1143	1164	901
12:00 PM	*	*	*	*	1190	1190	1088	984
01:00	*	*	*	*	1220	1220	1127	965
02:00	*	*	*	*	1204	1204	1146	1012
03:00	*	*	*	375	1197	786	1219	975
04:00	*	*	*	1202	1190	1196	1107	966
05:00	*	*	*	1209	1141	1175	928	799
06:00	*	*	*	1011	1014	1012	938	669
07:00	*	*	*	841	830	836	674	512
08:00	*	*	*	631	635	633	520	380
09:00	*	*	*	426	566	496	449	291
10:00	*	*	*	328	382	355	389	172
11:00	*	*	*	211	321	266	278	138
Total	0	0	0	6234	17479	16958	14857	11870
Percent	0.0%	0.0%	0.0%	36.8%	103.1%		87.6%	70.0%
AM Peak					08:00	08:00	11:00	11:00
Volume					1160	1160	1164	901
PM Peak				05:00	01:00	01:00	03:00	02:00
Volume				1209	1220	1220	1219	1012



# BETA Group, Inc.

701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20

Start Date: 11/18/2021  
End Date: 11/28/2021

Time	11/22/21 Mon	11/23/21 Tue	11/24/21 Wed	11/25/21* Thu	11/26/21 Fri	Weekday Average	11/27/21 Sat	11/28/21 Sun
12:00 AM	56	83	128	106	70	89	131	151
01:00	40	39	47	71	48	49	52	74
02:00	22	15	27	61	18	29	51	65
03:00	23	36	33	33	23	30	46	20
04:00	46	52	50	29	29	41	43	25
05:00	170	200	150	39	77	127	64	51
06:00	475	499	451	142	207	355	152	146
07:00	1050	1164	861	239	343	731	301	246
08:00	1153	1244	1028	275	492	838	446	169
09:00	979	1099	1100	369	553	820	695	*
10:00	964	1137	1164	495	700	892	811	*
11:00	993	1148	1198	549	797	937	927	*
12:00 PM	1065	1199	1161	572	836	967	1037	*
01:00	1031	1091	1235	538	926	964	989	*
02:00	1183	1203	1205	481	922	999	997	*
03:00	1162	1122	1225	377	924	962	987	*
04:00	1089	1039	1122	365	872	897	877	*
05:00	1224	1106	976	374	731	882	771	*
06:00	816	1041	819	405	653	747	862	*
07:00	682	805	643	379	568	615	569	*
08:00	466	555	528	377	430	471	466	*
09:00	374	392	397	279	378	364	461	*
10:00	205	292	277	193	288	251	303	*
11:00	144	170	204	145	217	176	202	*
Total	15412	16731	16029	6893	11102	13233	12240	947
Percent	116.5%	126.4%	121.1%	52.1%	83.9%		92.5%	7.2%
AM Peak	08:00	08:00	11:00	11:00	11:00	11:00	11:00	07:00
Volume	1153	1244	1198	549	797	937	927	246
PM Peak	05:00	02:00	01:00	12:00 PM	01:00	02:00	12:00 PM	
Volume	1224	1203	1235	572	926	999	1037	

\* Thanksgiving Day

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20

Start Date: 11/18/2021  
End Date: 11/28/2021

11/15/2021	Monday		Tuesday		Wednesday		Thursday		Friday		Weekday Average		Saturday		Sunday	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	*	*	*	*	*	*	*	*	61	62	61	62	85	120	117	97
1:00	*	*	*	*	*	*	*	*	45	38	45	38	83	60	66	63
2:00	*	*	*	*	*	*	*	*	37	67	37	67	55	91	42	43
3:00	*	*	*	*	*	*	*	*	22	26	22	26	40	31	40	57
4:00	*	*	*	*	*	*	*	*	32	22	32	22	19	20	34	56
5:00	*	*	*	*	*	*	*	*	87	59	87	59	52	41	35	25
6:00	*	*	*	*	*	*	*	*	282	205	282	205	137	94	101	63
7:00	*	*	*	*	*	*	*	*	620	466	620	466	225	165	184	94
8:00	*	*	*	*	*	*	*	*	634	526	634	526	383	265	239	203
9:00	*	*	*	*	*	*	*	*	585	494	585	494	478	397	401	285
10:00	*	*	*	*	*	*	*	*	608	468	608	468	546	443	498	363
11:00	*	*	*	*	*	*	*	*	624	519	624	519	683	481	469	432
12:00 PM	*	*	*	*	*	*	*	*	629	561	629	561	595	493	562	422
1:00	*	*	*	*	*	*	*	*	698	522	698	522	643	484	509	456
2:00	*	*	*	*	*	*	*	*	648	556	648	556	638	508	558	454
3:00	*	*	*	*	*	*	208	167	581	616	394	392	645	574	550	425
4:00	*	*	*	*	*	*	563	639	536	654	550	646	618	489	562	404
5:00	*	*	*	*	*	*	636	573	585	556	610	564	563	365	479	320
6:00	*	*	*	*	*	*	548	463	583	431	566	447	516	422	320	349
7:00	*	*	*	*	*	*	438	403	438	392	438	398	359	315	293	219
8:00	*	*	*	*	*	*	321	310	314	321	318	316	285	235	223	157
9:00	*	*	*	*	*	*	208	218	286	280	247	249	232	217	151	140
10:00	*	*	*	*	*	*	199	129	193	189	196	159	190	199	98	74
11:00	*	*	*	*	*	*	100	111	156	165	128	138	128	150	63	75
Total	0	0	0	0	0	0	3221	3013	9284	8195	9059	7900	8198	6659	6594	5276
Day	0		0		0		6234		17479		16959		14857		11870	
AM Peak									8:00	8:00	8:00	8:00	11:00	11:00	10:00	11:00
Volume									634	526	634	526	683	481	498	432
PM Peak							5:00	4:00	1:00	4:00	1:00	4:00	3:00	3:00	12:00 PM	1:00
Volume							636	639	698	654	698	646	645	574	562	456

# BETA Group, Inc.

701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20

Start Date: 11/18/2021  
End Date: 11/28/2021

11/22/2021	Monday		Tuesday		Wednesday		Thursday*		Friday		Weekday Average		Saturday		Sunday	
Time	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	32	24	40	43	69	59	55	51	41	29	47	41	74	57	87	64
1:00	28	12	22	17	24	23	47	24	30	18	30	19	30	22	39	35
2:00	11	11	10	5	15	12	31	30	12	6	16	13	27	24	39	26
3:00	13	10	21	15	17	16	20	13	16	7	17	12	28	18	14	6
4:00	26	20	26	26	26	24	10	19	20	9	22	20	23	20	16	9
5:00	102	68	126	74	86	64	20	19	51	26	77	50	40	24	35	16
6:00	298	177	301	198	278	173	90	52	126	81	219	136	96	56	88	58
7:00	598	452	683	481	524	337	133	106	212	131	430	301	175	126	132	114
8:00	563	590	661	583	595	433	146	129	285	207	450	388	255	191	95	74
9:00	557	422	612	487	632	468	175	194	332	221	462	358	394	301	*	*
10:00	522	442	628	509	618	546	236	259	363	337	473	419	444	367	*	*
11:00	522	471	609	539	635	563	253	296	457	340	495	442	496	431	*	*
12:00 PM	538	527	616	583	627	534	290	282	452	384	505	462	568	469	*	*
1:00	537	494	550	541	678	557	264	274	512	414	508	456	545	444	*	*
2:00	612	571	651	552	637	568	266	215	525	397	538	461	551	446	*	*
3:00	561	601	550	572	637	588	197	180	504	420	490	472	568	419	*	*
4:00	494	595	428	611	589	533	195	170	443	429	430	468	494	383	*	*
5:00	613	611	524	582	500	476	214	160	430	301	456	426	467	304	*	*
6:00	447	369	584	457	457	362	242	163	374	279	421	326	480	382	*	*
7:00	374	308	418	387	350	293	226	153	319	249	337	278	317	252	*	*
8:00	253	213	277	278	288	240	224	153	219	211	252	219	266	200	*	*
9:00	211	163	186	206	190	207	188	91	194	184	194	170	222	239	*	*
10:00	104	101	135	157	143	134	134	59	153	135	134	117	154	149	*	*
11:00	69	75	92	78	98	106	90	55	120	97	94	82	112	90	*	*
Total	8085	7327	8750	7981	8713	7316	3746	3147	6190	4912	7097	6136	6826	5414	545	402
Day	15412		16731		16029		6893		11102		13233		12240		947	
AM Peak	7:00	8:00	7:00	8:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	11:00	7:00	7:00
Volume	598	590	683	583	635	563	253	296	457	340	495	442	496	431	132	114
PM Peak	5:00	5:00	2:00	4:00	1:00	3:00	12:00 PM	12:00 PM	2:00	4:00	2:00	3:00	12:00 PM	12:00 PM		
Volume	613	611	651	611	678	588	290	282	525	429	538	472	568	469		
Comb Total	15412		16731		16029		13127		28581		30192		27097		12817	
ADT	ADT: 13,558		AADT: 13,558													

\* Thanksgiving Day



Speeds

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: NB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/18/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	*	*	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3:00	70	114	23	1	0	0	0	0	0	0	0	0	0	208
4:00	79	292	173	19	0	0	0	0	0	0	0	0	0	563
5:00	52	356	200	26	0	1	1	0	0	0	0	0	0	636
6:00	47	234	235	30	2	0	0	0	0	0	0	0	0	548
7:00	28	157	223	26	2	1	0	0	1	0	0	0	0	438
8:00	16	126	137	39	3	0	0	0	0	0	0	0	0	321
9:00	7	54	117	28	2	0	0	0	0	0	0	0	0	208
10:00	7	45	105	38	3	1	0	0	0	0	0	0	0	199
11:00	7	36	39	13	5	0	0	0	0	0	0	0	0	100
Total	313	1414	1252	220	17	3	1	0	1	0	0	0	0	3221

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: NB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/19/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	3	15	33	9	1	0	0	0	0	0	0	0	0	61
1:00	8	7	24	6	0	0	0	0	0	0	0	0	0	45
2:00	2	13	10	9	2	1	0	0	0	0	0	0	0	37
3:00	7	2	7	5	1	0	0	0	0	0	0	0	0	22
4:00	2	3	13	12	1	1	0	0	0	0	0	0	0	32
5:00	0	17	36	29	3	2	0	0	0	0	0	0	0	87
6:00	4	48	149	71	10	0	0	0	0	0	0	0	0	282
7:00	27	227	295	59	7	2	0	1	2	0	0	0	0	620
8:00	25	316	254	33	3	1	2	0	0	0	0	0	0	634
9:00	35	250	231	61	4	3	0	1	0	0	0	0	0	585
10:00	53	241	263	47	3	0	1	0	0	0	0	0	0	608
11:00	76	251	244	48	3	1	1	0	0	0	0	0	0	624
12:00 PM	91	303	203	27	3	2	0	0	0	0	0	0	0	629
1:00	101	385	195	13	3	0	1	0	0	0	0	0	0	698
2:00	83	263	268	30	3	1	0	0	0	0	0	0	0	648
3:00	93	291	168	21	2	4	2	0	0	0	0	0	0	581
4:00	35	278	198	21	1	1	2	0	0	0	0	0	0	536
5:00	56	296	210	15	4	3	1	0	0	0	0	0	0	585
6:00	51	316	185	28	3	0	0	0	0	0	0	0	0	583
7:00	10	126	254	46	1	0	0	1	0	0	0	0	0	438
8:00	2	97	167	44	2	2	0	0	0	0	0	0	0	314
9:00	12	106	142	25	0	1	0	0	0	0	0	0	0	286
10:00	20	46	94	31	2	0	0	0	0	0	0	0	0	193
11:00	20	46	64	21	4	1	0	0	0	0	0	0	0	156
Total	816	3943	3707	711	66	26	10	3	2	0	0	0	0	9284



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701 George Washington Highway  
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401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: NB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/20/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	4	17	40	22	2	0	0	0	0	0	0	0	0	85
1:00	4	14	47	11	4	2	1	0	0	0	0	0	0	83
2:00	1	13	24	13	2	2	0	0	0	0	0	0	0	55
3:00	0	5	24	8	2	1	0	0	0	0	0	0	0	40
4:00	0	2	11	5	1	0	0	0	0	0	0	0	0	19
5:00	3	7	33	8	1	0	0	0	0	0	0	0	0	52
6:00	1	18	68	44	5	0	1	0	0	0	0	0	0	137
7:00	2	29	115	67	10	2	0	0	0	0	0	0	0	225
8:00	4	75	236	58	8	1	1	0	0	0	0	0	0	383
9:00	7	141	266	53	8	2	0	0	1	0	0	0	0	478
10:00	14	158	305	63	5	0	1	0	0	0	0	0	0	546
11:00	60	304	266	45	7	0	0	1	0	0	0	0	0	683
12:00 PM	27	245	273	44	3	2	1	0	0	0	0	0	0	595
1:00	40	309	254	35	3	0	2	0	0	0	0	0	0	643
2:00	35	304	261	36	2	0	0	0	0	0	0	0	0	638
3:00	73	348	207	14	3	0	0	0	0	0	0	0	0	645
4:00	25	328	234	25	3	1	0	2	0	0	0	0	0	618
5:00	39	269	228	26	0	0	1	0	0	0	0	0	0	563
6:00	39	198	241	34	2	1	1	0	0	0	0	0	0	516
7:00	11	85	229	30	3	1	0	0	0	0	0	0	0	359
8:00	10	77	140	54	2	0	1	0	1	0	0	0	0	285
9:00	17	67	113	33	2	0	0	0	0	0	0	0	0	232
10:00	12	42	99	35	2	0	0	0	0	0	0	0	0	190
11:00	5	36	64	20	3	0	0	0	0	0	0	0	0	128
Total	433	3091	3778	783	83	15	10	3	2	0	0	0	0	8198

