

TAM Origin and Destination Report

Prepared for:
Transportation Authority of Marin

April 3rd, 2018

WC16-3330

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STUDY PURPOSE

The purpose of the TAM Origin and Destination study was to collect origin-destination (OD) data specific to Marin County to provide an updated understanding of Marin County travel patterns and to support the development of the TAM Travel Demand Model (TAMDM). A primary purpose of the OD data collection is to understand regional travel patterns on our national highway system and in addition, assess local travel behaviors generated from communities and towns within Marin County.

Traditionally, gaining an understanding of regional travel behavior patterns would involve traffic count collection to quantify the number of vehicles crossing the county line. The data would then be supplemented with origin-destination and demographic information obtained from license plate matching and a subsequent mail survey sent to the registration address of observed inter-county vehicles. Fehr & Peers has conducted a number of these studies and has typically received a small sample of user-response data (response rates have ranged in the one to two percent range) based on a single day of observation at a very high cost per sample.

Recognizing the limitations of the traditional approach, this study uses "Big Data" to obtain OD data passively and anonymously from mobile devices. This allows for the quantification of the flow of devices within, to, and from a specific geographic area for all types of trips that occur, including visitors to and trips passing through the area. This data provides trip making information for a very large sample of trips, including the inferred origin and destination of individual trips, in a format nearly identical to that used by travel demand models for a very small cost per sample. This data collection method has other benefits such as not requiring set up time or human transcribing of observed field data and can be collected for any length of time that has occurred in the past. The use of "Big Data" to quantify and determine the origin and destination of inter-county trips has been compared to data collected using traditional methods, resulting in a high level of confidence in this approach.

An additional purpose of this study is to obtain origin-destination data for trips that occur within Marin County. This data has traditionally been very difficult to obtain due to multiple access routes in and out of communities, and high costs of detailed surveying. Quantifying inter-county travel has traditionally been much easier to obtain as there are usually a limited number of routes in and out of a county and inter-county trips are typically a small percentage of total trips generated by a county.

An additional goal of the data collection plan was to obtain the "work" location of commuters who live in Marin County. This data has traditionally been obtained through Journey-to-Work commuting data provided by the United States Census Bureau. While this data is readily available for areas within Marin County, the data represents estimates that are generally more reliable for large geographic areas with



large populations due to the sample size and estimation techniques applied. For this study the goal was to understand commute patterns for commuters who lived in specific areas of Marin County and to determine how and why they may differ. Therefore, cellular data was used to obtain the “work” location of commuters in specified “home” locations, whether that be within the same “home” zone or a specified “work” zone outside their “home” zone or Marin County.

STUDY APPROACH AND METHODOLOGY

The first step of the OD Data Collection study was to obtain existing travel behavior data to understand what data was available for Marin County. To supplement and compliment this data, mobile device data was obtained from AirSage, INRIX, and StreetLight Data, which provided a very large sample of real-world observed OD information. This data was obtained for a zone system based on the regional travel demand model zone system that will be used for the development of the TAM Demand Model (TAMDM). The mobile device OD data was then refined using existing traffic count data and checked for reasonableness against existing United States Census Bureau data, reducing the limitations of the data.

In order to obtain OD data for travel patterns associated with the primary and secondary purposes of this study, three types of mobile device data were obtained.

1. Countywide origin-destination data was obtained to provide the number of trips between each zone in the geographic layer (which covered the entire Bay Area) to every other zone in the geographic layer.
2. Select-link origin-destination data was obtained to provide the number of trips between each zone that traveled through a selected roadway segment.
3. Home/work location data was obtained to determine the “work” location of commuters who live in specified “home” zones.

OD data from the three mobile device data sources was then analyzed and summarized to draw a set of conclusions and key findings regarding travel patterns within, to, from, and through Marin County. A robust, comprehensive dataset, specific to Marin County, is included in this report.

This report is divided into five chapters as described below:

- **Study Purpose** discusses the purpose of this report.
- **Study Approach and Methodology** discusses the organization of this report and provides an overview of the study methodology and mobile device data including advantages and limitations of the data.
- **Existing Travel Behavior Data** provides a summary of existing and historic Marin County travel behavior data that was gathered to refine and check the reasonableness of the mobile device-generated OD data. Data sources include 2009-2013 American Community Survey (ACS), 2010 California Household Travel Survey (CHTS), and transit on-board surveys conducted throughout the SF Bay Area between 2004 and 2015.

- **Mobile Device Data** provides a summary of the three types of origin-destination data provided by StreetLight Data.
- **Conclusions** provides a list of key questions answered from the existing travel behavior and mobile device data collected as part of this study.

Below is an alphabetical list of terms and acronyms with accompanying definitions that will be discussed in this report.

- Mobile device data – a subset of “Big Data” that uses anonymous, archival location data from mobile devices (i.e. cellular phones, global positioning systems, on-board or in hand navigation systems) to help planners answer important questions about their communities that were previously difficult, expensive, and time consuming to answer.
- MTC (Metropolitan Transportation Commission) - the transportation planning, financing and coordinating agency for the nine-county San Francisco Bay Area.
- TAZ (Traffic Analysis Zone) - is the unit of geography most commonly used in conventional transportation planning models to account for land use and socio-economic data.
- Travel Model Two – an activity-based travel demand model maintained by the Metropolitan Transportation Commission covering the nine-county San Francisco Bay Area.
- VMT (Vehicle Miles Traveled) - a measurement of miles traveled by vehicles within a specified region for a specified time period.
- Cut-through traffic – traffic that passes through an area or region with stopping on roadways not designated or designed for regional travel.
- Select-link analysis – the analysis of trips that travel through a select roadway segment (such as the Golden Gate Bridge) rather than through a select area such as Marin County or San Rafael.
- Origin-destination data – data associated with where trips start (origin) and end (destination) as opposed to data associated with locations where trips travelled through (traffic count data).

KEY FINDINGS

The TAM Origin and Destination study collected OD data specific to Marin County to provide an updated understanding of Marin County travel patterns and to support the development of the TAM Travel Demand Model (TAMDM). OD data was obtained passively and anonymously from mobile devices, providing a very large sample of empirical data that included the origins and destination of individual trips as well as the home and work locations associated with individual devices. Analysis of this data

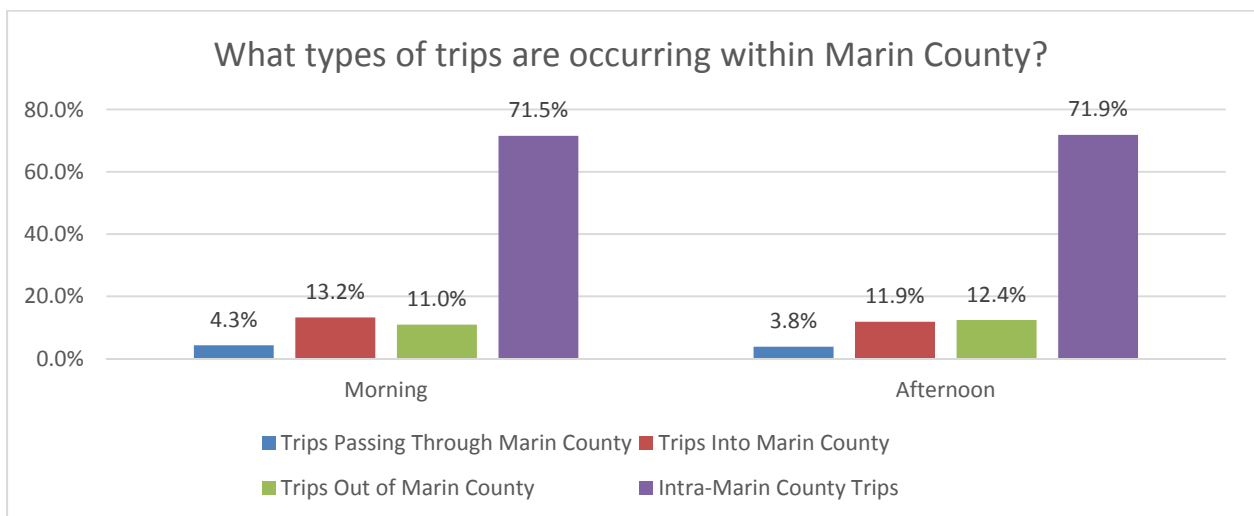
provided an understanding of Marin inter-county travel patterns on our national highway system as well as local travel behaviors generated from communities and towns within Marin County.

Below is an abbreviated list of key questions answered by the TAM Origin and Destination study – see the “Conclusions” section below for more information.

What types of trips are occurring within Marin County?

- Approximately 72 percent of total trips are intra-Marin County trips, four percent of total trips are passing through Marin County, and 24 percent of total trips are inter-county trips in the morning and afternoon peak periods.

Countywide Trips by Trip Type



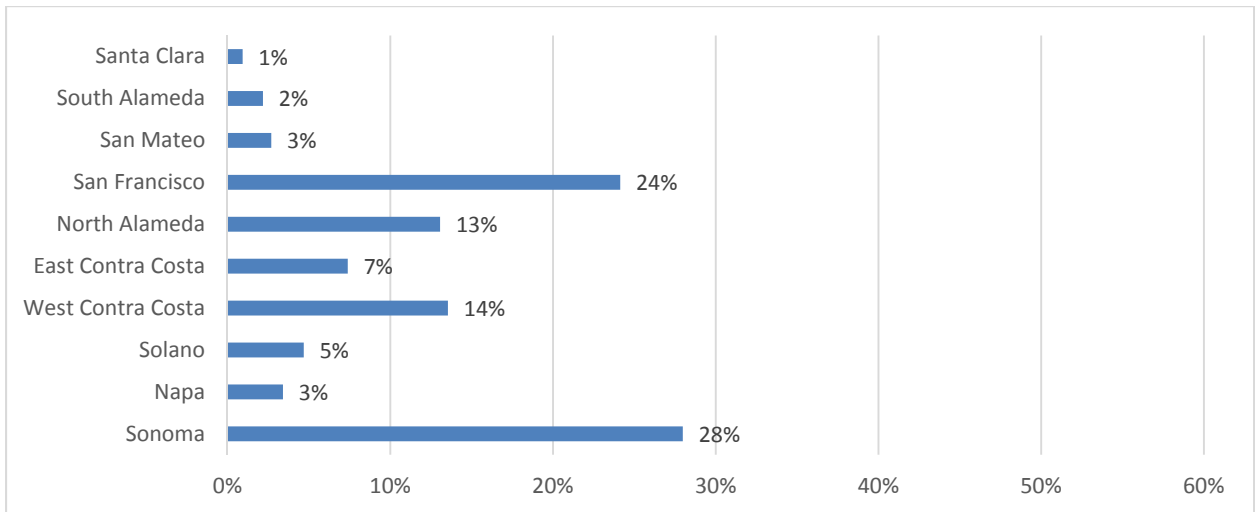
Does Marin County import or export workers?

- Traffic count data indicates that Marin County imports workers, with 9,000 more vehicles or 27 percent more traffic coming into Marin County in the morning peak period and 3,000 more vehicles or eight percent more traffic leaving Marin County in the afternoon peak period.
- Through a comparison of “trips into Marin County” and “trips out of Marin County,” mobile device data indicates that in the morning peak period Marin County imports 10,647 trips (and exports 4,990 trips) from Sonoma and other North Bay counties on US 101 and SR 37, exports 15,865 trips (and imports 7,894 trips) to San Francisco County on US 101, and imports 11,750 trips (and exports 4,235 trips) from the East Bay on I-580.

Where are morning peak period trips into Marin County coming from?

- Approximately 52 percent of morning peak period trips into Marin County are coming from Sonoma (24 percent) or San Francisco (28 percent) counties, while 14 percent are coming from West Contra Costa County and 13 percent are coming from North Alameda County.

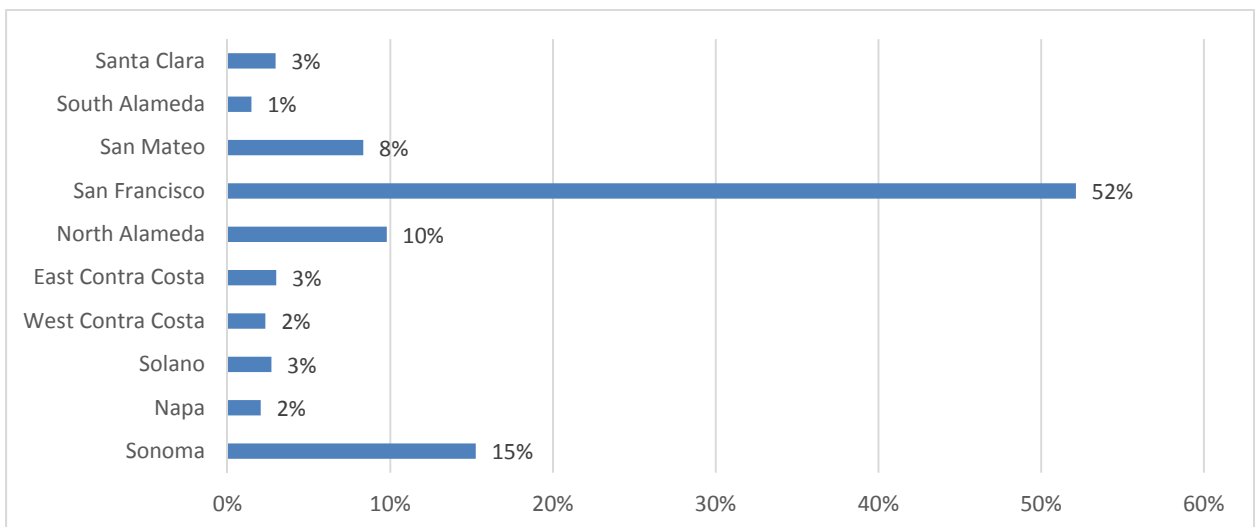
AM Peak Period Trips into Marin County



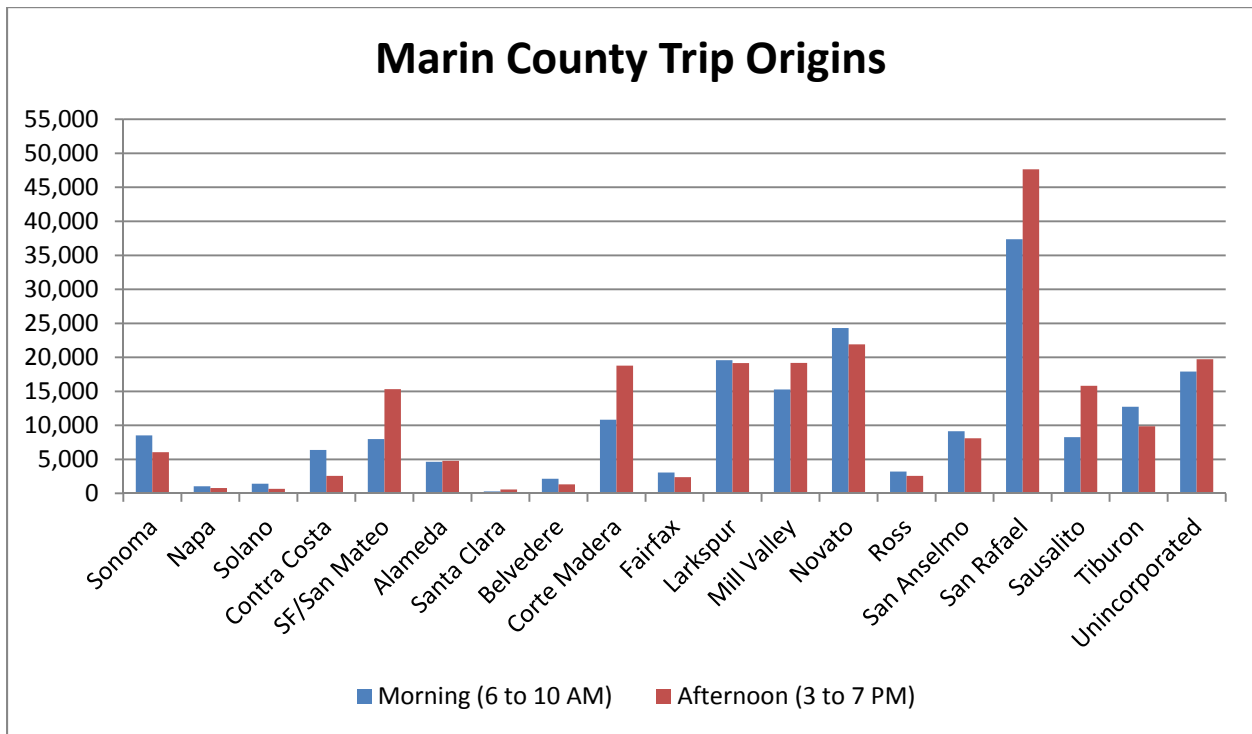
Where are morning peak period trips out of Marin County going to?

- Approximately 67 percent of all morning peak period trips out of Marin County are going to Sonoma (15 percent) or San Francisco (52 percent) counties, while ten percent are going to North Alameda County and eight percent are going to San Mateo County.

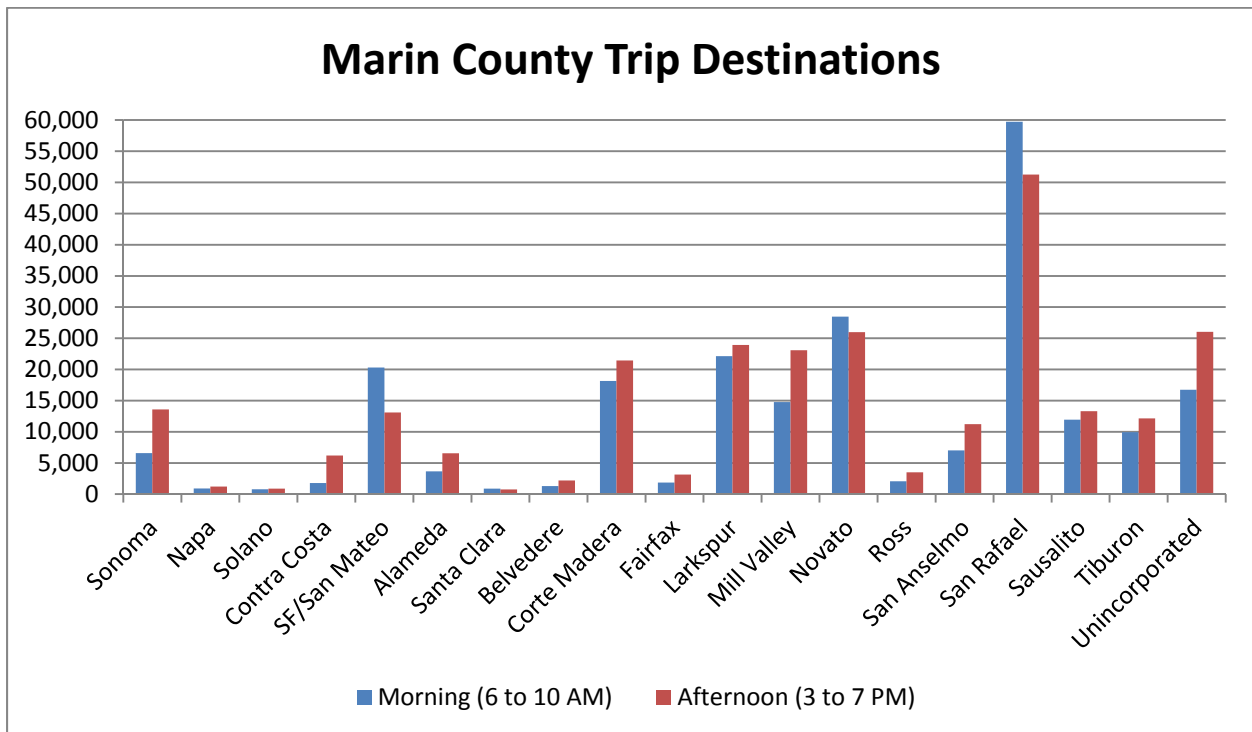
AM Peak Period Trips Out of Marin County



Where are Marin County trips originating?



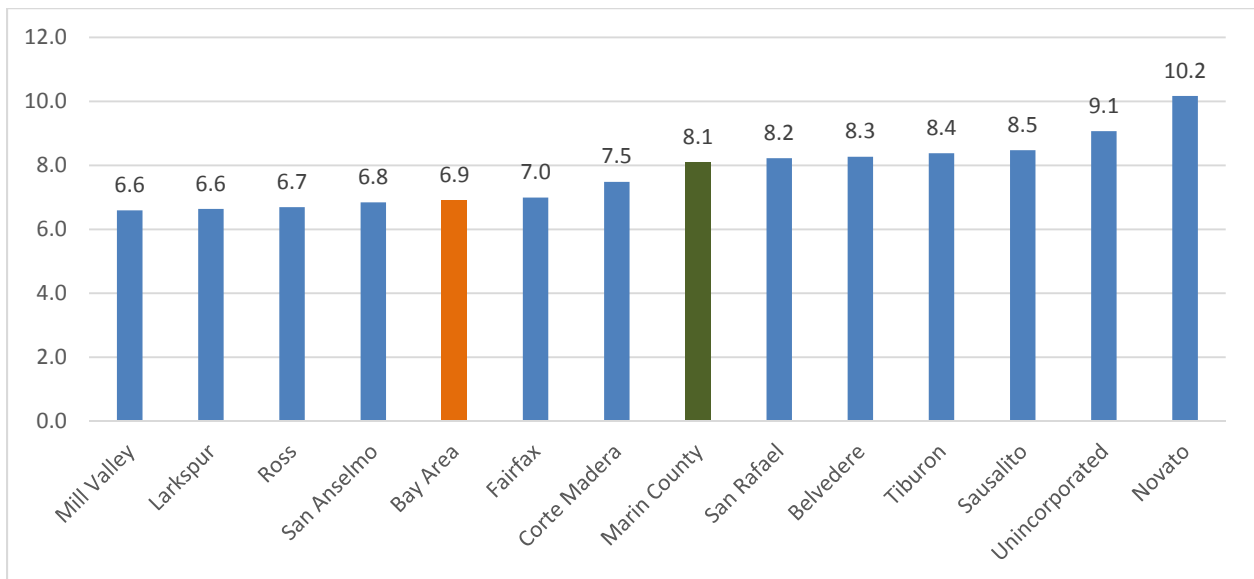
Where are the destinations of Marin County trips?



What is the average daily trip length of Marin County trips? How does it vary by city? How does it compare to the Bay Area average?

- The average daily trip length for Marin County trips is 8.1 miles, 17 percent longer than the average daily trip length for Bay Area trips.
- Novato has the longest average daily trip length at 10.2 miles and Mill Valley has the shortest average daily trip length at 6.6 miles.

Average Daily Trip Lengths (Miles)



What types of trips are occurring on the Richmond-San Rafael Bridge?

- Approximately 16 percent of trips are passing through Marin County, 62 percent of trips are travelling into Marin County, and 22 percent of trips are travelling out of Marin County in the morning peak period.

What types of trips are occurring on the Golden Gate Bridge?

- Approximately 21 percent of trips are passing through Marin County, 26 percent of trips are travelling into Marin County, and 53 percent of trips are travelling out of Marin County in the morning peak period.

