



# Broad Street West Redevelopment Area – Subdistrict III

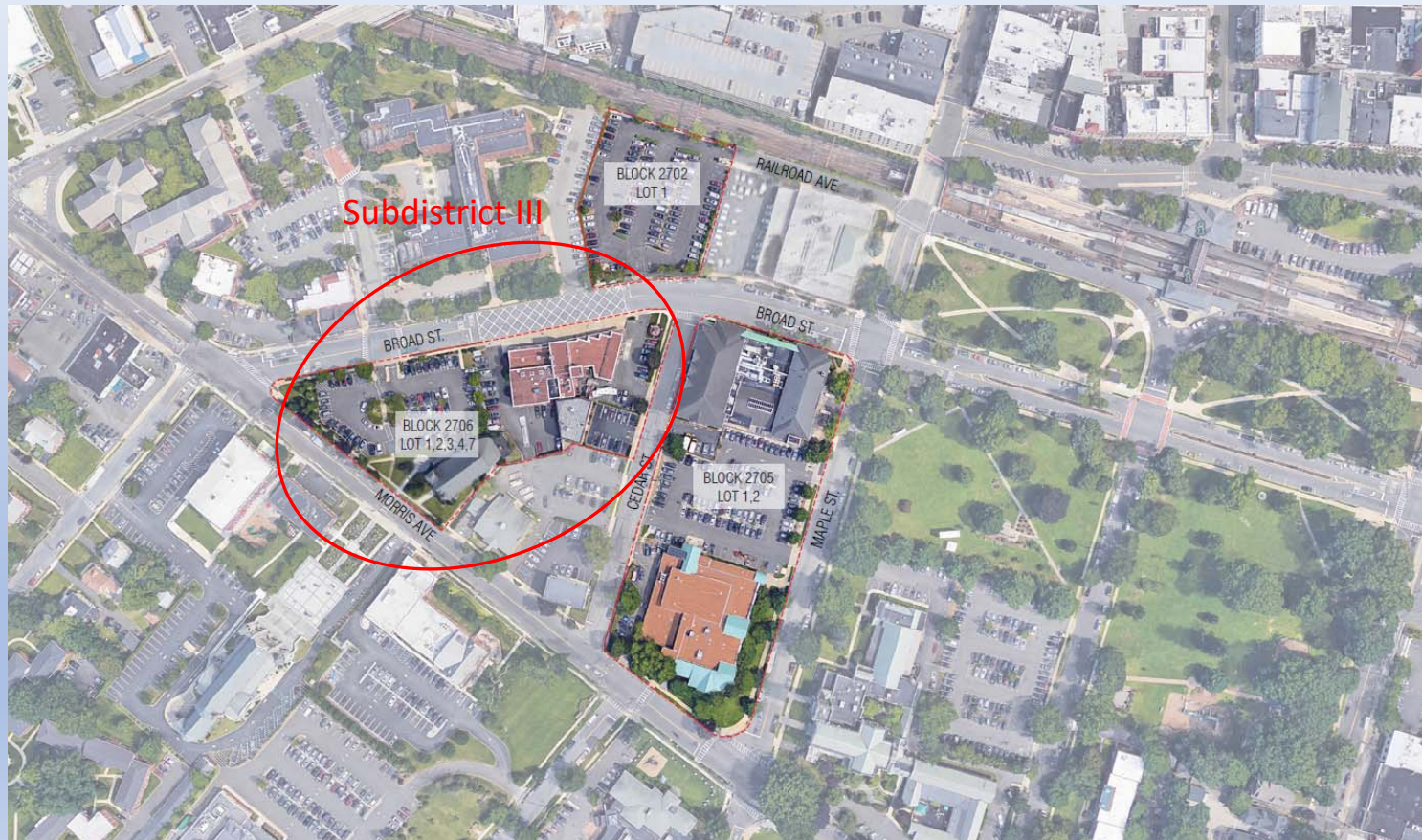
Traffic Engineering Presentation

Summit, New Jersey

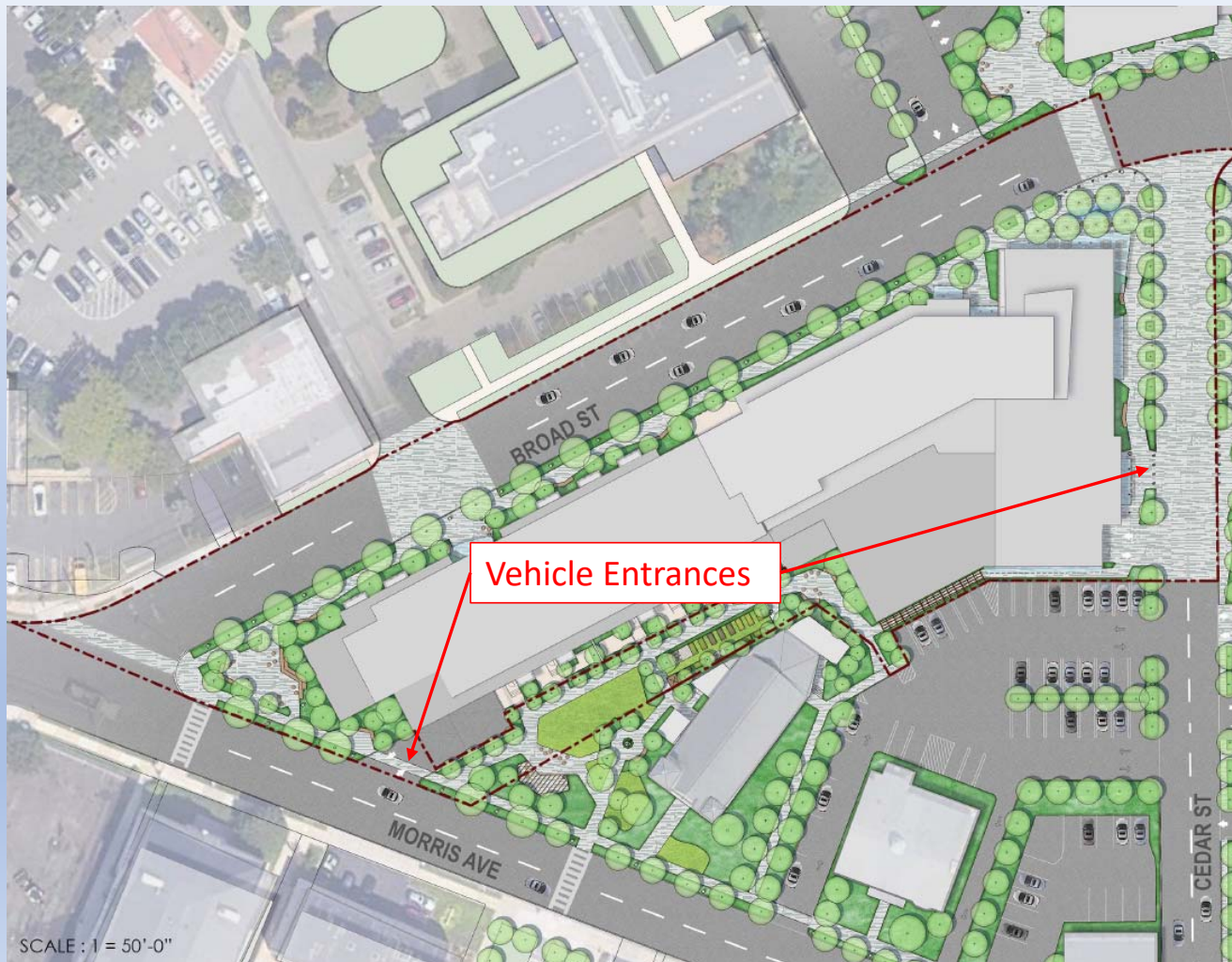
02/07/2022



# Broad Street West Redevelopment Area



# Site Plan





# Proposed Development

- 140 Residential Units
- 10,000 SF of Retail Space
  - For worst case traffic purposes - 4,000 SF of Convenience Store Space assumed

