

Appendix H

Local Transportation Assessment

MEMORANDUM

Date: July 24, 2020 Project #25048
To: City of Gardena
From: Miao Gao and Tim Erney, Kittelson & Associates, Inc.
Project: 141st and Normandie Townhomes
Subject: Local Transportation Assessment

This local transportation assessment summarizes the trip generation, trip distribution, and trip assignment for the proposed 141st and Normandie Townhomes (“project”) and includes information for cumulative development projects in the study area. The project is located in the eastern portion of the City of Garden at 1335, 1337, 1341, & 1343 West 141st Street. This assessment includes the following sections:

- Project Description
- VMT Screening
- Project Trip Generation Estimate
- Project Trip Distribution and Assignment
- Cumulative Projects Review
- Summary and Conclusions

The contents of this assessment are based on the City’s *SB 743 Implementation Transportation Analysis Updates* (June 2020) and analysis requirements for projects generating between 20 and 49 peak hour trips (proposed project and cumulative project trip generation and assignment). In addition, this project would be screened out of a detailed Vehicle Miles Traveled (VMT) analysis.

PROJECT DESCRIPTION

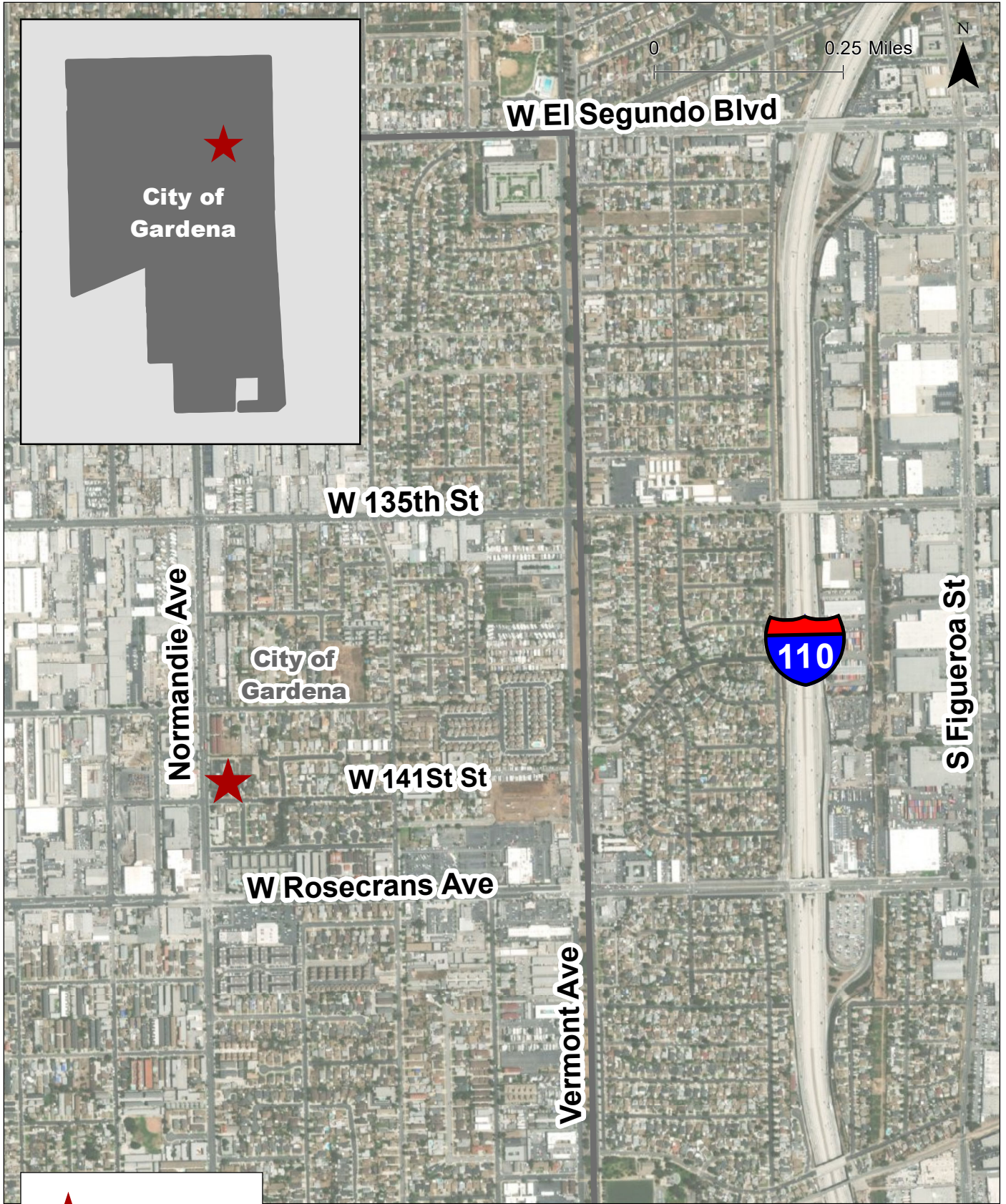
The project site is located at 1335, 1337, 1341, & 1343 West 141st Street in the City of Gardena; it is located on the northeast corner of Normandie Avenue and 141st Street approximately 500 feet north of the intersection of Normandie Avenue & Rosecrans Avenue.

The project site is comprised of five parcels (APNs 6115-013-007, -008, -009, -010 and -011) totaling approximately 2.02 gross acres. The site is currently partially zoned as Single Family Residential (R-1) on the east side and Medium Density Multiple-Unit Residential (R-3) on the west side. The site is occupied by a landscape nursery with greenhouses (Lloyd’s Nursery) and two single family residential structures. One of the residential structures serves as an office for the nursery operations and the other serves as the residence for the nursery’s groundskeeper.

The project would require a zone change to Multiple-Unit Residential (R-4). The project would provide 50 three-story attached townhomes in six buildings at 24.7 dwelling units (DU) per acre. The townhomes would consist of a mix of floor plans with two- to three-bedroom units with a fourth bedroom option, ranging in size from 1,260 to 1,659 square feet. The project would include approximately 33,236 square feet of open space with 8,693 square feet as a combination of private balconies and patios (limited to specific units) and 24,543 square feet as common open space area.

Vehicular access would be provided by a single driveway on 141st Street, approximately 200 feet east of the intersection of Normandie Avenue and 141st Street. Pedestrian access would be provided from 141st Street, adjacent to the driveway. A private interior driveway system, consistent with Los Angeles County Fire access requirements, would provide access to the individual townhome unit.

The project location is shown in Figure 1. The proposed site plan is shown in Figure 2.

