

Appendix R: Travel Patterns

To: San Diego Association of Governments and Caltrans District 11
From: North County Comprehensive Multimodal Corridor Plan Project Team
Date: October 2022
Subject: North County Comprehensive Multimodal Corridor Plan – Travel Patterns

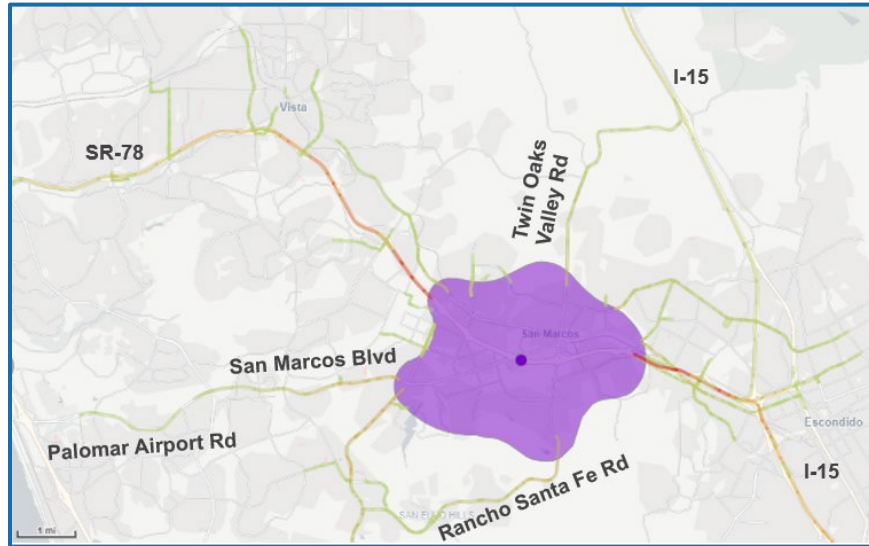
Overview

The North County Comprehensive Multimodal Corridor Plan (CMCP) identifies integrated transportation solutions that enhance the way people travel throughout North County. North County's location at the center of the San Diego, Riverside, and Orange counties captures travel from the surrounding region into the study area. Travel from outside North County increases the need for more efficient regional transportation within the study area. This memo includes travel demand and patterns to and from the 6 identified Mobility Hubs within North County. It also includes annual estimated trip length and duration analysis.

North County's Mobility Hub Travel Patterns

The following six Mobility Hubs have been identified as important areas in the community with regards to both activity and connectivity. This section describes the role of each Mobility Hub in the North County community and describes the travel demand and top paths to and from the Mobility Hub. The travel demand data represents the total daily trips to, from, and within the Mobility Hub. The top corridor paths to and from each Mobility Hub have also been highlighted in a figure. These paths show the roads most heavily used from travel to and from the Mobility Hub and can provide insight on where access could be improved.