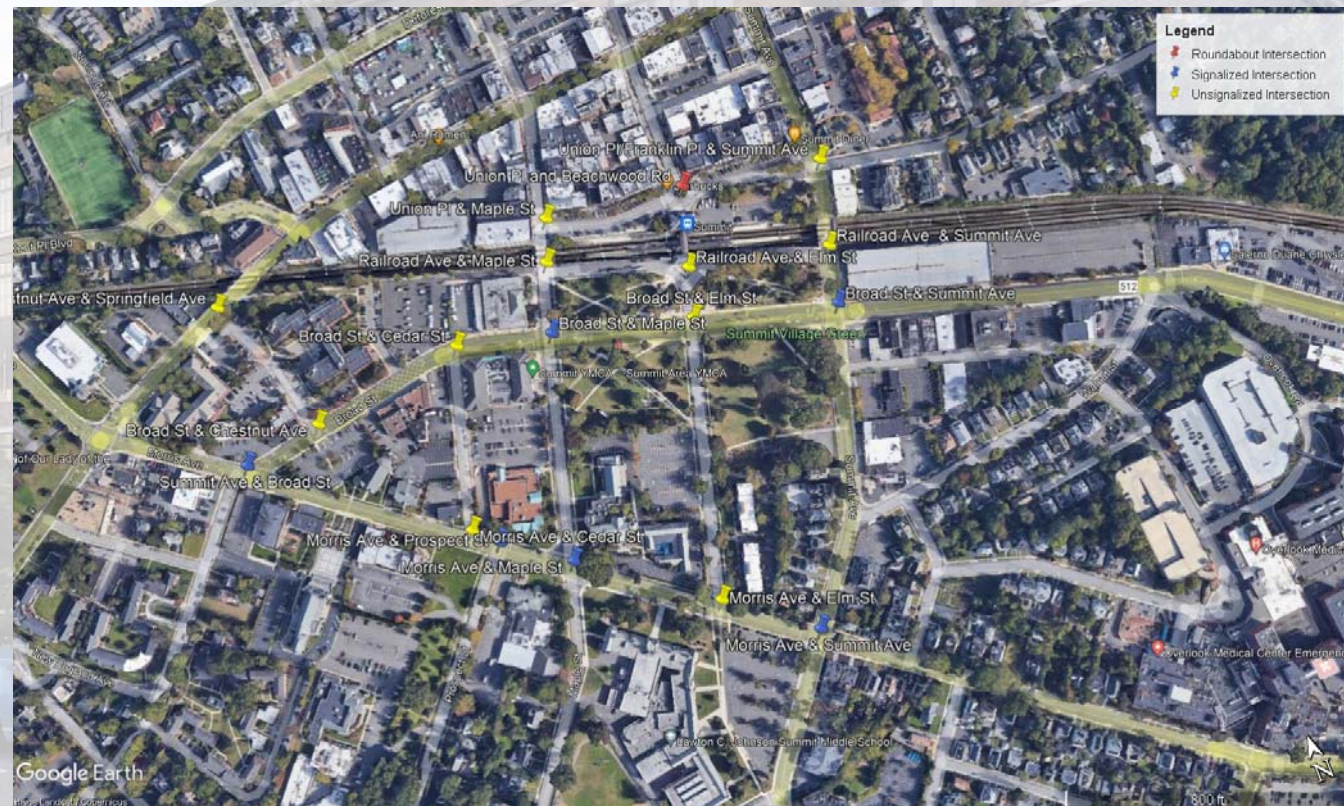


# Scope of Study

## Required Intersections

Primary Street	Intersecting Street(s)
Morris Avenue	Summit Avenue Elm Street Maple Street Prospect Street Cedar Street Broad Street
Broad Street	Summit Avenue Elm Street Maple Street Cedar Street Morris Avenue
Railroad Avenue	Summit Avenue Elm Street Maple Street
Chestnut Avenue (former right-of-way)	Broad Street Springfield Avenue
Union Place	Maple Street Beechwood Road Summit Avenue