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: NB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/21/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	17	24	55	18	2	0	0	0	0	1	0	0	0	117
1:00	5	16	27	14	3	0	1	0	0	0	0	0	0	66
2:00	2	7	26	6	1	0	0	0	0	0	0	0	0	42
3:00	1	9	17	10	2	0	1	0	0	0	0	0	0	40
4:00	0	3	16	14	1	0	0	0	0	0	0	0	0	34
5:00	0	8	12	13	2	0	0	0	0	0	0	0	0	35
6:00	2	12	47	32	8	0	0	0	0	0	0	0	0	101
7:00	0	25	90	55	13	0	1	0	0	0	0	0	0	184
8:00	3	58	132	40	3	2	0	0	0	1	0	0	0	239
9:00	10	90	214	79	5	1	0	2	0	0	0	0	0	401
10:00	5	168	267	52	5	0	0	0	1	0	0	0	0	498
11:00	16	130	268	51	3	0	0	1	0	0	0	0	0	469
12:00 PM	17	196	286	56	5	1	0	1	0	0	0	0	0	562
1:00	16	182	259	47	3	0	2	0	0	0	0	0	0	509
2:00	24	207	273	52	2	0	0	0	0	0	0	0	0	558
3:00	28	218	251	50	3	0	0	0	0	0	0	0	0	550
4:00	24	213	286	33	3	0	2	1	0	0	0	0	0	562
5:00	11	174	256	38	0	0	0	0	0	0	0	0	0	479
6:00	5	84	190	36	5	0	0	0	0	0	0	0	0	320
7:00	4	75	173	36	3	0	0	0	1	0	1	0	0	293
8:00	2	44	133	41	3	0	0	0	0	0	0	0	0	223
9:00	5	38	74	28	5	1	0	0	0	0	0	0	0	151
10:00	4	18	51	21	4	0	0	0	0	0	0	0	0	98
11:00	3	13	30	15	2	0	0	0	0	0	0	0	0	63
Total	204	2012	3433	837	86	5	7	5	2	2	1	0	0	6594

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: NB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/22/2021	0 - 15	> 15 -	> 20 -	> 25 -	> 30 -	> 35 -	> 40 -	> 45 -	> 50 -	> 55 -	> 60 -	> 65 -	> 70	
Time	MPH	20 MPH	25 MPH	30 MPH	35 MPH	40 MPH	45 MPH	50 MPH	55 MPH	60 MPH	65 MPH	70 MPH	MPH	Total
12:00 AM	3	4	19	5	1	0	0	0	0	0	0	0	0	32
1:00	1	5	13	7	1	1	0	0	0	0	0	0	0	28
2:00	1	1	5	4	0	0	0	0	0	0	0	0	0	11
3:00	0	2	5	4	2	0	0	0	0	0	0	0	0	13
4:00	0	2	9	12	3	0	0	0	0	0	0	0	0	26
5:00	5	20	50	24	2	0	0	0	1	0	0	0	0	102
6:00	1	56	192	44	5	0	0	0	0	0	0	0	0	298
7:00	86	227	250	32	0	1	0	0	2	0	0	0	0	598
8:00	58	239	232	29	3	2	0	0	0	0	0	0	0	563
9:00	51	255	222	26	2	0	0	1	0	0	0	0	0	557
10:00	16	228	233	37	5	2	0	1	0	0	0	0	0	522
11:00	18	185	243	68	5	1	0	2	0	0	0	0	0	522
12:00 PM	39	220	227	50	1	0	1	0	0	0	0	0	0	538
1:00	94	243	174	20	4	2	0	0	0	0	0	0	0	537
2:00	144	328	126	11	3	0	0	0	0	0	0	0	0	612
3:00	248	260	49	4	0	0	0	0	0	0	0	0	0	561
4:00	156	238	90	9	1	0	0	0	0	0	0	0	0	494
5:00	46	288	258	20	1	0	0	0	0	0	0	0	0	613
6:00	16	117	272	35	2	1	1	3	0	0	0	0	0	447
7:00	4	108	214	46	2	0	0	0	0	0	0	0	0	374
8:00	4	60	141	45	3	0	0	0	0	0	0	0	0	253
9:00	2	42	121	44	1	1	0	0	0	0	0	0	0	211
10:00	3	18	65	13	4	1	0	0	0	0	0	0	0	104
11:00	1	9	39	17	3	0	0	0	0	0	0	0	0	69
Total	997	3155	3249	606	54	12	2	7	3	0	0	0	0	8085



**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: NB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/23/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	7	22	8	2	0	0	0	1	0	0	0	0	40
1:00	0	2	13	7	0	0	0	0	0	0	0	0	0	22
2:00	0	2	3	4	1	0	0	0	0	0	0	0	0	10
3:00	2	0	11	7	1	0	0	0	0	0	0	0	0	21
4:00	0	2	10	10	4	0	0	0	0	0	0	0	0	26
5:00	0	27	54	41	4	0	0	0	0	0	0	0	0	126
6:00	2	50	197	47	4	0	0	0	1	0	0	0	0	301
7:00	47	271	285	70	5	2	2	1	0	0	0	0	0	683
8:00	136	311	189	25	0	0	0	0	0	0	0	0	0	661
9:00	50	256	259	44	1	1	1	0	0	0	0	0	0	612
10:00	31	283	266	41	6	0	1	0	0	0	0	0	0	628
11:00	99	258	216	32	0	1	2	1	0	0	0	0	0	609
12:00 PM	43	271	251	44	3	1	2	1	0	0	0	0	0	616
1:00	45	266	200	29	6	0	4	0	0	0	0	0	0	550
2:00	79	347	205	16	2	0	1	1	0	0	0	0	0	651
3:00	184	232	124	10	0	0	0	0	0	0	0	0	0	550
4:00	50	162	171	39	4	1	1	0	0	0	0	0	0	428
5:00	45	240	211	26	1	1	0	0	0	0	0	0	0	524
6:00	35	243	263	42	0	0	1	0	0	0	0	0	0	584
7:00	5	115	239	51	7	0	1	0	0	0	0	0	0	418
8:00	6	69	150	47	4	0	0	1	0	0	0	0	0	277
9:00	1	34	101	41	8	0	0	1	0	0	0	0	0	186
10:00	0	20	72	40	3	0	0	0	0	0	0	0	0	135
11:00	1	18	42	27	4	0	0	0	0	0	0	0	0	92
Total	861	3486	3554	748	70	7	16	6	2	0	0	0	0	8750

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: NB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/24/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	1	16	35	16	1	0	0	0	0	0	0	0	0	69
1:00	0	7	13	4	0	0	0	0	0	0	0	0	0	24
2:00	0	2	8	5	0	0	0	0	0	0	0	0	0	15
3:00	1	2	4	6	4	0	0	0	0	0	0	0	0	17
4:00	1	3	10	10	2	0	0	0	0	0	0	0	0	26
5:00	1	8	41	31	5	0	0	0	0	0	0	0	0	86
6:00	2	68	130	67	8	3	0	0	0	0	0	0	0	278
7:00	19	143	278	73	9	1	1	0	0	0	0	0	0	524
8:00	40	207	298	42	3	1	2	1	1	0	0	0	0	595
9:00	14	255	306	53	4	0	0	0	0	0	0	0	0	632
10:00	17	251	305	42	1	0	2	0	0	0	0	0	0	618
11:00	14	249	316	52	4	0	0	0	0	0	0	0	0	635
12:00 PM	66	276	251	32	2	0	0	0	0	0	0	0	0	627
1:00	126	301	222	27	2	0	0	0	0	0	0	0	0	678
2:00	48	270	288	26	3	2	0	0	0	0	0	0	0	637
3:00	49	295	258	34	1	0	0	0	0	0	0	0	0	637
4:00	18	282	259	29	0	1	0	0	0	0	0	0	0	589
5:00	15	164	267	48	6	0	0	0	0	0	0	0	0	500
6:00	13	132	243	67	1	1	0	0	0	0	0	0	0	457
7:00	7	83	191	61	5	0	3	0	0	0	0	0	0	350
8:00	2	62	183	36	5	0	0	0	0	0	0	0	0	288
9:00	2	43	108	31	6	0	0	0	0	0	0	0	0	190
10:00	2	29	86	22	3	0	1	0	0	0	0	0	0	143
11:00	0	15	49	27	6	1	0	0	0	0	0	0	0	98
Total	458	3163	4149	841	81	10	9	1	1	0	0	0	0	8713

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: NB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/25/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	1	8	30	15	1	0	0	0	0	0	0	0	0	55
1:00	0	9	16	19	3	0	0	0	0	0	0	0	0	47
2:00	0	2	16	11	2	0	0	0	0	0	0	0	0	31
3:00	0	6	8	4	2	0	0	0	0	0	0	0	0	20
4:00	0	2	6	2	0	0	0	0	0	0	0	0	0	10
5:00	2	5	8	5	0	0	0	0	0	0	0	0	0	20
6:00	1	10	37	34	8	0	0	0	0	0	0	0	0	90
7:00	3	20	56	42	10	2	0	0	0	0	0	0	0	133
8:00	5	23	66	46	5	1	0	0	0	0	0	0	0	146
9:00	3	32	87	43	8	1	1	0	0	0	0	0	0	175
10:00	7	51	114	50	11	2	1	0	0	0	0	0	0	236
11:00	5	60	128	53	6	0	1	0	0	0	0	0	0	253
12:00 PM	1	62	157	60	10	0	0	0	0	0	0	0	0	290
1:00	7	46	153	50	8	0	0	0	0	0	0	0	0	264
2:00	10	48	144	59	4	1	0	0	0	0	0	0	0	266
3:00	2	38	111	40	5	0	1	0	0	0	0	0	0	197
4:00	5	36	112	41	1	0	0	0	0	0	0	0	0	195
5:00	3	33	139	35	4	0	0	0	0	0	0	0	0	214
6:00	8	57	132	41	4	0	0	0	0	0	0	0	0	242
7:00	2	57	106	59	2	0	0	0	0	0	0	0	0	226
8:00	2	41	134	40	6	1	0	0	0	0	0	0	0	224
9:00	4	39	111	31	3	0	0	0	0	0	0	0	0	188
10:00	2	27	72	32	0	0	1	0	0	0	0	0	0	134
11:00	1	10	56	21	2	0	0	0	0	0	0	0	0	90
Total	74	722	1999	833	105	8	5	0	0	0	0	0	0	3746

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: NB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/26/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	1	9	24	4	3	0	0	0	0	0	0	0	0	41
1:00	1	5	15	6	3	0	0	0	0	0	0	0	0	30
2:00	0	0	11	1	0	0	0	0	0	0	0	0	0	12
3:00	1	1	10	3	1	0	0	0	0	0	0	0	0	16
4:00	0	4	8	5	1	2	0	0	0	0	0	0	0	20
5:00	1	5	28	15	2	0	0	0	0	0	0	0	0	51
6:00	3	15	67	34	7	0	0	0	0	0	0	0	0	126
7:00	7	43	95	55	11	0	0	0	1	0	0	0	0	212
8:00	12	56	159	51	7	0	0	0	0	0	0	0	0	285
9:00	6	65	185	60	13	0	0	1	1	0	1	0	0	332
10:00	9	114	200	37	3	0	0	0	0	0	0	0	0	363
11:00	4	141	246	56	8	0	1	1	0	0	0	0	0	457
12:00 PM	13	131	228	74	3	0	2	1	0	0	0	0	0	452
1:00	7	191	266	40	7	1	0	0	0	0	0	0	0	512
2:00	10	143	299	65	6	2	0	0	0	0	0	0	0	525
3:00	8	152	272	64	7	1	0	0	0	0	0	0	0	504
4:00	18	105	265	53	2	0	0	0	0	0	0	0	0	443
5:00	2	119	256	51	1	0	0	1	0	0	0	0	0	430
6:00	1	82	238	48	4	1	0	0	0	0	0	0	0	374
7:00	5	72	194	43	3	0	2	0	0	0	0	0	0	319
8:00	1	51	117	44	4	2	0	0	0	0	0	0	0	219
9:00	1	29	111	42	8	2	1	0	0	0	0	0	0	194
10:00	1	28	82	37	3	2	0	0	0	0	0	0	0	153
11:00	0	15	72	25	6	1	0	1	0	0	0	0	0	120
Total	112	1576	3448	913	113	14	6	5	2	0	1	0	0	6190



