# TRAFFIC ENGINEERING EVALUATION

## PROPOSED REDEVELOPMENT
## 138-140 GLENWOOD AVENUE
## BLOCK 13204, LOT 60
## CITY OF JERSEY CITY
## HUDSON COUNTY, NEW JERSEY

Prepared for:

Glenwood Ave West Side Ave, LLC

Prepared by:

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INTRODUCTION

The purpose of this Traffic Engineering Evaluation is to assess the traffic impacts associated with the adaptive reuse of the subject property known as Lot 60 in Block 13204 located at 138-140 Glenwood Avenue in the City of Jersey City, Hudson County. The site has approximately 175 feet of frontage along the north side of Glenwood Avenue.

EXISTING CONDITIONS

The site is in the University Zone – U Zone and was previously occupied by 87 dormitory rooms for Saint Peter's University. The proposal is to repurpose the existing building into 54 dwelling units of multifamily housing (mid-rise).

The site is located on the block of Glenwood Avenue between West Side Avenue and Kennedy Boulevard. The surrounding properties generally consist of a mix of multifamily housing. The adjacent roadways of Glenwood Avenue, West Side Avenue, and Kennedy Boulevard serving the subject site are described as follows:

**Glenwood Avenue** is a local street under the jurisdiction of the City of Jersey City, oriented in a westbound direction. There are sidewalks on both sides of the street. Parking is permitted on both side of the street, "Parking by Permit for Residents Only, Monday – Friday, 3 PM to 9 PM", and "No Parking Tuesday and Friday from 3 PM - 5 PM" on the north side of the street and "No Parking Monday and Thursday from 3 PM – 5 PM" on the south side of the street. There is on-street parking capacity for approximately 70 parked cars on this block of Glenwood Avenue. The statutory speed limit is 25 miles per hour (MPH).

**West Side Avenue** is a local street under the jurisdiction of the City of Jersey City, oriented in a North-south direction, between the Fayette Avenue in the north and Danforth Avenue in the south. There are sidewalks on both sides of the street. Parking is permitted on the west side of the street. West Side Avenue is a Snow Emergency Route with parking restricted when road is snow covered. There are no signs posted indicating Zone Permit Parking. There are no designated loading zones near the subject site. There are other multifamily housing units above the commercial spaces within the area that do not have on-site parking. There are approximately 20 parking spaces on the west side of the block of West Side Avenue between Montgomery Street and Highland Avenue. There are no metered parking spaces. The statutory speed limit is 25 MPH.

**Kennedy Boulevard** is a four-lane, urban principal arterial under the jurisdiction of the County of Hudson, oriented in a north-south direction. There are sidewalks on both sides of Kennedy Boulevard. Kennedy Boulevard is posted "No Parking, Tuesday & Friday, 10 AM to Noon" on the west side and "No Parking, Monday & Thursday, 10 AM to Noon" on the east side. There are bus stops and 3 reserved ADA parking spaces on Kennedy Boulevard. There are approximately 16 metered parking spaces on the two blocks of Kennedy Boulevard between Highland Avenue and Montgomery Street. The statutory speed limit is 25 MPH.

*Mass Transportation Options*

The Journal Square Transportation Center is a 16-minute/0.8-mile walk from the subject site. The number 1 and the number 80 bus lines, with service between Gates Avenue and Journal Square, stop on West Side Avenue between Glenwood Avenue and Highland Avenue. There are bus stops on Kennedy Boulevard at Glenwood Avenue and Montgomery Street for the number 10 and the number 119 bus routes with service to the Journal Square Transportation Center, Exchange Place PATH, and Hoboken PATH. With frequent and convenient mass transportation service during the peak commuting hours, as well as the variety of local commercial, retail, and entertainment options, this location is an attractive alternative to owning a car.

*Bicycle Master Plan 2019*

Near the subject site, as of 9/30/2019, the *Let's Ride JC Bicycle Master Plan* shows protected two-way, bicycle lane for West Side Avenue and a bike lane on Fairmount Avenue. The *Let's Ride JC Bicycle Master Plan* also shows bicycle lanes on Glenwood Avenue, Bergen Avenue, Montgomery Street, and Kennedy Boulevard. There is a Citi Bike coral on Glenwood Avenue at Kennedy Boulevard and a Citi Bike coral at McGinley Square.