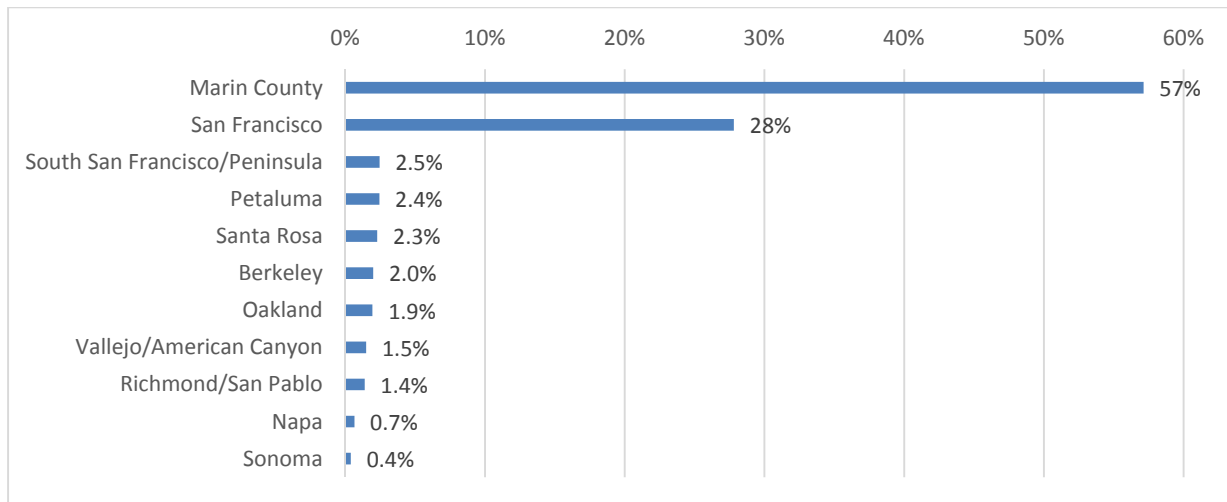
What types of trips are occurring at the Marin/Sonoma County Line (US 101 and SR 37)?

- Approximately 40 percent of trips are passing through Marin County, 41 percent of trips are travelling into Marin County, and 19 percent of trips are travelling out of Marin County in the morning peak period.

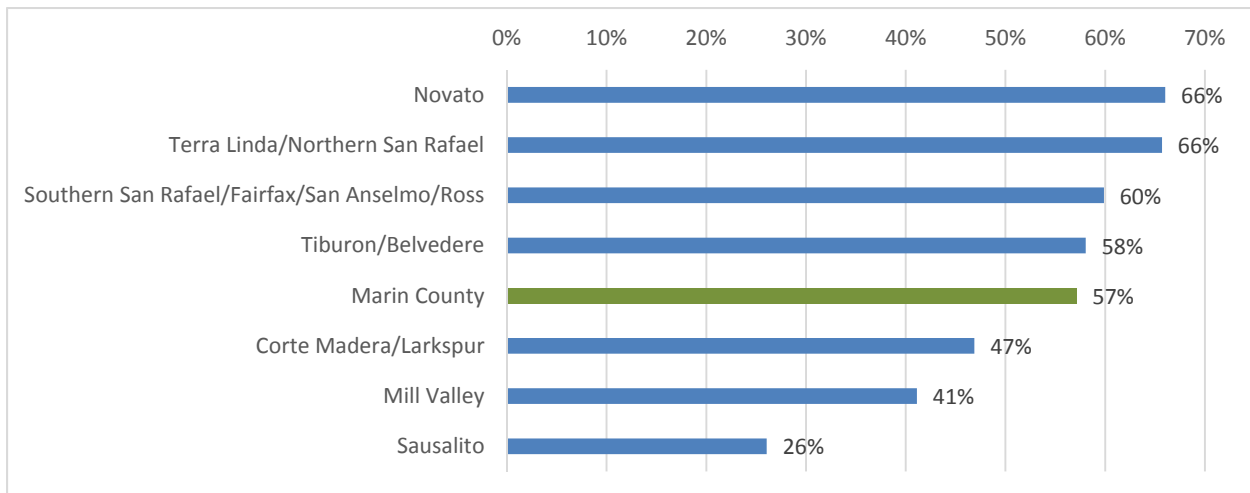
Where do Marin County residents work? How does it vary by city?

- Census data indicates there are approximately 120,000 workers who live in Marin County with approximately 34 percent travelling outside of Marin County for work (28 percent of residents work in San Francisco County).
- Factoring of the census data based on the home and work zone data indicates that approximately 70,000 Marin County residents work in Marin County while approximately 34,000 work in San Francisco County.
- The city with the highest percentage of residents working in San Francisco is Sausalito (57 percent) and the city with the lowest percentage of residents working in San Francisco is Terra Linda/Northern San Rafael (16 percent)

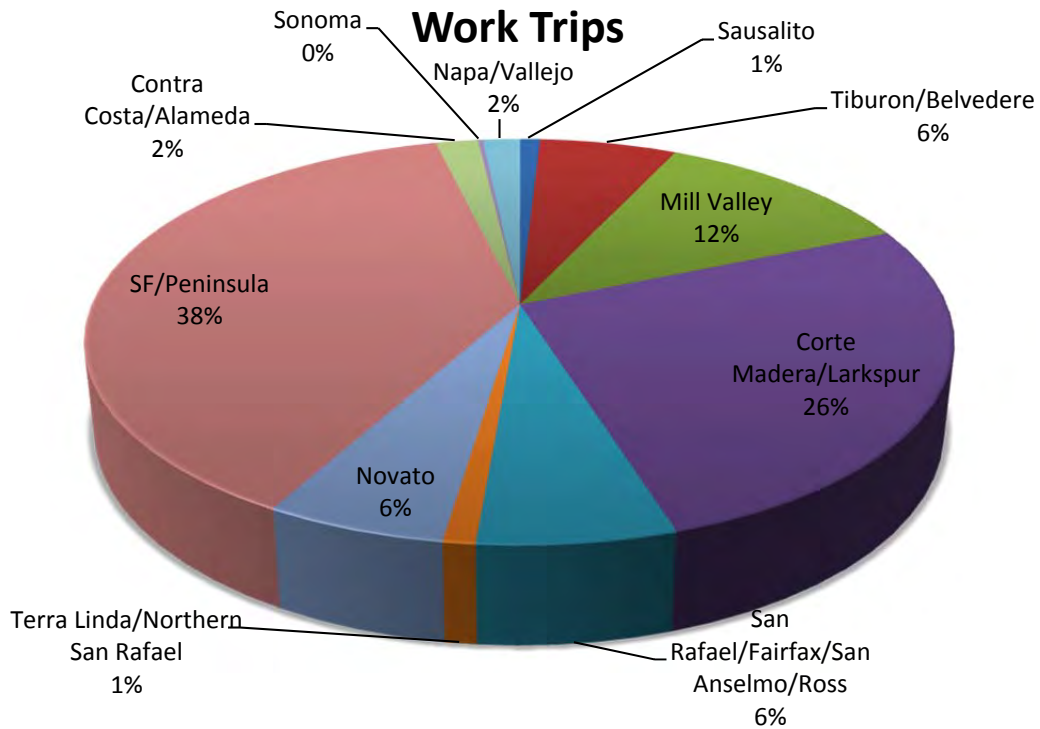
Where do Marin County Residents Work?



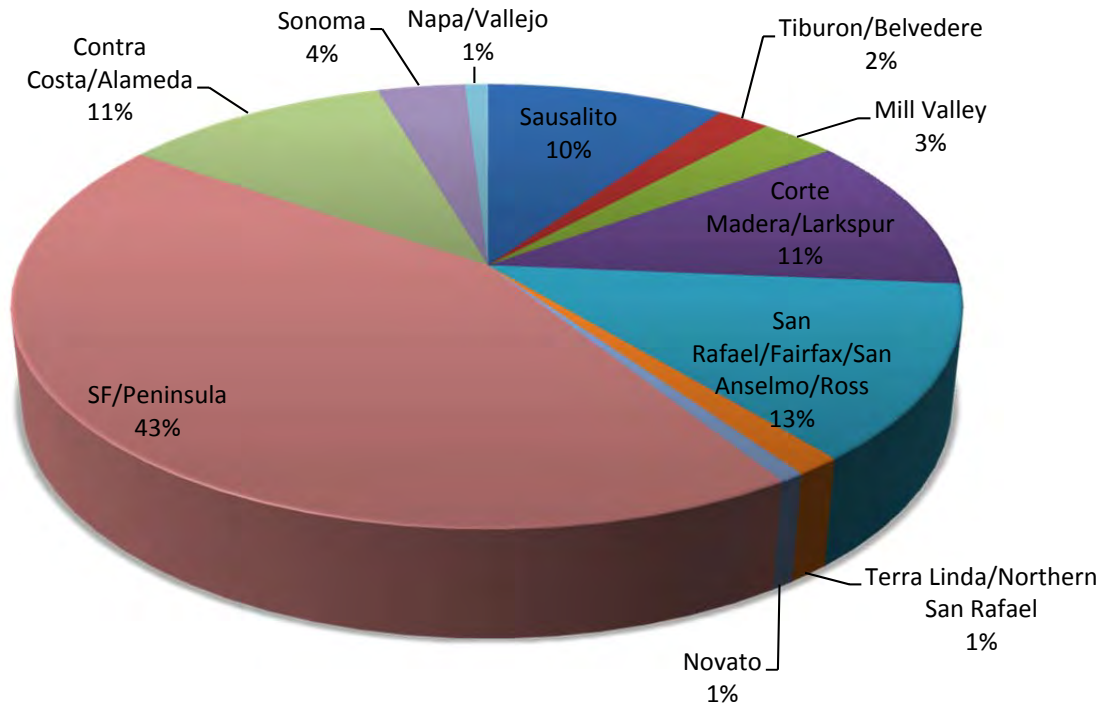
What percentage of Marin County residents work in Marin County?



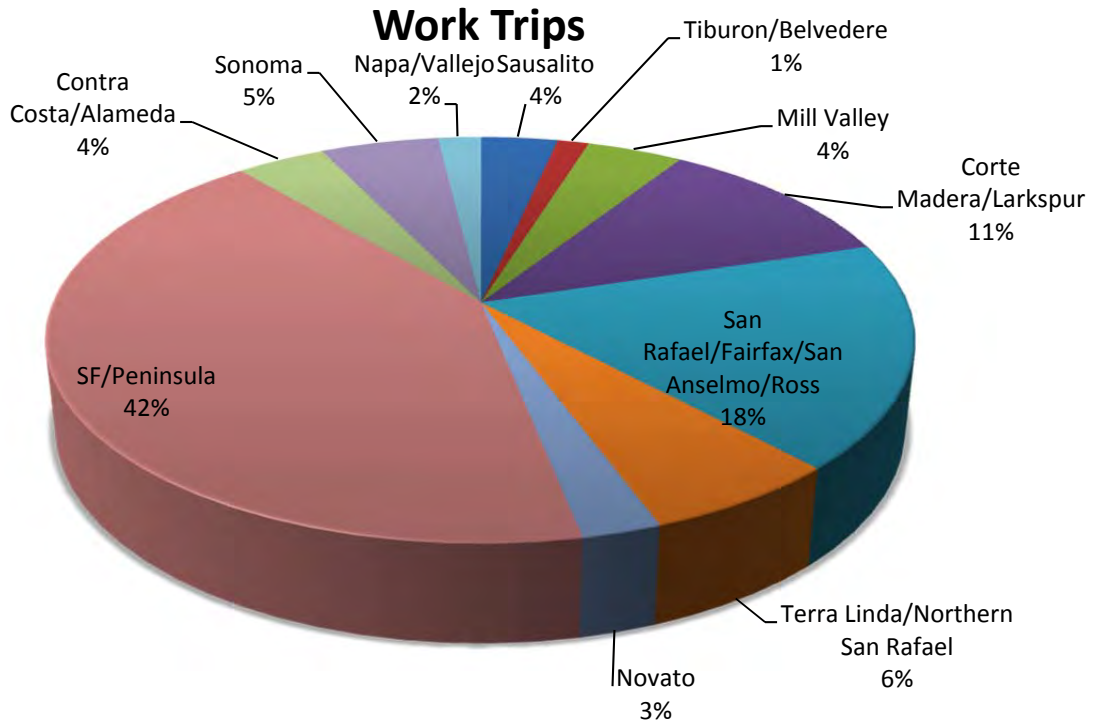
Destination of Tiburon & Belvedere Home to



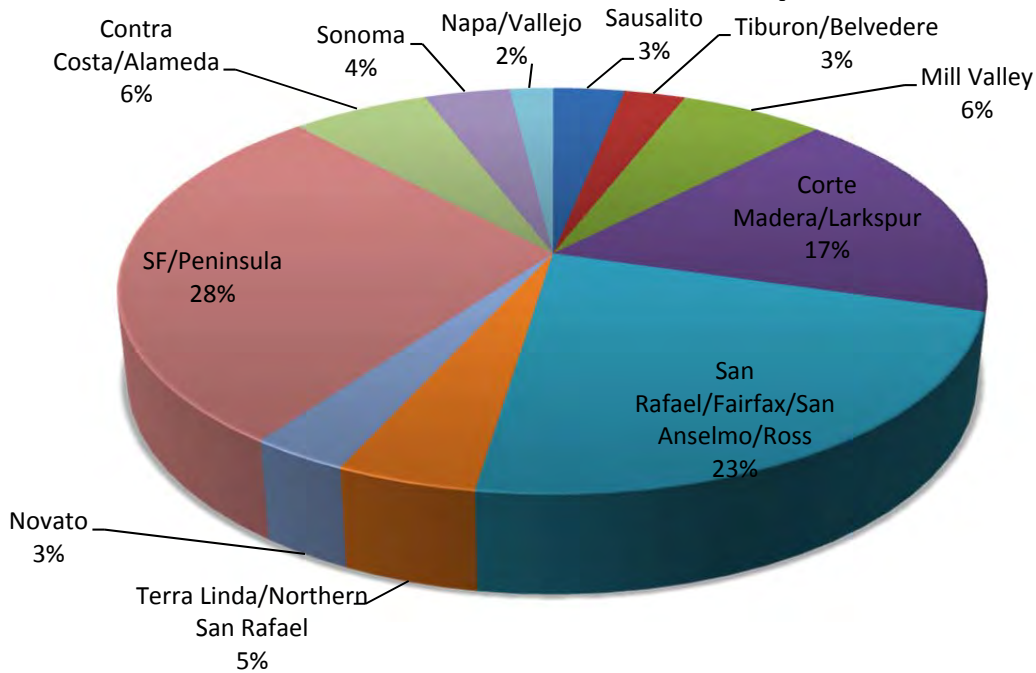
Destination of Mill Valley Home to Work Trips



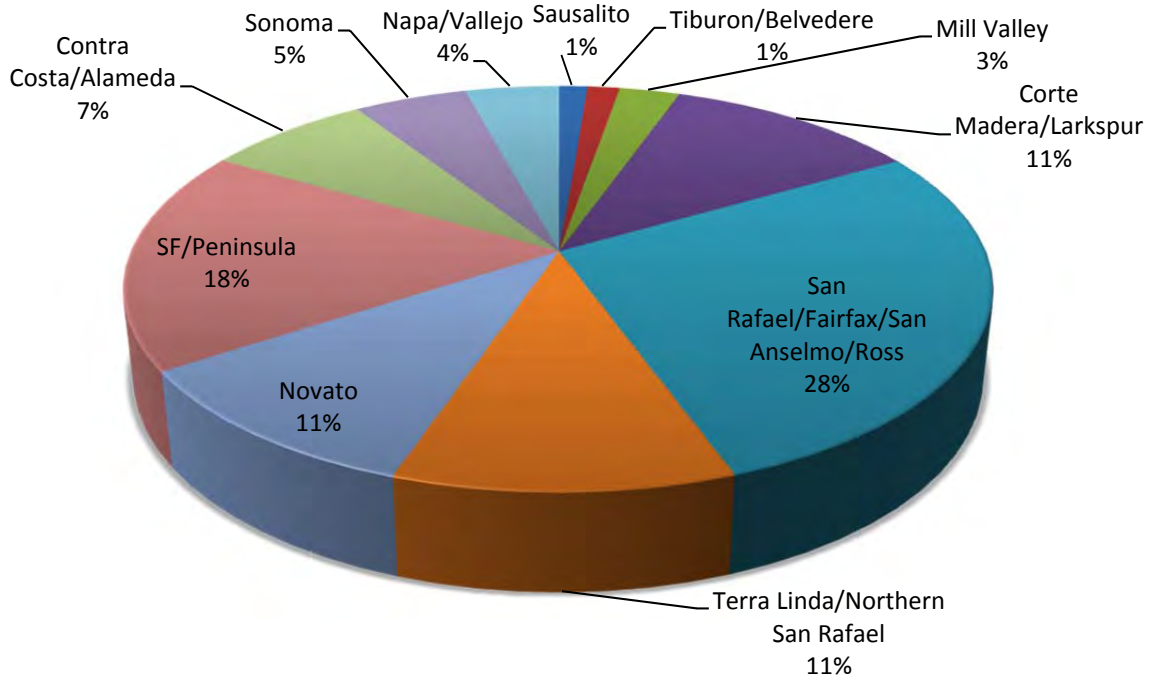
Destination of Corte Madera & Larkspur Home to



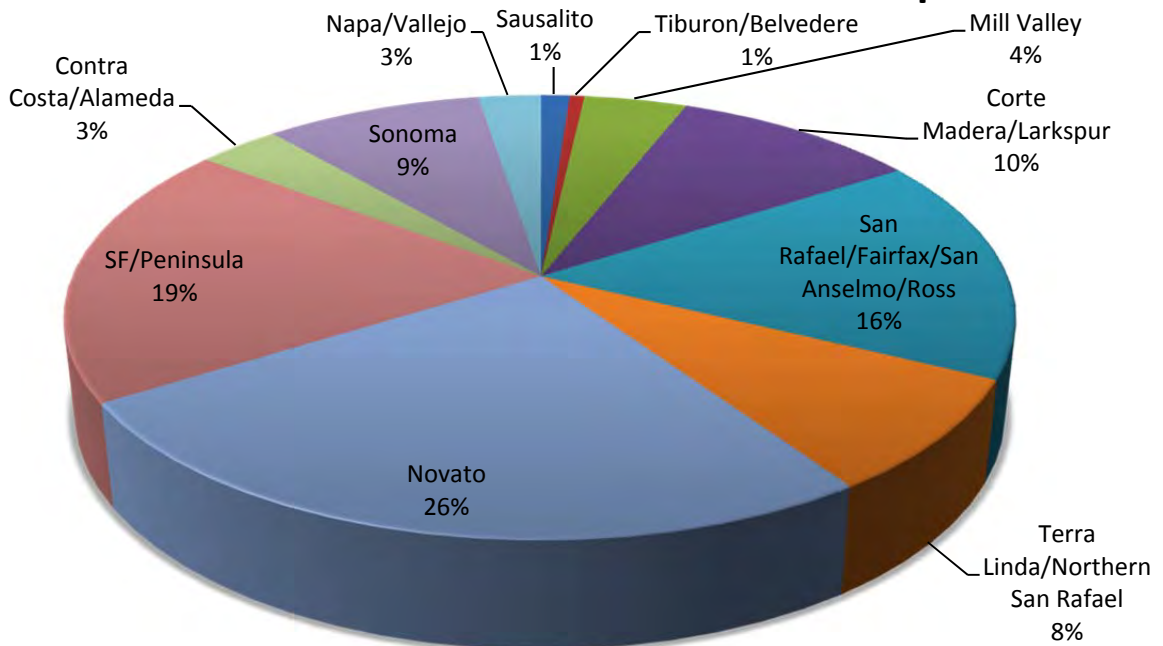
Destination of San Rafael, San Anselmo, Ross & Fairfax Home to Work Trips

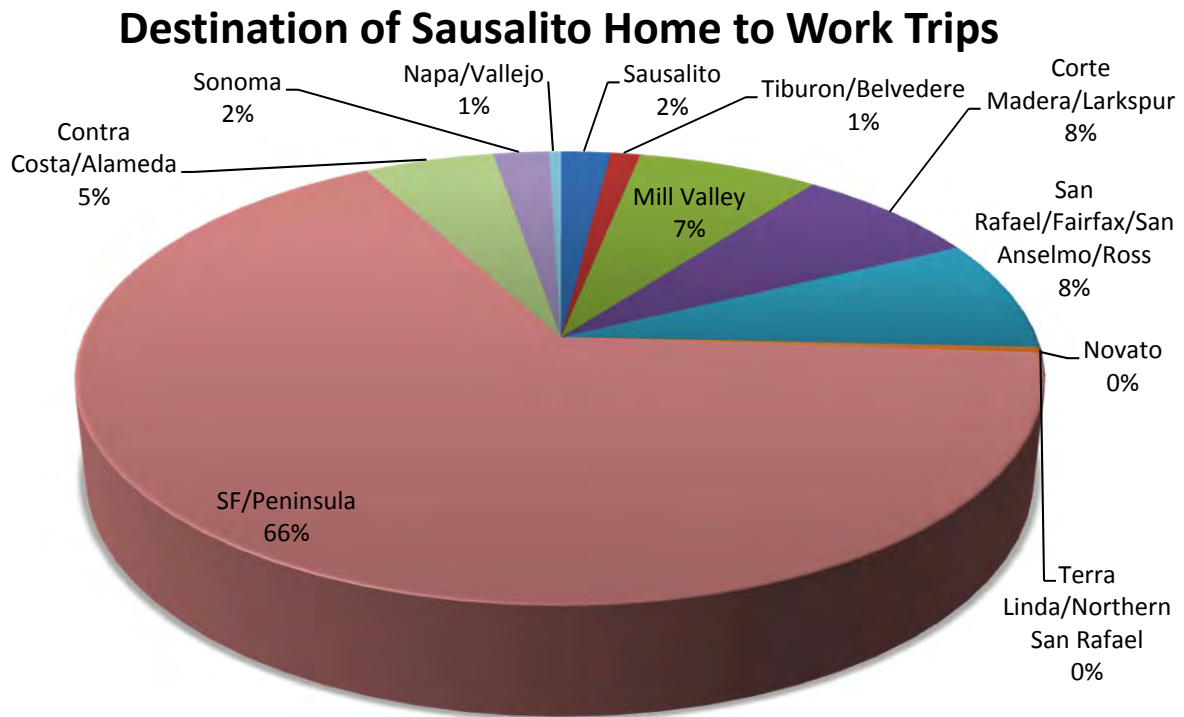


Destination of Northern San Rafael & Terra Linda Home to Work Trips



Destination of Novato Home to Work Trips





Where do Marin County workers live?

- Census data indicates there are approximately 125,000 workers who work in Marin County with approximately 35 percent living outside of Marin County.

MOBILE DEVICE DATA SUMMARY

Mobile devices such as cell phones and GPS units (in cars, on phones, and handheld units) frequently communicate with the mobile network, both during use (on a call or sending/receiving text or data) and in idle mode. INRIX, AirSage and StreetLight Data are firms that specialize in mobile device data and are able to collect and analyze this information while the device is in use to record the anonymous location (ensuring user privacy) and movement of mobile devices (and thus the population of mobile users) on the roadway network, both in real-time and over almost any designated time period, based on this mobile signaling data.

In order to infer the travel patterns and trip making characteristics of the mobile devices, such as the origin and destination of individual trips, StreetLight Data purchases from INRIX and AirSage movement

and usage patterns in the form of activity data points. StreetLight Data then uses algorithms to create trip distribution tables by first identifying mobile devices which were seen in a single location multiple times over a specified time interval and subsequently seen in a different location multiple times over a specified time interval. All of the sightings for the mobile device in a single location over this specified time interval are then combined to create an "Origin-Destination Point." The "Origin-Destination Points" of each mobile device are then paired to create a table of trips with origin and destination coordinate points as well as the observed time period. StreetLight Data then tags the "origin-destination points" to a pre-determined zone system based on the origin and destination coordinate points.