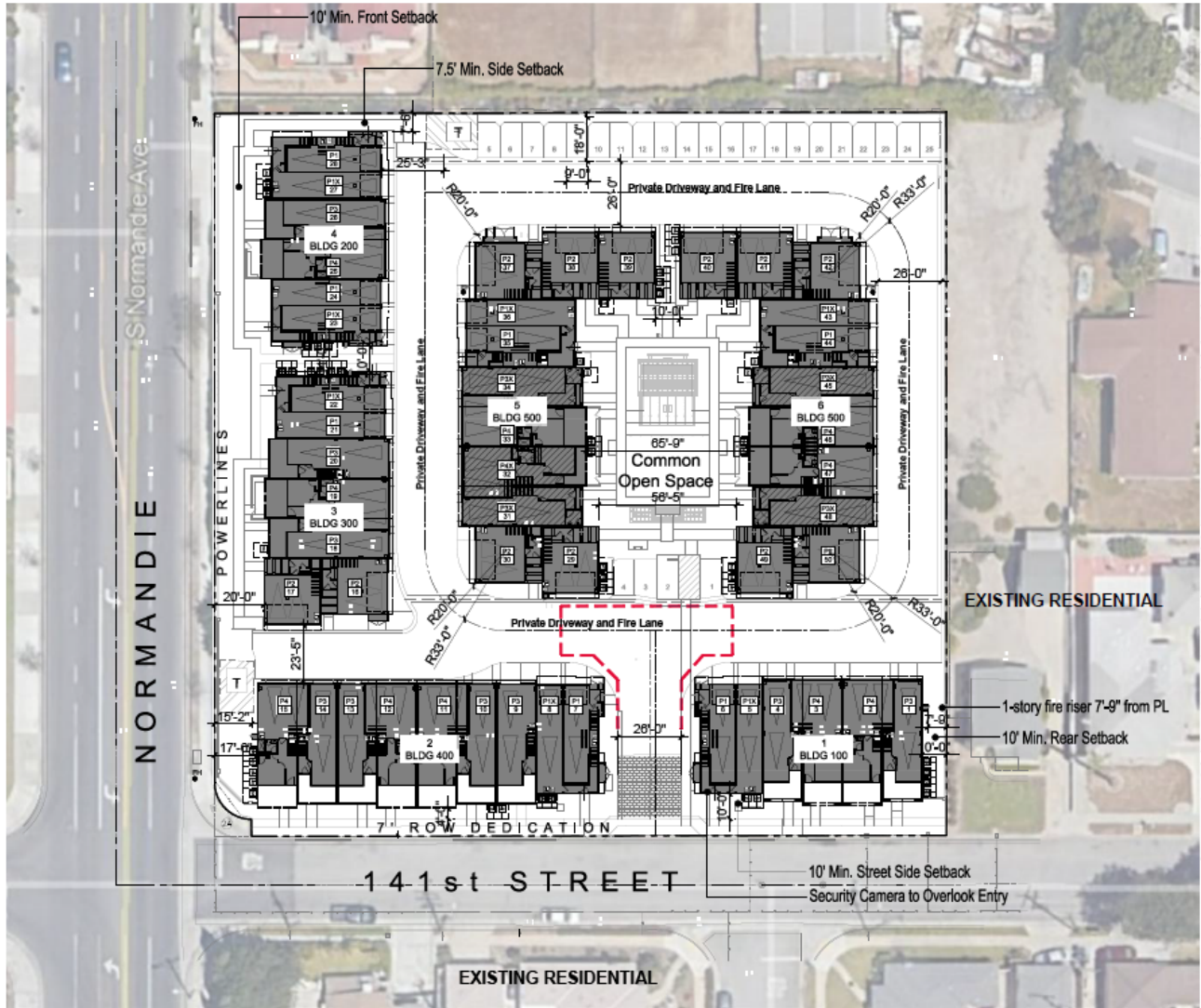


 Project Location
 City of Gardena

**Project Location
Gardena, California**

**Figure
1**

Figure 2: Project Site Plan



Source: The Olson Company, 07/16/2020

VMT SCREENING

The City's transportation analysis guidelines include criteria for individual project screening, which can be used to screen out projects that are expected to generate low VMT out of a detailed VMT analysis. The City's three VMT screening criteria and determinations are listed below.

- **Project Type Screening:** This screening criterion does not apply since the project is expected to generate more than 110 daily trips. Trip generation estimates are provided in the next section of this memorandum.
- **Low VMT Area Screening:** According to Figure 1 in the City's guidelines, the project site is located in an area with a daily residential home-based VMT per capita less than 85% of the regional average. Based on this criterion, the project would be screened out of requiring a detailed VMT analysis.
- **Transit Proximity Screening:** According to Figure 3 in the City's guidelines, the project site is located in a Frequent Transit Area. The project also has the following required characteristics:
 - **Development intensity of at least 20 units per acre:** The gross density of the site is 24.7 DU/acre and the net density of the site is 25.4 DU/acre, both of which exceed 20 units per acre.
 - **Parking supply does not exceed City requirements:** The total number of provided parking is equal to the total number of required parking spaces (125 spaces).

The transit proximity screening criterion could be used to screen out the project, should the City make the determination that this project is consistent with the Southern California Association of Governments (SCAG) Regional Transportation Plan/Sustainable Communities Strategy.

Based on the City's Guidelines, a project that satisfies at least one of the VMT screening criteria may be presumed to have a less than significant impact and can be screened out of a detailed VMT analysis. Given that this project meets the screening criteria for Low VMT Area Screening, a detailed VMT analysis is not required.

TRIP GENERATION ESTIMATE

Project trip generation was estimated for the following three time periods:

- Weekday daily
- Weekday AM peak hour
- Weekday PM peak hour

Trips were estimated using trip generation data provided by the Institute of Transportation Engineers (ITE) *Trip Generation Manual* and shown in Table 1. Trip generation was estimated using the multi-family housing (mid-rise) land use code, which is appropriate for townhomes of at least three stories. It should be noted that although the proposed project would replace existing uses, to be conservative, the trip generation does not deduct these existing trips.

As shown in Table 1, the proposed project is expected to generate 272 weekday daily vehicle trips, 18 weekday AM peak hour vehicle trips, and 22 weekday PM peak hour vehicle trips.

Table 1: Project Trip Generation Estimate

Trip Generation Rates								
Land Use	Rate	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Multifamily Housing – Mid-Rise (ITE Code 221)	DU	5.44	26%	74%	0.36	61%	39%	0.44
Trip Generation Estimates								
Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Multifamily Housing – Mid-Rise (ITE Code 221)	50 DU	272	5	13	18	13	9	22

Source: Kittelson & Associates, Inc., 2020; Institute of Transportation Engineers, 2017.

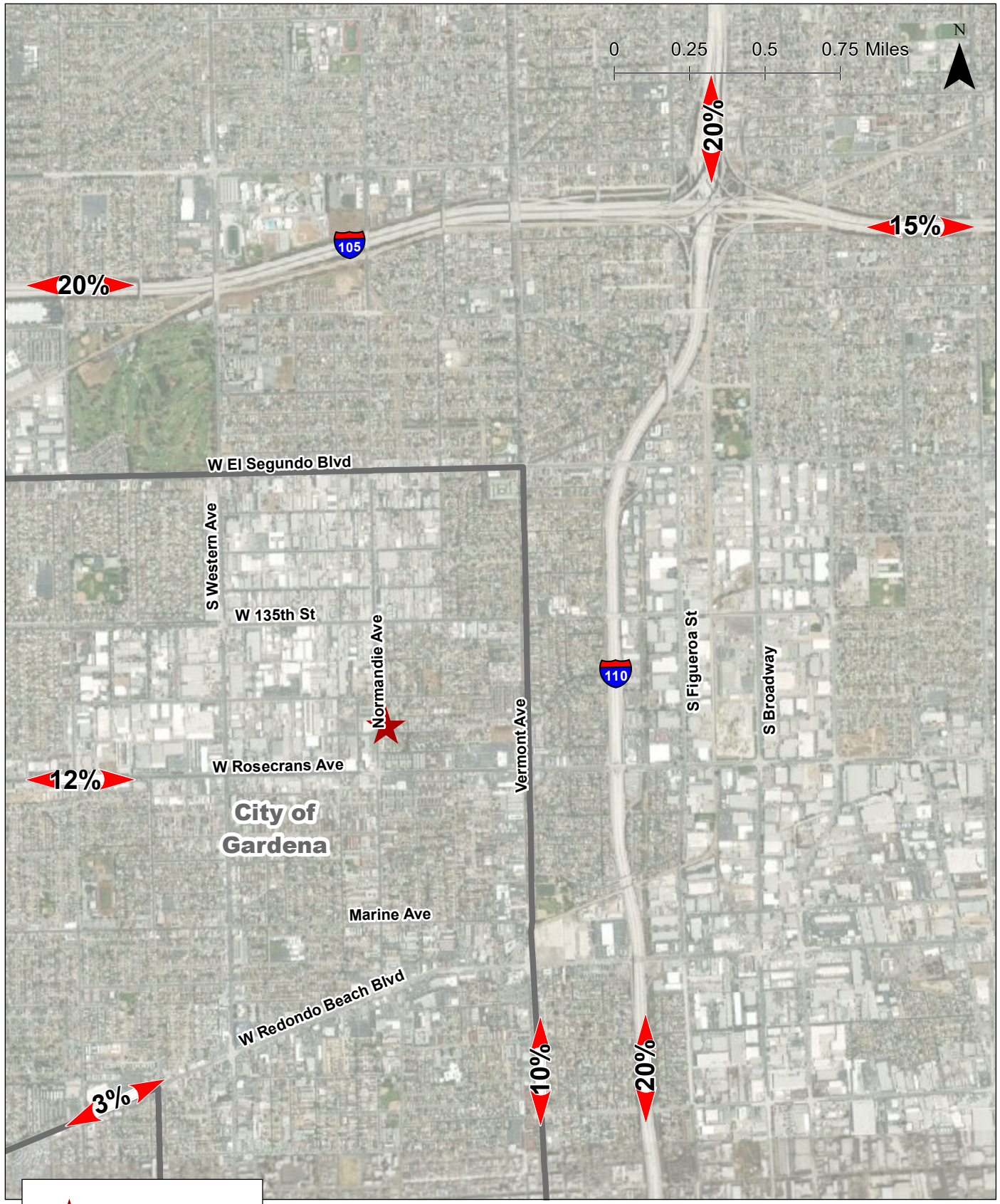
Note: DU signifies dwelling units.