*Pedestrian Enhancement Plan 2018*

Near the subject site, West Side Avenue, Kennedy Boulevard, Bergen Avenue, and Montgomery Street were identified by the public as key streets that need improvement for walkability. Between the years 2014 and 2016, there were no crashes involving pedestrians or bicyclists at the intersections of Glenwood Avenue with West Side Avenue or Glenwood Avenue with Kennedy Boulevard.

*School Travel Plan 2019*

Near the subject site, as of July 2019, the Jersey City School Travel Plan shows there are crossing guards at the intersections of Bergen Avenue with Glenwood Avenue and with Montgomery Street, and Kennedy Boulevard with Duncan Avenue.

*Crashes (2012 to 2016)*

Between the years 2012 and 2016, the *School Travel Plan* identified crashes involving bicyclists at the intersection of Glenwood Avenue with West Side Avenue, and crashes involving pedestrians at Glenwood Avenue with Kennedy Boulevard.

*Vision Zero*

Near the subject property, West Side Avenue, Montgomery Street, and Kennedy Boulevard are included in the "City Streets" and "All Roads High Injury Network". There was a moderate bicycle or pedestrian crash at the intersection of Glenwood Avenue with Kennedy Boulevard.

## DEVELOPMENT PROPOSAL

The proposed adaptive reuse of the existing four-story, college dormitory rooms as 54 units of multifamily housing (mid-rise). The existing property has zero on-site parking spaces, and no on-site parking is proposed. There are bicycle racks proposed to accommodate up to 27 bicycles.

## TRIP GENERATION

According to the *Trip Generation Manual, 11th Edition* published by the Institute of Transportation Engineers, "Multifamily Housing (Mid-Rise)" are located in rental buildings that have between three and ten levels (floors). Therefore, trip generation for the proposed 54-unit, mid-rise, residential building was calculated using the current Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* for the land use "Multifamily Housing (Mid-Rise)". A dense multi-use urban setting/location was used to account for the site location. Table 1, Trip Generation Summary, tabulates the trip generation for the proposed 54 mid-rise multifamily housing dwelling units and shows the proposed adaptive reuse would generate 31 person trips during the AM peak hour and 30 person trips during the PM peak hour. During the weekday AM peak hour the vehicle trips would be 11 and during the weekday PM peak hour the vehicle trips would be 10. The existing college dormitory rooms generated 8 vehicle trips during the weekday AM peak hour and 12 vehicle trips during the weekday PM peak hour and 58 person trips during the AM peak hour and 64 person trips during the PM peak hour.

According to *Transportation Impact Analysis for Site Development*, published by the Institute of Transportation Engineers (ITE), an increase of less than 100 vehicle trips would not change the level of service of the local street network nor appreciably increase the volume-to-capacity ratio of an intersection approach. Also, NJDOT Access Management Code considers a significant increase in trips greater than 100 peak hour trips AND greater than a 10 percent increase in previously anticipated daily trips. Therefore, the proposed development is not anticipated to significantly impact the operations of the local streets.

SITE PLAN REVIEW

The project proposes no off-street parking. The existing building is considered historic, and as such cannot be demolished to construct a new building with parking. Furthermore, provision of parking within the existing courtyard of the building is not best practice as it would replace pervious landscaped areas with impervious parking. The subject property is within a mile of the Journal Square Transportation Center, with several bus lines on West Side Avenue and Kennedy Boulevard providing transit service to Journal Square and other locations downtown. Services, shops, and restaurants are also available in proximity to the subject property along West Side Avenue and in the McGinley Square neighborhood.