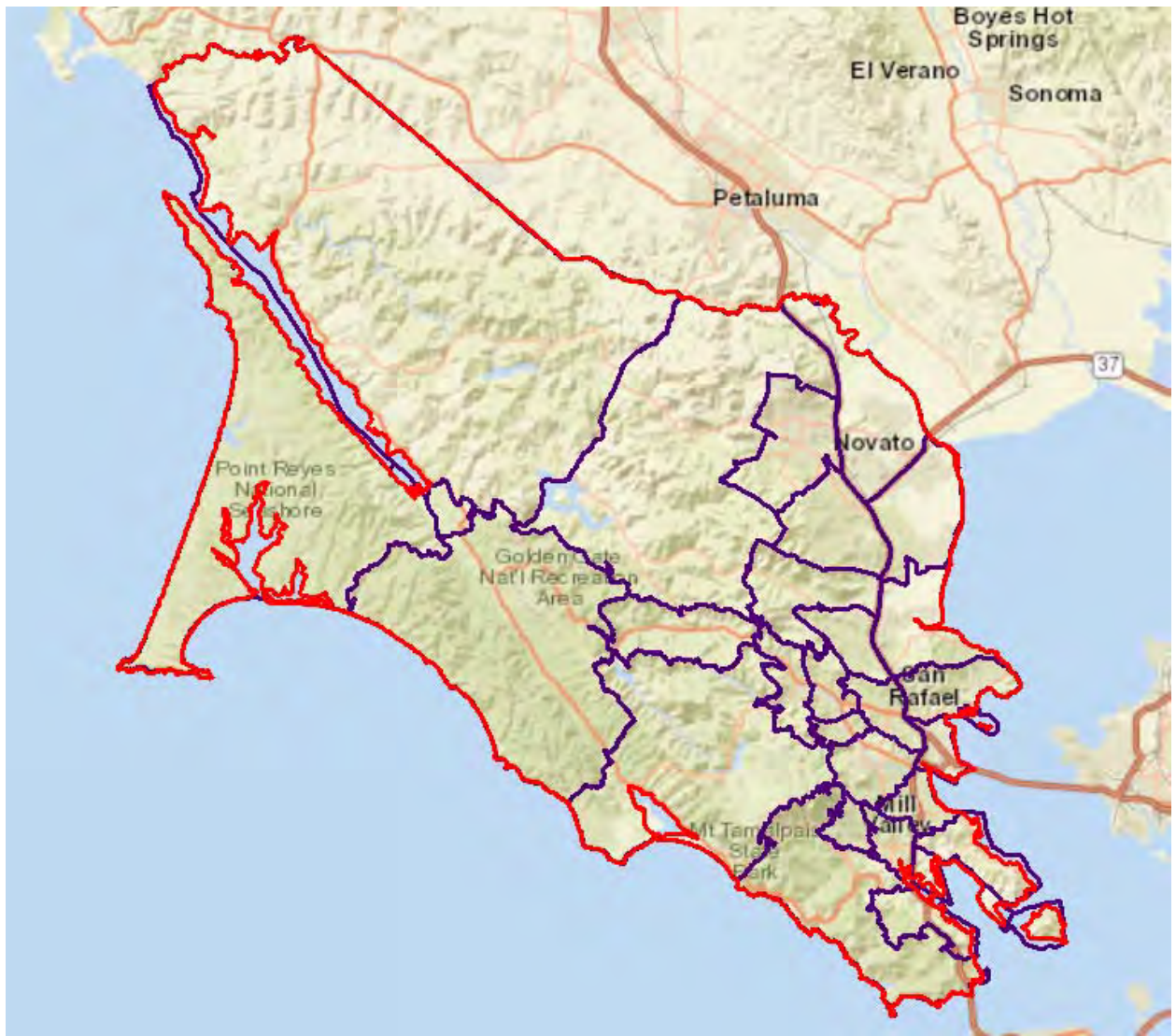
Fehr & Peers provided StreetLight Data with a zone system that the "origin-destination points" were tagged to. StreetLight Data then provided Fehr & Peers with three types of OD data in a tabular format nearly identical to that used by travel demand models. The three types of OD data were countywide OD data, select-link OD data, and home/work location data.

ZONE SYSTEM

To quantify and capture the origin and destination of trips that occur within Marin County, Fehr & Peers coordinated with TAM and member agencies to develop a zone system for Marin County based on the MTC Travel Model Two's zone system. The model's 202 traffic analysis zones representing Marin County were aggregated to 30 zones to obtain city-level travel patterns within Marin County. The 30-zone geographic layer within Marin County is shown on **Figure 1**.



Figure 1 Marin County Zone System



To quantify and capture the origin and destination of inter-county trips, an external zone system was developed for the other eight Bay Area counties. Due to their size and proximity to Marin County, Alameda and Contra Costa counties were split along logical geographic barriers, providing two zones for each county. Each of the other six Bay Area counties were represented as singular zones. The ten-zone system outside Marin County is shown on **Figure 2**, and the ten zones are listed below.

1. Sonoma County
2. Napa County
3. Solano County
4. West Contra Costa County
5. East Contra Costa County
6. Northwest Oakland
7. Southeast Oakland
8. Santa Clara County
9. San Mateo County
10. San Francisco County

The initial zone systems for Marin County and the other eight Bay Area counties were then upload to a GIS web server to allow TAM and member agencies to review and comment. The two zone systems were then combined into a singular 40-zone system that was sent to StreetLight Data.

ORIGIN-DESTINATION DATA

Mobile device data is continuously collected by INRIX and AirSage and continuously analyzed and translated to OD data using StreetLight Data's algorithms, allowing data to be obtained for any length of time that has occurred in the past. Fehr & Peers obtained two data periods of OD data that were each tagged to the 40-zone system. OD data was purchased for the entire portion of 2015 when school was in session and for the entire portion of 2015 when school was not in session to ensure a very large representative sample was obtained and to allow for the comparison of "summer" and "non-summer" travel patterns. This also ensured that the data was consistent with the updated Marin County Model outputs as travel demand models are typically developed to forecast an average day when school is in session from a specified year.

Figure 2 Zone System Outside Marin County



StreetLight Data tagged the “origin-destination points” of GPS-enabled devices to the 40-zone system and provided OD data in tabular format for the two data periods. The table of trips provided by StreetLight Data was derived from approximately 75 million indexed “origin-destination points.” The tabular OD data was stratified by day of week, time of day, and vehicle type (personal automobile and commercial vehicle).

Dataset: 75 million indexed “origin-destination points”

The resulting OD trip tables provide the number of trips for each zone to zone origin-destination pair for all types of trips that occur within Marin County. Each trip table provides 1,600 (40 zones by 40 zones) possible origin-destination pairs. The data is provided in a format nearly identical to that produced by a travel demand model which allows for comparison and integration with the updated Marin County Model. Trips were stratified as described below.

- Day Type – average day, average weekday (Monday to Thursday), average weekend day (Saturday to Sunday)
- Day Part - Early AM, AM Peak Period (6 AM to 10 AM), Mid-Day, PM peak period (3 PM to 7 PM), Late-Night, and Daily
- Vehicle type - personal automobile (including automobile trips to park-and-ride lots or kiss-and-ride but not the transit portion of the trip – see the “Limitations of Mobile Device Data” section below for more information) and commercial vehicles

ADVANTAGES OF MOBILE DEVICE DATA

Below is a bulleted discussion of the advantages of mobile device data over traditional data collection methods.

- Mobile device data is continuously collected and can be obtained for any length of time that has occurred in the past. This allows for the analysis of historical trends and seasonal or daily/weekly/monthly variation. Data collection does not require set up time or human transcribing of observed field data. Traditional methods of data collection typically rely on a single day or short period of data collection.
- Mobile device data vendors such as StreetLight Data continuously process data and provide a web application for fast and easy customization, analysis, and downloading of the data query.
- Mobile device data provides the actual origin and destination of inferred trips, rather than the location where the vehicle was observed as with traffic counts and Bluetooth or license plate capture technology.

- Mobile device data is passively collected, eliminating potential user input and transcription error.
- Mobile device data provides empirical origin-destination data, which can be cheaper, easier, and faster to obtain than similar data derived from more traditional methods such as surveys and travel demand models. In the case of travel demand models, we have found that the data collection methodology is more easily understood by the public.
- Since data is continuously collected and can be obtained for any length of time, extremely large sample sizes can be obtained for a relatively low cost per sample. Traditional methods such as surveys typically rely on a single day of data gathering and have very low response rates (typically experiences show a one to two percent response rates).
- Mobile device data is provided in a trip table format which is more suitable for comparison and integration with travel demand models.
- Origin-destination trip tables can be queried, aggregated and disaggregated to match desired level of analysis.
- GPS-based mobile device data provides a level of spatial resolution suitable for understanding users of specific roadway segments.

LIMITATIONS OF MOBILE DEVICE DATA

Below is a bulleted discussion of the limitations of mobile device data.

- Due to privacy concerns, the indexed trip values in the OD trip tables provided by StreetLight Data describe above represent “relative” rather than “absolute” trips. In other words, the tables do not provide the total number of trips that occur on a daily basis but provide the relative relationship of trips from each zone to every other zone in the geographic layer. Therefore, the mobile device data OD trip tables were used as a starting point due to their large sample size and high level of confidence in the GPS origin-destination data and refined using traffic count data to factor the relative trip data to represent a single day of absolute data.
- Analysis of mobile device data and determination of origin-destination points relies on computer algorithms to determine where a trip starts and ends rather than direct user input. Current algorithm parameters define the end of a trip and determine a trip’s destination if the mobile device travels no more than five meters for a five minute period of time.
- Unable to directly measure information regarding trip purpose, trip frequency, characteristics of travel or demographics. However, much of this information can be inferred or supplemented with information from other sources once the origin zone is known.

- GPS-based mobile device data has a potential bias towards higher income persons as they have a higher likelihood of owning a vehicle with embedded GPS, a smartphone, or handheld GPS device.
- Cellular-based mobile device data has a minimal potential bias towards higher income persons as a majority of the population now owns a cellular device. However, locational information is derived from cellular devices based on cellular tower triangulation, greatly reducing the spatial resolution and accuracy of cellular location data.
- Mobile device data typically represent persons in auto as the algorithms remove walk and bike trips based on travel speed and distance. The transit portion of trip tours are also removed as the algorithms are not yet sophisticated enough to interpret the trip complexity of transit trips. For instance, a typical transit trip may consist of a drive trip to a transit station (the only portion of the trip tour accounted for in the personal automobile data), wait time for a train, stops at stations along the way, and a walk trip to the destination. Auto trips are usually much less complex as people generally drive directly from their origin to their destination.
- In addition to lack of modal capture as described above, mobile device data capturing persons in auto can also lead to oversampling of areas or facilities where high-occupancy vehicles or bus trips are more common. Visitor and recreational trips may also be oversampled as they tend to have higher auto occupancies.
- Mobile device data has a potential bias towards trips made by persons over the age of 16 due to privacy regulations requiring the non-inclusion of data associated with mobile devices registered to persons under the age of 16.
- Mobile device data has a potential bias towards non-school-related trips made by persons over the age of 16. Home and work location data analysis will ignore school-related trips as the algorithms only track the inferred "home" and "work" location of mobile devices. Origin-destination trip table data analysis may miss school drop-off trips as the algorithms determine a trip to end only when the mobile device has moved less than five meters in five minutes. However, school-related trips associated with students who drive themselves to school will likely be captured as the mobile device will remain relatively stationary while at school.

EXISTING TRAVEL BEHAVIOR DATA

In order to refine and check the reasonableness of the mobile device-generated OD data, existing and historic Marin County travel behavior data was gathered and is included below. Existing data sources such as traffic counts, 2009-2013 American Community Survey (ACS), and 2010 California Household Travel Survey (CHTS) data were reviewed.

TRAFFIC COUNTS

Traffic count data was obtained for 11 locations within Marin County and was used to factor the sample of mobile device OD data to represent absolute trip data. Traffic counts were gathered for the time period most concentrated travel occurs and for which most planning studies aim at quantifying congestion in order to be used as a control total to refine OD data collected from mobile devices. The traffic count data is summarized in **Table 1**.

As shown in **Table 1**, the highest volume of traffic was observed on US 101 in Downtown San Rafael where there are five lanes of travel in each direction, and there is on average 11 percent more traffic in the afternoon peak period than the morning peak period. Additionally, the data indicates that Marin County imports workers, with 9,000 more vehicles or 27 percent more traffic coming into Marin County in the morning peak period and 3,000 more vehicles or eight percent more traffic leaving Marin County in the afternoon peak period.

Traffic counts are limited in determining the origin, destination, or purpose of the vehicle trip or any other trip making or demographic information. Additionally, this data takes into account but is unable to quantify pass through traffic.

TABLE 1 TRAFFIC COUNT DATA

Traffic Count Location	AM Peak Period (6 AM to 10 AM)		PM Peak Period (3 PM to 7 PM)	
	Northbound /Eastbound	Southbound/ Westbound	Northbound /Eastbound	Southbound/ Westbound
1 - US 101 at the Sonoma/Marin County Line ¹	5,000	11,000	10,000	8,000
2 - US 101 North of San Rafael	13,000	25,000	26,000	21,000
3 - US 101 in Downtown San Rafael	19,000	28,000	30,000	25,000
4 - US 101 at Sir Francis Drake Boulevard	13,000	10,000	21,000	20,000
5 - US 101 over Richardson Bay	9,000	22,000	16,000	16,000
6 - US 101 at the Golden Gate Bridge ¹	10,000	20,000	19,000	13,000
7 - SR 37 at the Sonoma/Marin County Line ¹	3,000	7,000	6,000	4,000
8 - I-580 at the Contra Costa/Marin County Line ¹	5,000	14,000	14,000	9,000
9 - Sir Francis Drake Blvd West of US 101	5,000	4,000	7,000	7,000
10 - Sir Francis Drake Blvd East of US 101	6,000	6,000	5,000	7,000
11 - Highway 1 West of US 101	5,000	3,000	4,000	5,000
Sum of Traffic at Four Marin County Gateways	23,000	52,000	49,000	34,000
Total Traffic	75,000		83,000	
Traffic into Marin County	42,000		40,000	
Traffic out of Marin County	33,000		43,000	

¹Marin County Gateway

Red text indicates key data points discussed in more detail in the body of this report.

CENSUS DATA

Census data is the most readily available form of travel behavior data as it is provided online by the United States Census Bureau, primarily providing demographic and trip making information for various geographies rather than OD data. One available source of data is ACS journey-to-Work data which provides an estimate of the place of work for areas of residence across the country. It is important to note that the information provided is self-reported and limited in nature and does not represent true origin or destination trip information, but rather home and corresponding work locations which greatly influence the origin and destination of individual trips made by residences. Another available source of data is the CHTS which is conducted every ten years to obtain detailed information about the socioeconomic characteristics and travel behavior of households statewide.

ACS DATA

County-to-county worker flows from 2009-2013 ACS journey-to-work data was obtained for Marin County as the place of residence or "Home County," as shown in **Table 2**, and for Marin County as the place of work or "Work County," as shown in **Table 3**.

TABLE 2 CENSUS DATA – WHERE DO MARIN COUNTY RESIDENTS WORK?

Home County	Work County	Commuters	Percent of Commuters
Marin County 121,269 Workers live in Marin County 40,749 (34%) Workers travel outside Marin County for Work	Marin County	79,676	66%
	San Francisco County	25,237	21%
	Sonoma County	4,302	4%
	Alameda County	4,165	3%
	Contra Costa County	2,183	2%
	San Mateo County	2,161	2%
	Santa Clara County	986	1%
	Solano County	682	1%
	Napa County	508	0%
	Los Angeles County	155	0%

As shown in **Table 2**, there are approximately 120,000 workers who live in Marin County with approximately 34 percent travelling outside of Marin County for work, indicating that a majority of Marin County residents work within Marin County. The data also indicates that Marin County residents who work outside Marin County primarily work in San Francisco County.

TABLE 3 CENSUS DATA – WHERE DO MARIN COUNTY WORKERS LIVE?

Home County	Work County	Commuters	Percent of Commuters
Marin County		79,676	64%
Sonoma County		16,745	13%
Contra Costa County		7,966	6%
San Francisco County	Marin County	6,883	6%
Solano County	124,550 Workers work in Marin County	4,304	3%
Alameda County		4,110	3%
Napa County	44,062 (35%) Workers travel into Marin County for Work	1,120	1%
San Mateo County		923	1%
Santa Clara County		508	0%
Sacramento County		485	0%

As shown in **Table 3**, there are approximately 125,000 workers who work in Marin County with approximately 35 percent living outside of Marin County, indicating that a majority of workers in Marin County live within Marin County. The data also indicates that a majority of imported workers live in Sonoma, Contra Costa, and San Francisco counties.

As mentioned above, ACS journey-to-work data only provides information for work trips which are only a portion (roughly 20 percent) of trips made during the peak periods, and does not include the origin and destination of trips within the county, the average trip length, or routing information.

CHTS DATA

County-to-county work, non-work, and all tour flows were obtained for Marin County from 2010 CHTS data and are summarized in **Table 4**.

TABLE 4 CENSUS DATA – MARIN COUNTY TOUR FLOWS

County	Work Tours		Non-Work Tours		All Tours	
	Marin Residents	Marin Workers	Marin Origins	Marin Destinations	Marin Origins	Marin Destinations
Marin	57%	59%	87%	92%	80%	84%
San Francisco	26%	2%	5%	4%	10%	3%
Sonoma	7%	19%	4%	1%	5%	5%
Alameda	5%	7%	1%	0%	2%	2%
San Mateo	3%	1%	0%	0%	1%	1%
Contra Costa	2%	11%	1%	1%	1%	4%
Santa Clara	1%	0%	0%	0%	0%	0%
Napa	1%	0%	2%	0%	1%	0%
Solano	0%	1%	0%	0%	0%	1%

As shown in **Table 4**, the work tour distribution is similar to the ACS journey-to-work data for Marin County residents and workers, where Marin County has the highest interaction with San Francisco, Sonoma, Alameda, and Contra Costa counties. The data also indicates that a much higher share of non-work tours occur with Marin County, while the highest interaction with other counties is primarily to/from San Francisco and Sonoma counties.

MOBILE DEVICE DATA

As described above, StreetLight Data provided Fehr & Peers with three types of mobile device data in a tabular format nearly identical to that used by travel demand models. The mobile device data OD trip tables, which represent a relative measure of travel from each zone to every other zone in the zone system, were used as a starting point due to their large sample size and high level of confidence in the origin and destination of inferred trips. The data was then refined using traffic count data to factor the relative trip data to represent a single day of absolute data.

REFINED ORIGIN-DESTINATION TRIP TABLES

The refined OD trip tables for the select-link and countywide OD data are provided in tabular format in **Appendix A** and are summarized in subsequent sections below.

SELECT-LINK ORIGIN-DESTINATION TRIP TABLES

“Select-link” origin-destination trip tables provide the index of trips between each zone that travel through a selected roadway segment. Each trip table provides 1,600 (40 zones by 40 zones) possible zone pairs but a separate trip table is provided for each “select-link” location, effectively providing three points of travel for each origin-destination zone pair (the origin location, the roadway location the trip traveled through, and the destination location). As discussed above, traffic counts collected at “select-link” locations were used to factor “relative” trips to “absolute” trips. The select-link origin-destination data is based on the same GPS-enabled devices as the countywide origin-destination data, allowing the two datasets to be integrated.

A “select-link” roadway segment system was developed, selecting key county gateway or roadway segments within the county. A total of 11 non-directional “select-link” locations were selected, with Fehr & Peers developing an initial “select-link” roadway segment system that was uploaded to a GIS web server to allow TAM and its member agencies to comment.

The 11 non-directional “select-link” locations are listed below and shown on **Figure 3**. To maximize accuracy roadway segments with limited or no parallel facilities or adjacent land use were selected in order to more easily isolate trips on the roadway segment. Locations where traffic counts were available were prioritized to ensure traffic count data was available to factor the relative trip data.

1. US 101 at the Sonoma/Marin County Line
2. US 101 North of San Rafael
3. US 101 in Downtown San Rafael
4. US 101 at Sir Francis Drake Boulevard
5. US 101 over Richardson Bay
6. US 101 at the Golden Gate Bridge
7. SR 37 at the Sonoma/Marin County Line
8. I-580 at the Contra Costa/Marin County Line (Richmond-San Rafael Bridge)
9. Sir Frances Drake Blvd West of US 101
10. Sir Frances Drake Blvd East of US 101
11. Highway 1 West of US 101

Select-Link Trip Type Summary

The refined select-link origin-destination trip tables were first summarized by the types of trips that were observed travelling on the “select-link” roadway segment. The trip type classifications that were identified are described below.

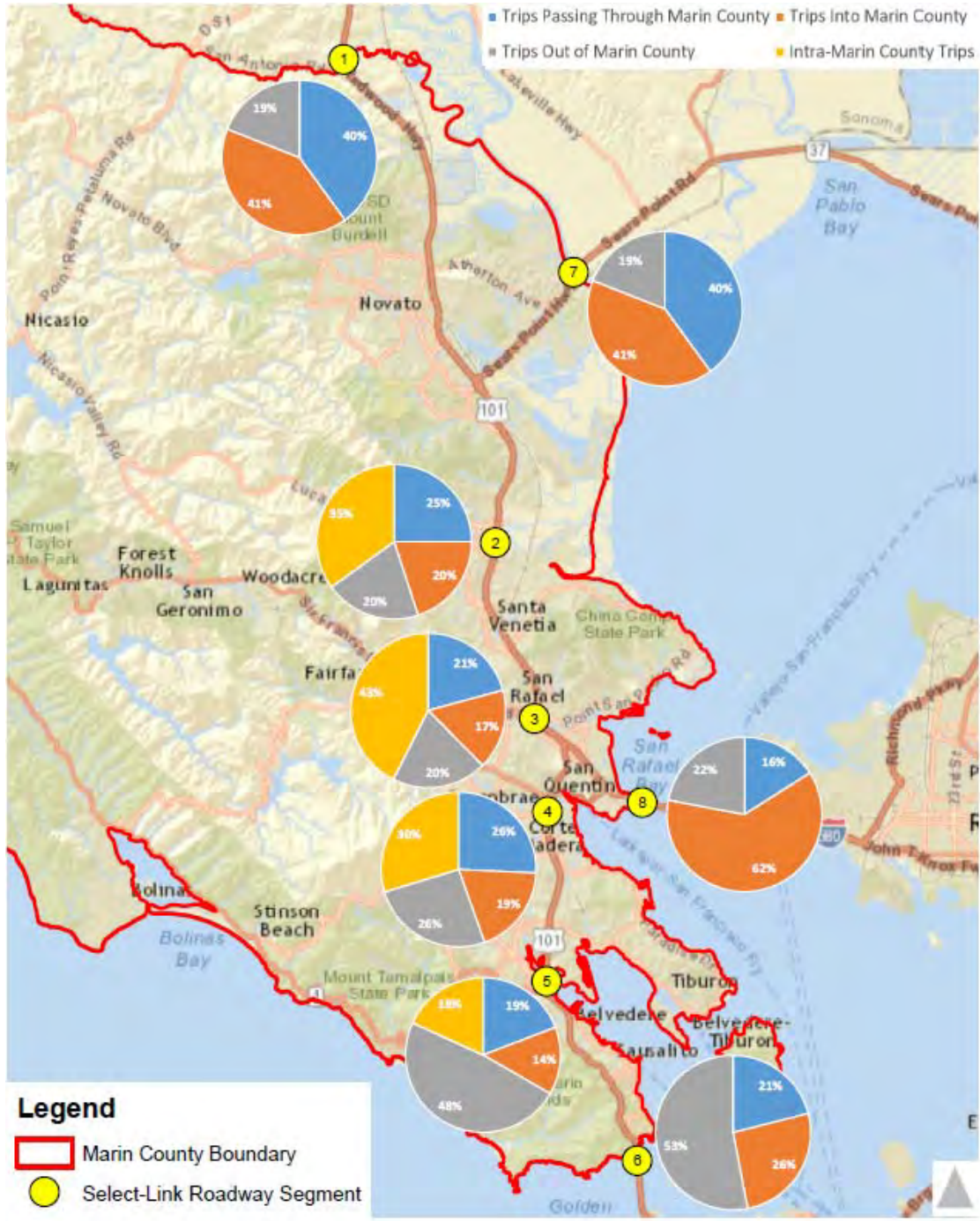
- Total Trips – the total number of vehicles counted at each traffic count location that the mobile device OD trip data was factored to.
- Trips Passing Through Marin County –trips starting outside Marin County that travel through the county and end in another county.
- Trips Into Marin County – trips starting outside Marin County with a destination in Marin County.
- Trips Out of Marin County – trips starting within Marin County with a destination outside Marin County.
- Intra-Marin County Trips – trips starting within Marin County with a destination within Marin County.