**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: NB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/27/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	1	10	35	20	5	2	0	0	1	0	0	0	0	74
1:00	0	3	16	9	2	0	0	0	0	0	0	0	0	30
2:00	0	3	16	6	2	0	0	0	0	0	0	0	0	27
3:00	0	4	15	7	2	0	0	0	0	0	0	0	0	28
4:00	0	2	12	7	2	0	0	0	0	0	0	0	0	23
5:00	1	9	14	15	1	0	0	0	0	0	0	0	0	40
6:00	1	12	40	37	5	0	1	0	0	0	0	0	0	96
7:00	6	21	87	50	10	0	1	0	0	0	0	0	0	175
8:00	1	27	124	89	11	0	1	2	0	0	0	0	0	255
9:00	2	79	217	82	13	0	1	0	0	0	0	0	0	394
10:00	7	93	249	84	8	2	0	1	0	0	0	0	0	444
11:00	8	134	255	87	9	2	0	0	1	0	0	0	0	496
12:00 PM	10	137	330	86	4	1	0	0	0	0	0	0	0	568
1:00	27	197	264	53	4	0	0	0	0	0	0	0	0	545
2:00	12	155	308	70	4	0	0	2	0	0	0	0	0	551
3:00	17	173	305	67	5	0	1	0	0	0	0	0	0	568
4:00	17	175	255	45	1	1	0	0	0	0	0	0	0	494
5:00	13	171	243	35	3	0	2	0	0	0	0	0	0	467
6:00	9	154	280	35	2	0	0	0	0	0	0	0	0	480
7:00	2	74	198	39	4	0	0	0	0	0	0	0	0	317
8:00	7	47	161	43	8	0	0	0	0	0	0	0	0	266
9:00	2	36	148	32	3	0	1	0	0	0	0	0	0	222
10:00	0	16	90	44	3	1	0	0	0	0	0	0	0	154
11:00	1	26	52	29	4	0	0	0	0	0	0	0	0	112
Total	144	1758	3714	1071	115	9	8	5	2	0	0	0	0	6826

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: NB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/28/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	15	51	19	1	1	0	0	0	0	0	0	0	87
1:00	0	5	18	14	0	1	0	1	0	0	0	0	0	39
2:00	0	6	20	10	3	0	0	0	0	0	0	0	0	39
3:00	0	1	4	5	2	2	0	0	0	0	0	0	0	14
4:00	0	0	10	4	2	0	0	0	0	0	0	0	0	16
5:00	0	4	17	13	1	0	0	0	0	0	0	0	0	35
6:00	2	10	41	31	3	0	0	1	0	0	0	0	0	88
7:00	5	11	59	46	10	1	0	0	0	0	0	0	0	132
8:00	0	15	38	37	4	1	0	0	0	0	0	0	0	95
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
Total	7	67	258	179	26	6	0	2	0	0	0	0	0	545
Grand Total	4419	24387	32541	7742	816	115	74	37	17	2	2	0	0	70152
Stats	Percentile													
	Speed													
	Mean Speed (Average)													
	10 MPH Pace Speed													
	Number in Pace													
	Percent in Pace													
	Number > 25 MPH													
	Percent > 25 MPH													

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: SB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/18/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	*	*	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3:00	110	27	20	9	1	0	0	0	0	0	0	0	0	167
4:00	126	131	284	74	12	6	2	4	0	0	0	0	0	639
5:00	107	130	233	82	10	6	2	1	2	0	0	0	0	573
6:00	25	93	242	89	12	2	0	0	0	0	0	0	0	463
7:00	20	72	184	100	22	3	2	0	0	0	0	0	0	403
8:00	19	43	160	72	12	2	2	0	0	0	0	0	0	310
9:00	9	36	93	63	13	1	1	1	1	0	0	0	0	218
10:00	11	15	54	39	7	2	0	0	0	1	0	0	0	129
11:00	6	25	39	36	5	0	0	0	0	0	0	0	0	111
Total	433	572	1309	564	94	22	9	6	3	1	0	0	0	3013

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: SB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/19/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	7	8	22	16	8	1	0	0	0	0	0	0	0	62
1:00	3	8	9	15	3	0	0	0	0	0	0	0	0	38
2:00	1	13	29	19	4	1	0	0	0	0	0	0	0	67
3:00	1	3	8	13	1	0	0	0	0	0	0	0	0	26
4:00	0	1	8	8	5	0	0	0	0	0	0	0	0	22
5:00	3	10	20	21	4	1	0	0	0	0	0	0	0	59
6:00	1	19	78	74	28	4	1	0	0	0	0	0	0	205
7:00	15	66	218	133	21	9	4	0	0	0	0	0	0	466
8:00	41	132	247	84	15	4	0	0	3	0	0	0	0	526
9:00	23	74	261	109	14	7	3	0	3	0	0	0	0	494
10:00	25	89	216	107	14	6	2	7	2	0	0	0	0	468
11:00	20	80	241	135	27	1	5	8	2	0	0	0	0	519
12:00 PM	91	172	228	60	3	4	3	0	0	0	0	0	0	561
1:00	53	152	221	68	15	3	10	0	0	0	0	0	0	522
2:00	34	133	258	107	17	1	2	4	0	0	0	0	0	556
3:00	270	158	135	40	7	4	1	0	1	0	0	0	0	616
4:00	94	206	272	72	4	3	2	1	0	0	0	0	0	654
5:00	64	155	216	103	15	0	2	1	0	0	0	0	0	556
6:00	28	80	206	95	13	5	2	1	0	1	0	0	0	431
7:00	12	52	180	127	16	3	0	1	1	0	0	0	0	392
8:00	3	52	140	99	21	2	3	1	0	0	0	0	0	321
9:00	22	38	131	81	7	1	0	0	0	0	0	0	0	280
10:00	24	21	69	49	22	1	3	0	0	0	0	0	0	189
11:00	18	18	51	66	11	1	0	0	0	0	0	0	0	165
Total	853	1740	3464	1701	295	62	43	24	12	1	0	0	0	8195

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: SB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/20/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	6	17	40	40	15	2	0	0	0	0	0	0	0	120
1:00	2	9	17	25	7	0	0	0	0	0	0	0	0	60
2:00	0	9	36	35	10	1	0	0	0	0	0	0	0	91
3:00	0	3	5	17	4	0	2	0	0	0	0	0	0	31
4:00	0	1	7	7	4	1	0	0	0	0	0	0	0	20
5:00	0	3	12	21	5	0	0	0	0	0	0	0	0	41
6:00	2	5	32	44	10	1	0	0	0	0	0	0	0	94
7:00	8	8	61	64	21	3	0	0	0	0	0	0	0	165
8:00	3	29	98	104	24	6	0	1	0	0	0	0	0	265
9:00	18	43	192	106	26	5	5	2	0	0	0	0	0	397
10:00	11	66	215	117	21	6	4	2	1	0	0	0	0	443
11:00	27	86	220	129	14	2	2	0	1	0	0	0	0	481
12:00 PM	37	106	245	84	13	3	3	1	1	0	0	0	0	493
1:00	20	96	255	91	14	2	5	1	0	0	0	0	0	484
2:00	38	128	211	104	16	5	3	1	2	0	0	0	0	508
3:00	72	188	246	58	6	1	2	1	0	0	0	0	0	574
4:00	19	127	226	92	10	6	3	3	3	0	0	0	0	489
5:00	27	84	171	67	9	5	1	1	0	0	0	0	0	365
6:00	15	93	207	93	11	0	1	2	0	0	0	0	0	422
7:00	3	38	177	79	13	2	2	1	0	0	0	0	0	315
8:00	15	32	92	69	23	1	2	1	0	0	0	0	0	235
9:00	30	34	94	49	9	1	0	0	0	0	0	0	0	217
10:00	28	22	77	57	14	0	1	0	0	0	0	0	0	199
11:00	11	17	53	48	20	1	0	0	0	0	0	0	0	150
Total	392	1244	2989	1600	319	54	36	17	8	0	0	0	0	6659



**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: SB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/21/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	4	9	37	40	5	2	0	0	0	0	0	0	0	97
1:00	3	6	22	22	9	1	0	0	0	0	0	0	0	63
2:00	1	9	20	4	5	4	0	0	0	0	0	0	0	43
3:00	0	6	20	19	12	0	0	0	0	0	0	0	0	57
4:00	0	3	21	26	4	0	2	0	0	0	0	0	0	56
5:00	2	3	7	9	2	2	0	0	0	0	0	0	0	25
6:00	0	4	10	34	10	3	1	0	1	0	0	0	0	63
7:00	3	11	41	26	13	0	0	0	0	0	0	0	0	94
8:00	4	12	70	87	25	1	2	1	1	0	0	0	0	203
9:00	2	18	119	113	25	6	0	2	0	0	0	0	0	285
10:00	9	46	160	131	6	3	7	1	0	0	0	0	0	363
11:00	26	74	217	96	12	4	2	1	0	0	0	0	0	432
12:00 PM	22	64	209	105	12	5	4	0	1	0	0	0	0	422
1:00	20	92	203	116	17	0	3	0	5	0	0	0	0	456
2:00	21	102	219	87	18	3	2	0	0	2	0	0	0	454
3:00	29	98	209	76	12	0	0	0	0	1	0	0	0	425
4:00	15	66	214	86	13	5	3	1	0	1	0	0	0	404
5:00	6	60	152	88	13	1	0	0	0	0	0	0	0	320
6:00	5	36	156	129	17	2	4	0	0	0	0	0	0	349
7:00	1	22	98	74	22	2	0	0	0	0	0	0	0	219
8:00	3	19	64	55	15	0	0	1	0	0	0	0	0	157
9:00	3	13	53	53	15	2	0	1	0	0	0	0	0	140
10:00	2	8	28	29	4	3	0	0	0	0	0	0	0	74
11:00	5	6	25	25	12	1	1	0	0	0	0	0	0	75
Total	186	787	2374	1530	298	50	31	8	8	4	0	0	0	5276

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: SB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/22/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	2	6	12	2	2	0	0	0	0	0	0	0	24
1:00	0	1	4	7	0	0	0	0	0	0	0	0	0	12
2:00	0	2	4	5	0	0	0	0	0	0	0	0	0	11
3:00	0	1	4	4	1	0	0	0	0	0	0	0	0	10
4:00	1	2	9	6	2	0	0	0	0	0	0	0	0	20
5:00	2	8	14	31	12	1	0	0	0	0	0	0	0	68
6:00	3	19	50	78	22	2	3	0	0	0	0	0	0	177
7:00	19	54	230	123	21	2	2	0	1	0	0	0	0	452
8:00	37	134	274	122	16	4	2	1	0	0	0	0	0	590
9:00	25	76	221	86	9	4	1	0	0	0	0	0	0	422
10:00	40	128	183	73	6	3	5	2	2	0	0	0	0	442
11:00	34	59	245	109	19	1	1	2	1	0	0	0	0	471
12:00 PM	44	118	224	126	9	4	0	2	0	0	0	0	0	527
1:00	62	238	155	30	0	2	1	5	1	0	0	0	0	494
2:00	127	304	113	19	3	4	0	0	0	1	0	0	0	571
3:00	228	268	96	6	2	1	0	0	0	0	0	0	0	601
4:00	154	260	134	36	4	3	1	2	0	1	0	0	0	595
5:00	71	140	293	89	12	2	3	1	0	0	0	0	0	611
6:00	10	35	197	106	11	2	7	1	0	0	0	0	0	369
7:00	6	25	171	92	8	4	1	1	0	0	0	0	0	308
8:00	6	20	91	74	19	0	1	2	0	0	0	0	0	213
9:00	4	4	73	63	16	2	1	0	0	0	0	0	0	163
10:00	0	5	37	43	15	1	0	0	0	0	0	0	0	101
11:00	0	4	23	37	11	0	0	0	0	0	0	0	0	75
Total	873	1907	2851	1377	220	44	29	19	5	2	0	0	0	7327

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: SB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/23/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	6	11	20	5	1	0	0	0	0	0	0	0	43
1:00	0	2	9	5	1	0	0	0	0	0	0	0	0	17
2:00	1	2	0	2	0	0	0	0	0	0	0	0	0	5
3:00	0	1	2	7	4	0	1	0	0	0	0	0	0	15
4:00	0	2	10	10	4	0	0	0	0	0	0	0	0	26
5:00	2	6	26	31	8	1	0	0	0	0	0	0	0	74
6:00	3	21	61	80	29	4	0	0	0	0	0	0	0	198
7:00	29	66	227	128	16	7	6	2	0	0	0	0	0	481
8:00	64	115	273	104	18	5	1	3	0	0	0	0	0	583
9:00	64	146	182	73	14	4	0	4	0	0	0	0	0	487
10:00	17	90	239	137	13	9	2	2	0	0	0	0	0	509
11:00	64	133	259	62	11	1	4	2	3	0	0	0	0	539
12:00 PM	35	180	273	68	14	7	3	3	0	0	0	0	0	583
1:00	135	128	193	69	6	1	8	1	0	0	0	0	0	541
2:00	155	154	175	53	4	4	2	2	3	0	0	0	0	552
3:00	351	106	90	21	1	2	1	0	0	0	0	0	0	572
4:00	176	115	218	77	16	3	1	2	3	0	0	0	0	611
5:00	192	124	184	66	4	6	4	1	1	0	0	0	0	582
6:00	5	52	247	124	17	1	3	6	2	0	0	0	0	457
7:00	4	65	191	103	21	2	0	0	1	0	0	0	0	387
8:00	2	40	135	81	15	3	2	0	0	0	0	0	0	278
9:00	1	15	97	73	15	3	2	0	0	0	0	0	0	206
10:00	1	15	53	67	18	1	2	0	0	0	0	0	0	157
11:00	0	4	29	38	6	1	0	0	0	0	0	0	0	78
Total	1301	1588	3184	1499	260	66	42	28	13	0	0	0	0	7981