## Intersections Counted



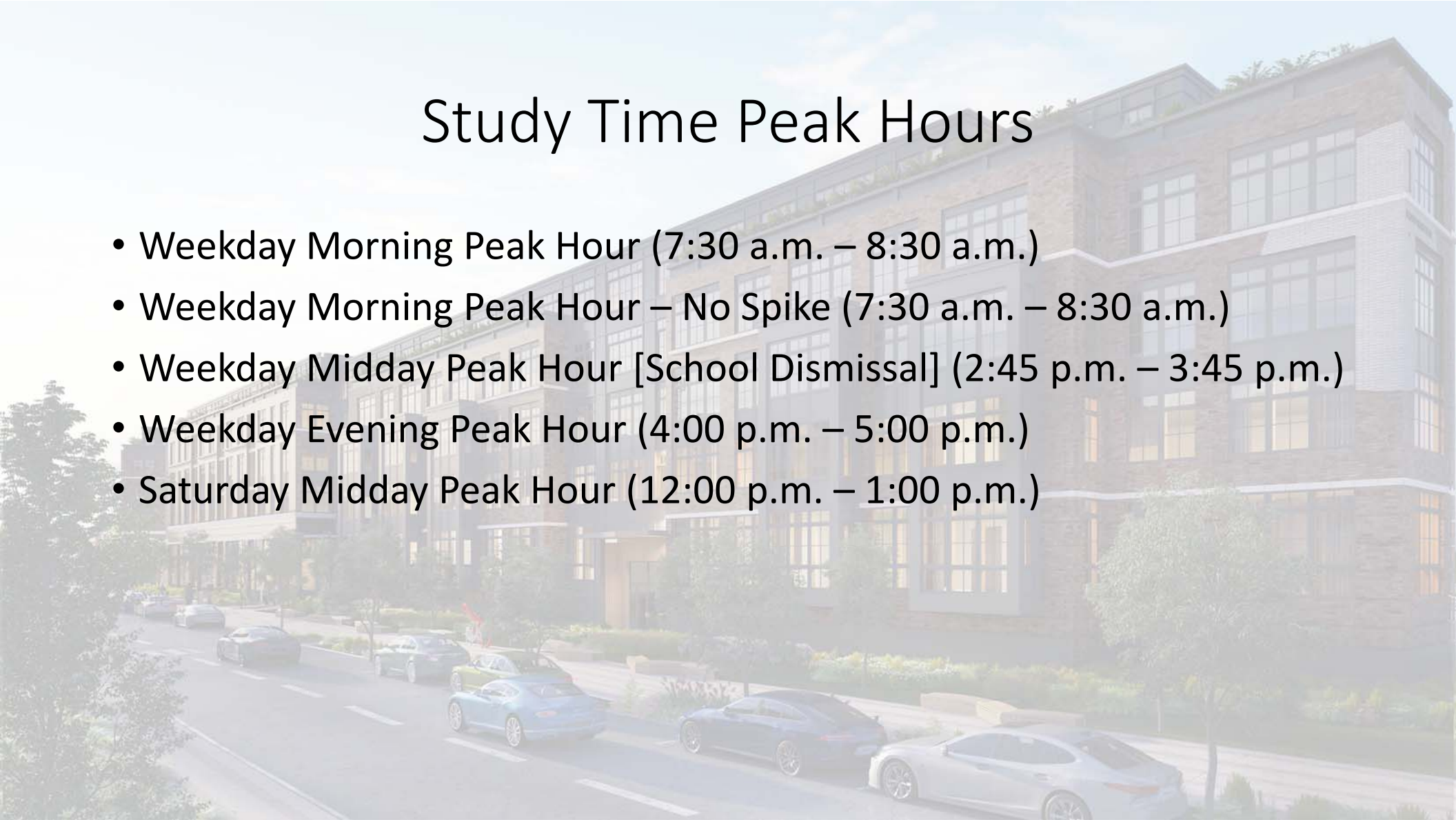


# Count Information

- Thursday, September 23, 2021 from 7:00 a.m. to 9:00 a.m. & 2:30 p.m. to 6:30 p.m.
- Saturday, September 25, 2021 from 11:00 a.m. to 2:00 p.m.
- Counts included:
  - Cars
  - Trucks
  - Buses
  - Pedestrians
  - Bicyclists
- Drone Video, Street Level Videos, Observations