Figure 4 provides a relative summary of the types of trips that occur at the select-link locations during the AM Peak Period (6 AM to 10 AM) and PM peak period (3 PM to 7 PM). The figure helps illustrate the types of trips travelling on roadways in different parts of Marin County and generally shows that the percentage of trips travelling into and out of Marin County is generally higher closer to a county gateway.

Figure 3 Select-Link Roadway Segment Locations



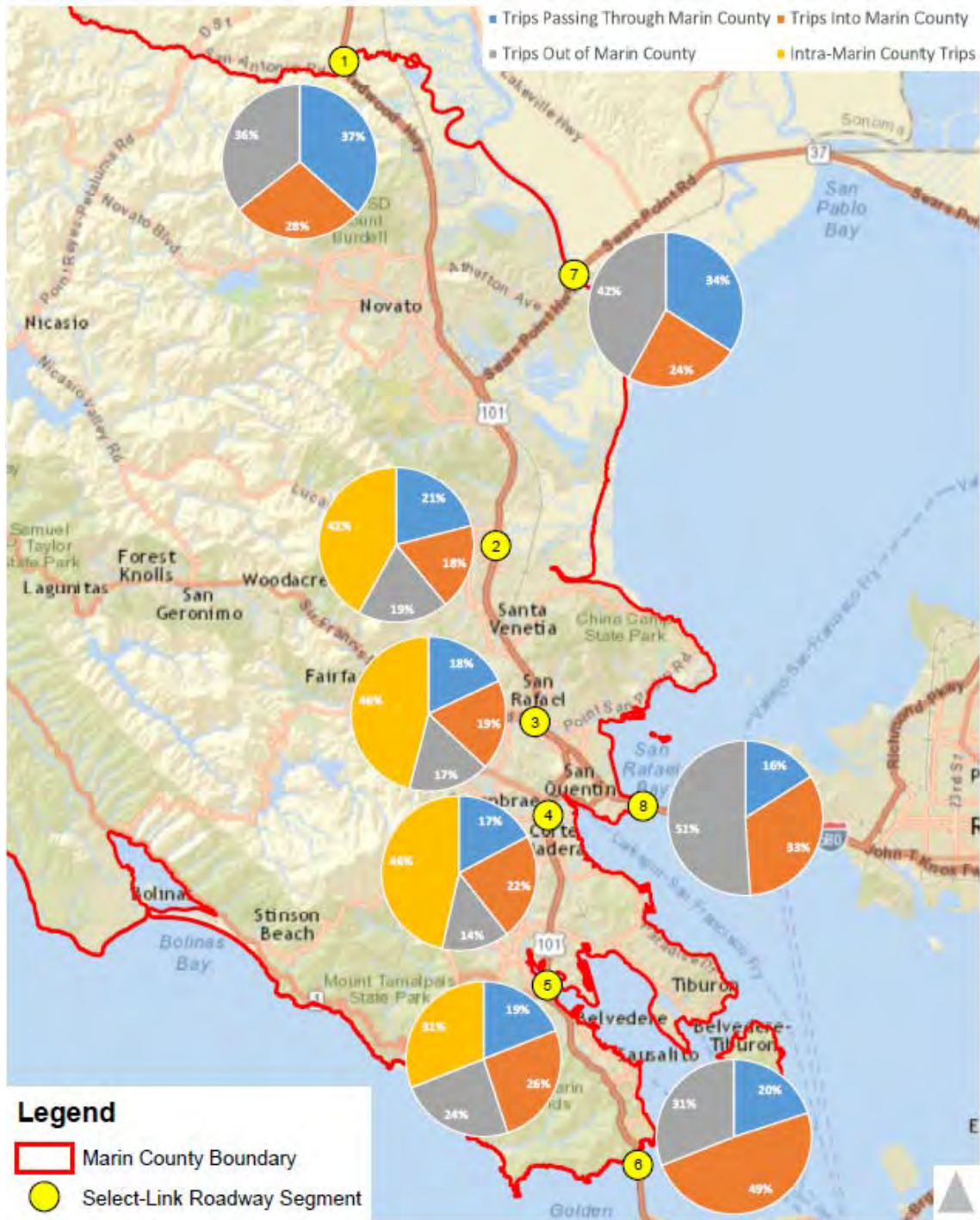
Figure 4A Select-Link OD Data – AM Peak Period Trips by Trip Type Percentage



Select-Link O-D Data
AM Peak Period Trips by Trip Type Percentage

Figure 4A

Figure 4B Select-Link OD Data – PM Peak Period Trips by Trip Type Percentage



Select-Link O-D Data
PM Peak Period Trips by Trip Type Percentage

Figure 4B

Table 5 provides a relative summary of the types of trips that occur at each of the 11 select-link locations during the AM Peak Period (6 AM to 10 AM).

TABLE 5 SELECT-LINK O-D DATA – AM PEAK PERIOD TRIPS BY TRIP TYPE PERCENTAGE

Traffic Count Location	Total Trips	Trips Passing Through Marin County	Trips Into Marin County	Trips Out of Marin County	Intra-Marin County Trips
1 - US 101 at the Sonoma/Marin County Line ¹	16,000	40%	41%	19%	0%
In to Marin County (Southbound)	11,000	41%	59%	0%	0%
Out of Marin County (Northbound)	5,000	38%	0%	62%	0%
2 - US 101 North of San Rafael	38,000	25%	20%	20%	35%
3 - US 101 in Downtown San Rafael	47,000	21%	17%	20%	43%
4 - US 101 at Sir Francis Drake Boulevard	23,000	26%	19%	26%	30%
5 - US 101 over Richardson Bay	31,000	19%	14%	48%	18%
6 - US 101 at the Golden Gate Bridge ¹	30,000	21%	26%	53%	0%
In to Marin County (Northbound)	10,000	21%	79%	0%	0%
Out of Marin County (Southbound)	20,000	21%	0%	79%	0%
7 - SR 37 at the Sonoma/Marin County Line ¹	10,000	40%	41%	19%	0%
In to Marin County (Westbound)	7,000	41%	59%	0%	0%
Out of Marin County (Eastbound)	3,000	37%	0%	63%	0%
8 - I-580 at the Contra Costa/Marin County Line ¹	19,000	16%	62%	22%	0%
In to Marin County (Westbound)	14,000	16%	84%	0%	0%
Out of Marin County (Eastbound)	5,000	15%	0%	85%	0%
9 - Sir Francis Drake Blvd West of US 101	9,000	0%	7%	26%	67%
10 - Sir Francis Drake Blvd East of US 101	12,000	5%	12%	28%	55%
11 - Highway 1 West of US 101	8,000	0%	5%	54%	40%

¹Marin County Gateway

Red text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 5**, the highest percentage of trips passing through Marin County (40%) occurs at the two Sonoma/Marin county line locations, the highest percentage of inter-county trips (84%) occurs on I-580 at the Contra Costa/Marin County Line , and the two highest percentage of intra-Marín County trips (55% and 67%) occur on Sir Francis Drake Boulevard.

Through a comparison of “trips into Marin County” and “trips out of Marin County,” **Table 5** also indicates that in the morning peak period Marin County imports trips from Sonoma and other North Bay counties on US 101 and SR 37, exports trips to San Francisco County on US 101, and imports trips from the East Bay on I-580.

County-to-county pass-through trip information at each of the 11 select-link locations is provided in **Appendix A**. A relative summary of county-to-county pass-through trip information at each of the four Marin County gateway locations during the AM Peak Period (6 AM to 10 AM) is provide below.

1 - US 101 at the Sonoma/Marin County Line

Percent of Total Trips at Select-Link Location (16,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0%	0%	0%	7%	21%
Napa	0%	0%	0%	0%	0%
Solano	0%	0%	0%	0%	0%
East Bay	4%	0%	0%	0%	0%
San Francisco, San Mateo, Santa Clara	7%	0%	0%	0%	0%

Red text indicates key data points discussed in more detail in the body of this report.

- 21% of total trips on US 101 at the Sonoma/Marin County Line are traveling from Sonoma County to San Francisco, San Mateo, or Santa Clara during the AM Peak Period (6 AM to 10 AM).

6 - US 101 at the Golden Gate Bridge

Percent of Total Trips at Select-Link Location (30,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0%	0%	0%	0%	12%
Napa	0%	0%	0%	0%	1%
Solano	0%	0%	0%	0%	0%
East Bay	0%	0%	0%	0%	0%
San Francisco, San Mateo, Santa Clara	5%	1%	0%	1%	0%

Red text indicates key data points discussed in more detail in the body of this report.

- 12% of total trips on US 101 at the Golden Gate Bridge are traveling from Sonoma County to San Francisco, San Mateo, or Santa Clara during the AM Peak Period (6 AM to 10 AM).

7 - SR 37 at the Sonoma/Marin County Line

Percent of Total Trips at Select-Link Location (10,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0%	0%	0%	5%	13%
Napa	0%	0%	0%	0%	9%
Solano	1%	0%	0%	0%	1%
East Bay	2%	0%	0%	0%	0%
San Francisco, San Mateo, Santa Clara	4%	5%	1%	0%	0%

Red text indicates key data points discussed in more detail in the body of this report.

- 13% of total trips on SR 37 at the Sonoma/Marin County Line are traveling from Sonoma County to San Francisco, San Mateo, or Santa Clara during the AM Peak Period (6 AM to 10 AM).

8 - I-580 at the Contra Costa/Marin County Line

Percent of Total Trips at Select-Link Location (19,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0%	0%	0%	3%	0%
Napa	0%	0%	0%	0%	0%
Solano	0%	0%	0%	0%	0%
East Bay	7%	0%	0%	0%	2%
San Francisco, San Mateo, Santa Clara	1%	0%	0%	1%	0%

Red text indicates key data points discussed in more detail in the body of this report.

- 7% of total trips on I-580 at the Contra Costa/Marin County Line are traveling from the East Bay to Sonoma County during the AM Peak Period (6 AM to 10 AM).
- 1% of total trips on I-580 at the Contra Costa/Marin County Line are traveling from San Francisco, San Mateo, or Santa Clara to the East Bay during the AM Peak Period (6 AM to 10 AM).

Table 6 provides an absolute summary of the types of trips that occur at each of the 11 select-link locations during the AM Peak Period (6 AM to 10 AM).

TABLE 6 SELECT-LINK O-D DATA – AM PEAK PERIOD TRIPS BY TRIP TYPE

Traffic Count Location	Total Trips	Trips Passing Through Marin County	Trips Into Marin County	Trips Out of Marin County	Intra-Marin County Trips
1 - US 101 at the Sonoma/Marin County Line ¹	16,000	6,405	6,498	3,097	0
In to Marin County (Southbound)	11,000	4,502	6,498	0	0
Out of Marin County (Northbound)	5,000	1,903	0	3,097	0
2 - US 101 North of San Rafael	38,000	9,548	7,663	7,516	13,273
3 - US 101 in Downtown San Rafael	47,000	9,642	8,001	9,315	20,042
4 - US 101 at Sir Francis Drake Boulevard	23,000	6,005	4,287	5,921	6,787
5 - US 101 over Richardson Bay	31,000	5,946	4,306	15,034	5,714
6 - US 101 at the Golden Gate Bridge ¹	30,000	6,241	7,894	15,865	0
In to Marin County (Northbound)	10,000	2,105	7,894	0	0
Out of Marin County (Southbound)	20,000	4,135	0	15,865	0
7 - SR 37 at the Sonoma/Marin County Line ¹	10,000	3,959	4,149	1,893	0
In to Marin County (Westbound)	7,000	2,851	4,149	0	0
Out of Marin County (Eastbound)	3,000	1,107	0	1,893	0
8 - I-580 at the Contra Costa/Marin County Line ¹	19,000	3,015	11,750	4,235	0
In to Marin County (Westbound)	14,000	2,250	11,750	0	0
Out of Marin County (Eastbound)	5,000	765	0	4,235	0
9 - Sir Francis Drake Blvd West of US 101	9,000	15	595	2,375	6,015
10 - Sir Francis Drake Blvd East of US 101	12,000	592	1,443	3,323	6,642
11 - Highway 1 West of US 101	8,000	38	416	4,321	3,225

¹Marin County Gateway

Red text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 6**, the highest number of trips passing through Marin County (9,642) occurs on US 101 in Downtown San Rafael, the highest number of inter-county trips (23,759) occurs on US 101 at the Golden Gate Bridge, and the highest number of intra-Marin County trips (20,042) occurs on US 101 in Downtown San Rafael.

Through a comparison of “trips into Marin County” and “trips out of Marin County,” **Table 6** also indicates that in the morning peak period Marin County imports 10,647 trips (and exports 4,990 trips) from Sonoma and other North Bay counties on US 101 and SR 37, exports 15,865 trips (and imports 7,894 trips) to San Francisco County on US 101, and imports 11,750 trips (and exports 4,235 trips) from the East Bay on I-580. This data is consistent with traffic count data which indicates that Marin County imports workers, with 9,000 more vehicles coming into Marin County in the morning peak period and 3,000 more vehicles leaving Marin County in the afternoon peak period.

An absolute summary of county-to-county pass-through trip information at each of the four Marin County gateway locations during the AM Peak Period (6 AM to 10 AM) is provide below.

1 - US 101 at the Sonoma/Marin County Line

Percent of Total Trips at Select-Link Location (16,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0	0	18	1,082	3,386
Napa	2	0	0	0	16
Solano	31	0	0	0	0
East Bay	657	0	0	0	0
San Francisco, San Mateo, Santa Clara	1,197	15	0	0	0

Red text indicates key data points discussed in more detail in the body of this report.

- 3,386 trips on US 101 at the Sonoma/Marin County Line are traveling from Sonoma County to San Francisco, San Mateo, or Santa Clara during the AM Peak Period (6 AM to 10 AM).

6 - US 101 at the Golden Gate Bridge

Percent of Total Trips at Select-Link Location (30,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0	0	0	4	3,736
Napa	1	0	0	1	201
Solano	0	0	0	0	61
East Bay	2	0	0	0	96
San Francisco, San Mateo, Santa Clara	1,441	321	58	264	0

Red text indicates key data points discussed in more detail in the body of this report.

- 3,736 trips on US 101 at the Golden Gate Bridge are traveling from Sonoma County to San Francisco, San Mateo, or Santa Clara during the AM Peak Period (6 AM to 10 AM).

7 - SR 37 at the Sonoma/Marin County Line

Percent of Total Trips at Select-Link Location (10,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0	0	21	488	1,277
Napa	4	0	0	6	920
Solano	52	1	0	0	140
East Bay	164	0	0	0	0
San Francisco, San Mateo, Santa Clara	353	456	77	0	0

Red text indicates key data points discussed in more detail in the body of this report.

- 1,277 trips on SR 37 at the Sonoma/Marin County Line are traveling from Sonoma County to San Francisco, San Mateo, or Santa Clara during the AM Peak Period (6 AM to 10 AM).

8 - I-580 at the Contra Costa/Marin County Line

Percent of Total Trips at Select-Link Location (19,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0	0	0	483	30
Napa	0	0	0	1	5
Solano	1	0	0	0	43
East Bay	1,393	1	0	0	451
San Francisco, San Mateo, Santa Clara	217	1	8	191	0

Red text indicates key data points discussed in more detail in the body of this report.

- 1,393 trips on I-580 at the Contra Costa/Marin County Line are traveling from the East Bay to Sonoma County during the AM Peak Period (6 AM to 10 AM).
- 191 trips on I-580 at the Contra Costa/Marin County Line are traveling from San Francisco, San Mateo, or Santa Clara to the East Bay during the AM Peak Period (6 AM to 10 AM).

Table 7 provides a relative summary of the types of trips that occur at each of the 11 select-link locations during the PM Peak Period (3 PM to 7 PM).

TABLE 7 SELECT-LINK O-D DATA – PM PEAK PERIOD TRIPS BY TRIP TYPE PERCENTAGE

Traffic Count Location	Total Trips	Trips Passing Through Marin County	Trips Into Marin County	Trips Out of Marin County	Intra-Marin County Trips
1 - US 101 at the Sonoma/Marin County Line ¹	18,000	37%	28%	36%	0%
In to Marin County (Southbound)	8,000	38%	62%	0%	0%
Out of Marin County (Northbound)	10,000	36%	0%	64%	0%
2 - US 101 North of San Rafael	47,000	21%	18%	19%	42%
3 - US 101 in Downtown San Rafael	55,000	18%	19%	17%	46%
4 - US 101 at Sir Francis Drake Boulevard	41,000	17%	22%	14%	46%
5 - US 101 over Richardson Bay	32,000	19%	26%	24%	31%
6 - US 101 at the Golden Gate Bridge ¹	32,000	20%	49%	31%	0%
In to Marin County (Northbound)	19,000	17%	83%	0%	0%
Out of Marin County (Southbound)	13,000	24%	0%	76%	0%
7 - SR 37 at the Sonoma/Marin County Line ¹	10,000	34%	24%	42%	0%
In to Marin County (Westbound)	4,000	39%	61%	0%	0%
Out of Marin County (Eastbound)	6,000	30%	0%	70%	0%
8 - I-580 at the Contra Costa/Marin County Line ¹	23,000	16%	33%	51%	0%
In to Marin County (Westbound)	9,000	15%	85%	0%	0%
Out of Marin County (Eastbound)	14,000	16%	0%	84%	0%
9 - Sir Francis Drake Blvd West of US 101	14,000	0%	18%	8%	74%
10 - Sir Francis Drake Blvd East of US 101	12,000	4%	23%	12%	60%
11 - Highway 1 West of US 101	9,000	0%	40%	10%	49%

¹Marin County Gateway

Red text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 7**, the two highest percentages of trips passing through Marin County (34% and 37%) occur at the two Sonoma/Marin county line locations, the highest percentage of inter-county trips (84%) occurs on I-580 at the Contra Costa/Marin County Line, and the two highest percentage of intra-Marin County trips (60% and 74%) occur on Sir Francis Drake Boulevard.

Through a comparison of “trips into Marin County” and “trips out of Marin County,” **Table 7** also indicates a reversal of travel patterns shown in **Table 5** for the morning peak period, suggesting a majority of imported and exported trips are commuters.

A relative summary of county-to-county pass-through trip information at each of the four Marin County gateway locations during the PM Peak Period (3 PM to 7 PM) is provide below.

1 - US 101 at the Sonoma/Marin County Line

Percent of Total Trips at Select-Link Location (18,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0%	0%	0%	5%	11%
Napa	0%	0%	0%	0%	0%
Solano	0%	0%	0%	0%	0%
East Bay	5%	0%	0%	0%	0%
San Francisco, San Mateo, Santa Clara	15%	0%	0%	0%	0%

Red text indicates key data points discussed in more detail in the body of this report.

- 15% of total trips on US 101 at the Sonoma/Marin County Line are traveling from San Francisco, San Mateo, or Santa Clara to Sonoma during the PM Peak Period (3 PM to 7 PM).

6 - US 101 at the Golden Gate Bridge

Percent of Total Trips at Select-Link Location (32,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0%	0%	0%	0%	7%
Napa	0%	0%	0%	0%	1%
Solano	0%	0%	0%	0%	0%
East Bay	0%	0%	0%	0%	1%
San Francisco, San Mateo, Santa Clara	9%	0%	0%	0%	0%

Red text indicates key data points discussed in more detail in the body of this report.

- 9% of total trips on US 101 at the Golden Gate Bridge are traveling from San Francisco, San Mateo, or Santa Clara to Sonoma County during the PM Peak Period (3 PM to 7 PM).

7 - SR 37 at the Sonoma/Marin County Line

Percent of Total Trips at Select-Link Location (10,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0%	0%	0%	1%	7%
Napa	0%	0%	0%	0%	6%
Solano	0%	0%	0%	0%	1%
East Bay	3%	0%	0%	0%	0%
San Francisco, San Mateo, Santa Clara	10%	4%	1%	0%	0%

Red text indicates key data points discussed in more detail in the body of this report.

- 10% of total trips on SR 37 at the Sonoma/Marin County Line are traveling from San Francisco, San Mateo, or Santa Clara to Sonoma County during the PM Peak Period (3 PM to 7 PM).

8 - I-580 at the Contra Costa/Marin County Line

Percent of Total Trips at Select-Link Location (23,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0%	0%	0%	6%	1%
Napa	0%	0%	0%	0%	0%
Solano	0%	0%	0%	0%	0%
East Bay	4%	0%	0%	0%	1%
San Francisco, San Mateo, Santa Clara	0%	0%	0%	2%	0%

Red text indicates key data points discussed in more detail in the body of this report.

- 6% of total trips on I-580 at the Contra Costa/Marin County Line are traveling from Sonoma County to the East Bay during the PM Peak Period (3 PM to 7 PM).
- 2% of total trips on I-580 at the Contra Costa/Marin County Line are traveling from San Francisco, San Mateo, or Santa Clara to the East Bay during the PM Peak Period (3 PM to 7 PM).

Table 8 provides an absolute summary of the types of trips that occur at each of the 11 select-link locations during the PM Peak Period (3 PM to 7 PM).