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: SB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/24/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	2	5	18	21	9	2	0	0	1	1	0	0	0	59
1:00	2	3	4	10	4	0	0	0	0	0	0	0	0	23
2:00	0	2	5	4	1	0	0	0	0	0	0	0	0	12
3:00	0	0	7	4	3	2	0	0	0	0	0	0	0	16
4:00	0	5	7	11	0	1	0	0	0	0	0	0	0	24
5:00	0	5	17	29	11	2	0	0	0	0	0	0	0	64
6:00	2	13	72	61	20	4	0	1	0	0	0	0	0	173
7:00	9	44	142	99	32	3	6	0	2	0	0	0	0	337
8:00	16	65	184	137	26	1	2	2	0	0	0	0	0	433
9:00	13	78	193	138	34	4	5	1	2	0	0	0	0	468
10:00	28	83	288	111	23	6	6	1	0	0	0	0	0	546
11:00	35	132	262	103	20	8	2	1	0	0	0	0	0	563
12:00 PM	118	119	201	81	9	3	2	0	1	0	0	0	0	534
1:00	60	113	278	90	11	4	0	1	0	0	0	0	0	557
2:00	51	122	262	101	12	7	3	6	2	2	0	0	0	568
3:00	124	138	226	77	12	9	1	1	0	0	0	0	0	588
4:00	25	153	240	93	7	9	1	3	1	0	1	0	0	533
5:00	16	77	231	121	26	0	2	2	1	0	0	0	0	476
6:00	4	37	175	119	23	2	0	1	1	0	0	0	0	362
7:00	2	34	135	96	22	2	2	0	0	0	0	0	0	293
8:00	2	29	128	70	11	0	0	0	0	0	0	0	0	240
9:00	2	23	98	71	12	1	0	0	0	0	0	0	0	207
10:00	1	20	49	51	12	1	0	0	0	0	0	0	0	134
11:00	2	2	34	54	12	2	0	0	0	0	0	0	0	106
Total	514	1302	3256	1752	352	73	32	20	11	3	1	0	0	7316

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: SB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/25/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	1	19	23	7	0	1	0	0	0	0	0	0	51
1:00	0	3	6	9	5	1	0	0	0	0	0	0	0	24
2:00	0	4	12	11	1	2	0	0	0	0	0	0	0	30
3:00	0	2	5	4	2	0	0	0	0	0	0	0	0	13
4:00	0	3	8	6	2	0	0	0	0	0	0	0	0	19
5:00	0	2	10	5	2	0	0	0	0	0	0	0	0	19
6:00	1	4	16	23	7	1	0	0	0	0	0	0	0	52
7:00	0	6	39	39	18	3	1	0	0	0	0	0	0	106
8:00	16	4	42	58	8	1	0	0	0	0	0	0	0	129
9:00	0	21	78	84	10	0	1	0	0	0	0	0	0	194
10:00	5	22	97	107	22	3	0	3	0	0	0	0	0	259
11:00	6	17	116	129	20	4	4	0	0	0	0	0	0	296
12:00 PM	6	34	100	104	33	2	3	0	0	0	0	0	0	282
1:00	4	25	94	110	34	3	4	0	0	0	0	0	0	274
2:00	7	22	61	87	32	4	0	1	1	0	0	0	0	215
3:00	9	26	90	43	11	1	0	0	0	0	0	0	0	180
4:00	8	25	75	50	10	0	1	1	0	0	0	0	0	170
5:00	2	11	68	60	17	0	0	2	0	0	0	0	0	160
6:00	1	18	70	60	12	1	0	1	0	0	0	0	0	163
7:00	0	12	62	58	19	2	0	0	0	0	0	0	0	153
8:00	0	11	63	66	8	3	2	0	0	0	0	0	0	153
9:00	0	12	32	38	8	1	0	0	0	0	0	0	0	91
10:00	1	8	19	23	6	1	1	0	0	0	0	0	0	59
11:00	0	4	14	26	9	1	0	1	0	0	0	0	0	55
Total	66	297	1196	1223	303	34	18	9	1	0	0	0	0	3147



**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: SB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/26/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	1	5	11	10	1	1	0	0	0	0	0	0	0	29
1:00	0	2	9	6	0	1	0	0	0	0	0	0	0	18
2:00	0	1	2	2	0	1	0	0	0	0	0	0	0	6
3:00	0	1	0	2	0	3	0	1	0	0	0	0	0	7
4:00	0	1	3	5	0	0	0	0	0	0	0	0	0	9
5:00	0	3	9	9	5	0	0	0	0	0	0	0	0	26
6:00	0	9	31	35	6	0	0	0	0	0	0	0	0	81
7:00	1	15	45	49	20	1	0	0	0	0	0	0	0	131
8:00	1	19	83	93	8	1	0	2	0	0	0	0	0	207
9:00	0	31	92	79	13	4	2	0	0	0	0	0	0	221
10:00	2	43	176	97	14	3	0	2	0	0	0	0	0	337
11:00	5	59	167	83	24	1	0	1	0	0	0	0	0	340
12:00 PM	0	36	201	127	16	2	0	0	2	0	0	0	0	384
1:00	9	51	198	125	20	4	2	4	1	0	0	0	0	414
2:00	17	59	193	114	9	4	0	0	1	0	0	0	0	397
3:00	14	50	212	120	18	2	3	0	1	0	0	0	0	420
4:00	4	46	217	140	16	4	2	0	0	0	0	0	0	429
5:00	7	19	152	102	15	4	1	1	0	0	0	0	0	301
6:00	6	36	139	83	13	0	2	0	0	0	0	0	0	279
7:00	2	25	106	85	28	2	0	1	0	0	0	0	0	249
8:00	0	26	92	79	11	1	2	0	0	0	0	0	0	211
9:00	1	13	95	63	9	1	0	2	0	0	0	0	0	184
10:00	1	8	45	61	19	0	1	0	0	0	0	0	0	135
11:00	0	4	28	46	17	2	0	0	0	0	0	0	0	97
Total	71	562	2306	1615	282	42	15	14	5	0	0	0	0	4912

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: SB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/27/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	2	22	20	11	2	0	0	0	0	0	0	0	57
1:00	0	1	10	8	3	0	0	0	0	0	0	0	0	22
2:00	0	3	5	11	5	0	0	0	0	0	0	0	0	24
3:00	0	0	4	8	4	1	1	0	0	0	0	0	0	18
4:00	2	2	8	6	2	0	0	0	0	0	0	0	0	20
5:00	2	1	9	8	4	0	0	0	0	0	0	0	0	24
6:00	1	3	23	20	8	1	0	0	0	0	0	0	0	56
7:00	3	6	35	59	20	3	0	0	0	0	0	0	0	126
8:00	1	5	54	89	30	4	1	3	2	1	1	0	0	191
9:00	1	17	105	128	44	2	3	0	1	0	0	0	0	301
10:00	5	24	144	149	32	2	5	5	1	0	0	0	0	367
11:00	0	29	174	174	43	7	0	4	0	0	0	0	0	431
12:00 PM	17	60	209	151	24	3	1	3	1	0	0	0	0	469
1:00	10	65	222	116	18	5	5	1	1	1	0	0	0	444
2:00	8	46	207	152	24	3	3	2	1	0	0	0	0	446
3:00	11	71	190	117	23	4	1	1	1	0	0	0	0	419
4:00	4	78	183	101	9	1	5	2	0	0	0	0	0	383
5:00	1	34	150	90	18	4	2	2	3	0	0	0	0	304
6:00	2	46	204	109	17	2	0	2	0	0	0	0	0	382
7:00	1	28	105	100	15	2	0	1	0	0	0	0	0	252
8:00	0	15	86	67	30	2	0	0	0	0	0	0	0	200
9:00	0	8	100	101	26	2	2	0	0	0	0	0	0	239
10:00	0	12	66	53	15	3	0	0	0	0	0	0	0	149
11:00	0	8	21	37	21	2	0	1	0	0	0	0	0	90
Total	69	564	2336	1874	446	55	29	27	11	2	1	0	0	5414

**BETA Group, Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island 02865  
401.333.2382

Project Name: Gano Street Residential  
Town/City: Providence, RI  
Roadway: Gano Street  
Location: Utility Pole 20  
Direction: SB

Start Date: 11/18/2021  
End Date: 11/28/2021

11/28/2021 Time	0 - 15 MPH	> 15 - 20 MPH	> 20 - 25 MPH	> 25 - 30 MPH	> 30 - 35 MPH	> 35 - 40 MPH	> 40 - 45 MPH	> 45 - 50 MPH	> 50 - 55 MPH	> 55 - 60 MPH	> 60 - 65 MPH	> 65 - 70 MPH	> 70 MPH	Total
12:00 AM	0	3	23	25	10	1	2	0	0	0	0	0	0	64
1:00	0	2	12	16	4	1	0	0	0	0	0	0	0	35
2:00	2	2	7	11	1	2	1	0	0	0	0	0	0	26
3:00	0	2	1	3	0	0	0	0	0	0	0	0	0	6
4:00	0	0	4	3	2	0	0	0	0	0	0	0	0	9
5:00	1	1	4	5	4	1	0	0	0	0	0	0	0	16
6:00	1	2	18	24	11	2	0	0	0	0	0	0	0	58
7:00	2	5	40	52	12	2	0	0	0	1	0	0	0	114
8:00	1	2	27	31	9	4	0	0	0	0	0	0	0	74
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
12:00 PM	*	*	*	*	*	*	*	*	*	*	*	*	*	0
1:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
2:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
3:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
4:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
5:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
6:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
7:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
8:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
9:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
11:00	*	*	*	*	*	*	*	*	*	*	*	*	*	0
Total	7	19	136	170	53	13	3	0	0	1	0	0	0	402
Grand Total	4765	10582	25401	14905	2922	515	287	172	77	14	2	0	0	59642
Stats	Percentile													
	Speed													
	Mean Speed (Average)													
	10 MPH Pace Speed													
	Number in Pace													
	Percent in Pace													
	Number > 25 MPH													
	Percent > 25 MPH													

# A

---

## Intersection Turning Movement Count

Gano Street at Power Street

Gano Street at Power Street



**BETA Group Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island, 02865  
P:401.333.2382

Project: Gano Street Residential  
Town/City: Providence, RI  
Location: Gano St. @ Power St.  
Weather: Sunny, 50's

File Name : 10214\_Gano  
Site Code : 01021401  
Start Date : 11/18/2021  
Page No : 1