# Study Time Peak Hours

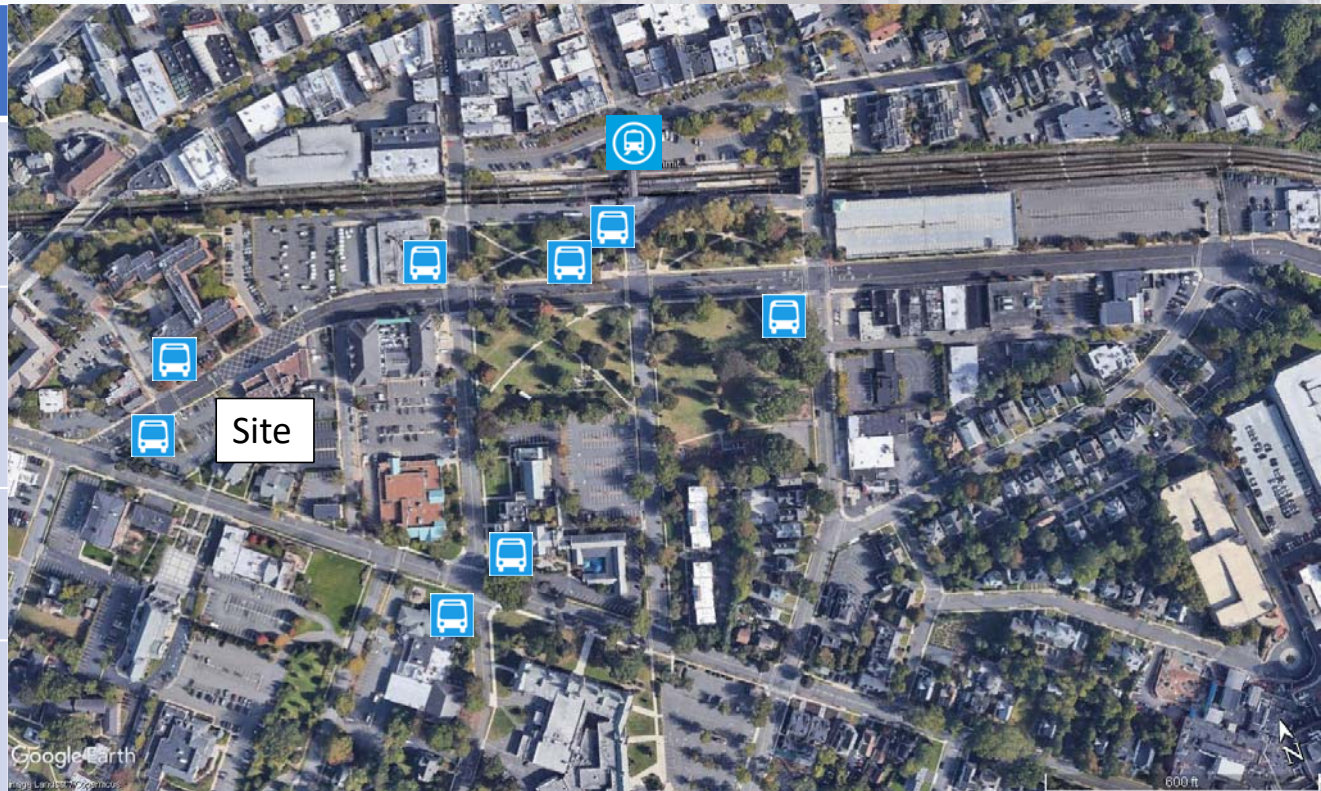
- Weekday Morning Peak Hour (7:30 a.m. – 8:30 a.m.)
- Weekday Morning Peak Hour – No Spike (7:30 a.m. – 8:30 a.m.)
- Weekday Midday Peak Hour [School Dismissal] (2:45 p.m. – 3:45 p.m.)
- Weekday Evening Peak Hour (4:00 p.m. – 5:00 p.m.)
- Saturday Midday Peak Hour (12:00 p.m. – 1:00 p.m.)





# Multi-Modal Transit Options

Travel Mode	Proximity to Site	Destination(s)	Time Travel to Major Destination
Gladstone Branch Summit Train Station	0.2 miles	New York Penn Station, Secaucus Junction, Hoboken Terminal, Newark Station, Berkley Heights	48 Minutes
Morristown Line Summit Train Station	0.2 miles	New York Penn Station, Secaucus Junction, Hoboken Terminal, Newark Station, Morristown Station, Hackettstown	48 Minutes
NJ Transit Bus Route 70	Along Site Frontage	Livingston Mall, Springfield, Milburn Station, Newark Penn Station	1 Hour 14 Minutes
NJ Transit Bus Route 986	Along Site Frontage	New Providence, Plainfield Rail Station	46 Minutes





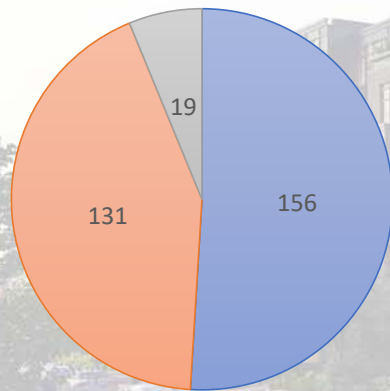
# Trip Generation

- Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition
- Residential Units – Land Use 221 “Multifamily Housing (Mid-Rise)”
- Retail Space – Land Use 820 “Shopping Center”
- Convenience Store – Land Use 851 “Convenience Market”