TRIP DISTRIBUTION AND ASSIGNMENT

For the purposes of this analysis, project trip distribution estimates were developed using the US Census OnTheMap tool, a web-based mapping and reporting tool that shows where workers are employed and where they live based on the 2017 Longitudinal Employer-Household Dynamics (LEHD) Origin-Destination Employment Statistics (LODES) database by the US Census Bureau.

Given that the proposed project is a residential project, the tool’s work trip trends for residents living in the proposed project’s census block group were utilized. According to the LEHD data, major work locations for residents in the area include Gardena, Los Angeles International Airport to the northwest, Downtown Los Angeles to the north, Torrance to the south, and Compton to the east. Project trip distribution estimates are shown in Figure 3. Based on these trip distribution estimates, project trips were assigned to the study area roadways based on local travel patterns and the locations of the nearby freeway on- and off-ramps. Weekday AM/PM inbound and outbound project trip assignment are shown in Figure 4 and Figure 5.

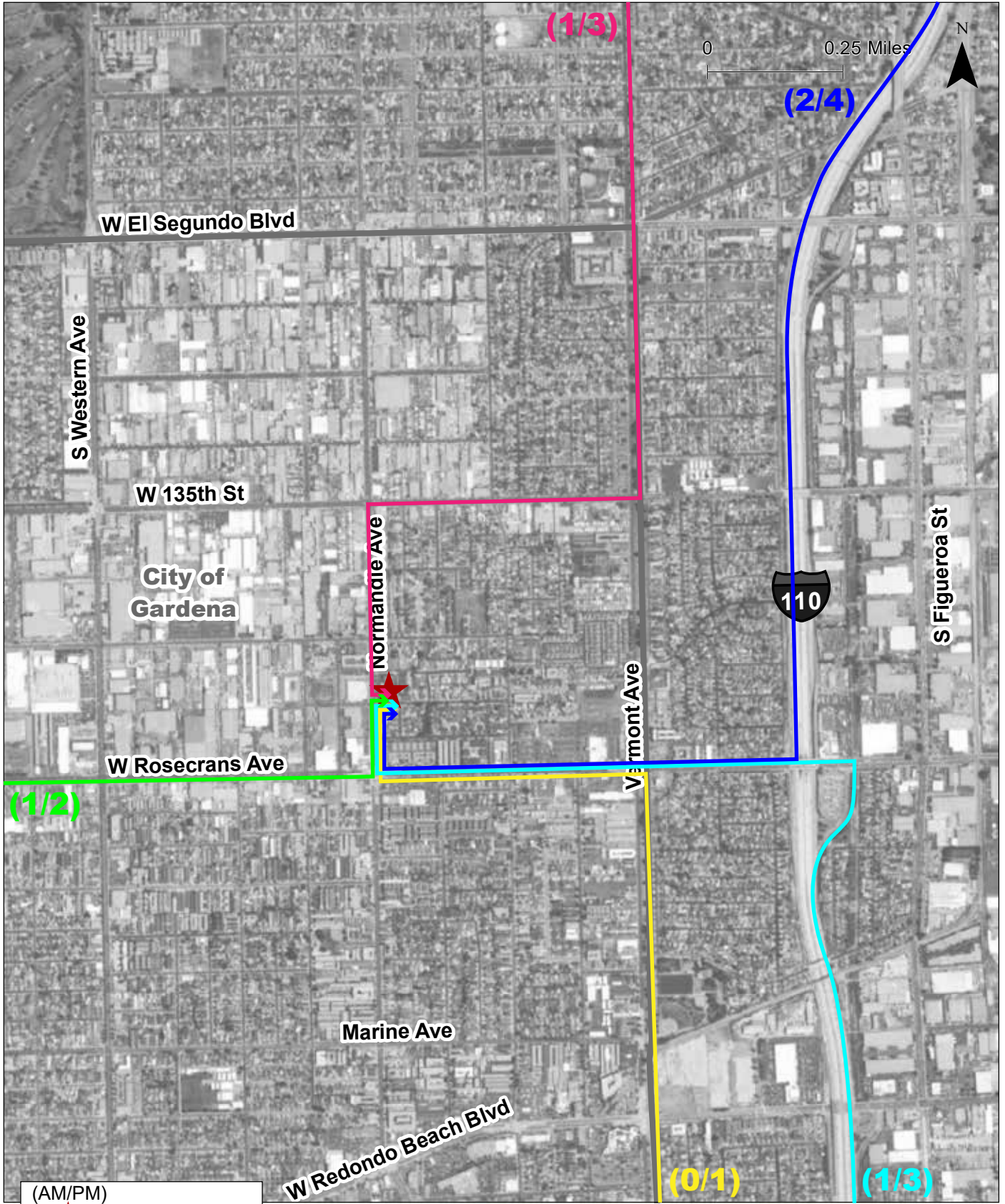
H:\25125048 - Gardena Olson Townhome VMT Analysis\GIS\mxd\Figure 03 - Project Trip Distribution.mxd - mngao - 10:57 AM 7/22/2020