**Groups Printed- Passenger Vehicles - Heavy Vehicles - Bicycles**

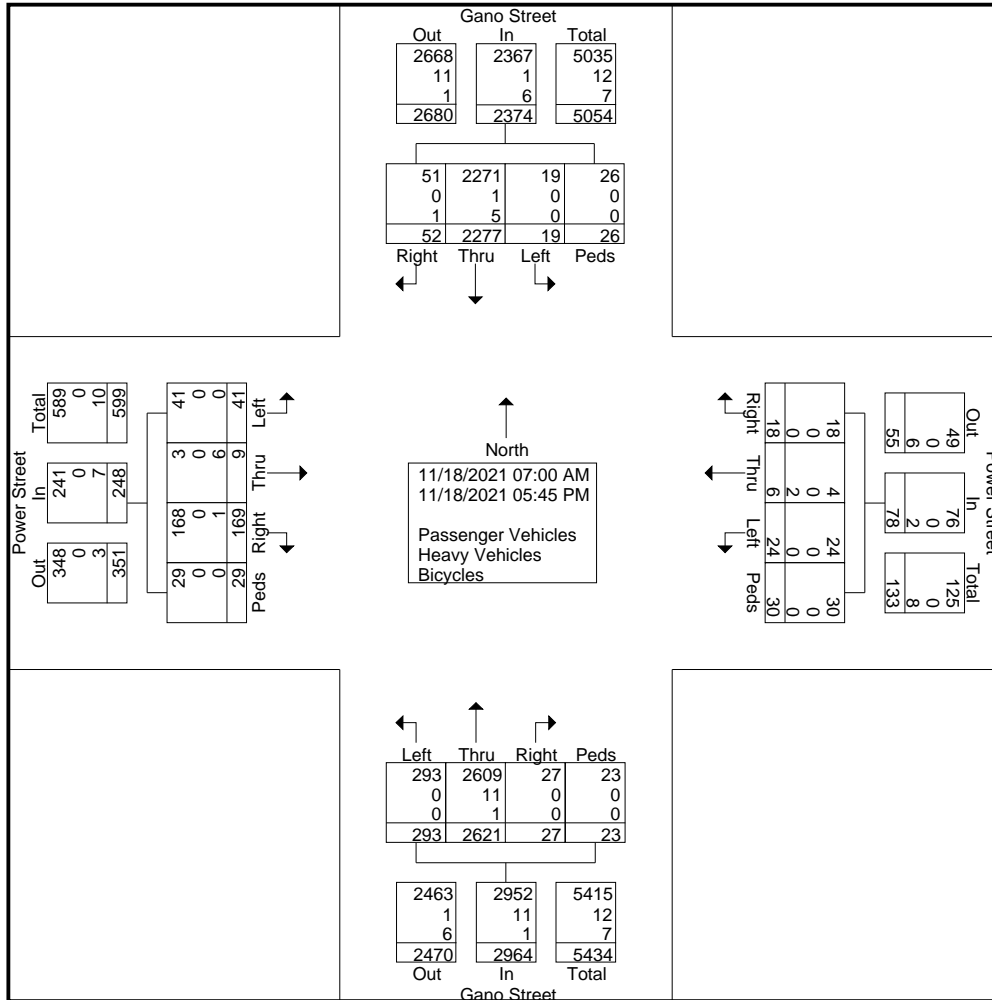
	<b>Gano Street Southbound</b>				<b>Power Street Westbound</b>				<b>Gano Street Northbound</b>				<b>Power Street Eastbound</b>				
Start Time	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Int. Total
07:00 AM	0	86	1	4	1	0	0	5	10	116	0	1	0	0	5	2	231
07:15 AM	1	111	2	0	1	0	0	0	14	198	0	0	0	0	4	0	331
07:30 AM	0	150	3	0	2	0	0	3	24	198	0	0	1	1	4	0	386
07:45 AM	0	146	2	1	1	1	1	0	34	199	2	0	0	0	8	1	396
Total	1	493	8	5	5	1	1	8	82	711	2	1	1	1	21	3	1344
08:00 AM	0	134	7	1	0	0	0	1	21	157	5	0	2	0	14	1	343
08:15 AM	2	164	3	1	1	1	1	2	21	179	0	1	0	0	8	3	387
08:30 AM	1	143	1	1	1	1	1	3	32	176	6	0	0	0	10	0	376
08:45 AM	2	145	5	1	1	0	0	1	25	208	1	2	3	0	8	2	404
Total	5	586	16	4	3	2	2	7	99	720	12	3	5	0	40	6	1510
*** BREAK ***																	
04:00 PM	1	154	3	6	0	1	2	0	11	148	0	0	6	0	13	5	350
04:15 PM	2	169	5	2	1	0	1	5	7	151	4	4	4	1	13	4	373
04:30 PM	1	165	4	3	5	0	1	0	14	144	1	3	2	0	23	2	368
04:45 PM	3	148	2	3	2	0	1	6	13	116	1	3	8	5	7	3	321
Total	7	636	14	14	8	1	5	11	45	559	6	10	20	6	56	14	1412
05:00 PM	2	159	5	2	3	1	4	2	19	151	1	4	3	1	15	1	373
05:15 PM	2	137	6	0	1	1	1	1	10	146	1	0	3	0	15	0	324
05:30 PM	2	142	0	1	1	0	0	0	18	161	1	3	5	1	12	4	351
05:45 PM	0	124	3	0	3	0	5	1	20	173	4	2	4	0	10	1	350
Total	6	562	14	3	8	2	10	4	67	631	7	9	15	2	52	6	1398
Grand Total	19	2277	52	26	24	6	18	30	293	2621	27	23	41	9	169	29	5664
Apprch %	0.8	95.9	2.2	1.1	30.8	7.7	23.1	38.5	9.9	88.4	0.9	0.8	16.5	3.6	68.1	11.7	
Total %	0.3	40.2	0.9	0.5	0.4	0.1	0.3	0.5	5.2	46.3	0.5	0.4	0.7	0.2	3	0.5	
Passenger Vehicles	19	2271	51	26	24	4	18	30	293	2609	27	23	41	3	168	29	5636
% Passenger Vehicles	100	99.7	98.1	100	100	66.7	100	100	100	99.5	100	100	100	33.3	99.4	100	99.5
Heavy Vehicles	0	1	0	0	0	0	0	0	0	11	0	0	0	0	0	0	12
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0	0	0	0.2
Bicycles	0	5	1	0	0	2	0	0	0	1	0	0	0	6	1	0	16
% Bicycles	0	0.2	1.9	0	0	33.3	0	0	0	0	0	0	0	66.7	0.6	0	0.3

# BETA Group Inc.

701 George Washington Highway  
Lincoln, Rhode Island, 02865  
P:401.333.2382

Project: Gano Street Residential  
Town/City: Providence, RI  
Location: Gano St. @ Power St.  
Weather: Sunny, 50's

File Name : 10214\_Gano  
Site Code : 01021401  
Start Date : 11/18/2021  
Page No : 2

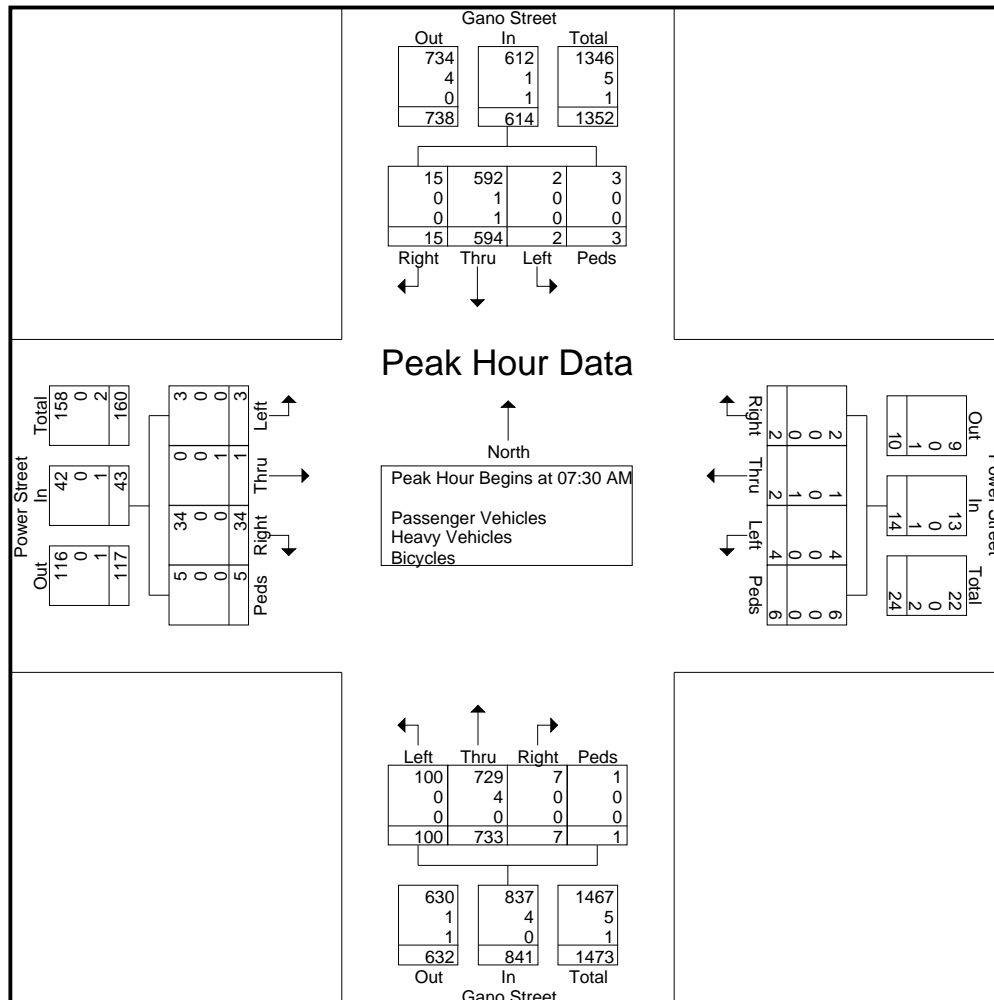


**BETA Group Inc.**  
701 George Washington Highway  
Lincoln, Rhode Island, 02865  
P:401.333.2382

Project: Gano Street Residential  
Town/City: Providence, RI  
Location: Gano St. @ Power St.  
Weather: Sunny, 50's

File Name : 10214\_Gano  
Site Code : 01021401  
Start Date : 11/18/2021  
Page No : 3

	Gano Street Southbound					Power Street Westbound					Gano Street Northbound					Power Street Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	150	3	0	153	2	0	0	3	5	24	198	0	0	222	1	1	4	0	6	386
07:45 AM	0	146	2	1	149	1	1	1	0	3	34	199	2	0	235	0	0	8	1	9	396
08:00 AM	0	134	7	1	142	0	0	0	1	1	21	157	5	0	183	2	0	14	1	17	343
08:15 AM	2	164	3	1	170	1	1	1	2	5	21	179	0	1	201	0	0	8	3	11	387
Total Volume	2	594	15	3	614	4	2	2	6	14	100	733	7	1	841	3	1	34	5	43	1512
% App. Total	0.3	96.7	2.4	0.5		28.6	14.3	14.3	42.9		11.9	87.2	0.8	0.1		7	2.3	79.1	11.6		
PHF	.250	.905	.536	.750	.903	.500	.500	.500	.500	.700	.735	.921	.350	.250	.895	.375	.250	.607	.417	.632	.955
Passenger Vehicles	2	592	15	3	612	4	1	2	6	13	100	729	7	1	837	3	0	34	5	42	1504
% Passenger Vehicles	100	99.7	100	100	99.7	100	50.0	100	100	92.9	100	99.5	100	100	99.5	100	0	100	100	97.7	99.5
Heavy Vehicles	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
% Heavy Vehicles	0	0.2	0	0	0.2	0	0	0	0	0	0	0.5	0	0	0.5	0	0	0	0	0	0.3
Bicycles	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
% Bicycles	0	0.2	0	0	0.2	0	50.0	0	0	7.1	0	0	0	0	0	0	100	0	0	2.3	0.2



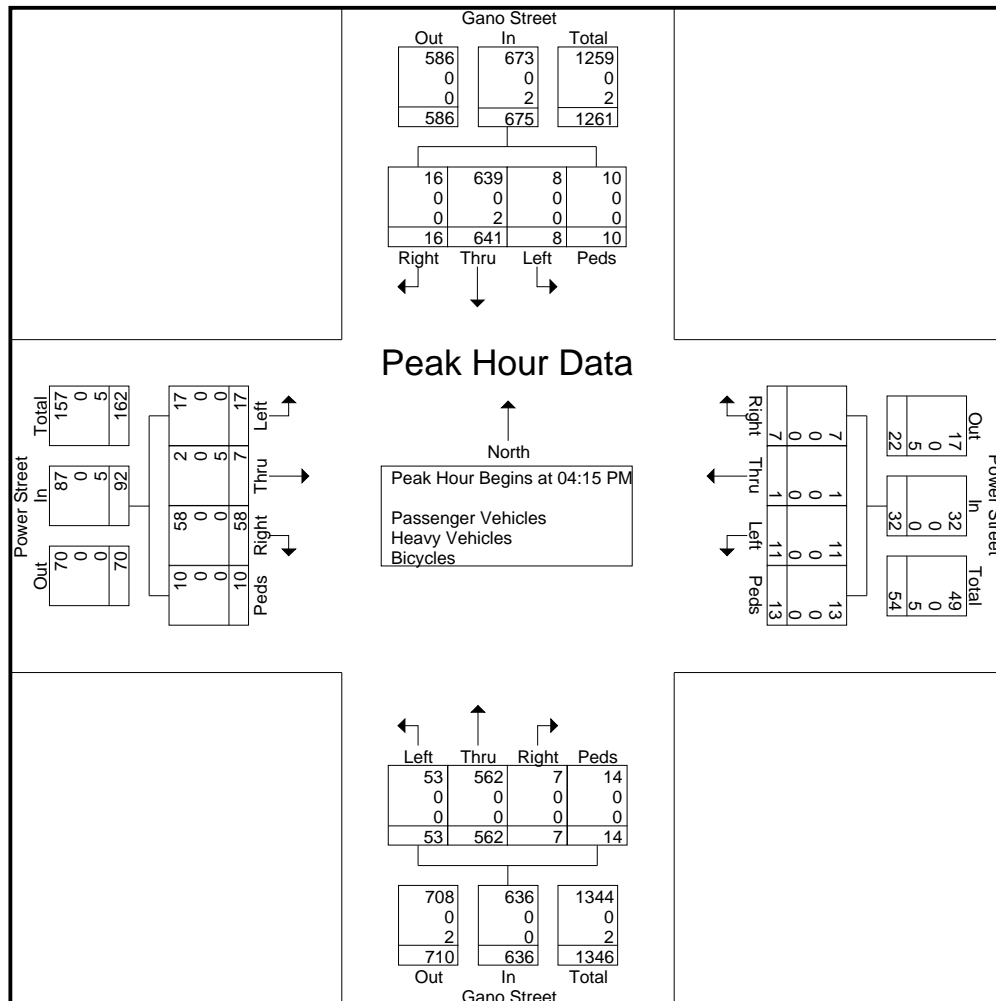
# BETA Group Inc.