TABLE 8 SELECT-LINK O-D DATA – PM PEAK PERIOD TRIPS BY TRIP TYPE

Traffic Count Location	Total Trips	Trips Passing Through Marin County	Trips Into Marin County	Trips Out of Marin County	Intra-Marin County Trips
1 - US 101 at the Sonoma/Marin County Line ¹	18,000	6,613	4,983	6,404	0
In to Marin County (Southbound)	8,000	3,017	4,983	0	0
Out of Marin County (Northbound)	10,000	3,596	0	6,404	0
2 - US 101 North of San Rafael	47,000	9,962	8,386	8,714	19,938
3 - US 101 in Downtown San Rafael	55,000	9,905	10,557	9,372	25,165
4 - US 101 at Sir Francis Drake Boulevard	41,000	7,055	9,142	5,760	19,043
5 - US 101 over Richardson Bay	32,000	6,148	8,242	7,665	9,946
6 - US 101 at the Golden Gate Bridge ¹	32,000	6,343	15,715	9,941	0
In to Marin County (Northbound)	19,000	3,285	15,715	0	0
Out of Marin County (Southbound)	13,000	3,059	0	9,941	0
7 - SR 37 at the Sonoma/Marin County Line ¹	10,000	3,350	2,435	4,215	0
In to Marin County (Westbound)	4,000	1,565	2,435	0	0
Out of Marin County (Eastbound)	6,000	1,785	0	4,215	0
8 - I-580 at the Contra Costa/Marin County Line ¹	23,000	3,660	7,621	11,719	0
In to Marin County (Westbound)	9,000	1,379	7,621	0	0
Out of Marin County (Eastbound)	14,000	2,281	0	11,719	0
9 - Sir Francis Drake Blvd West of US 101	14,000	10	2,546	1,072	10,372
10 - Sir Francis Drake Blvd East of US 101	12,000	512	2,819	1,466	7,203
11 - Highway 1 West of US 101	9,000	31	3,639	944	4,385

¹Marin County Gateway

Red text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 8**, the highest number of trips passing through Marin County (9,962) occurs on US 101 in North of San Rafael, the highest number of inter-county trips (25,657) occurs on US 101 at the Golden Gate Bridge, and the highest number of intra-Marin County trips (25,165) occurs on US 101 in Downtown San Rafael.

Through a comparison of “trips into Marin County” and “trips out of Marin County,” **Table 8** also indicates a reversal of travel patterns shown in **Table 6** for the morning peak period, suggesting a majority of imported and exported trips are commuters. A summary of the comparison of morning and afternoon imported and exported trips is provided below.

Sonoma and other North Bay Counties

- 10,647 trips imported in the morning, 10,620 trips exported in the afternoon

San Francisco County

- 15,865 trips exported in the morning, 15,715 trips imported in the afternoon

East Bay

- 11,750 trips imported in the morning, 11,719 trips exported in the afternoon

An absolute summary of county-to-county pass-through trip information at each of the four Marin County gateway locations during the PM Peak Period (3 PM to 7 PM) is provide below.

1 - US 101 at the Sonoma/Marin County Line

Percent of Total Trips at Select-Link Location (18,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0	1	19	898	2,063
Napa	1	0	0	3	34
Solano	9	0	0	0	0
East Bay	944	1	0	0	0
San Francisco, San Mateo, Santa Clara	2,611	29	0	0	0

Red text indicates key data points discussed in more detail in the body of this report.

- 2,611 trips on US 101 at the Sonoma/Marin County Line are traveling from San Francisco, San Mateo, or Santa Clara to Sonoma during the PM Peak Period (3 PM to 7 PM).

6 - US 101 at the Golden Gate Bridge

Percent of Total Trips at Select-Link Location (32,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0	0	0	3	2,368
Napa	2	0	0	1	349
Solano	0	0	0	0	107
East Bay	4	0	0	0	195
San Francisco, San Mateo, Santa Clara	2,945	144	49	105	0

Red text indicates key data points discussed in more detail in the body of this report.

- 2,945 trips on US 101 at the Golden Gate Bridge are traveling from San Francisco, San Mateo, or Santa Clara to Sonoma County during the PM Peak Period (3 PM to 7 PM).

7 - SR 37 at the Sonoma/Marin County Line

Percent of Total Trips at Select-Link Location (10,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0	2	13	117	700
Napa	6	0	0	4	588
Solano	9	0	0	1	139
East Bay	303	2	1	0	0
San Francisco, San Mateo, Santa Clara	975	407	81	0	0

Red text indicates key data points discussed in more detail in the body of this report.

- 975 trips on SR 37 at the Sonoma/Marin County Line are traveling from San Francisco, San Mateo, or Santa Clara to Sonoma County during the PM Peak Period (3 PM to 7 PM).

8 - I-580 at the Contra Costa/Marin County Line

Percent of Total Trips at Select-Link Location (23,000)	Sonoma	Napa	Solano	East Bay	San Francisco, San Mateo, Santa Clara
Sonoma	0	0	3	1,423	220
Napa	0	0	0	8	5
Solano	0	0	0	1	80
East Bay	829	3	2	0	333
San Francisco, San Mateo, Santa Clara	82	7	62	398	0

Red text indicates key data points discussed in more detail in the body of this report.

- 1,423 trips on I-580 at the Contra Costa/Marin County Line are traveling from Sonoma County to the East Bay during the PM Peak Period (3 PM to 7 PM).
- 398 trips on I-580 at the Contra Costa/Marin County Line are traveling from San Francisco, San Mateo, or Santa Clara to the East Bay during the PM Peak Period (3 PM to 7 PM).

Select-Link Inter-County Trip Summary

Inter-county trips were then summarized in more detail at each “select-link” roadway location. **Table 9** provides a relative summary of inter-county trips that travel between Marin County and Sonoma and San Francisco counties at each of the 11 select-link locations during the AM Peak Period (6 AM to 10 AM).

TABLE 9 SELECT-LINK O-D DATA – AM PEAK PERIOD INTER-COUNTY TRIPS PERCENTAGE

Traffic Count Location	Sonoma County Trips Passing Through Marin County	Sonoma County to Marin County	Marin County to Sonoma County	San Francisco County Trips Passing Through Marin County	San Francisco County to Marin County	Marin County to San Francisco County
1 - US 101 at the Sonoma/Marin County Line ¹	28%	41%	19%	6%	0%	0%
2 - US 101 North of San Rafael	15%	10%	6%	4%	4%	8%
3 - US 101 in Downtown San Rafael	12%	4%	3%	4%	6%	9%
4 - US 101 at Sir Francis Drake Boulevard	16%	1%	3%	7%	15%	19%
5 - US 101 over Richardson Bay	12%	0%	0%	5%	12%	39%
6 - US 101 at the Golden Gate Bridge ¹	12%	0%	0%	6%	23%	43%
7 - SR 37 at the Sonoma/Marin County Line ¹	18%	20%	7%	8%	0%	0%
8 - I-580 at the Contra Costa/Marin County Line ¹	3%	0%	0%	1%	1%	0%
9 - Sir Francis Drake Blvd West of US 101	0%	2%	1%	0%	3%	19%
10 - Sir Francis Drake Blvd East of US 101	0%	1%	0%	2%	3%	2%
11 - Highway 1 West of US 101	0%	0%	0%	0%	4%	47%

¹Marin County Gateway

Red text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 9**, the percentage of inter-county trips between Marin County and Sonoma County generally increases on US 101 as you get closer to Sonoma County while the percentage of inter-county trips between Marin County and San Francisco County generally increases on US 101 as you get closer to San Francisco County, suggesting greater inter-county activity in areas closer to adjacent counties.

Table 10 provides an absolute summary of inter-county trips that travel between Marin County and Sonoma and San Francisco counties at each of the 11 select-link locations during the AM Peak Period (6 AM to 10 AM).

TABLE 10 SELECT-LINK O-D DATA – AM PEAK PERIOD INTER-COUNTY TRIPS

Traffic Count Location	Sonoma County Trips Passing Through Marin County	Sonoma County to Marin County	Marin County to Sonoma County	San Francisco County Trips Passing Through Marin County	San Francisco County to Marin County	Marin County to San Francisco County
1 - US 101 at the Sonoma/Marin County Line ¹	4,486	6,489	3,080	905	0	0
2 - US 101 North of San Rafael	5,848	3,885	2,177	1,624	1,496	2,958
3 - US 101 in Downtown San Rafael	5,558	2,083	1,493	1,721	2,746	4,018
4 - US 101 at Sir Francis Drake Boulevard	3,610	198	734	1,657	3,427	4,373
5 - US 101 over Richardson Bay	3,865	67	136	1,448	3,681	12,154
6 - US 101 at the Golden Gate Bridge ¹	3,740	0	0	1,792	6,959	13,048
7 - SR 37 at the Sonoma/Marin County Line ¹	1,785	2,028	748	769	0	0
8 - I-580 at the Contra Costa/Marin County Line ¹	514	7	0	267	214	32
9 - Sir Francis Drake Blvd West of US 101	2	177	58	13	255	1,719
10 - Sir Francis Drake Blvd East of US 101	9	67	53	278	410	262
11 - Highway 1 West of US 101	1	6	34	35	326	3,739

¹Marin County Gateway

Red text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 10**, the number of inter-county trips between Marin County and Sonoma County generally increases on US 101 as you get closer to Sonoma County while the number of inter-county trips between Marin County and San Francisco County generally increases on US 101 as you get closer to San Francisco County, suggesting greater inter-county activity in areas closer to adjacent counties.

Table 11 provides a relative summary of inter-county trips that travel between Marin County and Sonoma and San Francisco counties at each of the 11 select-link locations during the PM Peak Period (3 PM to 7 PM).

TABLE 11 SELECT-LINK O-D DATA – PM PEAK PERIOD INTER-COUNTY TRIPS PERCENTAGE

Traffic Count Location	Sonoma County Trips Passing Through Marin County	Sonoma County to Marin County	Marin County to Sonoma County	San Francisco County Trips Passing Through Marin County	San Francisco County to Marin County	Marin County to San Francisco County
1 - US 101 at the Sonoma/Marin County Line ¹	17%	27%	35%	11%	0%	0%
2 - US 101 North of San Rafael	8%	7%	9%	7%	5%	4%
3 - US 101 in Downtown San Rafael	7%	4%	5%	6%	9%	5%
4 - US 101 at Sir Francis Drake Boulevard	6%	3%	2%	8%	15%	9%
5 - US 101 over Richardson Bay	8%	1%	0%	9%	21%	21%
6 - US 101 at the Golden Gate Bridge ¹	7%	0%	0%	9%	42%	27%
7 - SR 37 at the Sonoma/Marin County Line ¹	8%	11%	29%	12%	0%	0%
8 - I-580 at the Contra Costa/Marin County Line ¹	7%	0%	0%	3%	1%	0%
9 - Sir Francis Drake Blvd West of US 101	0%	1%	1%	0%	13%	5%
10 - Sir Francis Drake Blvd East of US 101	0%	0%	1%	2%	2%	3%
11 - Highway 1 West of US 101	0%	0%	0%	0%	35%	8%

¹Marin County Gateway

Red text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 11**, the percentage of inter-county trips between Marin County and Sonoma County generally increases on US 101 as you get closer to Sonoma County while the percentage of inter-county trips between Marin County and San Francisco County generally increases on US 101 as you get closer to San Francisco County, suggesting greater inter-county activity in areas closer to adjacent counties.

Table 12 provides an absolute summary of inter-county trips that travel between Marin County and Sonoma and San Francisco counties at each of the 11 select-link locations during the PM Peak Period (3 PM to 7 PM).

TABLE 12 SELECT-LINK O-D DATA – PM PEAK PERIOD INTER-COUNTY TRIPS

Traffic Count Location	Sonoma County Trips Passing Through Marin County	Sonoma County to Marin County	Marin County to Sonoma County	San Francisco County Trips Passing Through Marin County	San Francisco County to Marin County	Marin County to San Francisco County
1 - US 101 at the Sonoma/Marin County Line ¹	2,980	4,945	6,362	1,984	0	0
2 - US 101 North of San Rafael	3,785	3,393	4,458	3,159	2,568	1,721
3 - US 101 in Downtown San Rafael	3,577	2,158	2,574	3,202	5,224	2,995
4 - US 101 at Sir Francis Drake Boulevard	2,574	1,260	891	3,085	6,337	3,863
5 - US 101 over Richardson Bay	2,438	232	104	2,890	6,682	6,601
6 - US 101 at the Golden Gate Bridge ¹	2,372	0	0	3,033	13,553	8,680
7 - SR 37 at the Sonoma/Marin County Line ¹	833	1,102	2,852	1,162	0	0
8 - I-580 at the Contra Costa/Marin County Line ¹	1,646	2	0	623	117	85
9 - Sir Francis Drake Blvd West of US 101	1	85	149	7	1,870	648
10 - Sir Francis Drake Blvd East of US 101	8	37	85	213	258	305
11 - Highway 1 West of US 101	1	29	14	10	3,177	748

¹Marin County Gateway

Red text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 12**, the number of inter-county trips between Marin County and Sonoma County generally increases on US 101 as you get closer to Sonoma County while the number of inter-county trips between Marin County and San Francisco County generally increases on US 101 as you get closer to San Francisco County, suggesting greater inter-county activity in areas closer to adjacent counties.

Select-Link Origin and Destination Trip Summary

The refined select-link origin-destination trip tables were then summarized by the county of origin and destination of trips observed travelling on each "select-link" roadway segment. **Table 13** through **Table 20** provide the number and percentage of trips with an origin and destination in each county for the four Marin County gateway select-link locations during the AM Peak Period (6 AM to 10 AM) and PM Peak Period (3 PM to 7 PM). Below is a bulleted summary of the highest percentage origins and destination for each of the four Marin County gateway select-link locations followed by an analysis of the data.

US 101 at the Sonoma/Marin County Line

- In the northbound direction during the AM peak period, an estimated 62 percent of trips originate in Marin County and 99 percent of trips conclude in Sonoma County.
- In the southbound direction during the AM peak period, an estimated 100 percent of trips originate in Sonoma County and 59 percent of trips conclude in Marin County.
- In the northbound direction during the PM peak period, an estimated 64 percent of trips originate in Marin County and 99 percent of trips conclude in Sonoma County.
- In the southbound direction during the PM peak period, an estimated 99 percent of trips originate in Sonoma County and 62 percent of trips conclude in Marin County.

OD data for US 101 at the Sonoma/Marin County Line suggests that vehicles crossing the county line are primarily traveling between Sonoma County and Marin/San Francisco counties.

US 101 at the Golden Gate Bridge

- In the northbound direction during the AM peak period, an estimated 88 percent of trips originate in San Francisco County and 79 percent of trips conclude in Marin County.
- In the southbound direction during the AM peak period, an estimated 79 percent of trips originate in Marin County and 84 percent of trips conclude in San Francisco County.
- In the northbound direction during the PM peak period, an estimated 87 percent of trips originate in San Francisco County and 83 percent of trips conclude in Marin County.
- In the southbound direction during the PM peak period, an estimated 76 percent of trips originate in Marin County and 88 percent of trips conclude in San Francisco County.

OD data for US 101 at the Golden Gate Bridge suggests that Golden Gate Bridge users are primarily travelling between San Francisco County and Marin/Sonoma counties.

SR 37 at the Sonoma/Marin County Line

- In the northbound direction during the AM peak period, an estimated 63 percent of trips originate in Marin County and 44 percent of trips conclude in Sonoma County.
- In the southbound direction during the AM peak period, an estimated 54 percent of trips originate in Sonoma County and 59 percent of trips conclude in Marin County.
- In the northbound direction during the AM peak period, an estimated 70 percent of trips originate in Marin County and 69 percent of trips conclude in Sonoma County.
- In the southbound direction during the AM peak period, an estimated 48 percent of trips originate in Sonoma County and 61 percent of trips conclude in Marin County.

OD data for SR 37 at the Sonoma/Marin County Line suggests that vehicles crossing the county line are primarily traveling between Marin/San Francisco counties and Sonoma/Napa/Solano counties.

I-580 at the Contra Costa/Marin County Line (Richmond/San Rafael Bridge)

- In the northbound direction during the AM peak period, an estimated 36 percent of trips originate in North Alameda County and 84 percent of trips conclude in Marin County.
- In the southbound direction during the AM peak period, an estimated 85 percent of trips originate in Marin County and 56 percent of trips conclude in North Alameda County.
- In the northbound direction during the AM peak period, an estimated 54 percent of trips originate in North Alameda County and 85 percent of trips conclude in Marin County.
- In the southbound direction during the AM peak period, an estimated 84 percent of trips originate in Marin County and 42 percent of trips conclude in North Alameda County.

OD data for I-580 at the Contra Costa/Marin County Line (Richmond/San Rafael Bridge) suggests that vehicles crossing the county line are primarily traveling between Marin/Sonoma counties and Alameda/Contra Costa counties.

TABLE 13 SELECT-LINK O-D DATA – AM PEAK PERIOD COUNTY ORIGINS AND DESTINATIONS - US 101 AT THE SONOMA/MARIN COUNTY LINE

Trip Origins	Trip Origins Percentage	County	Trip Destinations	Trip Destinations Percentage
Northbound				
0	0%	Sonoma	4,967	99%
2	0%	Napa	32	1%
31	1%	Solano	1	0%
121	2%	West Contra Costa	0	0%
140	3%	East Contra Costa	0	0%
341	7%	North Alameda	0	0%
905	18%	San Francisco	0	0%
205	4%	San Mateo	0	0%
56	1%	South Alameda	0	0%
102	2%	Santa Clara	0	0%
3,097	62%	Marin	0	0%
Southbound				
10,975	100%	Sonoma	0	0%
23	0%	Napa	0	0%
3	0%	Solano	18	0%
0	0%	West Contra Costa	225	2%
0	0%	East Contra Costa	18	0%
0	0%	North Alameda	704	6%
0	0%	San Francisco	2,485	23%
0	0%	San Mateo	756	7%
0	0%	South Alameda	135	1%
0	0%	Santa Clara	161	1%
0	0%	Marin	6,498	59%

Red text indicates key data points discussed in more detail in the body of this report.

TABLE 14 SELECT-LINK O-D DATA – AM PEAK PERIOD COUNTY ORIGINS AND DESTINATIONS - US 101 AT THE GOLDEN GATE BRIDGE

Trip Origins	Trip Origins Percentage	County	Trip Destinations	Trip Destinations Percentage
Northbound				
0	0%	Sonoma	1,443	14%
1	0%	Napa	321	3%
0	0%	Solano	58	1%
1	0%	West Contra Costa	264	3%
5	0%	East Contra Costa	3	0%
11	0%	North Alameda	16	0%
8,751	88%	San Francisco	0	0%
1,028	10%	San Mateo	0	0%
6	0%	South Alameda	0	0%
197	2%	Santa Clara	0	0%
0	0%	Marin	7,894	79%
Southbound				
3,740	19%	Sonoma	0	0%
202	1%	Napa	0	0%
61	0%	Solano	0	0%
96	0%	West Contra Costa	2	0%
7	0%	East Contra Costa	4	0%
30	0%	North Alameda	34	0%
0	0%	San Francisco	16,806	84%
0	0%	San Mateo	2,417	12%
0	0%	South Alameda	11	0%
0	0%	Santa Clara	726	4%
15,865	79%	Marin	0	0%

Red text indicates key data points discussed in more detail in the body of this report.

TABLE 15 SELECT-LINK O-D DATA – AM PEAK PERIOD COUNTY ORIGINS AND DESTINATIONS – SR 37 AT THE SONOMA/MARIN COUNTY LINE

Trip Origins	Trip Origins Percentage	County	Trip Destinations	Trip Destinations Percentage
Eastbound				
0	0%	Sonoma	1,321	44%
4	0%	Napa	951	32%
53	2%	Solano	728	24%
7	0%	West Contra Costa	0	0%
122	4%	East Contra Costa	0	0%
30	1%	North Alameda	0	0%
769	26%	San Francisco	0	0%
83	3%	San Mateo	0	0%
5	0%	South Alameda	0	0%
34	1%	Santa Clara	0	0%
1,893	63%	Marin	0	0%
Westbound				
3,814	54%	Sonoma	0	0%
1,956	28%	Napa	0	0%
1,231	18%	Solano	21	0%
0	0%	West Contra Costa	53	1%
0	0%	East Contra Costa	24	0%
0	0%	North Alameda	394	6%
0	0%	San Francisco	1,804	26%
0	0%	San Mateo	454	6%
0	0%	South Alameda	23	0%
0	0%	Santa Clara	79	1%
0	0%	Marin	4,149	59%

Red text indicates key data points discussed in more detail in the body of this report.

TABLE 16 SELECT-LINK O-D DATA – AM PEAK PERIOD COUNTY ORIGINS AND DESTINATIONS – I-580 AT THE CONTRA COSTA/MARIN COUNTY LINE

Trip Origins	Trip Origins Percentage	County	Trip Destinations	Trip Destinations Percentage
Westbound				
7	0%	Sonoma	1,612	12%
3	0%	Napa	3	0%
336	2%	Solano	8	0%
4,846	35%	West Contra Costa	0	0%
2,418	17%	East Contra Costa	0	0%
4,971	36%	North Alameda	0	0%
278	2%	San Francisco	627	4%
58	0%	San Mateo	0	0%
790	6%	South Alameda	0	0%
293	2%	Santa Clara	0	0%
0	0%	Marin	11,750	84%
Eastbound				
514	10%	Sonoma	0	0%
6	0%	Napa	1	0%
43	1%	Solano	25	1%
0	0%	West Contra Costa	861	17%
0	0%	East Contra Costa	758	15%
0	0%	North Alameda	2,780	56%
203	4%	San Francisco	79	2%
0	0%	San Mateo	15	0%
0	0%	South Alameda	403	8%
0	0%	Santa Clara	78	2%
4,235	85%	Marin	0	0%

Red text indicates key data points discussed in more detail in the body of this report.

TABLE 17 SELECT-LINK O-D DATA – PM PEAK PERIOD COUNTY ORIGINS AND DESTINATIONS - US 101 AT THE SONOMA/MARIN COUNTY LINE

Trip Origins	Trip Origins Percentage	County	Trip Destinations	Trip Destinations Percentage
Northbound				
0	0%	Sonoma	9,927	99%
1	0%	Napa	72	1%
9	0%	Solano	1	0%
259	3%	West Contra Costa	0	0%
18	0%	East Contra Costa	0	0%
561	6%	North Alameda	0	0%
1,984	20%	San Francisco	0	0%
478	5%	San Mateo	0	0%
108	1%	South Alameda	0	0%
179	2%	Santa Clara	0	0%
6,404	64%	Marin	0	0%
Southbound				
7,926	99%	Sonoma	0	0%
73	1%	Napa	1	0%
2	0%	Solano	19	0%
0	0%	West Contra Costa	147	2%
0	0%	East Contra Costa	69	1%
0	0%	North Alameda	560	7%
0	0%	San Francisco	1,528	19%
0	0%	San Mateo	308	4%
0	0%	South Alameda	124	2%
0	0%	Santa Clara	261	3%
0	0%	Marin	4,983	62%

Red text indicates key data points discussed in more detail in the body of this report.

TABLE 18 SELECT-LINK O-D DATA – PM PEAK PERIOD COUNTY ORIGINS AND DESTINATIONS - US 101 AT THE GOLDEN GATE BRIDGE

Trip Origins	Trip Origins Percentage	County	Trip Destinations	Trip Destinations Percentage
Northbound				
0	0%	Sonoma	2,950	16%
2	0%	Napa	144	1%
0	0%	Solano	49	0%
4	0%	West Contra Costa	105	1%
9	0%	East Contra Costa	9	0%
31	0%	North Alameda	27	0%
16,587	87%	San Francisco	0	0%
1,843	10%	San Mateo	0	0%
12	0%	South Alameda	0	0%
512	3%	Santa Clara	0	0%
0	0%	Marin	15,715	83%
Southbound				
2,372	18%	Sonoma	0	0%
350	3%	Napa	0	0%
107	1%	Solano	0	0%
195	1%	West Contra Costa	0	0%
7	0%	East Contra Costa	8	0%
28	0%	North Alameda	39	0%
0	0%	San Francisco	11,405	88%
0	0%	San Mateo	1,192	9%
0	0%	South Alameda	21	0%
0	0%	Santa Clara	334	3%
9,941	76%	Marin	0	0%

Red text indicates key data points discussed in more detail in the body of this report.