SAN MARCOS MOBILITY HUB

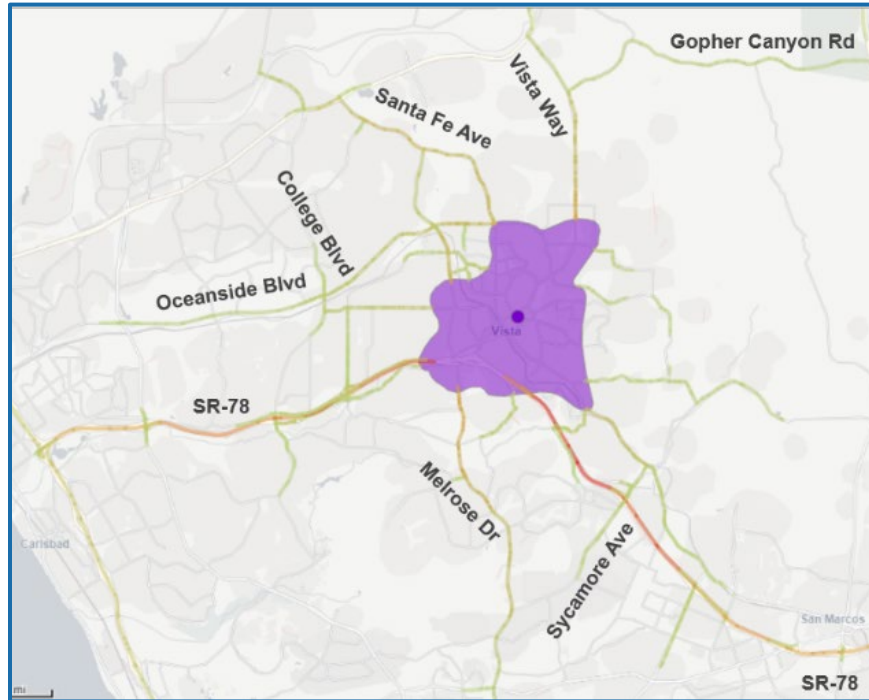


San Marcos is a vibrant area, designated as a Tier 2 Employment Center. This includes major employers such as Kaiser San Marcos Medical Center and TrueCare San Marcos. Educational and institutional centers in this area include the California State University at San Marcos, Palomar College, and the San Marcos Civic Center. In addition to the employment, education, and retail centers within this area, transit is abundant in the area with three SPRINTER stations located parallel to SR 78 near this mobility hub.

San Marcos Mobility Hub Travel Demand	Percent
Within Mobility Hub	24.4%
Within Study Area	73.7%
Inland San Diego	6.4%
Coastal San Diego	8.4%
Southern San Diego	2.0%
Riverside County/San Bernardino County	4.7%
Imperial County/East County	2.3%
Orange County/LA County	2.3%

Top Corridor Paths to and from the San Marcos Mobility Hub
<ul style="list-style-type: none"> • SR 78 • I-15 • San Marcos Boulevard • Mission Road • Santa Fe Road

VISTA MOBILITY HUB



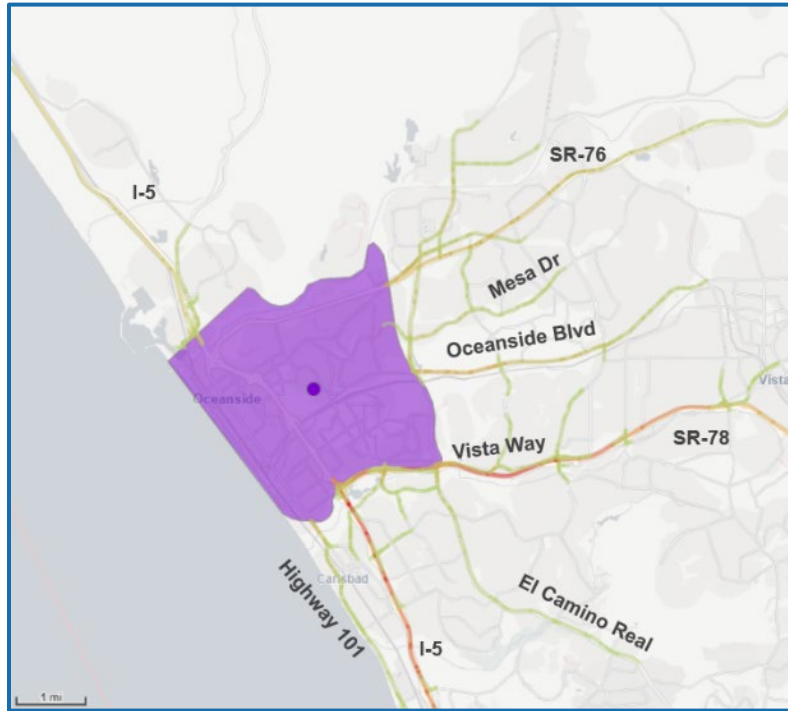
The Vista Mobility Hub is an emerging mixed-use and suburban area with a SPRINTER station in the middle. Destinations within and near the activity center include Vista Village (commercial and retail hub), Main Street (a revitalized dining district), and other community-based destinations such as three Vista Community Clinics.

Vista Mobility Hub Travel Demand	Percent
Within Mobility Hub	25.6%
Within Study Area	82.4%
Inland San Diego	3.0%
Coastal San Diego	5.4%
Southern San Diego	1.3%
Riverside County/San Bernardino County	3.0%
Imperial County/East County	0.8%
Orange County/LA County	4.0%

Top corridor paths to and from the Vista Mobility Hub:

- SR 78
- Vista Way
- Melrose Drive
- Santa Fe Avenue
- Oceanside Boulevard

OCEANSIDE MOBILITY HUB



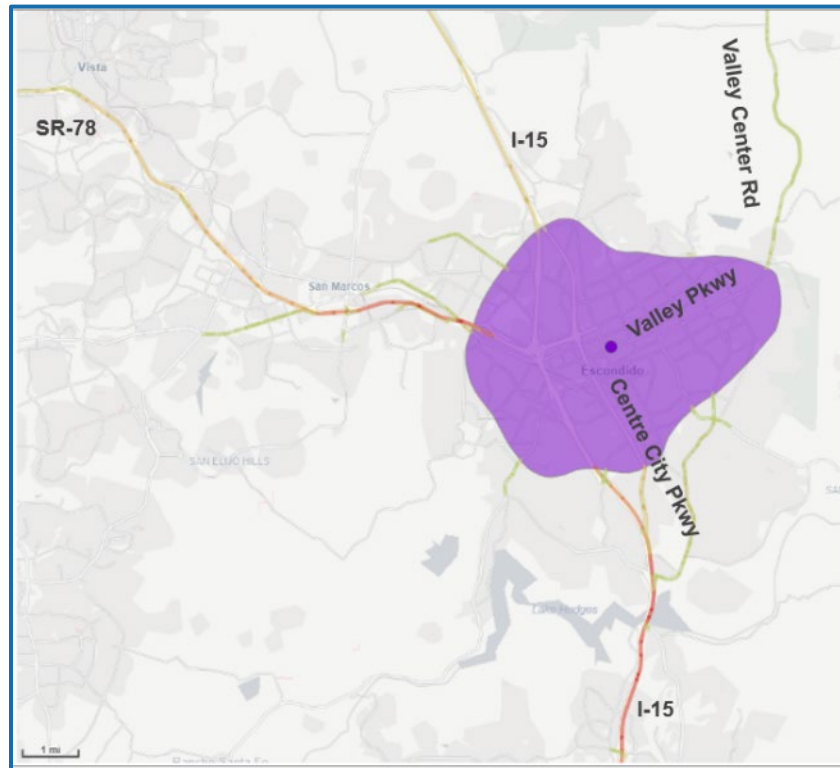
Oceanside’s larger activity generator is its oceanfront beaches. Downtown Oceanside’s retail and commercial center is an attraction both locally and regionally. Transit connects inland Oceanside with the beach front area via SPRINTER stations.

The Oceanside Mobility Hub also attracts the largest portion of trips within the study area at 84%. Furthermore, this mobility hub has the second-highest number of trips originating within it with 38% of trips originating and ending within the zone. Regional trips to this mobility hub are heavily weighted toward Orange County (6%) and Coastal San Diego (4.5%). This is apparent in I-5 and Highway 101 being the top routes used to access this zone. This mobility hub also contains the Oceanside Transit Center where people can use the COASTER, Amtrak, and Metrolink service to connect to destinations outside of the study area and beyond the region. Additionally, SR 78 is a top route for travel, acting as a conduit within the study area. This can be seen in the figure above. Key routes to the mobility hub include El Camino Real, Highway 101, Oceanside Boulevard, and Vista Way.

Oceanside Mobility Hub Travel Demand	Percent
Within Mobility Hub	33.1%
Within Study Area	73.7%
Inland San Diego	2.2%
Coastal San Diego	7.7%
Southern San Diego	2.0%
Riverside County/San Bernardino County	2.8%
Imperial County/East County	0.4%
Orange County/LA County	10.8%

Top corridor paths to and from the Oceanside Mobility Hub :
<ul style="list-style-type: none"> • SR 78 • I-5 • SR 76 • Oceanside Boulevard • Mission Road • El Camino Real • San Marcos Boulevard