Tenants and visitors of the proposed residential units would access the site via the doors on Glenwood Avenue. The route that pedestrians could take between the subject site and the bus stops would be via Glenwood Avenue, either east toward Kennedy Boulevard, or west toward Kennedy Boulevard. The proposed redevelopment of the subject property is expected to generate fewer pedestrian trips during the weekday AM and PM peak hours than the previous use as college administration offices. Therefore, in my professional opinion, the decrease in pedestrian trips along the existing sidewalks and crossing the existing intersections would not have a significant impact.

Garbage and recycling would be collected within the building and brought to the curb on collection days by the building superintendent.

The bicycle parking requirement is 0.5 bicycle spaces per unit or 27 bicycle parking spaces, where parking for 27 bicycles can be accommodated within the courtyard.

CONCLUSIONS

Based upon our trip generation evaluation, it is our professional opinion that the proposed 54-unit, Multifamily Housing (Mid-Rise) building with zero on-site parking spaces would generate approximately the same number of vehicle trips during the weekday AM and weekday PM peak hours than the existing college dormitory rooms. Therefore, in my professional opinion, this proposed adaptive reuse would not have a negative impact on traffic operations during the weekday AM and PM peak commuter traffic hours.

The route that pedestrians could take between the subject site and the bus stops would be via Glenwood Avenue either toward West Side Avenue or toward Kennedy Boulevard. The proposed adaptive reuse is expected to generate fewer pedestrian trips during the weekday AM and PM peak hours than the existing college dormitory rooms. Therefore, in my professional opinion, the decrease in pedestrian trips along the existing sidewalks and crossing the existing intersections would not have a negative impact.

In conclusion, the development of this project would have no significant impact on the traffic operations of area roadways and intersections and would not have a significant impact on local parking conditions.

The foregoing is a true representation of my findings.

Lee D Klein

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Professional Engineer License No. 37104
Professional Traffic Operations Engineer 1627

**138-140 Glenwood Avenue**

**Table 1 Trip Generation Summary and Comparison - Off-Campus Student Apartment versus Multifamily Housing (Mid-Rise)**

| | | | WEEKDAY | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | AM PEAK HOUR | | | PM PEAK HOUR | | |
| CODE | LAND USE | AMOUNT | IN | OUT | TOTAL | IN | OUT | TOTAL |
| **EXISTING OFF-CAMPUS HOUSING** | | | | | | | | |
| **EXISTING VEHICLE TRIPS** | | | | | | | | |
| 226 | Off-Campus Student Apartment (Mid-Rise)(Dense Multi-Use Urban) | 87 Bedrooms | 3 | 5 | 8 | 6 | 6 | 12 |
| **EXISTING PERSON TRIPS** | | | | | | | | |
| 226 | Off-Campus Student Apartment (Mid-Rise)(Dense Multi-Use Urban) | 87 Bedrooms | 20 | 38 | 58 | 32 | 31 | 64 |
| | | | | | | | | |
| **PROPOSED MULTIFAMILY HOUSING (MID-RISE)** | | | | | | | | |
| **PROPOSED VEHICLE TRIPS** | | | | | | | | |
| 221 | Multifamily Housing (Mid-Rise)(Average)(Dense Multi-Use Urban-Vehicle Trips) | 54 units | 1 | 10 | 11 | 7 | 3 | 10 |
| **PROPOSED PERSON TRIPS** | | | | | | | | |
| 221 | Multifamily Housing (Mid-Rise)(Average)(Dense Multi-Use Urban-Person Trips) | 54 units | 6 | 25 | 31 | 18 | 12 | 30 |
| | | | | | | | | |
| | **TOTAL CHANGE IN PEAK HOUR VEHICLE TRIPS** | | **-2** | **5** | **3** | **1** | **-3** | **-2** |
| | | | | | | | | |
| | **TOTAL CHANGE IN PEAK HOUR PERSON TRIPS** | | **-14** | **-14** | **-28** | **-15** | **-19** | **-34** |

SOURCES: *Trip Generation, 11th Edition* , published by the Institute of Transportation Engineers (ITE)

# Google Maps 138 Glenwood Ave, Jersey City, NJ 07306 to Journal Square, 1 Path Plaza, Jersey City, NJ 07306 Walk 0.8 mile, 16 min