701 George Washington Highway  
Lincoln, Rhode Island, 02865  
P:401.333.2382

Project: Gano Street Residential  
Town/City: Providence, RI  
Location: Gano St. @ Power St.  
Weather: Sunny, 50's

File Name : 10214\_Gano  
Site Code : 01021401  
Start Date : 11/18/2021  
Page No : 4

	Gano Street Southbound					Power Street Westbound					Gano Street Northbound					Power Street Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	2	169	5	2	178	1	0	1	5	7	7	151	4	4	166	4	1	13	4	22	373
04:30 PM	1	165	4	3	173	5	0	1	0	6	14	144	1	3	162	2	0	23	2	27	368
04:45 PM	3	148	2	3	156	2	0	1	6	9	13	116	1	3	133	8	5	7	3	23	321
05:00 PM	2	159	5	2	168	3	1	4	2	10	19	151	1	4	175	3	1	15	1	20	373
Total Volume	8	641	16	10	675	11	1	7	13	32	53	562	7	14	636	17	7	58	10	92	1435
% App. Total	1.2	95	2.4	1.5		34.4	3.1	21.9	40.6		8.3	88.4	1.1	2.2		18.5	7.6	63	10.9		
PHF	.667	.948	.800	.833	.948	.550	.250	.438	.542	.800	.697	.930	.438	.875	.909	.531	.350	.630	.625	.852	.962
Passenger Vehicles	8	639	16	10	673	11	1	7	13	32	53	562	7	14	636	17	2	58	10	87	1428
% Passenger Vehicles	100	99.7	100	100	99.7	100	100	100	100	100	100	100	100	100	100	100	28.6	100	100	94.6	99.5
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycles	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	7
% Bicycles	0	0.3	0	0	0.3	0	0	0	0	0	0	0	0	0	0	0	71.4	0	0	5.4	0.5



## APPENDIX B – Traffic Crash Data

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January 2017 through December 2019

Gano Street at Power Street



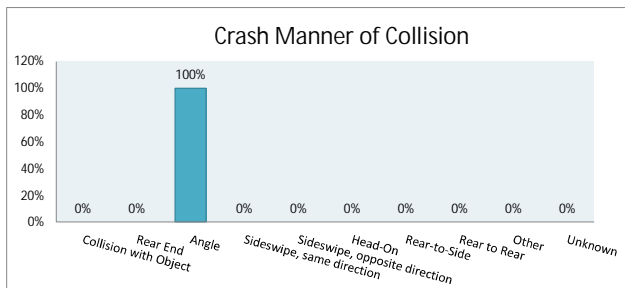
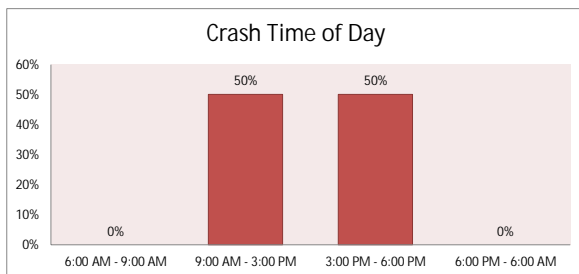
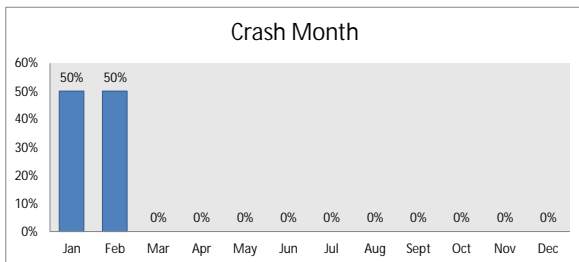
Crash Data Summary

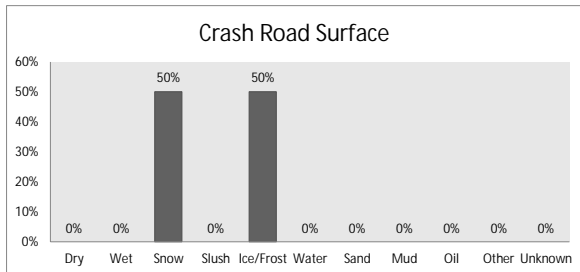
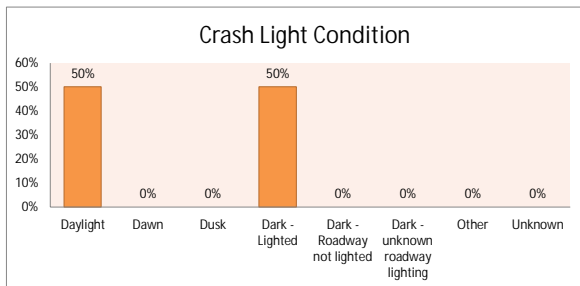
				Total	Average per Year
	2017	2018	2019		
Gano Street at Power Street	1	0	1	2	1

Gano Street at Power Street

	2017	2018	2019	Total	Percent
<b>Collision Type</b>					
Rear End	0	0	0	0	0%
Angle	1	0	1	2	100%
Head-On	0	0	0	0	0%
Sideswipe, Same Direction	0	0	0	0	0%
Sideswipe, Opposite Direction	0	0	0	0	0%
Rear-to-Side	0	0	0	0	0%
Collision with Object	0	0	0	0	0%
Other	0	0	0	0	0%
Unknown	0	0	0	0	0%
<b>Crash Severity</b>					
Property	1	0	0	1	50%
Injury	0	0	1	1	50%
Fatal	0	0	0	0	0%
<b>Light Condition</b>					
Daylight	1	0	0	1	50%
Dawn	0	0	0	0	0%
Dusk	0	0	0	0	0%
Dark - Lighted	0	0	1	1	50%
Dark - Not Lighted	0	0	0	0	0%
Dark - Unknown Lighting	0	0	0	0	0%
Other	0	0	0	0	0%
Unknown	0	0	0	0	0%
<b>Road Condition</b>					
Dry	0	0	0	0	0%
Wet	0	0	0	0	0%
Snow	1	0	0	1	50%
Ice/Frost	0	0	1	1	50%
Other	0	0	0	0	0%
Unknown	0	0	0	0	0%
<b>Hour of Day</b>					
6:00 AM - 9:00 AM	0	0	0	0	0%
9:00 AM - 3:00 PM	1	0	0	1	50%
3:00 PM - 6:00 PM	0	0	1	1	50%
6:00 PM - 6:00 AM	0	0	0	0	0%
<b>Total Crashes:</b>					
	1	0	1	2	

## Crash Data Summary Charts





## APPENDIX C – Trip Generation

---

ITE Trip Generation Summary

Site Trip Distribution

ITE Land Use Code

ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)

# C

---

## ITE Trip Generation Summary

## Trip Generation Summary

### Summary;

	<u>Description</u>	<u>Enter</u>	<u>Exit</u>	<u>Total</u>
<u>Weekday AM Peak Hour</u>				
ITE Land Use Code 221	Multifamily Housing (Mid-Rise)	12	40	52
<u>Weekday PM Peak Hour</u>				
ITE Land Use Code 221	Multifamily Housing (Mid-Rise)	33	22	55



## Calculations;

### ITE Land Use Code 221      Multifamily Housing (Mid-Rise)      (140 Dwelling Units)

Independent Variable (X) = Dwelling Units

X = 140

AM Peak*Directional Distribution:*

23% Entering      77% Exiting

$$\begin{aligned} T &= 0.37 \times (X) \\ T &= 0.37 \times 140 \\ T &= 52 \end{aligned}$$

$$\begin{array}{r} \text{Enter: } 12 \\ \text{Exit: } 40 \\ \hline \text{Total: } 52 \end{array}$$

PM Peak*Directional Distribution:*

61% Entering      39% Exiting

$$\begin{aligned} T &= 0.39 \times (X) \\ T &= 0.39 \times 140 \\ T &= 55 \end{aligned}$$

$$\begin{array}{r} \text{Enter: } 33 \\ \text{Exit: } 22 \\ \hline \text{Total: } 55 \end{array}$$

# C

---

## Site Trip Distribution



**SITE**

**Site Trips:**

Enter:	12
Exit:	40
Total:	52

Gano Street

Power Street

Power Street

2



5



5



30

2



8

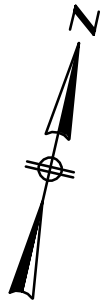
Gano Street



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**SITE TRIP DISTRIBUTION  
WEEKDAY AM PEAK HOUR**

**PROPOSED RESIDENTIAL REDEVELOPMENT  
PROVIDENCE, RHODE ISLAND**



## SITE

### Site Trips:

Enter:	33
Exit:	<u>22</u>
Total:	55

Gano Street

Power Street

Power Street

5

5

2

15

3 →

25

Gano Street



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SITE TRIP DISTRIBUTION  
WEEKDAY PM PEAK HOUR

PROPOSED RESIDENTIAL REDEVELOPMENT  
PROVIDENCE, RHODE ISLAND

# C

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## ITE Land Use Code

ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)

ITE Land Use Code 221 – Multifamily Housing (Mid-Rise)

# Land Use: 221

## Multifamily Housing (Mid-Rise)

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### Description

Mid-rise multifamily housing includes apartments and condominiums located in a building that has between four and 10 floors of living space. Access to individual dwelling units is through an outside building entrance, a lobby, elevator, and a set of hallways.

Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (mid-rise) (Land Use 226), and mid-rise residential with ground-floor commercial (Land Use 231) are related land uses.

### Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

### Additional Data

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.5 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 96 percent of the total dwelling units were occupied.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (<https://www.ite.org/technical-resources/topics/trip-and-parking-generation/>).

***It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).***

The sites were surveyed in the 1990s, the 2000s, the 2010s, and the 2020s in Alberta (CAN), California, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Montana, New Jersey, New York, Ontario (CAN), Oregon, Utah, and Virginia.

### Source Numbers

168, 188, 204, 305, 306, 321, 818, 857, 862, 866, 901, 904, 910, 949, 951, 959, 963, 964, 966, 967, 969, 970, 1004, 1014, 1022, 1023, 1025, 1031, 1032, 1035, 1047, 1056, 1057, 1058, 1071, 1076



# Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

## Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 30

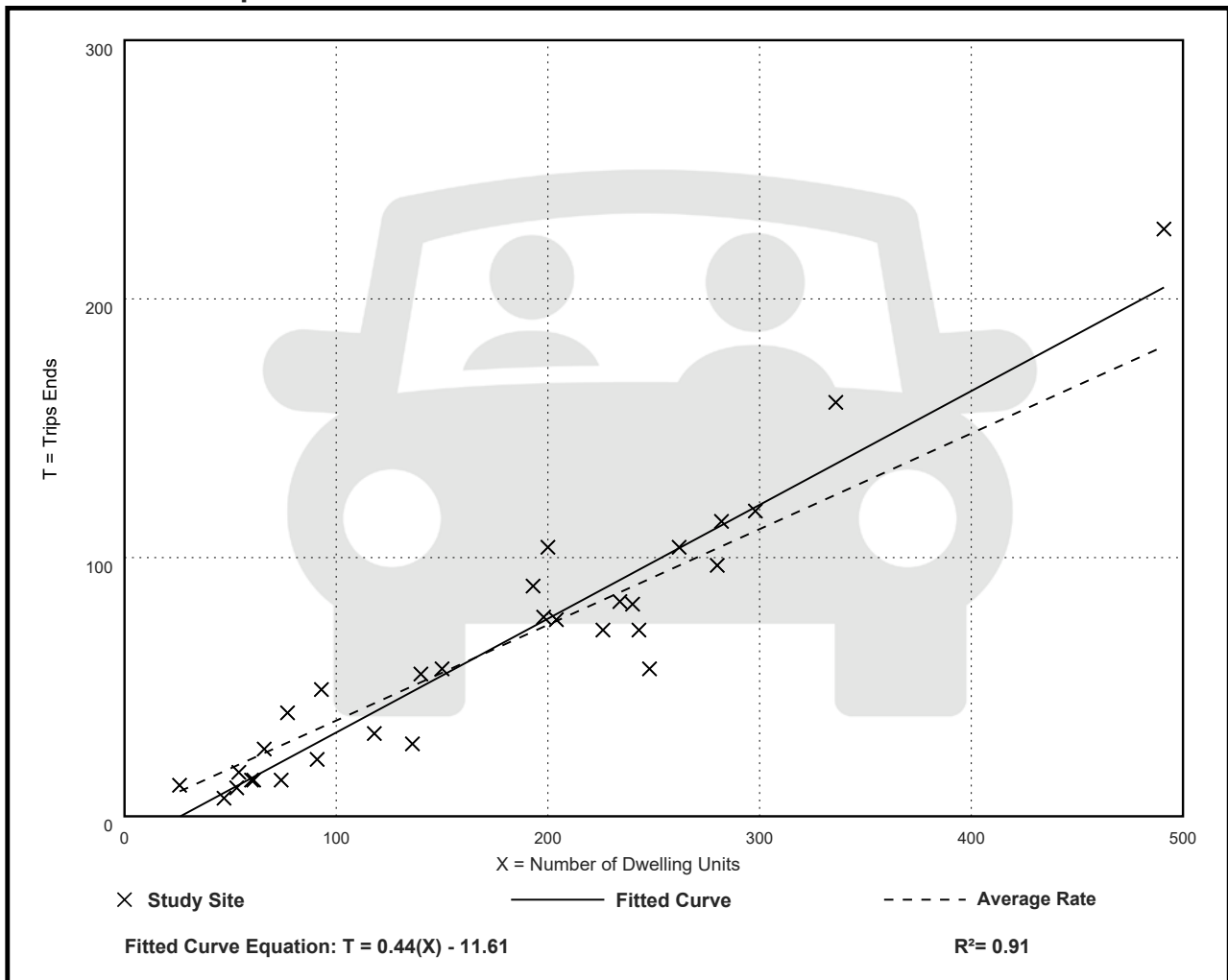
Avg. Num. of Dwelling Units: 173

Directional Distribution: 23% entering, 77% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.37	0.15 - 0.53	0.09