TABLE 19 SELECT-LINK O-D DATA – PM PEAK PERIOD COUNTY ORIGINS AND DESTINATIONS – SR 37 AT THE SONOMA/MARIN COUNTY LINE

Trip Origins	Trip Origins Percentage	County	Trip Destinations	Trip Destinations Percentage
Eastbound				
0	0%	Sonoma	4,145	69%
6	0%	Napa	1,261	21%
9	0%	Solano	594	10%
49	1%	West Contra Costa	0	0%
6	0%	East Contra Costa	0	0%
234	4%	North Alameda	0	0%
1,162	19%	San Francisco	0	0%
243	4%	San Mateo	0	0%
17	0%	South Alameda	0	0%
58	1%	Santa Clara	0	0%
4,215	70%	Marin	0	0%
Westbound				
1,935	48%	Sonoma	0	0%
1,344	34%	Napa	2	0%
720	18%	Solano	13	0%
0	0%	West Contra Costa	11	0%
0	0%	East Contra Costa	22	1%
0	0%	North Alameda	80	2%
0	0%	San Francisco	1,236	31%
0	0%	San Mateo	161	4%
0	0%	South Alameda	9	0%
0	0%	Santa Clara	30	1%
0	0%	Marin	2,435	61%

Red text indicates key data points discussed in more detail in the body of this report.

TABLE 20 SELECT-LINK O-D DATA – PM PEAK PERIOD COUNTY ORIGINS AND DESTINATIONS – I-580 AT THE CONTRA COSTA/MARIN COUNTY LINE

Trip Origins	Trip Origins Percentage	County	Trip Destinations	Trip Destinations Percentage
Westbound				
2	0%	Sonoma	912	10%
2	0%	Napa	10	0%
84	1%	Solano	64	1%
1,931	21%	West Contra Costa	0	0%
1,192	13%	East Contra Costa	0	0%
4,819	54%	North Alameda	0	0%
199	2%	San Francisco	393	4%
25	0%	San Mateo	0	0%
580	6%	South Alameda	0	0%
164	2%	Santa Clara	0	0%
0	0%	Marin	7,621	85%
Eastbound				
1,646	12%	Sonoma	0	0%
13	0%	Napa	23	0%
81	1%	Solano	255	2%
0	0%	West Contra Costa	4,452	32%
0	0%	East Contra Costa	1,929	14%
0	0%	North Alameda	5,947	42%
540	4%	San Francisco	193	1%
0	0%	San Mateo	42	0%
0	0%	South Alameda	763	5%
0	0%	Santa Clara	397	3%
11,719	84%	Marin	0	0%

Red text indicates key data points discussed in more detail in the body of this report.

COUNTYWIDE ORIGIN-DESTINATION TRIP TABLES

Countywide origin-destination trip tables provide the number of trips between each zone and every other zone in the zone system. They are very similar to the select-link origin-destination trips tables but rather than provide the index of trips between each zone that travel through a selected roadway segment, they provide the index of trips between each zone that travel through Marin County regardless of what roadway they travel on. These OD trip tables are intended to summarize all trips that travel within Marin County as opposed to trips that travel on individual roadway segments within Marin County. As with the select-link OD trip tables, each trip table provides 1,600 (40 zones by 40 zones) possible zone pairs but a separate trip table is only provided for each day type, day part, and vehicle type, not for individual roadway segments.

As with the select-link origin-destination data, the indexed trip values in the countywide OD trip tables represent “relative” rather than “absolute” trips, but since the data summarizes all trips that travel within Marin County, there is no singular count location that can be used to factor “relative” trips to “absolute” trips. However, since the countywide origin-destination data is also based on the same GPS-enabled devices as the select-link origin-destination data, the ratio of inter-county trips (absolute magnitude derived from refined select-link OD data) to intra-county trips was applied to estimate “absolute” intra-county trips.

The refined countywide origin-destination trip tables represent an “absolute” measure of the total trips that occur with Marin County, including trips that pass through Marin County, trips that travel into Marin County, trips that travel out of Marin County, and trips that have both their origin and destination within Marin County.

The refined countywide origin-destination trip tables were first summarized by the county of origin and destination of trips observed travelling within Marin County. **Table 21** provides a summary of the “absolute” AM Peak Period (6 AM to 10 AM) county-to-county flows and **Table 22** provides a summary of the “absolute” PM Peak Period (3 PM to 7 PM) county-to-county flows. As shown in **Table 21** and **Table 22**, intra-Marin County flows comprise the majority of total OD flows for Marin County with the highest county-to-county flows generally between Marin County and San Francisco (six percent) or Sonoma (four percent) counties in the AM and PM peak periods. This data is generally consistent with CHTS county-to-county total tour flows which indicates approximately seven percent of Marin County tours interact with San Francisco County and five percent of Marin County tours interact with Sonoma County on a daily basis.

TABLE 21 COUNTYWIDE O-D DATA – AM PEAK PERIOD COUNTY-TO-COUNTY FLOWS

County	Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Marin	Total
Sonoma	0	0	20	182	25	721	3,413	664	100	138	8,525	13,787
Napa	4	0	0	1	0	2	449	108	1	14	1,039	1,618
Solano	42	0	0	0	0	0	119	3	0	0	1,428	1,593
West Contra Costa	199	0	0	0	0	0	273	0	0	0	4,126	4,599
East Contra Costa	195	0	0	0	0	0	25	0	0	0	2,251	2,471
North Alameda	618	1	0	0	0	0	82	0	0	0	3,981	4,682
San Francisco	1,179	380	65	227	2	13	0	0	0	0	7,172	9,039
San Mateo	255	15	7	0	0	0	0	0	0	0	820	1,098
South Alameda	96	0	0	0	0	0	0	0	0	0	665	761
Santa Clara	170	2	0	0	0	0	0	0	0	0	282	454
Marin	3,827	512	676	585	752	2,455	13,080	2,093	369	740	163,837	188,926
Total	6,585	910	768	995	779	3,191	17,441	2,867	470	892	194,128	229,027

Red text indicates key data points discussed in more detail in the body of this report.

Below is a summary of the ten highest AM peak period county-to-county travel flows shown in **Table 21**.

1. Marin County to Marin County 163,837
2. Marin County to San Francisco County 13,080
3. Sonoma County to Marin County 8,525
4. San Francisco County to Marin County 7,172
5. West Contra Costa County to Marin County 4,126
6. North Alameda County to Marin County 3,981
7. Marin County to Sonoma County 3,827
8. Sonoma County to San Francisco County 3,413
9. Marin County to North Alameda County 2,455
10. East Contra Costa County to Marin County 2,251

TABLE 22 COUNTYWIDE O-D DATA – PM PEAK PERIOD COUNTY-TO-COUNTY FLOWS

County	Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Marin	Total
Sonoma	0	2	17	194	87	779	2,092	316	160	269	6,049	9,965
Napa	4	0	0	0	1	4	433	48	3	6	790	1,291
Solano	9	0	0	0	0	1	158	5	0	0	667	840
West Contra Costa	257	0	2	0	0	0	264	0	0	0	1,393	1,915
East Contra Costa	16	0	0	0	0	0	10	0	0	0	1,178	1,205
North Alameda	665	2	0	0	0	0	38	0	0	0	4,264	4,969
San Francisco	2,740	229	91	251	21	68	0	0	0	0	13,670	17,071
San Mateo	412	54	5	0	0	0	0	0	0	0	1,648	2,118
South Alameda	102	1	0	0	0	0	0	0	0	0	512	615
Santa Clara	155	11	0	0	0	0	0	0	0	0	582	748
Marin	9,214	916	766	3,823	1,819	4,949	8,766	965	590	472	186,478	218,757
Total	13,574	1,215	881	4,269	1,928	5,801	11,760	1,334	754	747	217,232	259,495

Red text indicates key data points discussed in more detail in the body of this report.

Below is a summary of the ten highest PM peak period county-to-county travel flows shown in **Table 22**.

1. Marin County to Marin County 186,478
2. San Francisco County to Marin County 13,670
3. Marin County to Sonoma County 9,214
4. Marin County to San Francisco County 8,766
5. Sonoma County to Marin County 6,049
6. Marin County to North Alameda County 4,949
7. North Alameda County to Marin County 4,264
8. Marin County to West Contra Costa County 3,823
9. San Francisco County to Sonoma County 2,740
10. Marin County to East Contra Costa County 1,819

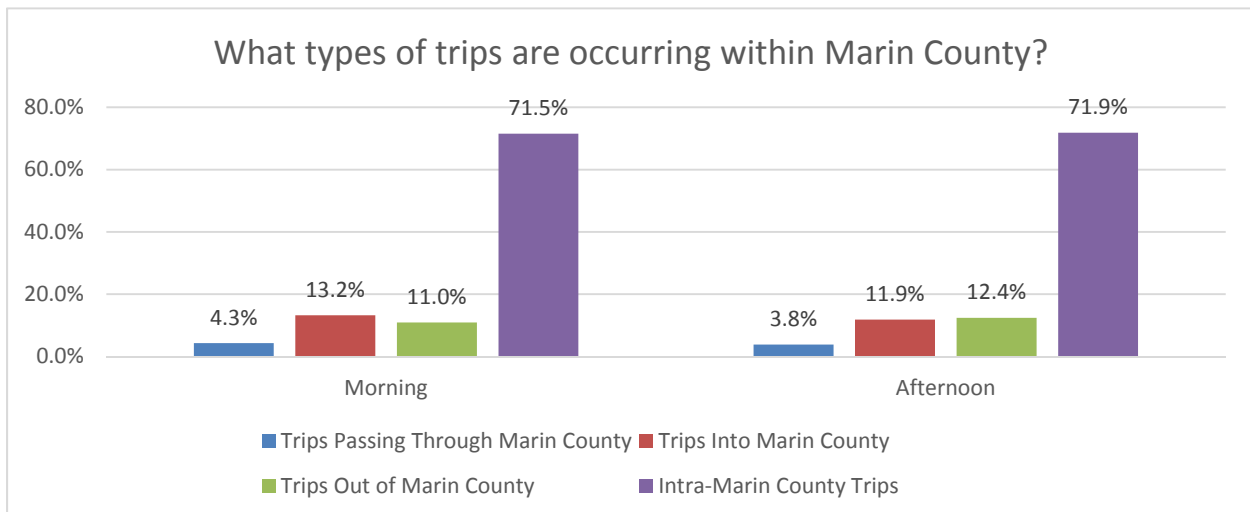
The refined countywide origin-destination trip tables were then summarized by the types of trips observed travelling within Marin County. **Table 23** provides an absolute and relative summary of the types of trips that occur within Marin County during the AM Peak Period (6 AM to 10 AM) and PM Peak Period (3 PM to 7 PM).

TABLE 23 COUNTYWIDE O-D DATA –TRIPS BY TRIP TYPE

Time Period	Total Trips	Trips Passing Through Marin County	Trips Into Marin County	Trips Out of Marin County	Intra-Marin County Trips
Total Trips					
AM Peak Period (6 AM to 10 AM)	229,027	9,809	30,292	25,089	163,837
PM Peak Period (3 PM to 7 PM)	259,495	9,983	30,755	32,279	186,478
Percentage of Total Trips					
AM Peak Period (6 AM to 10 AM)	100%	4.3%	13.2%	11.0%	71.5%
PM Peak Period (3 PM to 7 PM)	100%	3.8%	11.9%	12.4%	71.9%

Red text indicates key data points discussed in more detail in the body of this report.

CHART 1 COUNTYWIDE O-D DATA –TRIPS BY TRIP TYPE



As shown in **Table 23**, approximately 13 percent more total trips occur during the PM peak period, with a majority of those trips being intra-Marin County trips likely representing shopping, recreational, or visitor trips. This is consistent with traffic count data which indicated that on average 11 percent more traffic occurs in the PM peak period.

Additionally, intra-Marin County trips comprise 71.5 and 71.9 percent of total trips, trips passing through Marin County comprise 4.3 and 3.8 percent of total trips, and inter-county trips comprise 24.2 and 24.3 percent of total trips, in the AM and PM peak periods, respectively. This data suggests that trips that travel within Marin County comprise a majority of traffic on Marin County roadways and is generally consistent with CHTS county-to-county total tour flows which indicate approximately 80 percent of Marin County trips are intra-county trips.

Inter-county trips were then summarized in more detail for trips observed travelling within Marin County. **Table 24** provides an absolute and relative summary of inter-county trips that travel between Marin County and Sonoma and San Francisco counties during the AM Peak Period (6 AM to 10 AM) and PM Peak Period (3 PM to 7 PM).

TABLE 24 COUNTYWIDE O-D DATA – INTER-COUNTY TRIPS

Time Period	Sonoma County Trips Passing Through Marin County	Sonoma County to Marin County	Marin County to Sonoma County	San Francisco County Trips Passing Through Marin County	San Francisco County to Marin County	Marin County to San Francisco County
Total Trips						
AM Peak Period (6 AM to 10 AM)	5,262	8,525	3,827	1,866	7,172	13,080
PM Peak Period (3 PM to 7 PM)	3,916	6,049	9,214	3,401	13,670	8,766
Percentage of Total Trips						
AM Peak Period (6 AM to 10 AM)	2%	4%	2%	1%	3%	6%
PM Peak Period (3 PM to 7 PM)	2%	2%	4%	1%	5%	3%

Red, green, and blue text indicates key data points discussed in more detail in the body of this report.

Below is a summary of key takeaways from **Table 24**.

- More than twice as many Sonoma County trips pass through Marin County than San Francisco County trips pass through Marin County in the AM peak period (red text).
- Almost twice as many Marin County trips travel to San Francisco County than from San Francisco County to Marin County in the AM peak period (green text).
- More than twice as many Sonoma County trips travel to Marin County than from Marin County to Sonoma County in the AM peak period (blue text).

Chart 2 through **Chart 5** illustrate the relative percent of trips coming into and going out of Marin County in the AM Peak Period and PM peak period.

CHART 2 COUNTYWIDE O-D DATA – AM PEAK PERIOD TRIPS INTO MARIN COUNTY

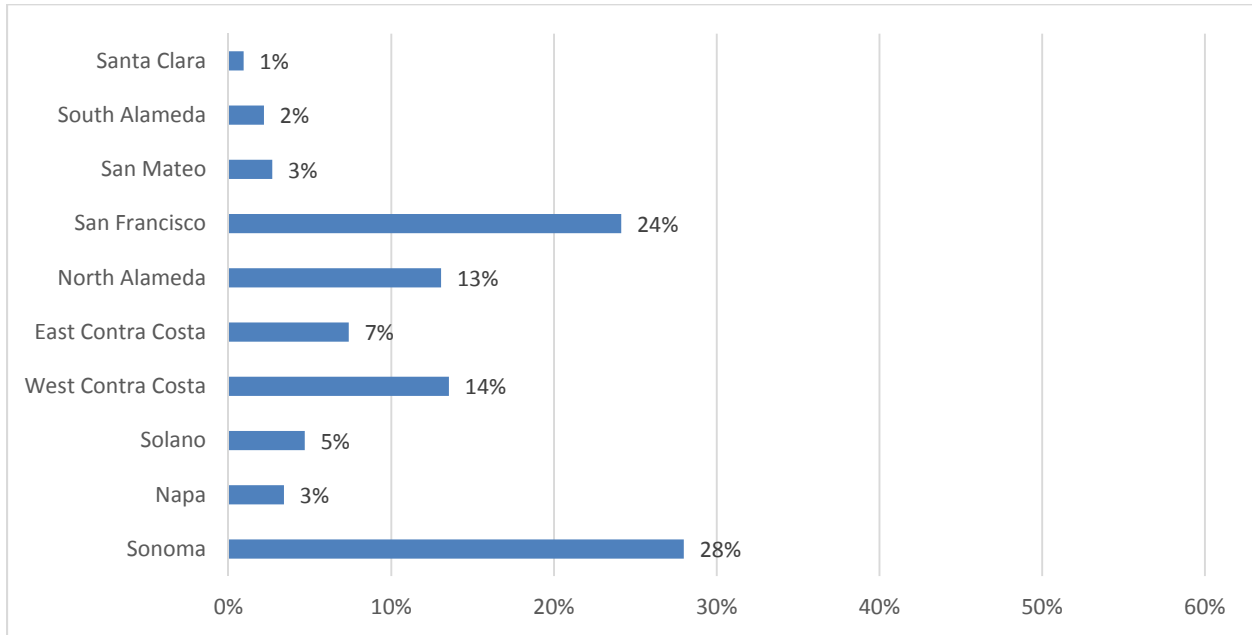


CHART 3 COUNTYWIDE O-D DATA – AM PEAK PERIOD TRIPS OUT OF MARIN COUNTY

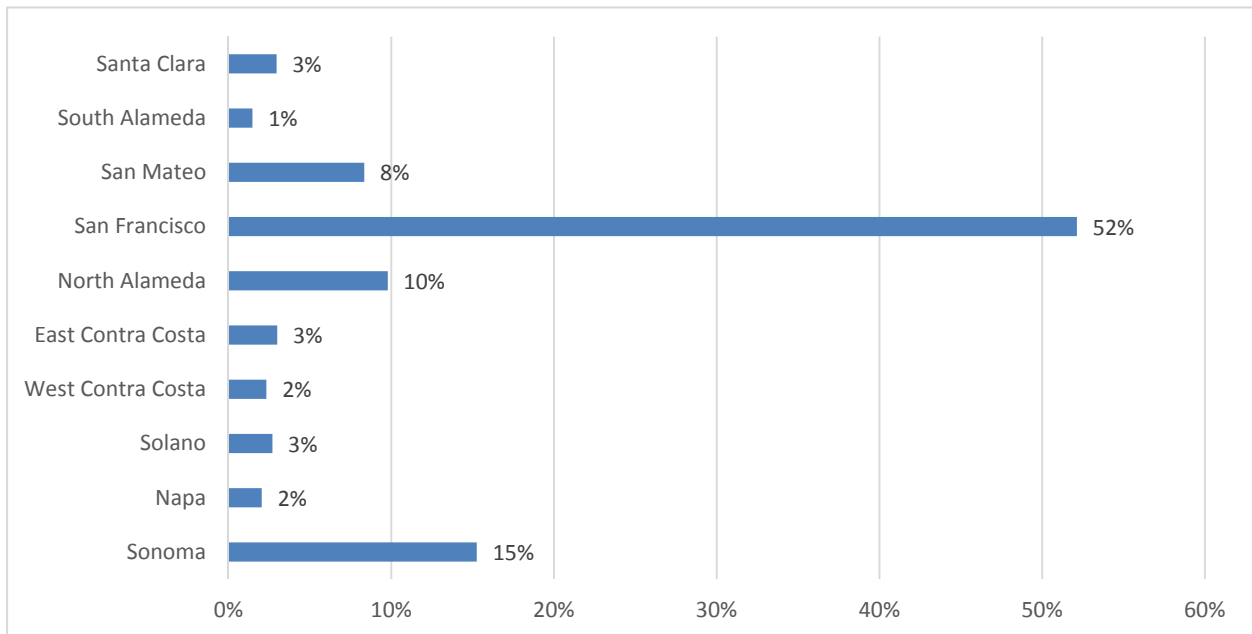


CHART 4 COUNTYWIDE O-D DATA – PM PEAK PERIOD TRIPS INTO MARIN COUNTY

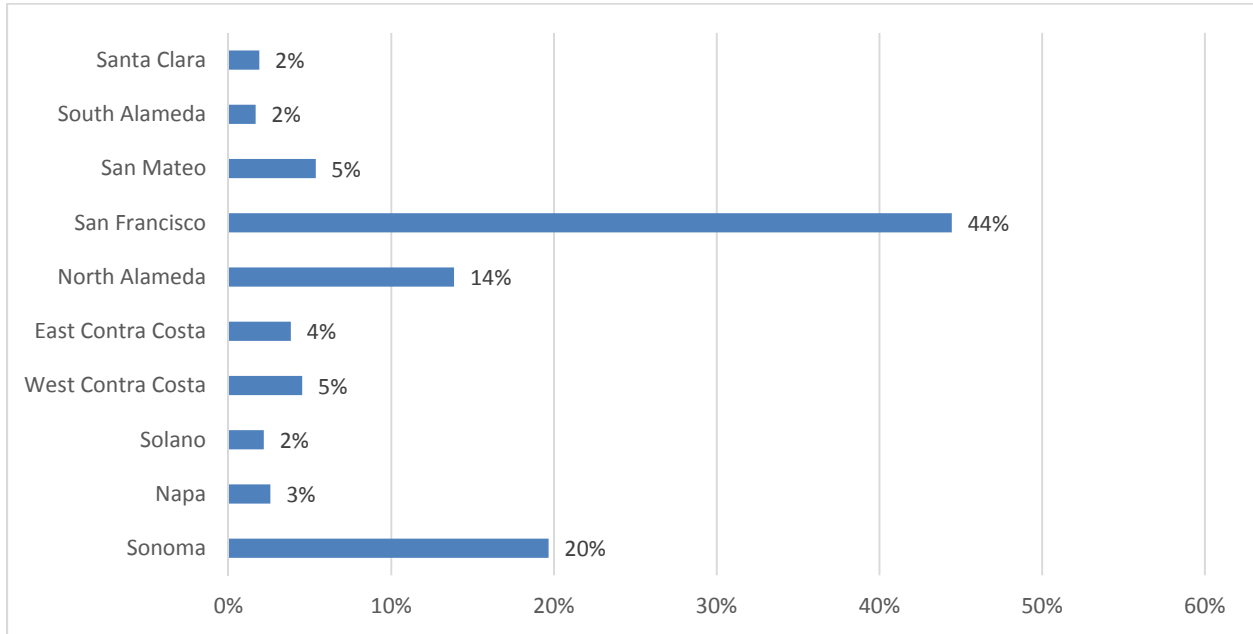
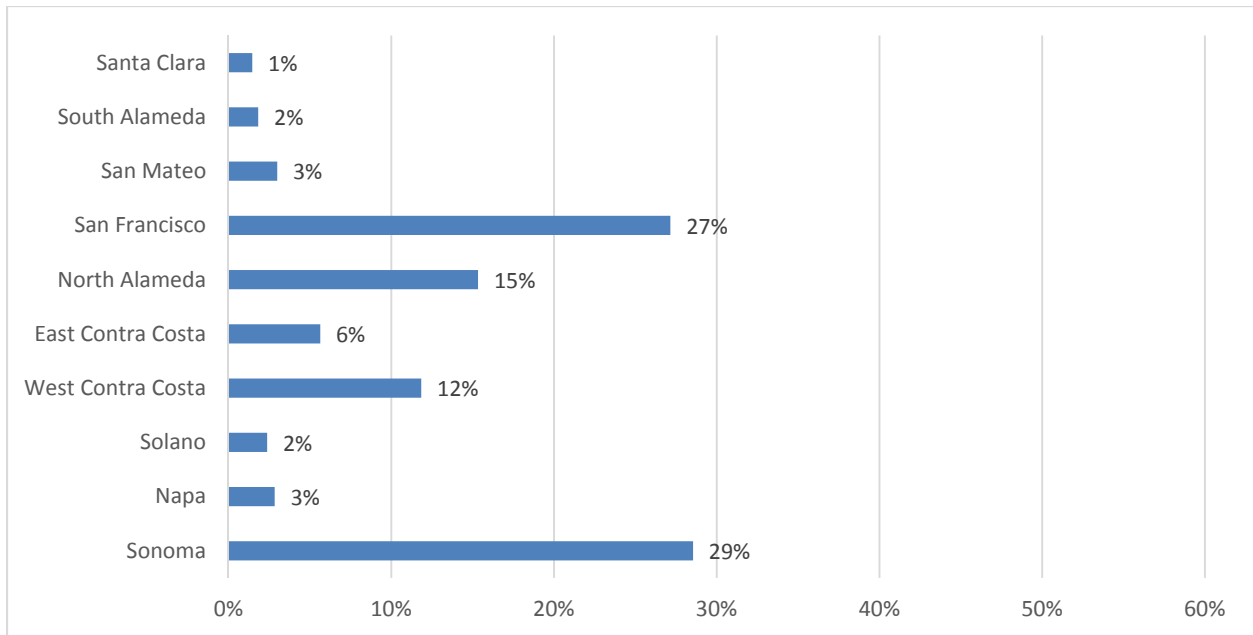


CHART 5 COUNTYWIDE O-D DATA – PM PEAK PERIOD TRIPS OUT OF MARIN COUNTY



Below is a summary of key takeaways from **Chart 2** to **Chart 5**.