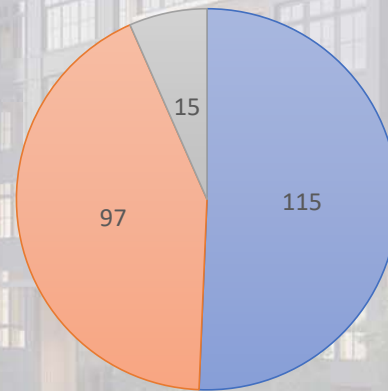
# Trip Generation – Peak Hour

AM Trips



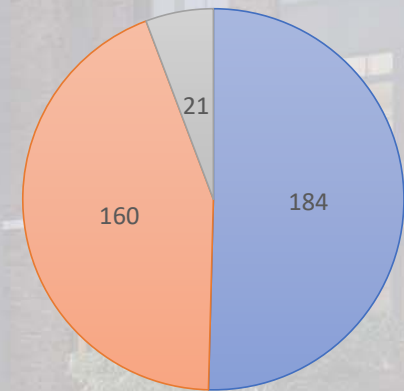
■ New Vehicle Trips ■ Pedestrian Trips ■ Bicycle Trips

PM Trips



■ New Vehicle Trips ■ Pedestrian Trips ■ Bicycle Trips

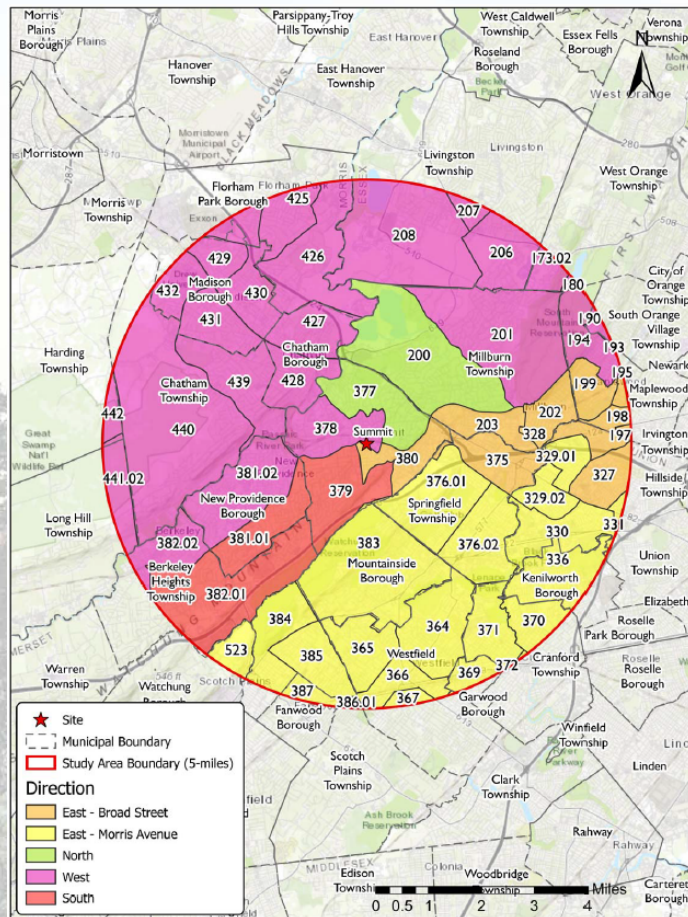
Saturday Trips



■ New Vehicle Trips ■ Pedestrian Trips ■ Bicycle Trips



# Gravity Model (Commercial Distribution)



Origin	Percentage
From North – Summit Avenue SB	14%
From South – Prospect Avenue NB	12%
From East – Morris Avenue WB	7%
From East – Broad Street WB	29%
From West – Morris Avenue EB	38%
<b>TOTAL</b>	<b>100%</b>

# Journey to Work (Residential Distribution)



Destination	Percentage
To East – Morris Avenue EB	66%
To West – Morris Avenue WB	29%
To North – Summit Avenue NB	5%
To South	0%
TOTAL	100%



# Morris Avenue and Broad Street/Locust Street



- Acceptable Levels of Service
- Low Crash History
- Limited Available ROW
- No Realignment Proposed



# Pedestrian Improvements





# Parking