ESCONDIDO MOBILITY HUB

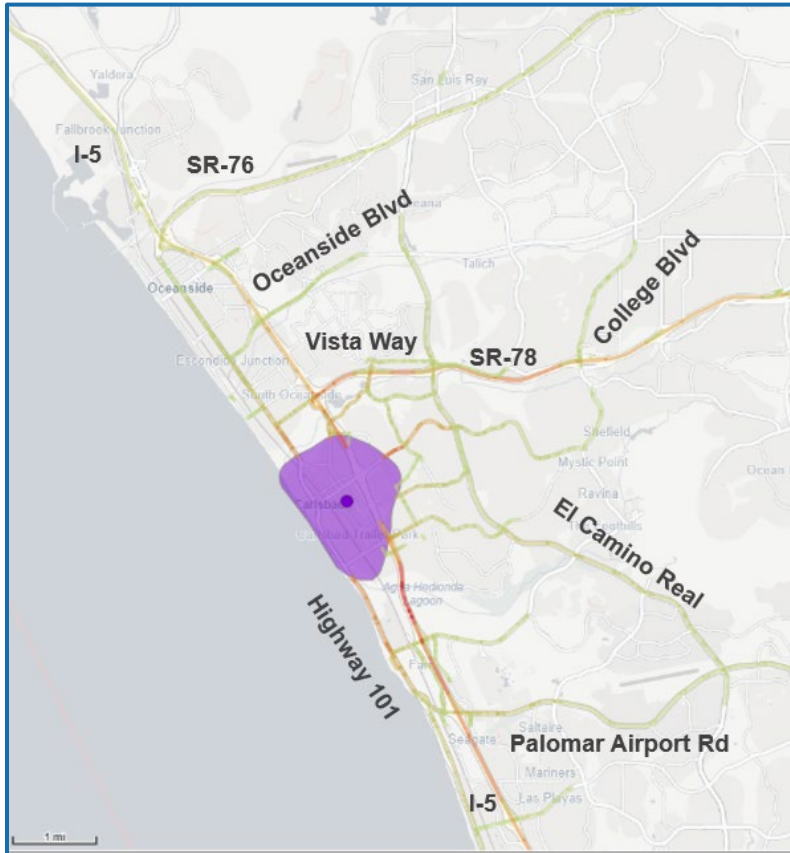


Escondido includes the major intersection of I-15 and SR 78. Near this hub is the Escondido Transit Center which hosts a SPRINTER station. Within close proximity is Central Escondido, a vibrant area of retail, commercial, and educational uses (San Diego Children’s Discovery Museum) in addition to a large community park. The area is identified as a Tier 2 Employment Center, which includes the Palomar Medical Center.

Escondido Mobility Hub Travel Demand	Percent
Within Mobility Hub	44.5%
Within Study Area	66.5%
Inland San Diego	11.0%
Coastal San Diego	6.4%
Southern San Diego	2.6%
Riverside County/San Bernardino County	4.1%
Imperial County/East County	7.8%
Orange County/LA County	1.4%

Top corridor paths to and from the Escondido Mobility Hub:
<ul style="list-style-type: none"> • SR 78 • I-15 • Center City Parkway • Valley Parkway • Mission Road

CARLSBAD VILLAGE MOBILITY HUB

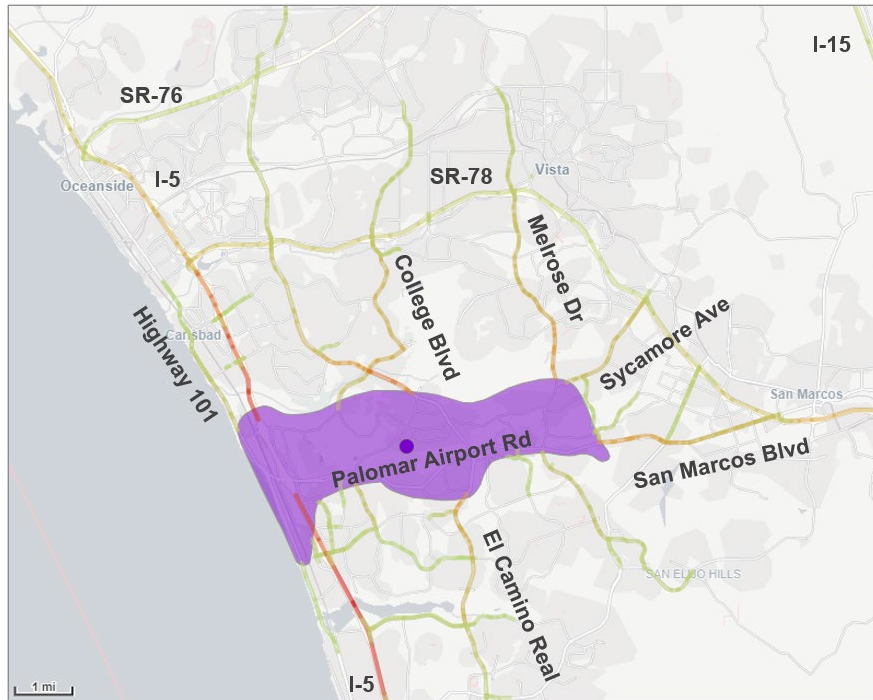


Carlsbad Village is a coastal community, with many North County and regional trips visiting local beaches, such as Tamarack Beach. Carlsbad Village is a commercial center for coastal village retail and shopping. The City of Carlsbad is investing in bicycle infrastructure to support cycling around Carlsbad Village and beach access points. This mobility hub also contains a COASTER station that can help connect users to destinations outside of the study area such as Downtown San Diego.