## Data Plot and Equation



# Multifamily Housing (Mid-Rise) Not Close to Rail Transit (221)

## Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 31

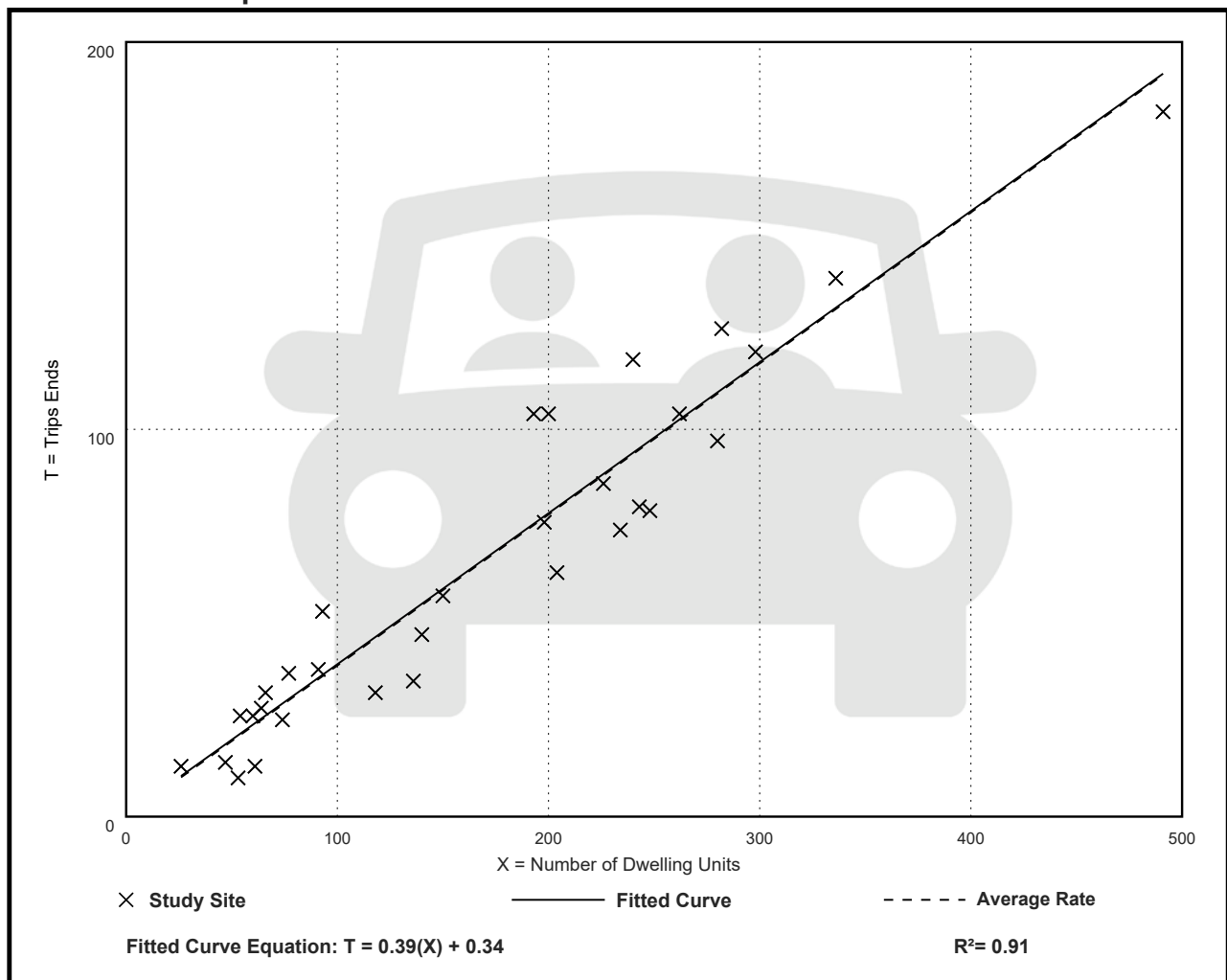
Avg. Num. of Dwelling Units: 169

Directional Distribution: 61% entering, 39% exiting

## Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.39	0.19 - 0.57	0.08

## Data Plot and Equation



## APPENDIX D – Operational Analysis

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### Existing Conditions

Gano Street at Power Street

### Future Build Conditions

Gano Street at Power Street

# D

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Existing Weekday AM / PM Peak Hour

Gano Street at Power Street

Gano Street at Power Street

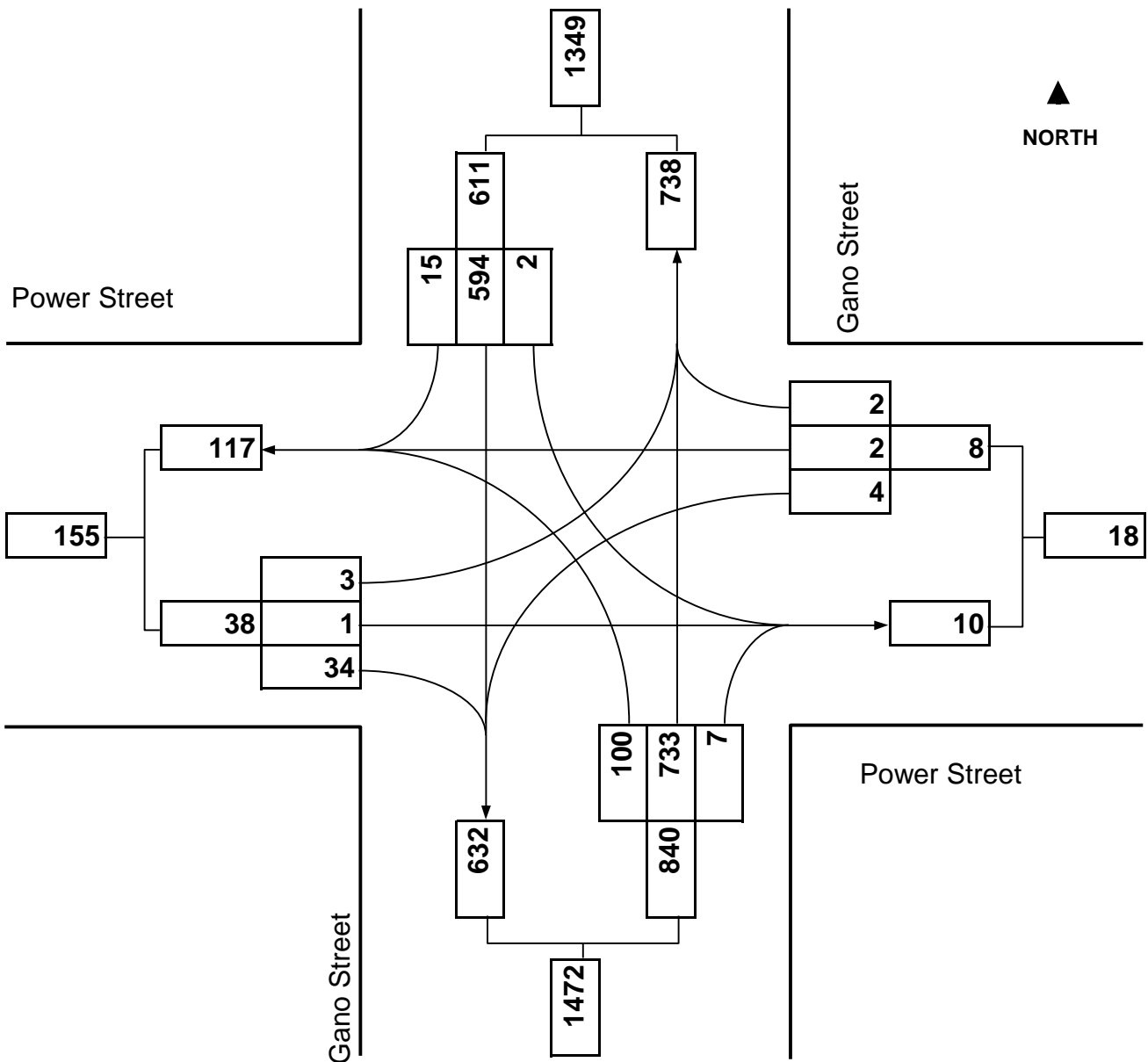


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## Turning Movement Diagram

**Major Street:** Gano Street  
**City/Town:** Providence, RI  
**Reference No.:** 10214  
**Existing:** AM Peak Hour

**Minor Street:** Power Street  
**Day of Week:** Weekday  
**Peak Period:** 7:30 AM - 8:30 AM  
**Future:** n/a



Proposed Residential Redevelopment  
Gano Street at Power Street

Providence, RI  
12/15/2021

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	3	1	34	4	2	2	100	733	7	2	594	15
Future Vol, veh/h	3	1	34	4	2	2	100	733	7	2	594	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	3	1	35	4	2	2	104	764	7	2	619	16

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1609	1610	627	1625	1615	768	635	0	0	771	0	0
Stage 1	631	631	-	976	976	-	-	-	-	-	-	-
Stage 2	978	979	-	649	639	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	85	106	487	83	105	405	958	-	-	853	-	-
Stage 1	472	477	-	305	332	-	-	-	-	-	-	-
Stage 2	304	331	-	462	474	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	71	86	487	65	85	405	958	-	-	853	-	-
Mov Cap-2 Maneuver	71	86	-	65	85	-	-	-	-	-	-	-
Stage 1	382	475	-	247	269	-	-	-	-	-	-	-
Stage 2	243	268	-	426	472	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.5	49.6	1.1	0
HCM LOS	C	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	958	-	-	307	89	853	-
HCM Lane V/C Ratio	0.109	-	-	0.129	0.094	0.002	-
HCM Control Delay (s)	9.2	0	-	18.5	49.6	9.2	0
HCM Lane LOS	A	A	-	C	E	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0.4	0.3	0	-



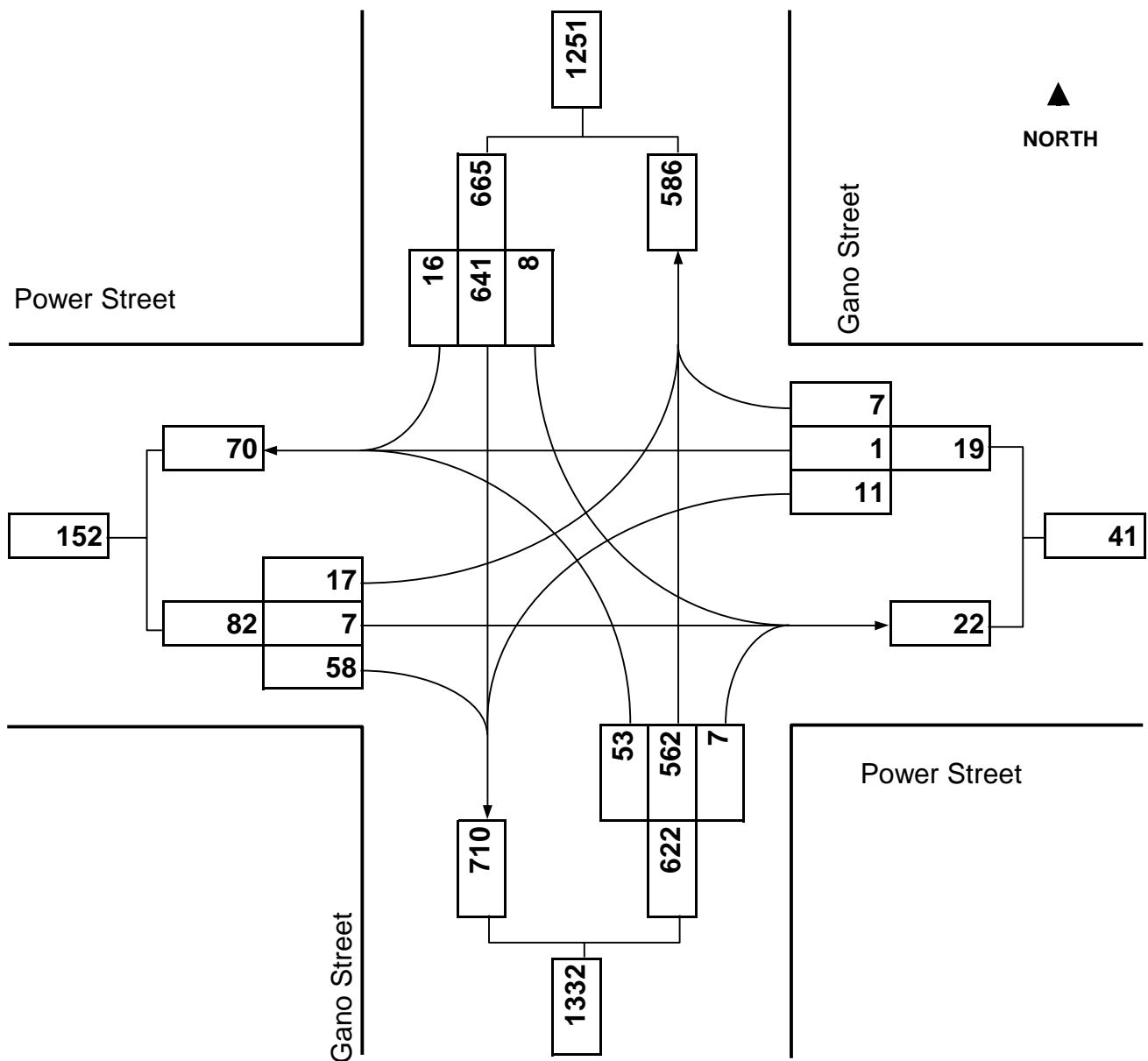


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## Turning Movement Diagram

**Major Street:** Gano Street  
**City/Town:** Providence, RI  
**Reference No.:** 10214  
**Existing:** PM Peak Hour

**Minor Street:** Power Street  
**Day of Week:** Weekday  
**Peak Period:** 4:30 PM - 5:30 PM  
**Future:** n/a



Proposed Residential Redevelopment  
Gano Street at Power Street

Providence, RI  
12/15/2021

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	7	58	11	1	7	53	562	7	8	641	16
Future Vol, veh/h	17	7	58	11	1	7	53	562	7	8	641	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	18	7	60	11	1	7	55	585	7	8	668	17