- Project Location
- City of Gardena

**Project Trip Distribution
Gardena, California**

**Figure
3**

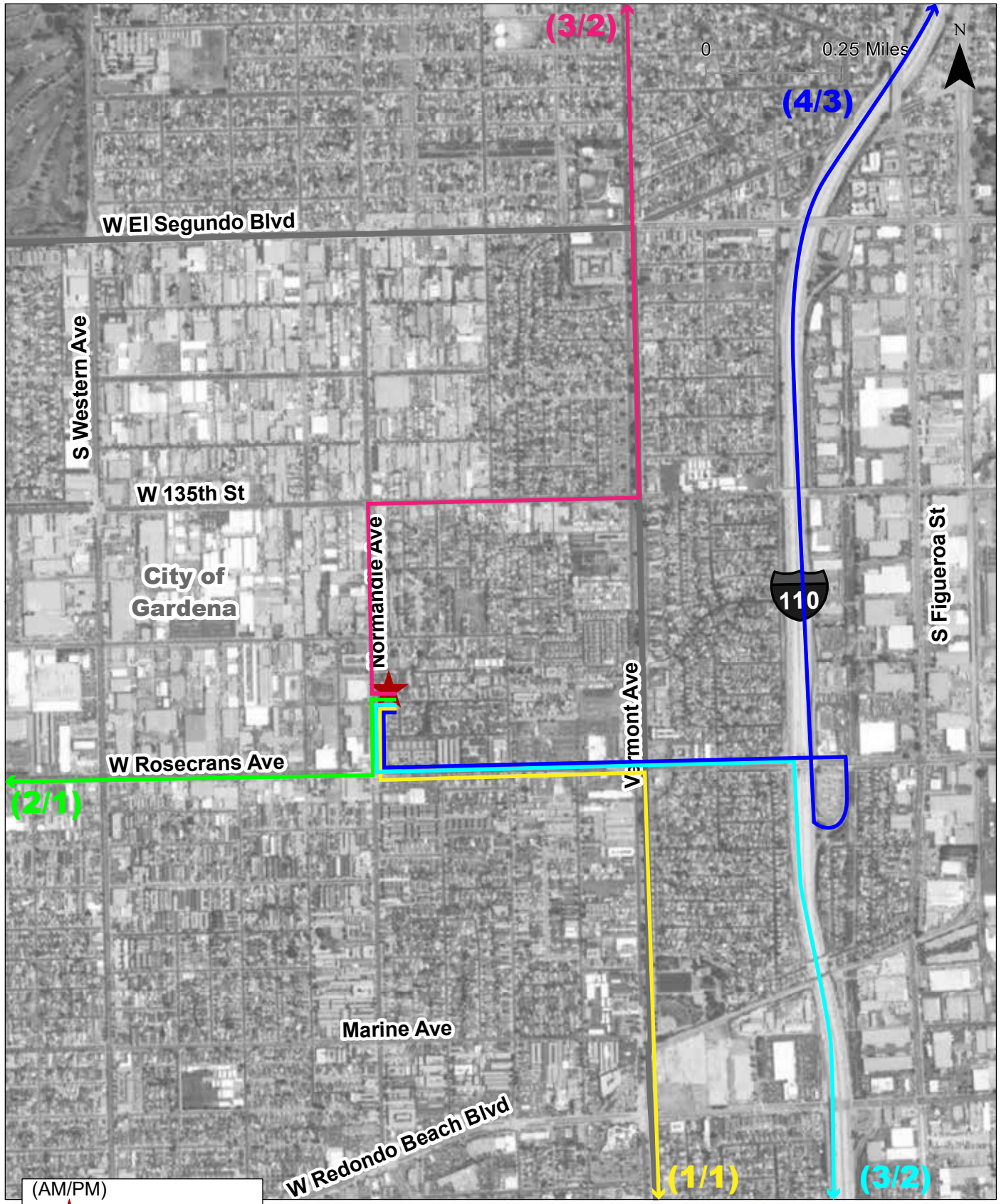


(AM/PM)



-  Project Location
-  City of Gardena

**Project Trip Assignment (Inbound)
Gardena, California**

Figure
4



(AM/PM)

-  Project Location
-  City of Gardena

**Project Trip Assignment (Outbound)
Gardena, California**

Figure
5

CUMULATIVE PROJECTS REVIEW

As part of this study, trip generation was estimated for cumulative projects¹ within a half mile of the proposed project site and assigned to the local roadway network. Based on cumulative project information within the Cities of Gardena and Los Angeles provided by City of Gardena staff, three residential and one industrial projects were identified within a half mile of the project site, listed below and shown in Figure 6. All four projects are within Gardena city limits.

Three residential projects at the following locations:

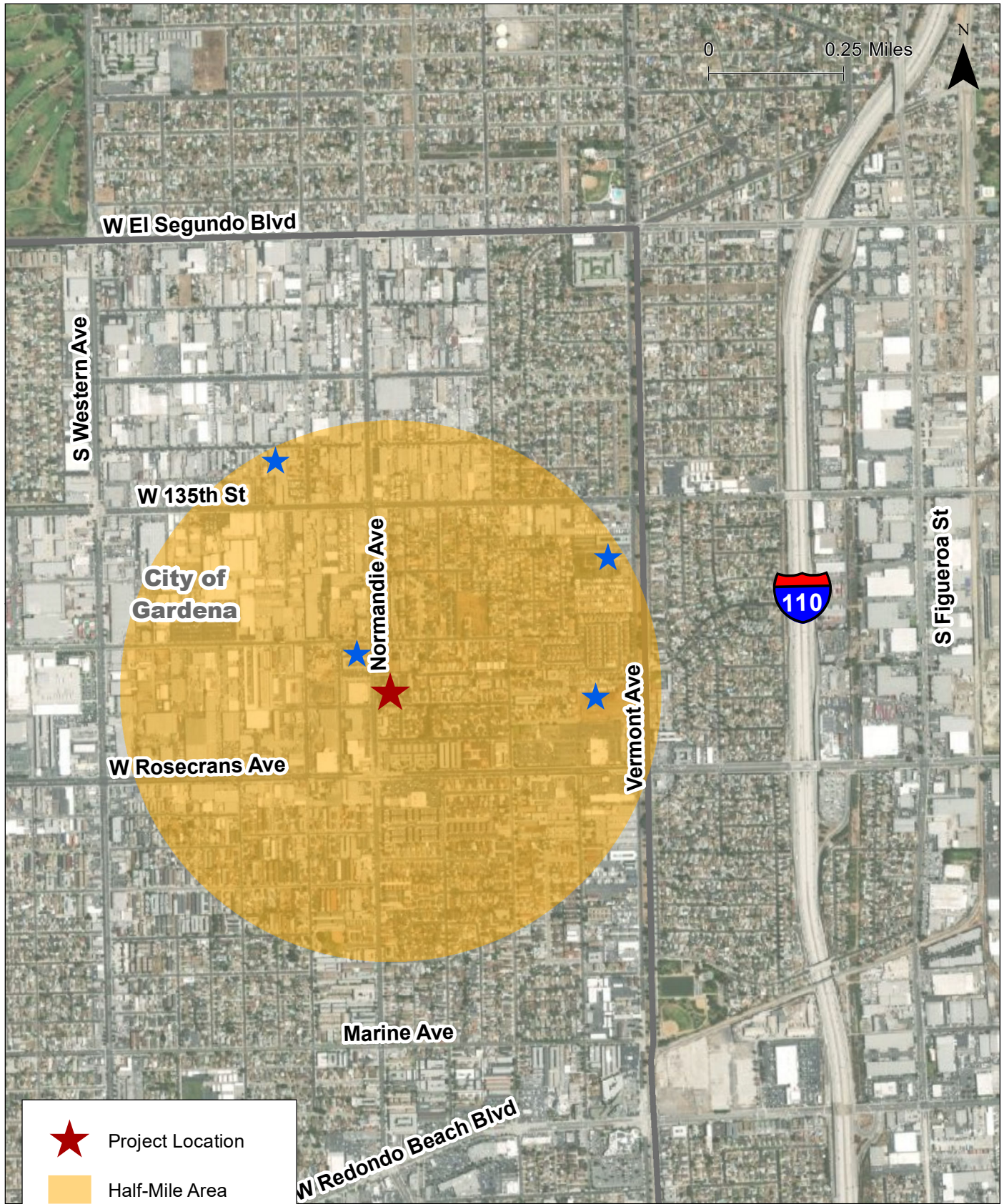
- 1017 West 141st Street and 14031 South Vermont Avenue (KB Home Stonefield project)
- 13919 Normandie Avenue
- 13615 S. Vermont Avenue





One industrial project at the following location:

- 1528 W. 134th Street

The trip generation and assignment for each cumulative project is detailed below. The proposed project's trip distribution percentages in Figure 3 were used for the residential cumulative projects given the proximity to the proposed project and similar resident journey-to-work distributions. The non-residential worker trip distribution percentages were derived from LODES for the industrial project at 1528 W. 134th Street, as later shown in Figure 13.

¹ These are projects for which entitlements have been received or are undergoing planning review, building and safety check, or construction.