- Approximately 52 percent of all AM peak period trips into Marin County are coming from Sonoma or San Francisco counties.
- Approximately 67 percent of all AM peak period trips out of Marin County are going to Sonoma or San Francisco counties.

LOCAL JURISDICTION ORIGIN-DESTINATION DATA

The refined countywide origin-destination trip tables were then summarized by trips with an origin and trips with a destination in each local jurisdiction within Marin County. **Table 25** provides an absolute and relative summary of trips with an origin or destination in each Marin County jurisdiction during the AM Peak Period (6 AM to 10 AM), providing an estimate of the relative and absolute magnitude of trips generated by each Marin County jurisdiction.

TABLE 25 LOCAL JURISDICTION O-D DATA – AM PEAK PERIOD CITY ORIGINS AND DESTINATIONS

Trip Origins	Trip Origins Percentage	City	Trip Destinations	Trip Destinations Percentage
2,446	1%	Belvedere	1,304	1%
12,925	7%	Corte Madera	18,158	9%
3,216	2%	Fairfax	1,851	1%
22,363	12%	Larkspur	22,141	11%
17,643	9%	Mill Valley	14,776	8%
27,752	15%	Novato	28,476	15%
3,626	2%	Ross	2,063	1%
10,215	5%	San Anselmo	7,011	4%
42,250	22%	San Rafael	59,723	31%
10,630	6%	Sausalito	11,938	6%
14,639	8%	Tiburon	9,933	5%
21,220	11%	Unincorporated	16,754	9%

Red text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 25**, approximately 22 percent of trips originating in Marin County originate in the city of San Rafael while approximately 31 percent of trips concluding in Marin County conclude in the city of San Rafael in the AM peak period (6 AM to 10 AM), suggesting that the City of San Rafael generates more trips in the morning peak period than any other local jurisdiction in Marin County while the City of Belvedere generates the fewest trips.

Table 26 provides an absolute and relative summary of trips with an origin or destination in each Marin County jurisdiction during the PM Peak Period (3 PM to 7 PM), providing an estimate of the relative and absolute magnitude of trips generated by each Marin County jurisdiction.

TABLE 26 LOCAL JURISDICTION O-D DATA – PM PEAK PERIOD CITY ORIGINS AND DESTINATIONS

Trip Origins	Trip Origins Percentage	City	Trip Destinations	Trip Destinations Percentage
1,623	1%	Belvedere	2,187	1%
21,355	10%	Corte Madera	21,426	10%
2,560	1%	Fairfax	3,133	1%
21,080	10%	Larkspur	23,937	11%
20,801	10%	Mill Valley	23,084	11%
29,106	13%	Novato	25,986	12%
2,784	1%	Ross	3,501	2%
8,672	4%	San Anselmo	11,233	5%
58,207	27%	San Rafael	51,252	24%
18,159	8%	Sausalito	13,306	6%
11,047	5%	Tiburon	12,154	6%
23,364	11%	Unincorporated	26,032	12%

Red text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 26**, approximately 27 percent of trips originating in Marin County originate in the city of San Rafael while approximately 24 percent of trips concluding in Marin County conclude in the city of San Rafael in the PM peak period (3 PM to 7 PM), suggesting that the City of San Rafael generates more trips in the afternoon peak period than any other local jurisdiction in Marin County while the City of Belvedere generates the fewest trips.

SEASONAL VARIATION

In order to determine variations in seasonal trip making, mobile device OD data was purchased for the entire portion of 2015 when school was in session and for the entire portion of 2015 when school was not in session. This allowed for the comparison of “summer” and “non-summer” travel patterns.

Table 27 provides the percent difference in “summer” travel patterns compared to “non-summer” travel patterns by types of trips that occur within Marin County during the AM Peak Period (6 AM to 10 AM).

TABLE 27 AM PEAK PERIOD SEASONAL VARIATION BY TRIP TYPE

Traffic Count Location	Total Trips	Trips Passing Through Marin County	Trips Into Marin County	Trips Out of Marin County	Intra-Marin County Trips
1 - US 101 at the Sonoma/Marin County Line ¹	-5%	2%	-5%	-14%	0%
2 - US 101 North of San Rafael	-7%	3%	-1%	-6%	-17%
3 - US 101 in Downtown San Rafael	-8%	2%	0%	-7%	-19%
4 - US 101 at Sir Francis Drake Boulevard	-9%	3%	7%	-9%	-22%
5 - US 101 over Richardson Bay	-11%	-2%	-1%	-13%	-19%
6 - US 101 at the Golden Gate Bridge ¹	-12%	-1%	0%	-16%	0%
7 - SR 37 at the Sonoma/Marin County Line ¹	-1%	7%	-13%	4%	0%
8 - I-580 at the Contra Costa/Marin County Line ¹	-2%	-6%	-5%	2%	0%
9 - Sir Francis Drake Blvd West of US 101	-13%	-79%	-6%	-10%	-15%
10 - Sir Francis Drake Blvd East of US 101	-16%	-23%	-17%	-6%	-20%
11 - Highway 1 West of US 101	-9%	-83%	36%	-12%	-10%

Red and blue text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 27**, total trip making is lower in the “summer” at all 11 select-link locations, ranging from a one percent decrease to a 16 percent decrease, with the two largest percent decreases (-13 percent and -16 percent) on Sir Francis Drake Boulevard (red text). Additionally, the largest percent decrease in inter-county trips (-17 percent) is observed along Sir Francis Drake Boulevard for trips coming into Marin County (blue text), suggesting a decrease in work trips coming from the East Bay into Marin County.

Table 28 provides the percent difference in “summer” travel patterns compared to “non-summer” travel patterns by types of trips that occur within Marin County during the PM Peak Period (3 PM to 7 PM).

TABLE 28 PM PEAK PERIOD SEASONAL VARIATION BY TRIP TYPE

Traffic Count Location	Total Trips	Trips Passing Through Marin County	Trips Into Marin County	Trips Out of Marin County	Intra-Marin County Trips
1 - US 101 at the Sonoma/Marin County Line ¹	-11%	-24%	-12%	4%	0%
2 - US 101 North of San Rafael	-12%	-21%	-11%	-7%	-10%
3 - US 101 in Downtown San Rafael	-13%	-22%	-16%	-6%	-11%
4 - US 101 at Sir Francis Drake Boulevard	-17%	-22%	-21%	-5%	-17%
5 - US 101 over Richardson Bay	-18%	-22%	-22%	-16%	-13%
6 - US 101 at the Golden Gate Bridge ¹	-19%	-22%	-21%	-15%	0%
7 - SR 37 at the Sonoma/Marin County Line ¹	1%	-20%	6%	17%	0%
8 - I-580 at the Contra Costa/Marin County Line ¹	-13%	-20%	-13%	-10%	0%
9 - Sir Francis Drake Blvd West of US 101	-27%	-41%	-28%	-38%	-25%
10 - Sir Francis Drake Blvd East of US 101	-21%	-26%	-19%	-28%	-19%
11 - Highway 1 West of US 101	-23%	-73%	-25%	-12%	-23%

Red and blue text indicates key data points discussed in more detail in the body of this report.

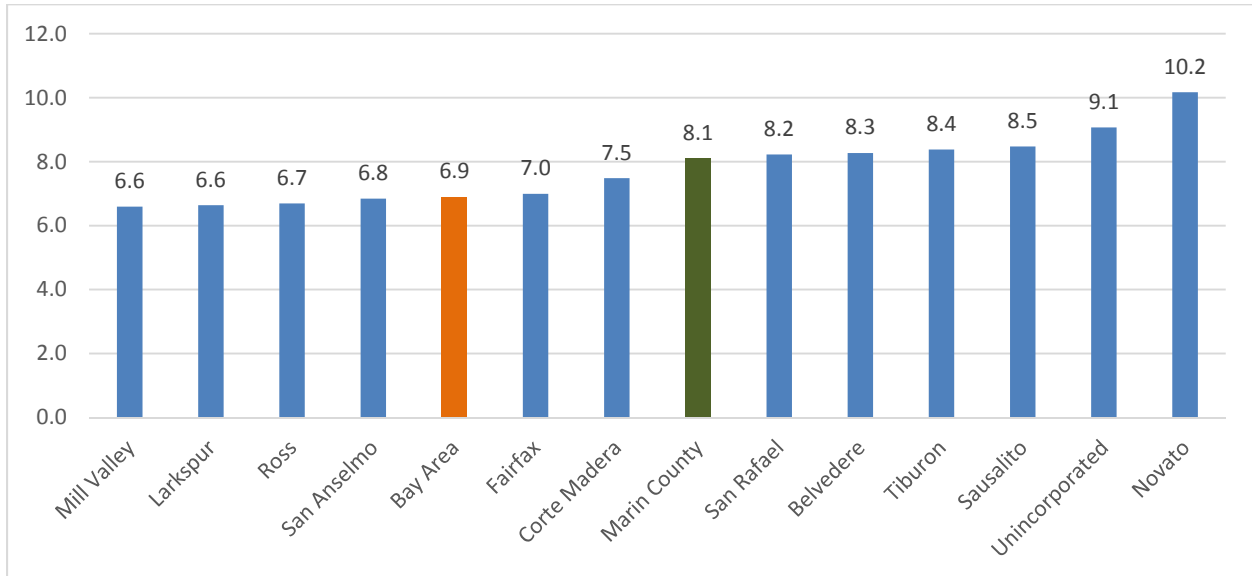
As shown in **Table 28**, total trip making is lower in the “summer” at ten of the 11 select-link locations, ranging from a one percent increase to a 27 percent decrease, with two of the three largest percent decreases (21 percent and 27 percent) on Sir Francis Drake Boulevard (red text). Additionally, the largest percent decrease in inter-county trips (-38 percent) is observed along Sir Francis Drake Boulevard for trips travelling out of Marin County (blue text), suggesting a decrease in work trips returning home to the East Bay from Marin County.

AVERAGE TRIP LENGTHS

In order to determine average trip lengths for trips originating in Marin County cities, Fehr & Peers purchased advanced trip length metrics offered by StreetLight Data that provide the trip length distribution and average trip length for each zone in the geographic layer, allowing for an understanding of how average trip length varies in different parts of Marin County.

Chart 6 provides the average daily trip length for Marin County, individual cities within Marin County, unincorporated areas within Marin County, and the Bay Area.

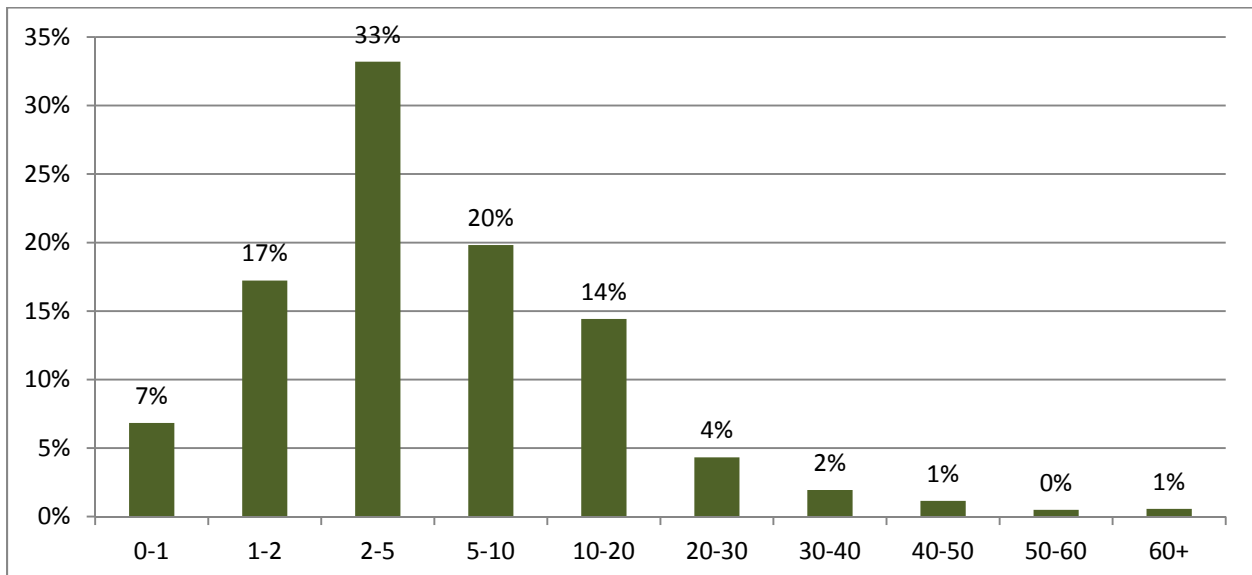
CHART 6 AVERAGE DAILY TRIP LENGTHS (MILES)



As shown in **Chart 6**, the average daily trip length for Marin County trips is 17 percent longer than the average daily trip length for Bay Area trips.

Chart 7 provides the average daily trip length distribution for Marin County trips.

CHART 7 MARIN COUNTY DAILY TRIP LENGTH DISTRIBUTION (MILES)



As shown in **Chart 7**, 57 percent of Marin County trips are less than five miles in length, while 34 percent of trips are between five and 20 miles in length.

OBSERVED TRAVEL DATA FOR MODEL CALIBRATION

Starting with the latest Travel Model Two traffic analysis zone system allows the mobile device OD trip table data to be easily compared to trip tables generated by the updated Marin County Model, providing a substantial amount of observed travel data for base year calibration and validation purposes. It is important to note however that the mobile device trip tables do not represent person-level trip productions and attractions (P-A) similar to those produced in the early stages of traditional four-step travel demand models (i.e. trip generation and trip distribution). Instead, the mobile device trip tables represent vehicle trip origins and destinations (O-D) similar to those used during the trip assignment stage of traditional four-step travel demand models. The main difference is that cell values in a model's productions and attractions trip tables are non-directional, only indicating the magnitude of interaction between two TAZs, whereas the cell values in an origins and destinations trip table are directional, indicating the magnitude and direction of interaction between two TAZs.

Although the updated Marin County Model and its parent Travel Model Two are not available for comparison purposes, Travel Model One (the precursor to Travel Model Two) is available and was used to ensure the total number of daily trips from the countywide OD trip tables were reasonable. The total average Monday to Thursday weekday AM and PM peak period personal automobile trips from the refined countywide OD trip tables were compared to AM and PM peak period trips with an origin or destination in Marin County from the 2015 Travel Model One. The results of the comparison are shown in **Table 29** and indicate the observed AM and PM peak period mobile device data very closely resemble forecasted weekday AM and PM peak period trip data from the 2015 Travel Model One.

TABLE 29 AM AND PM PEAK PERIOD TRAVEL MODEL ONE COUTYWIDE OD DATA COMPARISON

Data Source	AM Peak Period (6 AM to 10 AM)				PM Peak Period (3 PM to 7 PM)			
	In to Marin County	Out of Marin County	Intra-Marin County	Total Trips	In to Marin County	Out of Marin County	Intra-Marin County	Total Trips
2015 Travel Model One	43,866	43,688	139,203	226,757	37,637	41,912	189,100	268,649
Refined Countywide OD Data	30,292	25,089	163,837	219,218	30,755	32,279	186,478	249,512

HOME AND WORK LOCATION DATA

In addition to countywide and select-link mobile device OD data, Fehr & Peers also obtained from StreetLight Data the work location of workers who live in specified "home" zones and the home location of workers who work in specified "work" zones. By overlapping "home" and "work" zones it is possible not only to determine where commuters work who live in a specific area and where commuters live who work in a specific area, but also the percentage of workers who commute outside the area they live.

The data analysis performed by StreetLight Data was similar to the origin-destination analysis but rather than the origin and destination of trips, StreetLight Data inferred the "home" zone and the "work" zone for cellular, rather than GPS-enabled devices. For instance, a "home" zone was designated if a particular device spent a majority of nighttime hours (i.e. 9 PM to 6 AM) at a specific location, whereas a "work" zone was designated if a particular device spent a majority of daytime hours (i.e. 8 AM to 5 PM) at a specific location over the time period of analysis. This data was then used to answer questions such as "if you live in San Rafael, where do you work" or "what percentage of San Rafael workers commute outside Marin County and to where?" For consistency, the "home" and "work" zones generally follow the boundaries of their respective cities but are based on an aggregation of the Travel Model Two traffic analysis zone system so likely differ in multiple areas along their boundaries.

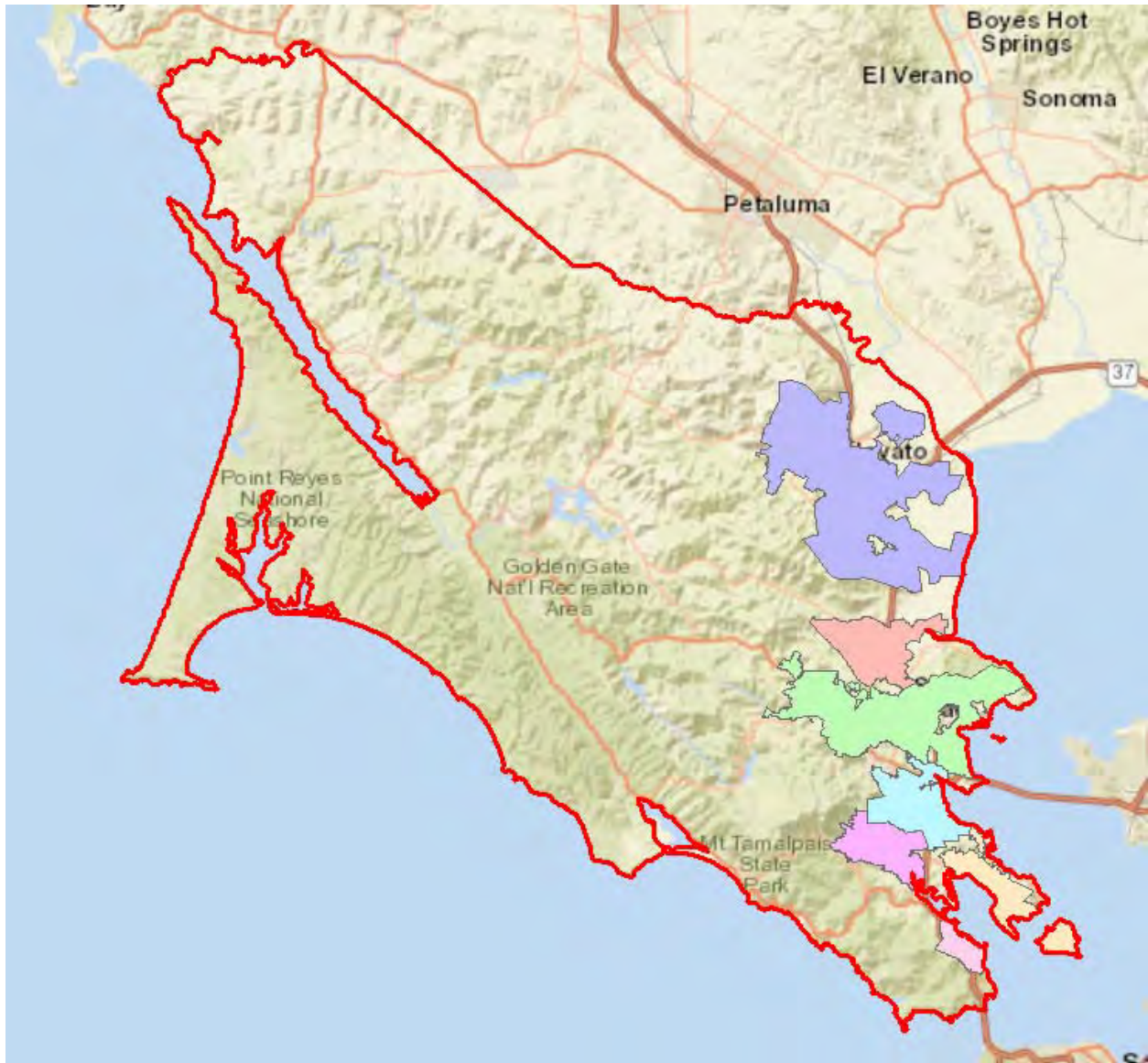
HOME AND WORK ZONE SYSTEMS

Seven "home" and ten "work" zone systems were developed and provided to StreetLight Data.

The seven "home" zones are listed below and shown on **Figure 4**.

1. Sausalito
2. Tiburon/Belvedere
3. Mill Valley
4. Corte Madera/Larkspur
5. Southern San Rafael/Fairfax/San Anselmo/Ross
6. Terra Linda/Northern San Rafael
7. Novato

Figure 4 Home Zone System



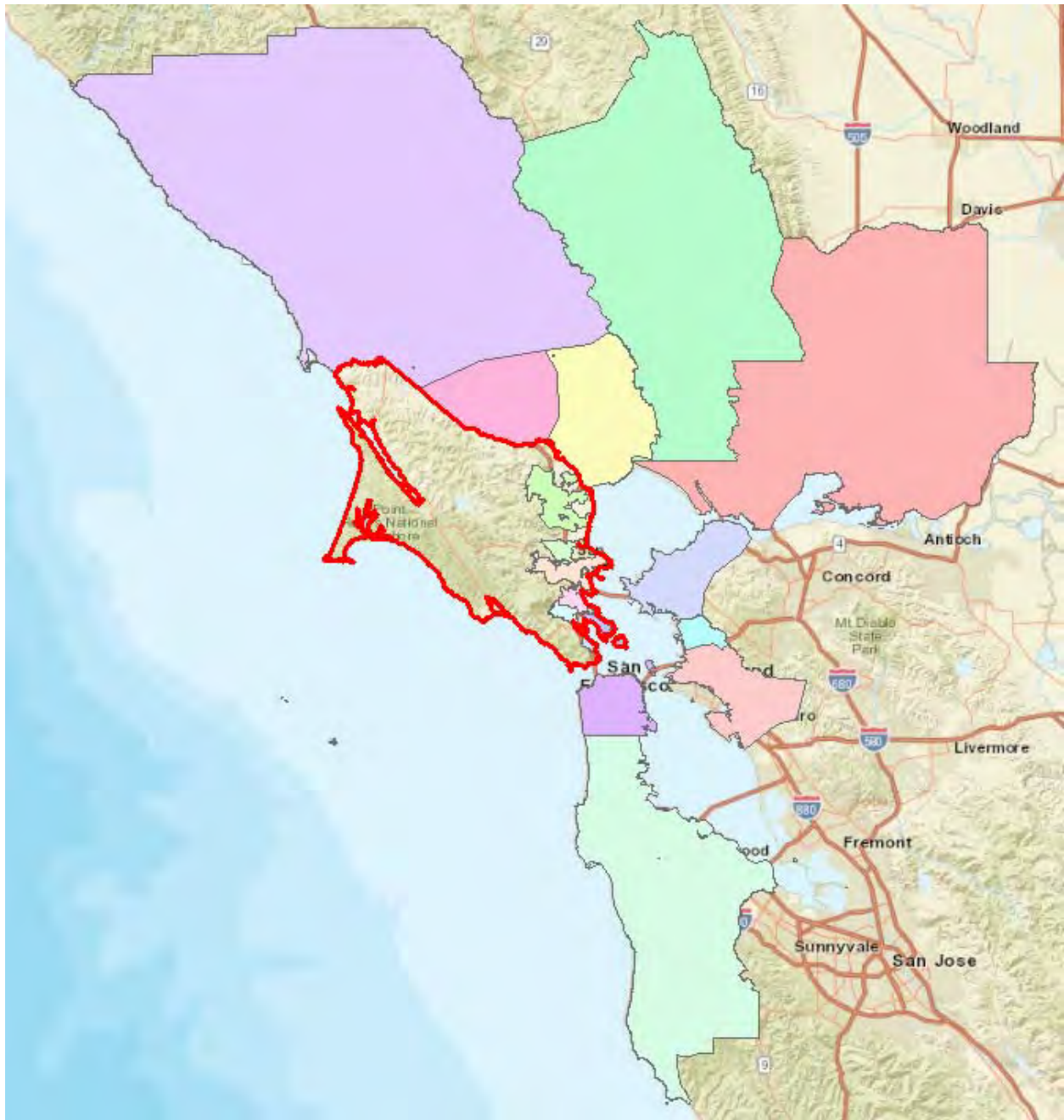


The ten “work” zones are listed below and shown on **Figure 5**.