Carlsbad Village Mobility Hub Travel Demand	Percent
Within Mobility Hub	16.1%
Within Study Area	73.3%
Inland San Diego	2.7%
Coastal San Diego	14.7%
Southern San Diego	2.2%
Riverside County/San Bernardino County	1.8%
Imperial County/East County	0.5%
Orange County/LA County	4.6%

Top corridor paths to and from the Carlsbad Village Mobility Hub:
<ul style="list-style-type: none"> • I-5 • SR 78 • El Camino Real • Palomar Airport Road • Oceanside Boulevard

CARLSBAD PALOMAR MOBILITY HUB



Carlsbad Palomar is designated as a Tier 2 Employment Center due to its industrial area and the McClellan-Palomar Airport. Additional activity generators in this area include the Legoland Resort and Theme Park. Transit connects in this area via the Coaster Station located along the oceanfront.

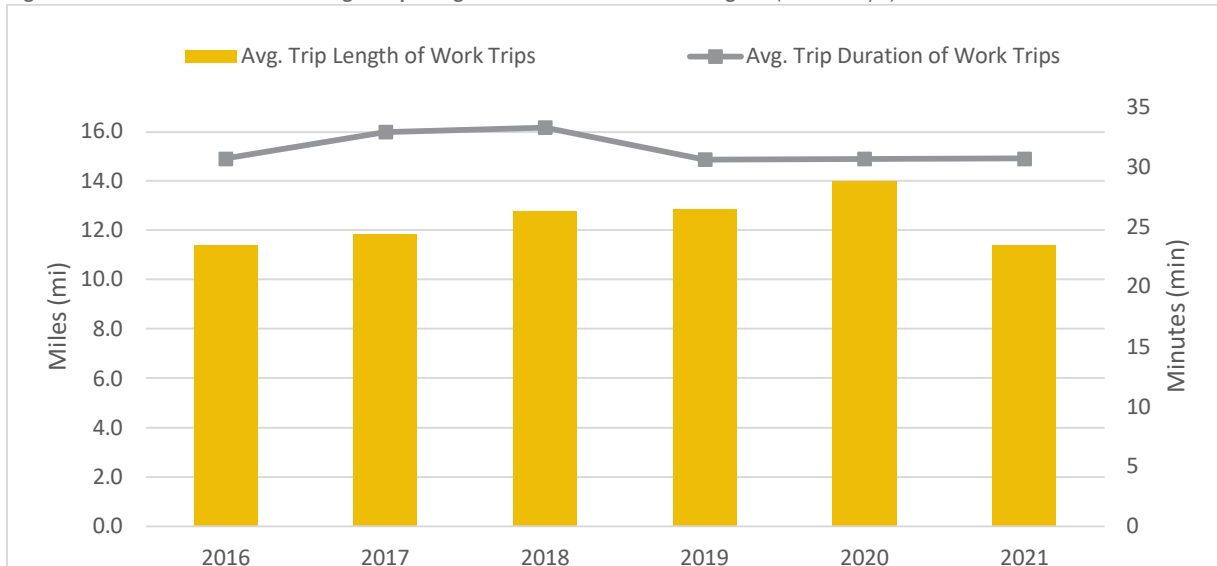
Carlsbad Palomar Mobility Hub Travel Demand	Percent
Within Mobility Hub	16.8%
Within Study Area	62.5%
Inland San Diego	5.7%
Coastal San Diego	19.6%
Southern San Diego	3.7%
Riverside County/San Bernardino County	3.0%
Imperial County/East County	0.6%
Orange County/LA County	4.9%

Top corridor paths to and from the Carlsbad Palomar Mobility Hub :
<ul style="list-style-type: none"> • I-5 • SR 78 • El Camino Real • College Boulevard • Palomar Airport Road • Melrose Drive • San Marcos Boulevard • Sycamore Avenue