-  Project Location
-  Half-Mile Area
-  Cumulative Projects
-  City of Gardena

**Cumulative Projects
Gardena, California**

Figure
6

KB Home Stonefield Project

This residential project is located at 1017 West 141st Street and 14031 South Vermont Avenue, on the west side of Normandie Avenue and north of Rosecrans Avenue. It consists of 63 three-story townhomes and is currently under construction. As shown in Table 2, this project is expected to generate 343 weekday daily vehicle trips, 23 weekday AM peak hour vehicle trips, and 28 weekday PM peak hour vehicle trips.

Table 2: KB Home Stonefield Trip Generation Estimate

Trip Generation Rates								
Land Use	Rate	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Multifamily Housing – Mid-Rise (ITE Code 221)	DU	5.44	26%	74%	0.36	61%	39%	0.44
Trip Generation Estimates								
Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Multifamily Housing – Mid-Rise (ITE Code 221)	63 DU	343	6	17	23	17	11	28

Source: Kittelson & Associates, Inc., 2020; Institute of Transportation Engineers, 2017.




Note: DU signifies dwelling units.

Weekday AM/PM inbound and outbound project trip assignment are shown in Figure 7 and Figure 8. It should be noted that the project trip assignment includes U-turns since the project access point is a single right-in/right-out only driveway. These consist of outbound U-turns at the intersection of Vermont Avenue and Rosecrans Avenue and inbound U-turns at the intersection of Vermont Avenue and the median parking lot.

H:\25125048 - Gardena Olson Townhome VMT Analysis\GIS\mxd\Figure 07 - KB Trip Assignment (Inbound).mxd - migo - 4:41 PM 7/22/2020

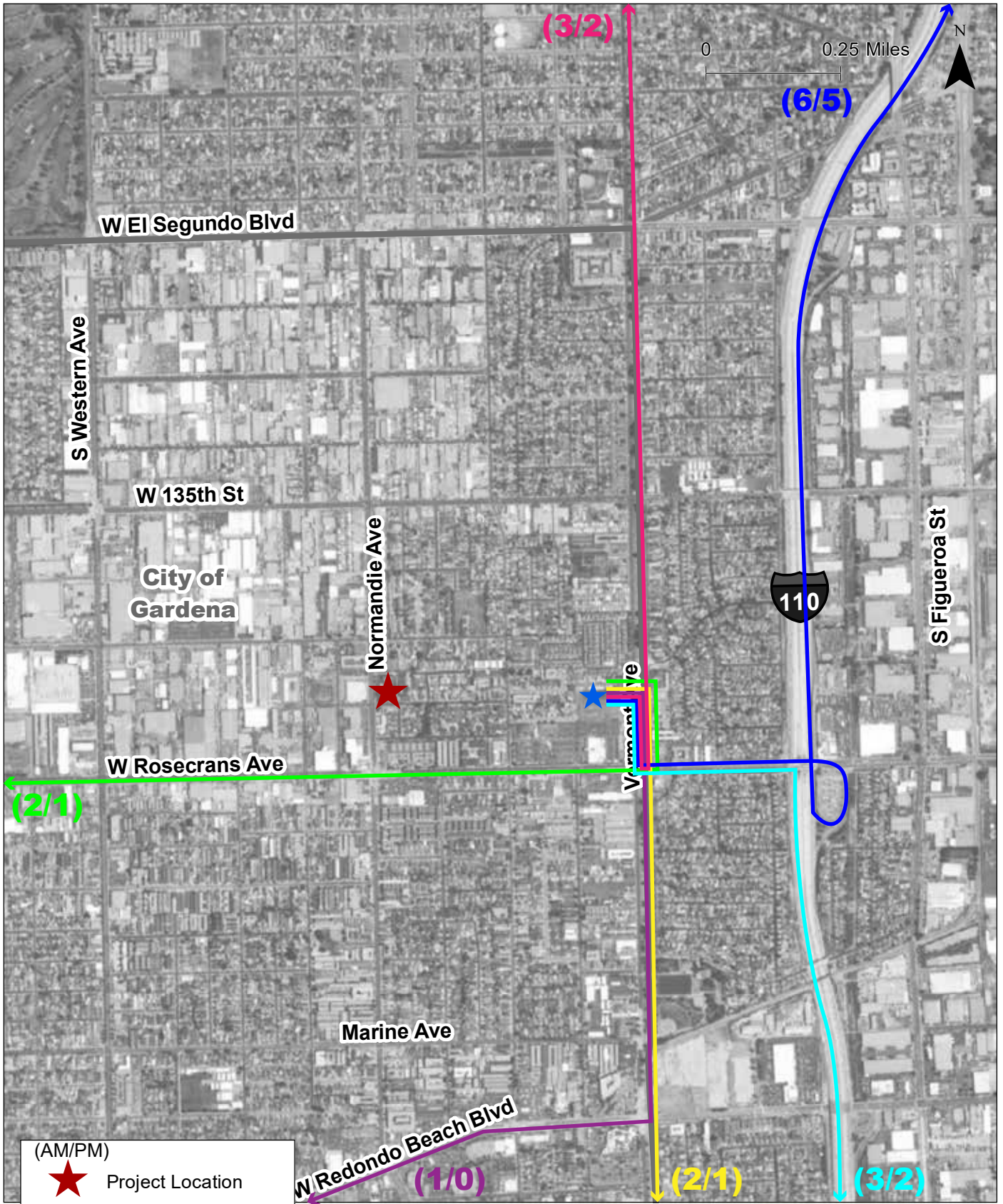


(AM/PM)

-  Project Location
-  Cumulative Projects
-  City of Gardena

**KB Home Stonefield Trip Assignment
(Inbound)
Gardena, California**

Figure
7



- (AM/PM)
- ★ Project Location
- ★ Cumulative Projects
- City of Gardena

**KB Home Stonefield Trip Assignment
(Outbound)
Gardena, California**

Figure
8

13919 Normandie Avenue Project

This residential project, which consists of 20 single room occupancy (SRO) units, is undergoing building and safety plan check. It is located at the southwestern corner of Normandie Avenue and 139th Street. As shown in Table 3, this project is expected to generate 109 weekday daily vehicle trips, seven weekday AM peak hour vehicle trips, and nine weekday PM peak hour vehicle trips. Weekday AM/PM inbound and outbound project trip assignment are shown in Figure 9 and Figure 10.

Table 3: 13919 Normandie Avenue Trip Generation Estimate

Trip Generation Rates								
Land Use	Rate	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Multifamily Housing – Mid-Rise (ITE Code 221)	DU	5.44	26%	74%	0.36	61%	39%	0.44
Trip Generation Estimates								
Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Multifamily Housing – Mid-Rise (ITE Code 221)	20 DU	109	2	5	7	5	4	9

Source: Kittelson & Associates, Inc., 2020; Institute of Transportation Engineers, 2017.

Note: DU signifies dwelling units.