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1396	1395	677	1425	1400	589	685	0	0	592	0	0
Stage 1	693	693	-	699	699	-	-	-	-	-	-	-
Stage 2	703	702	-	726	701	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	120	143	456	114	142	512	918	-	-	994	-	-
Stage 1	437	448	-	434	445	-	-	-	-	-	-	-
Stage 2	431	443	-	419	444	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	108	129	456	87	128	512	918	-	-	994	-	-
Mov Cap-2 Maneuver	108	129	-	87	128	-	-	-	-	-	-	-
Stage 1	398	442	-	395	405	-	-	-	-	-	-	-
Stage 2	386	404	-	353	438	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	27.8		38.2		0.8		0.1	
HCM LOS	D		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	918	-	-	242	128	994	-
HCM Lane V/C Ratio	0.06	-	-	0.353	0.155	0.008	-
HCM Control Delay (s)	9.2	0	-	27.8	38.2	8.7	0
HCM Lane LOS	A	A	-	D	E	A	A
HCM 95th %tile Q(veh)	0.2	-	-	1.5	0.5	0	-

# D

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Future 2026 Build Weekday AM / PM Peak Hour

Gano Street at Power Street

Gano Street at Power Street

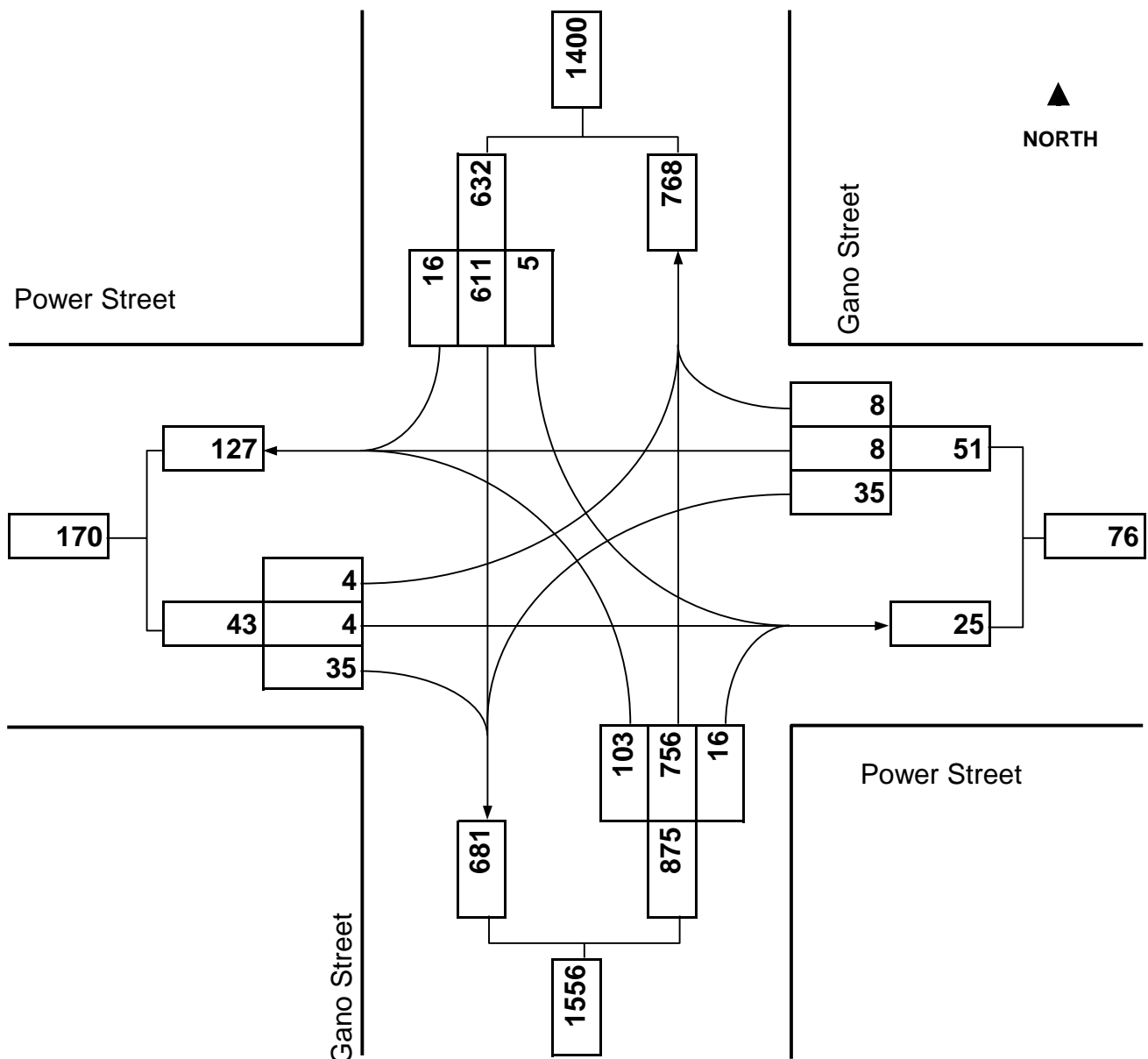


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## Turning Movement Diagram

**Major Street:** Gano Street  
**City/Town:** Providence, RI  
**Reference No.:** 10214  
**Existing:** n/a

**Minor Street:** Power Street  
**Day of Week:** Weekday  
**Peak Period:** AM Peak Hour  
**Future:** 2026 Build



Proposed Residential Redevelopment  
Gano Street at Power Street

Providence, RI  
12/16/2021

Intersection												
Int Delay, s/veh	6.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	4	4	35	35	8	8	103	756	16	5	611	16
Future Vol, veh/h	4	4	35	35	8	8	103	756	16	5	611	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	1	0	0	1	0
Mvmt Flow	4	4	36	36	8	8	107	788	17	5	636	17
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1674	1674	645	1686	1674	797	653	0	0	805	0	0
Stage 1	655	655	-	1011	1011	-	-	-	-	-	-	-
Stage 2	1019	1019	-	675	663	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	77	97	476	75	97	390	943	-	-	828	-	-
Stage 1	458	466	-	291	320	-	-	-	-	-	-	-
Stage 2	288	317	-	447	462	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	58	76	476	56	76	390	943	-	-	828	-	-
Mov Cap-2 Maneuver	58	76	-	56	76	-	-	-	-	-	-	-
Stage 1	364	461	-	231	254	-	-	-	-	-	-	-
Stage 2	216	252	-	405	457	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s	25.5		153.8		1.1		0.1					
HCM LOS	D		F									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	943	-	-	220	68	828	-	-				
HCM Lane V/C Ratio	0.114	-	-	0.204	0.781	0.006	-	-				
HCM Control Delay (s)	9.3	0	-	25.5	153.8	9.4	0	-				
HCM Lane LOS	A	A	-	D	F	A	A	-				
HCM 95th %tile Q(veh)	0.4	-	-	0.7	3.6	0	-	-				

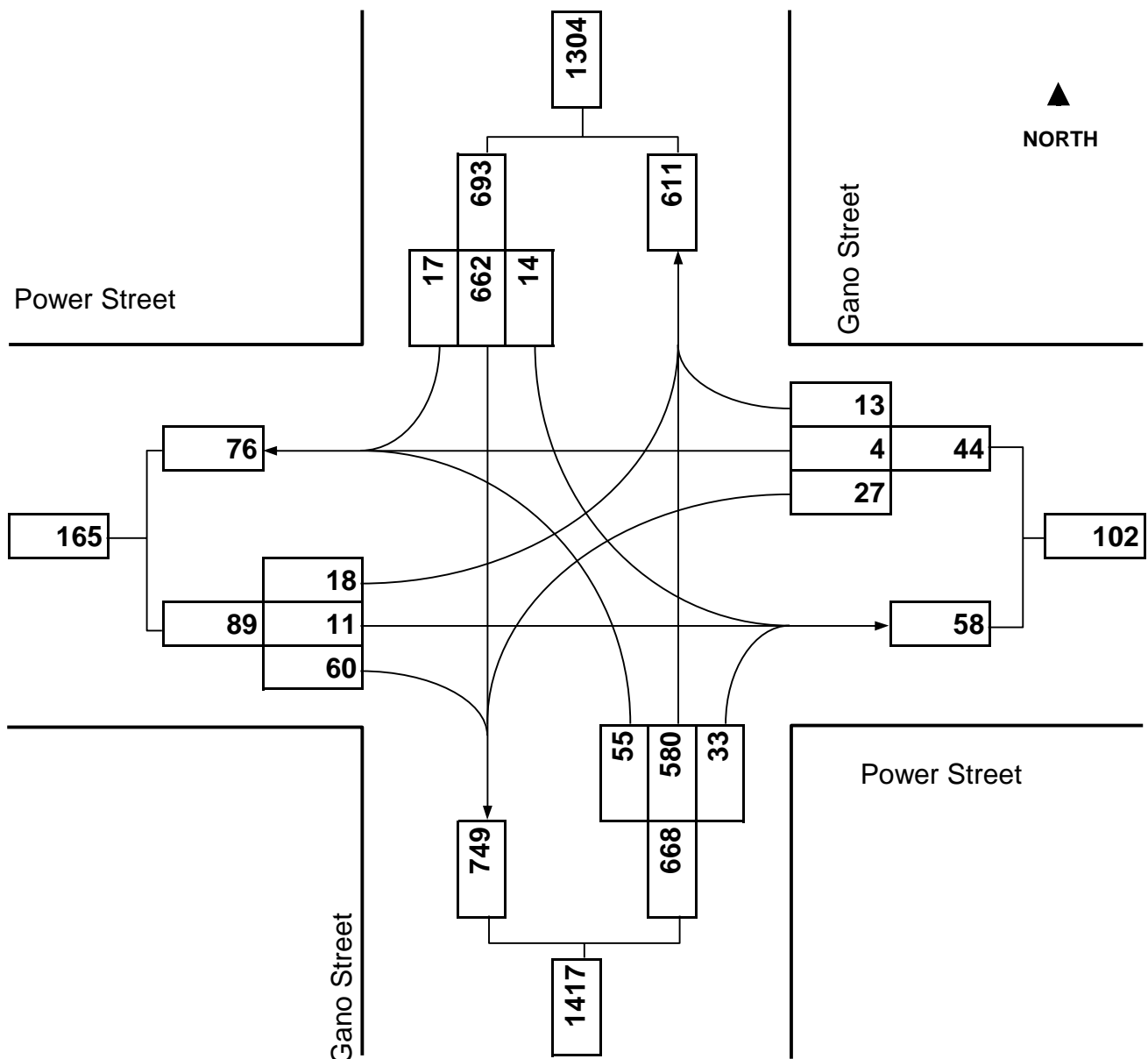


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## Turning Movement Diagram

**Major Street:** Gano Street  
**City/Town:** Providence, RI  
**Reference No.:** 10214  
**Existing:** n/a

**Minor Street:** Power Street  
**Day of Week:** Weekday  
**Peak Period:** PM Peak Hour  
**Future:** 2026 Build





Proposed Residential Redevelopment  
Gano Street at Power Street

Providence, RI  
12/16/2021

Intersection												
Int Delay, s/veh	4.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	18	11	60	27	4	13	55	580	33	14	662	17
Future Vol, veh/h	18	11	60	27	4	13	55	580	33	14	662	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	19	11	63	28	4	14	57	604	34	15	690	18

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1473	1481	699	1501	1473	621	708	0	0	638	0	0
Stage 1	729	729	-	735	735	-	-	-	-	-	-	-
Stage 2	744	752	-	766	738	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	106	127	443	101	128	491	900	-	-	956	-	-
Stage 1	417	431	-	414	428	-	-	-	-	-	-	-
Stage 2	410	421	-	398	427	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	91	112	443	73	112	491	900	-	-	956	-	-
Mov Cap-2 Maneuver	91	112	-	73	112	-	-	-	-	-	-	-
Stage 1	376	420	-	373	386	-	-	-	-	-	-	-
Stage 2	355	379	-	324	416	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	36	66.4	0.8	0.2
HCM LOS	E	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	900	-	-	206	102	956	-
HCM Lane V/C Ratio	0.064	-	-	0.45	0.449	0.015	-
HCM Control Delay (s)	9.3	0	-	36	66.4	8.8	0
HCM Lane LOS	A	A	-	E	F	A	A
HCM 95th %tile Q(veh)	0.2	-	-	2.1	1.9	0	-