TRIP LENGTH AND DURATION

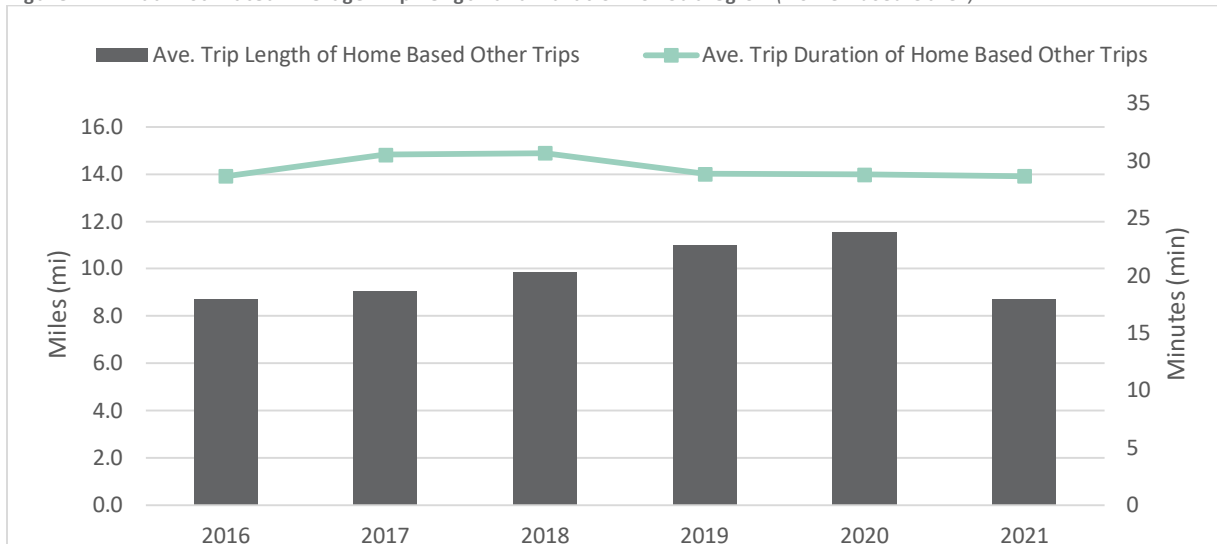
The following tables document the average trip length (in miles) and duration (in minutes) throughout the subregion. The tables are separated by type of trip: Home to Work, Home Based Other, and Non-Home Based.

Figure 1: Annual Estimated Average Trip Length and Duration for Subregion (Work Trips)



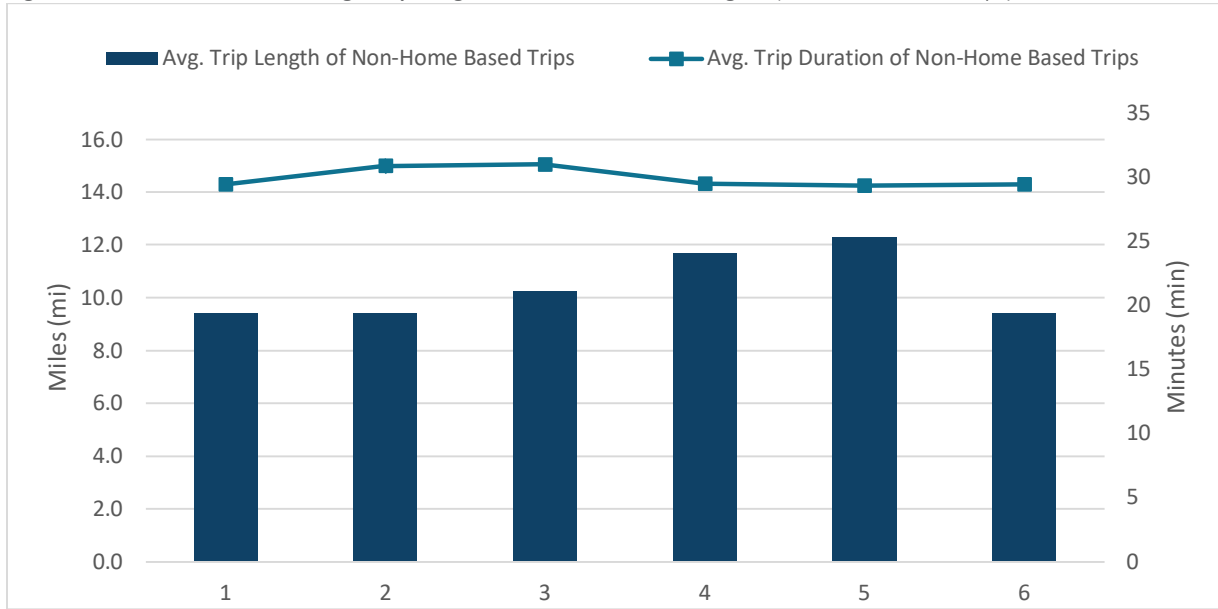
Source: Streetlight Analytics

Figure 2: Annual Estimated Average Trip Length and Duration for Subregion (Home Based Other)



Source: Streetlight Analytics

Figure 3: Annual Estimated Average Trip Length and Duration for Subregion (Non-Home Based Trips)



Source: Streetlight Analytics