13615 S. Vermont Avenue Project

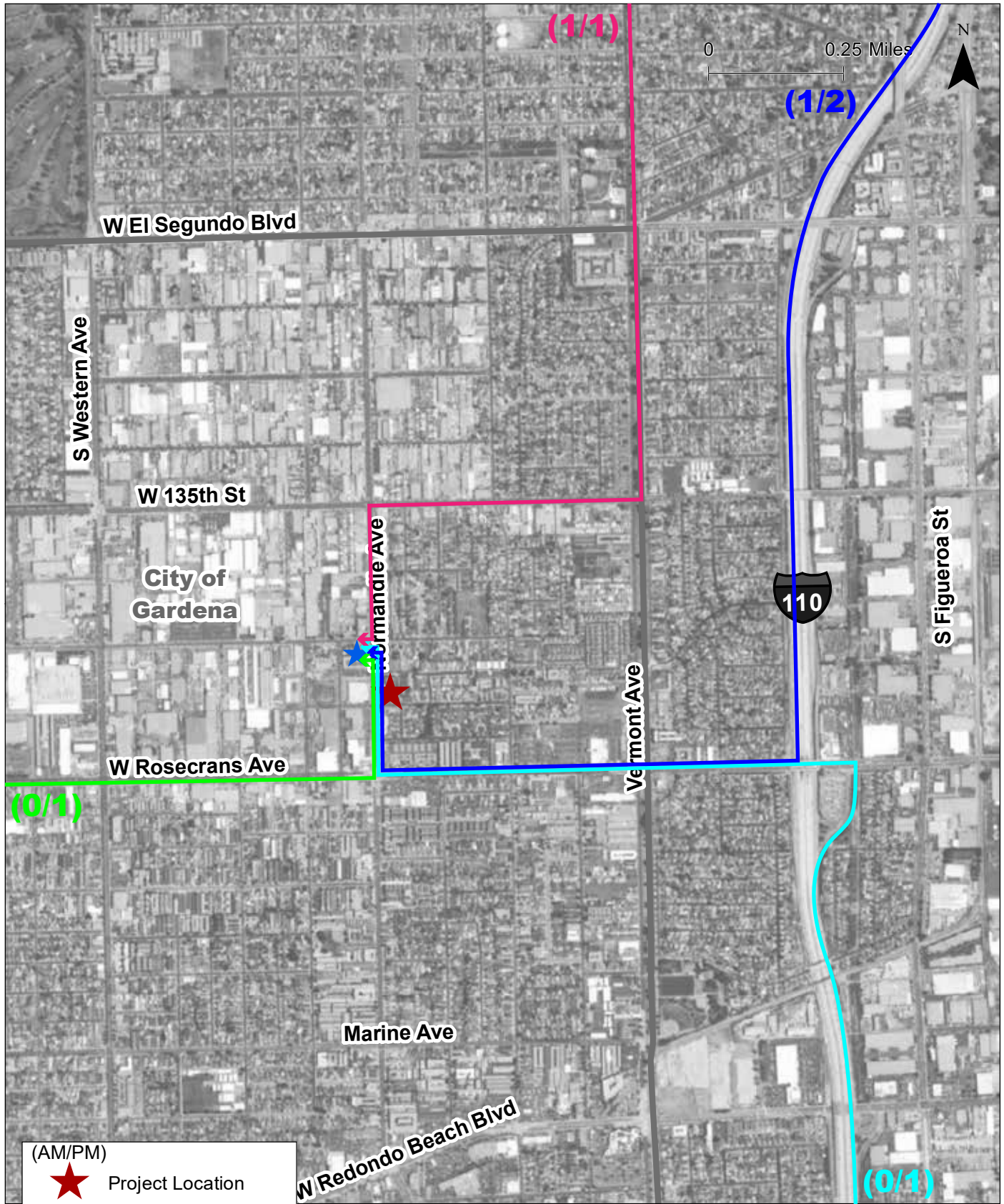
This residential project, which consists of 84 townhomes including 2 affordable units, is undergoing planning review. It is located to the southwest of the intersection of S. Vermont Avenue and W. 135th Street. As shown in Table 4, this project is expected to generate 457 weekday daily vehicle trips, 30 weekday AM peak hour vehicle trips, and 37 weekday PM peak hour vehicle trips. Weekday AM/PM inbound and outbound project trip assignment are shown in Figure 11 and Figure 12.

Table 4: 13615 S. Vermont Avenue Trip Generation Estimate

Trip Generation Rates								
Land Use	Rate	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Multifamily Housing – Mid-Rise (ITE Code 221)	DU	5.44	26%	74%	0.36	61%	39%	0.44
Trip Generation Estimates								
Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Multifamily Housing – Mid-Rise (ITE Code 221)	84 DU	457	8	22	30	23	14	37

Source: Kittelson & Associates, Inc., 2020; Institute of Transportation Engineers, 2017.

Note: DU signifies dwelling units.

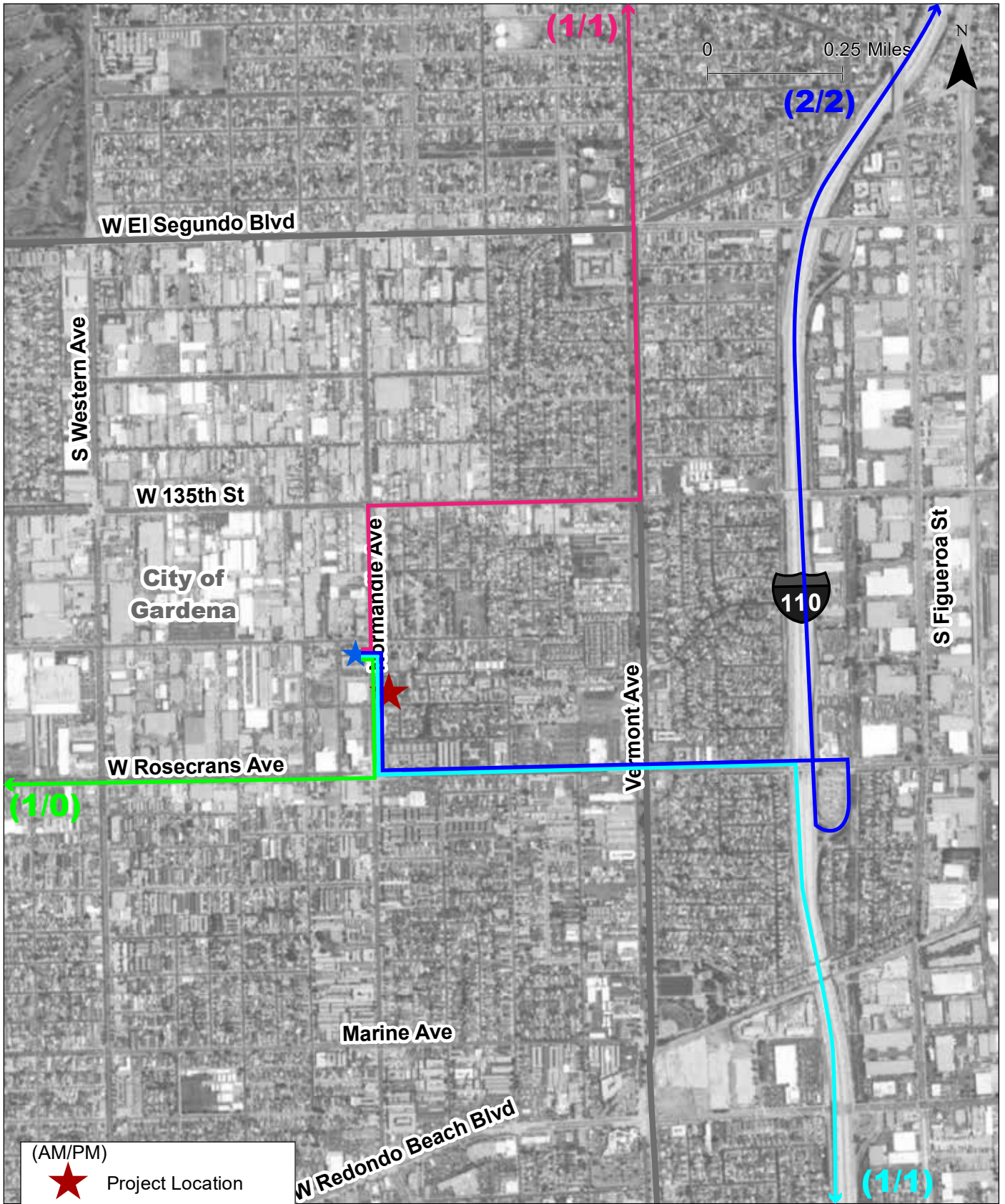


(AM/PM)

- ★ Project Location
- ★ Cumulative Projects
- City of Gardena

**13919 Normandie Ave. Project
Trip Assignment (Inbound)
Gardena, California**

Figure
9



(AM/PM)




- ★ Project Location
- ★ Cumulative Projects
- City of Gardena

**13919 Normandie Ave. Project
Trip Assignment (Outbound)
Gardena, California**

Figure
10



(AM/PM)

-  Project Location
-  Cumulative Projects
-  City of Gardena

**13615 S Vermont Ave. Project
Trip Assignment (Inbound)
Gardena, California**

Figure
11



(AM/PM)

- ★ Project Location
- ★ Cumulative Projects
- City of Gardena

**13615 S Vermont Ave. Project
Trip Assignment (Outbound)
Gardena, California**

Figure
12

1528 W. 134th Street Project

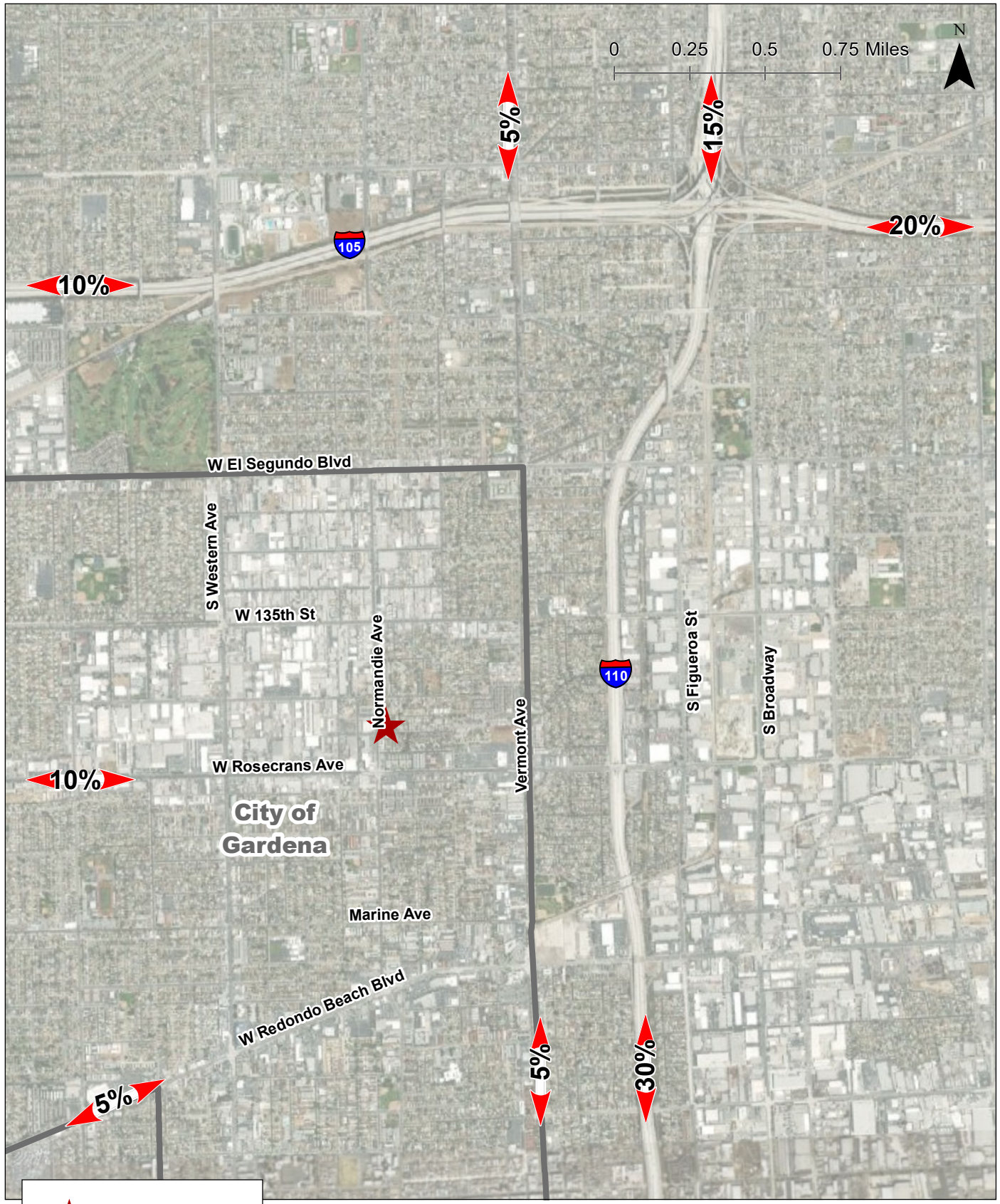
This industrial project, which consists of a new 62,960 square foot (sf) industrial building, is undergoing building and safety plan check. It is located between S. Western Avenue and Normandie Avenue on 134th Street. As shown in Table 5, this project is expected to generate 312 weekday daily vehicle trips, 44 weekday AM peak hour vehicle trips, and 40 weekday PM peak hour vehicle trips. The non-residential worker trip distribution percentages for the area, which were derived from LODES and used to distribute trips to and from the 1528 W. 134th Street project, are shown in Figure 13. Weekday AM/PM inbound and outbound project trip assignment are shown in Figure 14 and Figure 15.



Table 5: 1528 W. 134th Street Project Trip Generation Estimate

Trip Generation Rates								
Land Use	Rate	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
General Light Industrial (ITE Code 110)	TSF	4.96	88%	12%	0.70	13%	87%	0.63
Trip Generation Estimates								
Land Use	Size	Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
General Light Industrial (ITE Code 110)	62.96 TSF	312	39	5	44	5	35	40

Source: Kittelson & Associates, Inc., 2020; Institute of Transportation Engineers, 2017.

Note: TSF signifies thousand square feet.

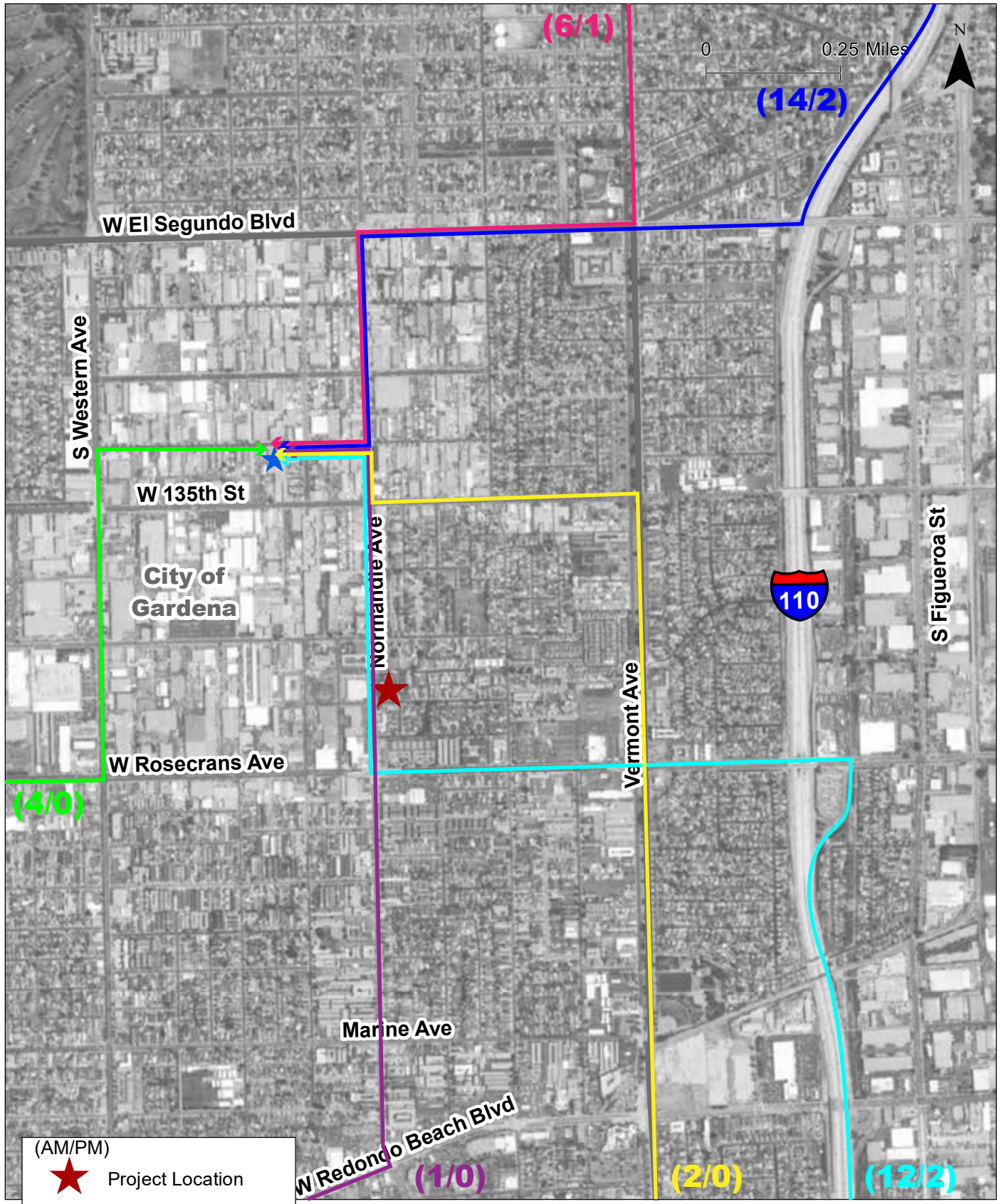


 Project Location
 City of Gardena

**Employee Trip Distribution
Gardena, California**

**Figure
13**

H:\25125048 - Gardena Olson Townhome VMT Analysis\GIS\mxd\Figure 16 - 1528 134th St Trip Assignment (Inbound).mxd - migo - 4:39 PM 7/22/2020

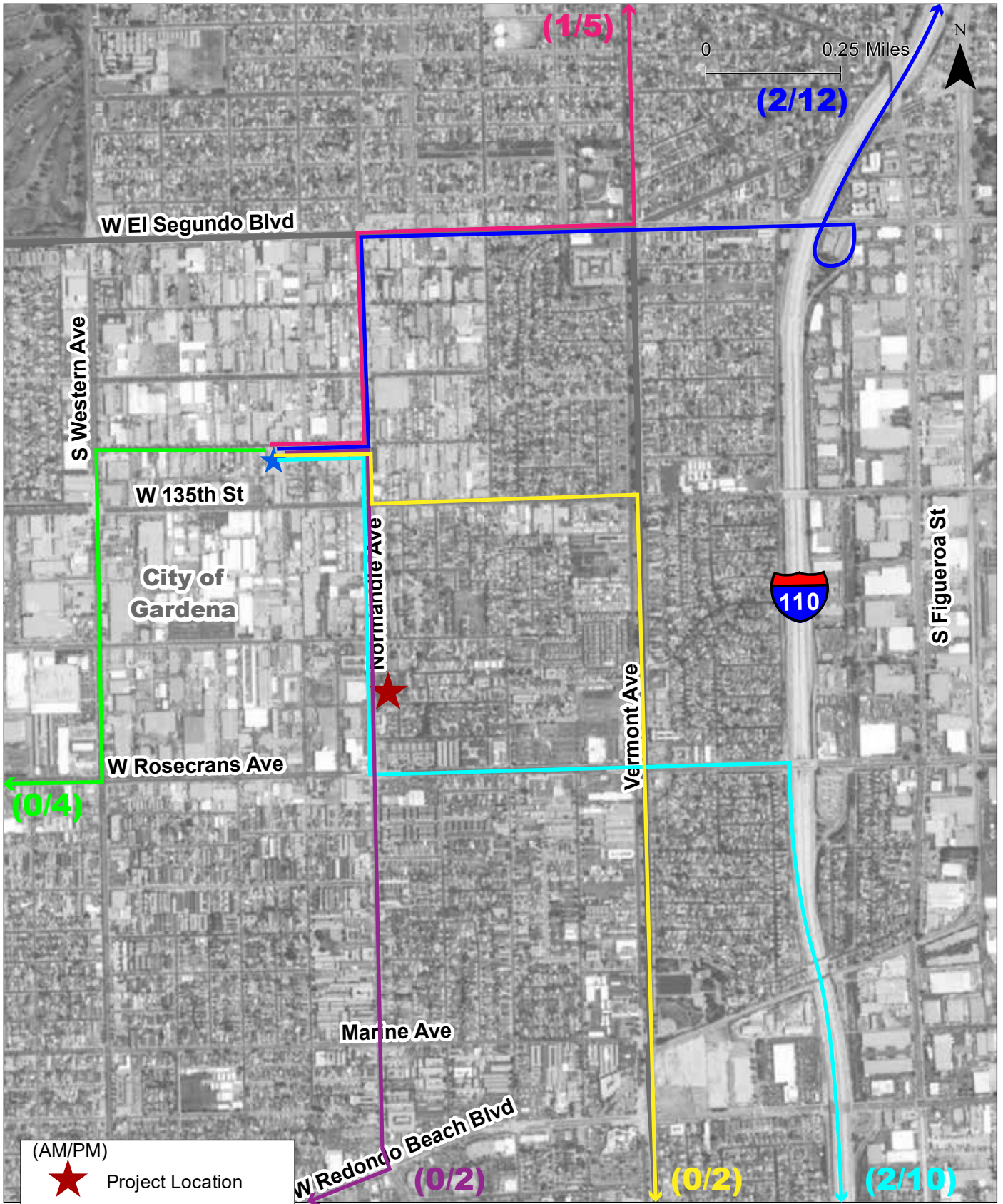


(AM/PM)	
★	Project Location
★	Cumulative Projects
□	City of Gardena

**1528 W. 134 St. Project
Trip Assignment (Inbound)
Gardena, California**

Figure
14

H:\25125048 - Gardena Olson Townhome VMT Analysis\GIS\mxd\Figure 17 - 1528 134th St Trip Assignment (Outbound).mxd - mgao - 4:39 PM 7/22/2020



(AM/PM)	
	Project Location
	Cumulative Projects
	City of Gardena

**1528 W. 134 St. Project
Trip Assignment (Outbound)
Gardena, California**

Figure
15

SUMMARY AND CONCLUSIONS

The following summarizes the findings of the local transportation assessment, based on the trip generation, distribution, and assignment analysis of the proposed project and cumulative projects:

- The proposed project would consist of 50 three-story attached townhomes in six buildings. Vehicular access and pedestrian access would be provided by a single driveway on 141st Street at the south side of the site.
- The proposed project is expected to generate 272 weekday daily vehicle trips, 18 weekday AM peak hour vehicle trips, and 22 weekday PM peak hour vehicle trips. No credit was taken for the displacement of the landscape nursery that is currently located at the project site.
- Project trips are expected to be distributed to major commute destinations such as Gardena, Los Angeles Airport, Downtown Los Angeles, Torrance, and Compton.
- Four cumulative projects within a half mile of the proposed project site were also analyzed:
 - The KB Home Stonefield project, which is located at 1017 West 141st Street and 14031 South Vermont Avenue, consists of 63 three-story townhomes. It is expected to generate 343 weekday daily vehicle trips, 23 weekday AM peak hour vehicle trips, and 28 weekday PM peak hour vehicle trips.
 - The 13919 Normandie Avenue project consists of 20 single room occupancy units and is expected to generate 109 weekday daily vehicle trips, 7 weekday AM peak hour vehicle trips, and 9 weekday PM peak hour vehicle trips.
 - The 13615 S. Vermont Avenue project consists of 84 townhomes (including two affordable units) and is expected to generate 457 weekday daily vehicle trips, 30 weekday AM peak hour vehicle trips, and 37 weekday PM peak hour vehicle trips.
 - The 1528 W. 134th Street project consists of 62,960 sf of industrial uses and is expected to generate 312 weekday daily vehicle trips, 44 weekday AM peak hour vehicle trips, and 40 weekday PM peak hour vehicle trips.