1. Richmond/San Pablo
2. Berkeley
3. Oakland
4. San Francisco
5. South San Francisco/Peninsula
6. Petaluma
7. Santa Rosa
8. Sonoma
9. Napa
10. Vallejo/American Canyon



Figure 5 Work Zone System

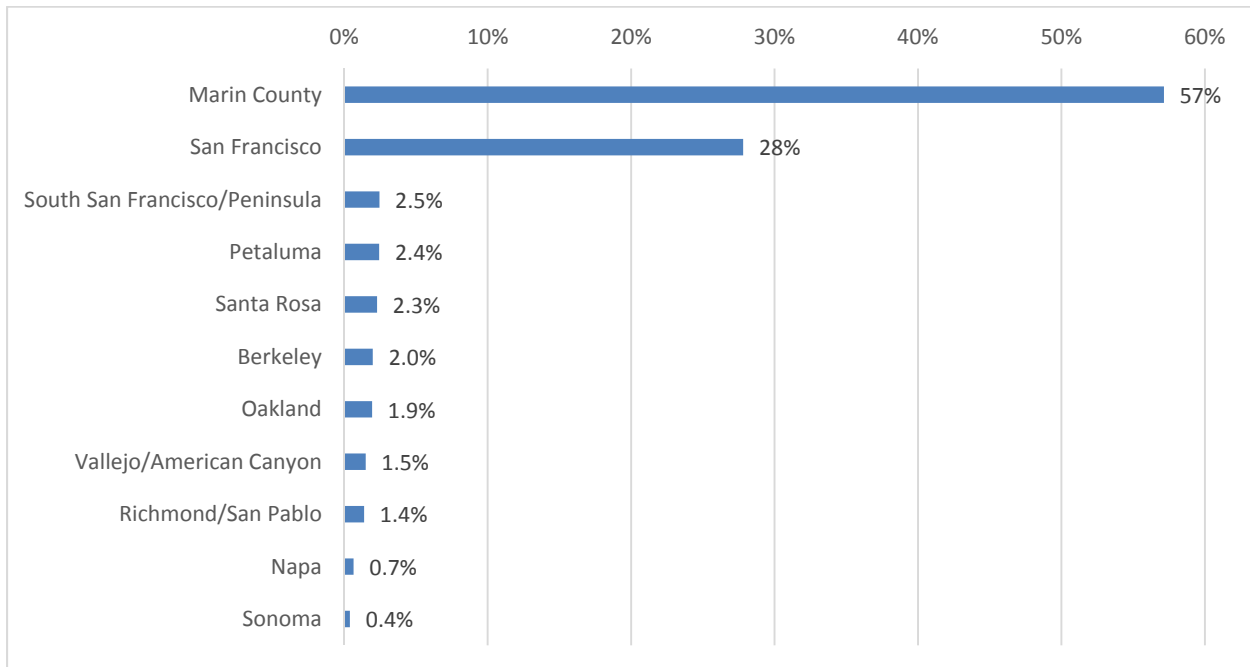


HOME AND WORK ZONE DATA

The home and work zone data are provided in tabular format in **Appendix B** and are summarized below.

Chart 8 summarizes where Marin County residents work.

CHART 8 WHERE DO MARIN COUNTY RESIDENTS WORK?

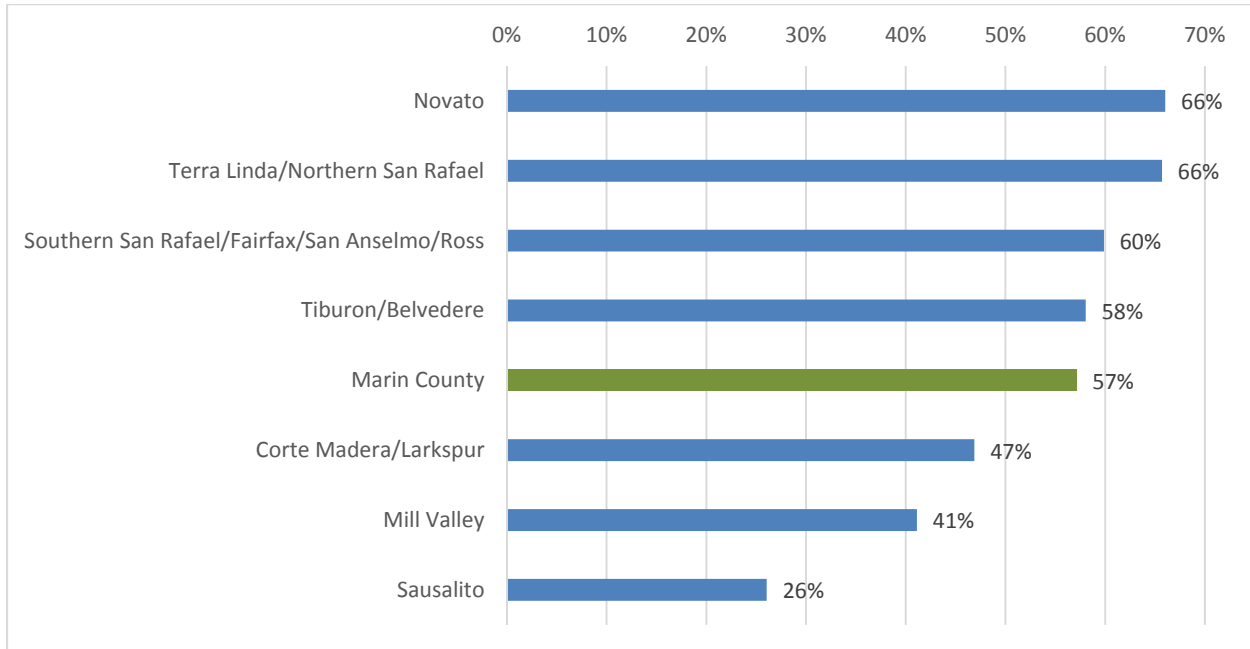


As shown in **Chart 8**, 57 percent of Marin County residents work in Marin County while 28 percent work in San Francisco County. This data is consistent with ACS journey-to-work data which indicated that 66 percent of Marin County residents work in Marin County while 21 percent of Marin County residents work in San Francisco County. As with the GPS-based OD data, the cellular-based home and work zone data is based on a sample of mobile devices and represents “relative” rather than “absolute” trips. However, much like the OD data, the home and work zone data can be factored based on existing travel behavior data. Given the data represents the work location of Marin County residents, census data rather than traffic counts represents a more appropriate source for factoring the data to absolute numbers.

As shown in **Table 2**, journey-to-work census data indicates 121,269 workers live in Marin County. Therefore, factoring of the census data based on the home and work zone data indicates that approximately 70,000 (58 percent) Marin County residents work in Marin County while approximately 34,000 work in San Francisco County.

Chart 9 summarizes the percentage of Marin County residents that work in Marin County.

CHART 9 WHAT PERCENTAGE OF MARIN COUNTY RESIDENTS WORK IN MARIN COUNTY?



As shown in **Chart 9**, on average 57 percent of Marin County residents work in Marin County, 66 percent of Novato residents work in Marin County, and 26 percent on Sausalito residents work in Marin County.

As shown in **Table 3**, journey-to-work census data indicates 124,550 workers work in Marin County. Therefore, factoring of the census data based on the home and work zone data indicates that approximately 70,000 (56 percent) Marin County workers live in Marin County.

Table 30 provides the percent of workers in each home zone that work in each work zone.

TABLE 30 HOME AND WORK LOCATION DATA BY ZONE

Work Zone	Home Zone						
	Sausalito	Tiburon, Belvedere	Mill Valley	Corte Madera, Larkspur	Southern San Rafael, Fairfax, San Anselmo, Ross	Terra Linda, Northern San Rafael	Novato
Marin County							
Sausalito	2%	1%	10%	3%	3%	1%	1%
Tiburon, Belvedere	1%	6%	2%	1%	3%	1%	1%
Mill Valley	7%	12%	3%	4%	6%	3%	4%
Corte Madera, Larkspur	7%	26%	11%	11%	17%	11%	10%
Southern San Rafael, Fairfax, San Anselmo, Ross	8%	6%	13%	18%	23%	28%	16%
Terra Linda, Northern San Rafael	0%	1%	1%	6%	4%	11%	8%
Novato	0%	6%	1%	2%	3%	10%	25%
Outside Marin County							
Richmond, San Pablo	0%	1%	5%	1%	1%	2%	1%
Berkeley	4%	0%	4%	1%	3%	1%	1%
Oakland	1%	0%	1%	2%	2%	5%	2%
San Francisco	57%	37%	40%	41%	26%	16%	17%
South San Francisco, Peninsula	9%	1%	4%	1%	2%	2%	2%
Petaluma	2%	0%	1%	1%	3%	4%	4%
Santa Rosa	0%	0%	3%	4%	1%	1%	4%
Sonoma	0%	0%	0%	0%	0%	1%	1%
Napa	0%	2%	0%	0%	1%	2%	1%
Vallejo, American Canyon	0%	0%	1%	2%	1%	2%	2%

Red text indicates key data points discussed in more detail in the body of this report.

As shown in **Table 30**, the city with the highest percentage of residents working in San Francisco is Sausalito (57 percent) and the city with the lowest percentage of residents working in San Francisco is Terra Linda/Northern San Rafael (16 percent), suggesting the further a local jurisdiction is from San Francisco County the less worker interaction it has with San Francisco County. The data also suggests that Marin County residents generally do not work in Sonoma, Napa, or Solano counties.

MAPPING OF MOBILE DEVICE DATA

As shown in **Table 21** and **Table 22**, the mobile device data collection effort provided trip making characteristics for over 400,000 AM and PM peak period trips, which was then used to create stratified origin-destination trip tables, each consisting of approximately 1,600 cells of trips.

Trip making characteristics for over 400,000 AM and PM Peak Period Trips

Due to the overwhelming amount of data, it was imperative to develop an innovative and meaningful way to display the results.

One effective way to graphically represent OD data is through the use of heat maps. Heat maps apply a gradient to the geographic zone system with more intense coloring representing a higher magnitude of trip generation and less intense coloring representing a lower magnitude of trip generation.

Figure 6 through **Figure 13** provide a graphical representation of average weekday (Monday to Thursday) AM directional trip origins and trip destinations for each of the four Marin County gateway select-link locations. A separate figure is provided for each gateway and travel direction, and each figure shows the number and location of trip origins in green and the number and location of trip destinations in blue. For example, as shown on **Figure 6**, 17,019 trips originate in Sonoma County that travel southbound through US 101 at the Marin/Sonoma County line, while 3,853 trips that travel southbound through US 101 at the Marin/Sonoma County line conclude in San Francisco County.

Figure 6 US 101 at the Marin/Sonoma County Line – Southbound AM Origins and Destinations

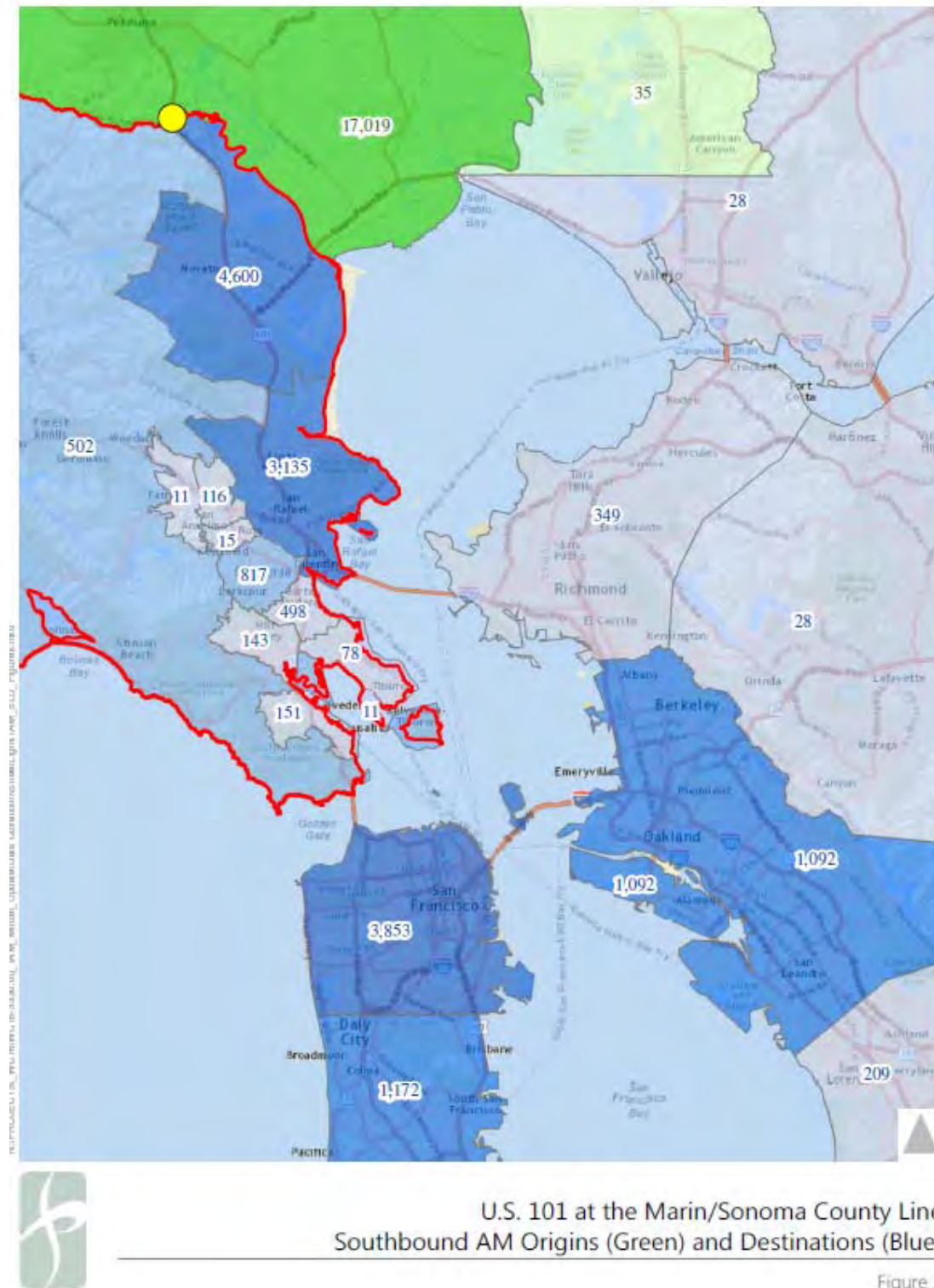
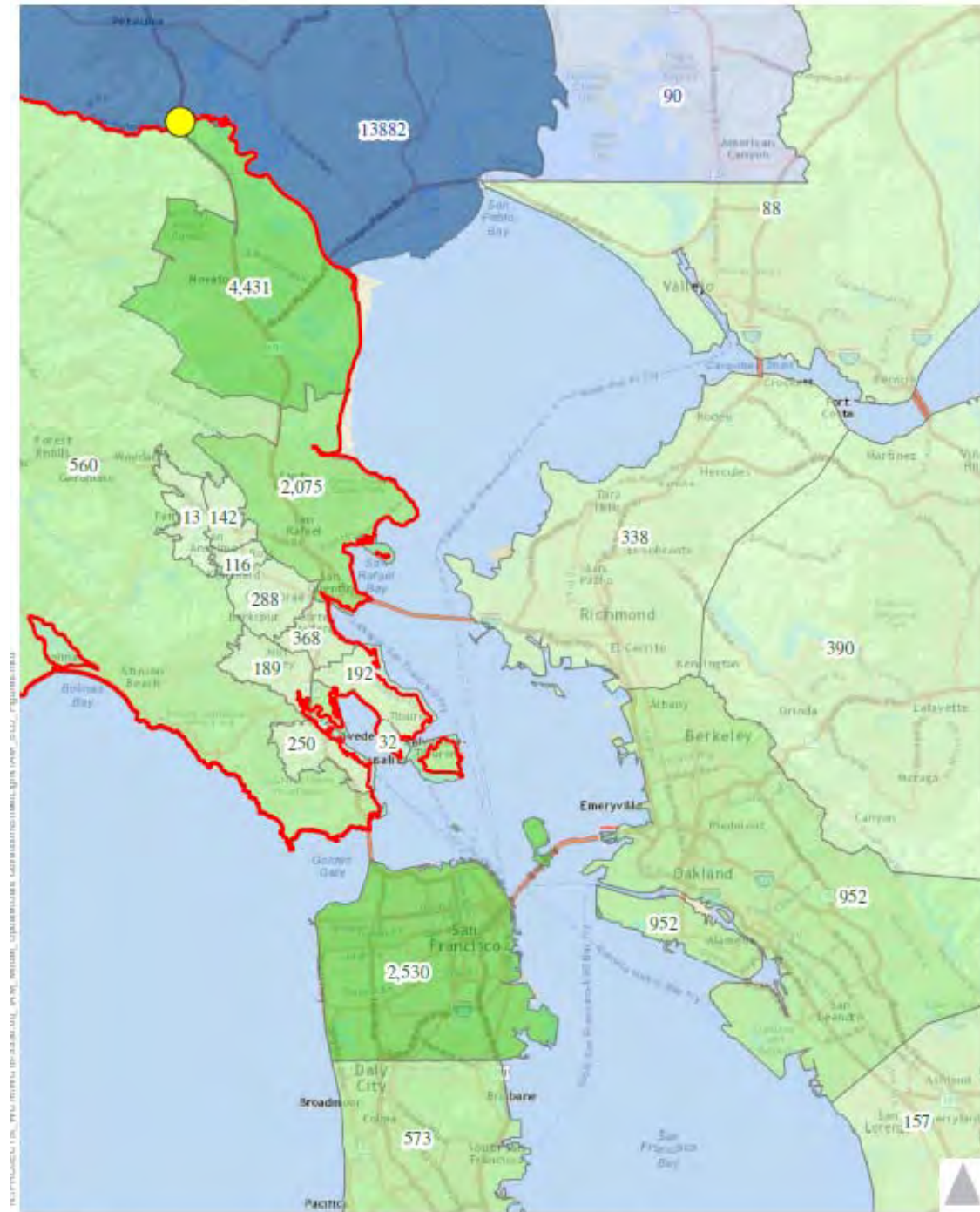




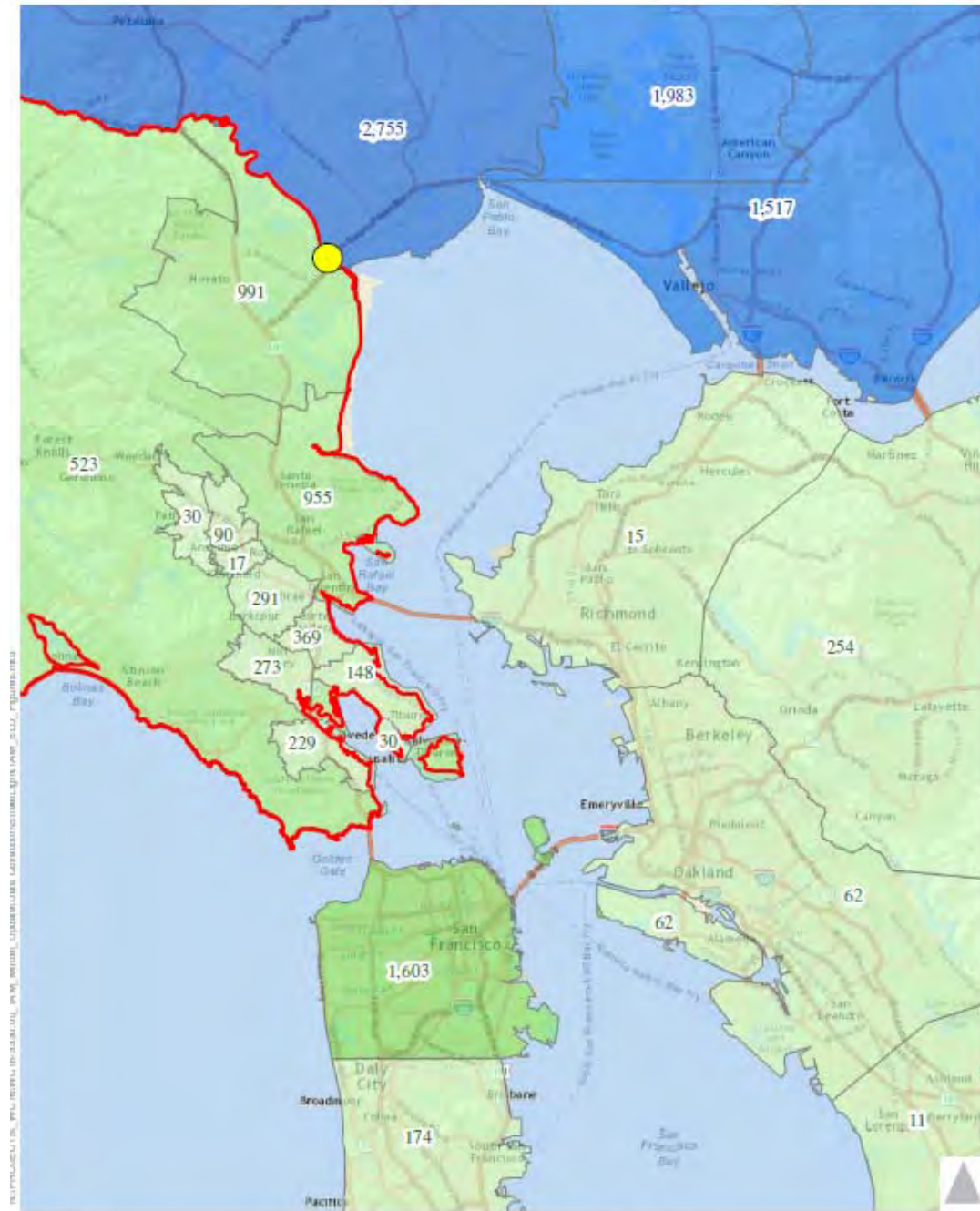
Figure 7 US 101 at the Marin/Sonoma County Line – Northbound AM Origins and Destinations



U.S. 101 at the Marin/Sonoma County Line
Northbound AM Origins (Green) and Destinations (Blue)

Figure 2

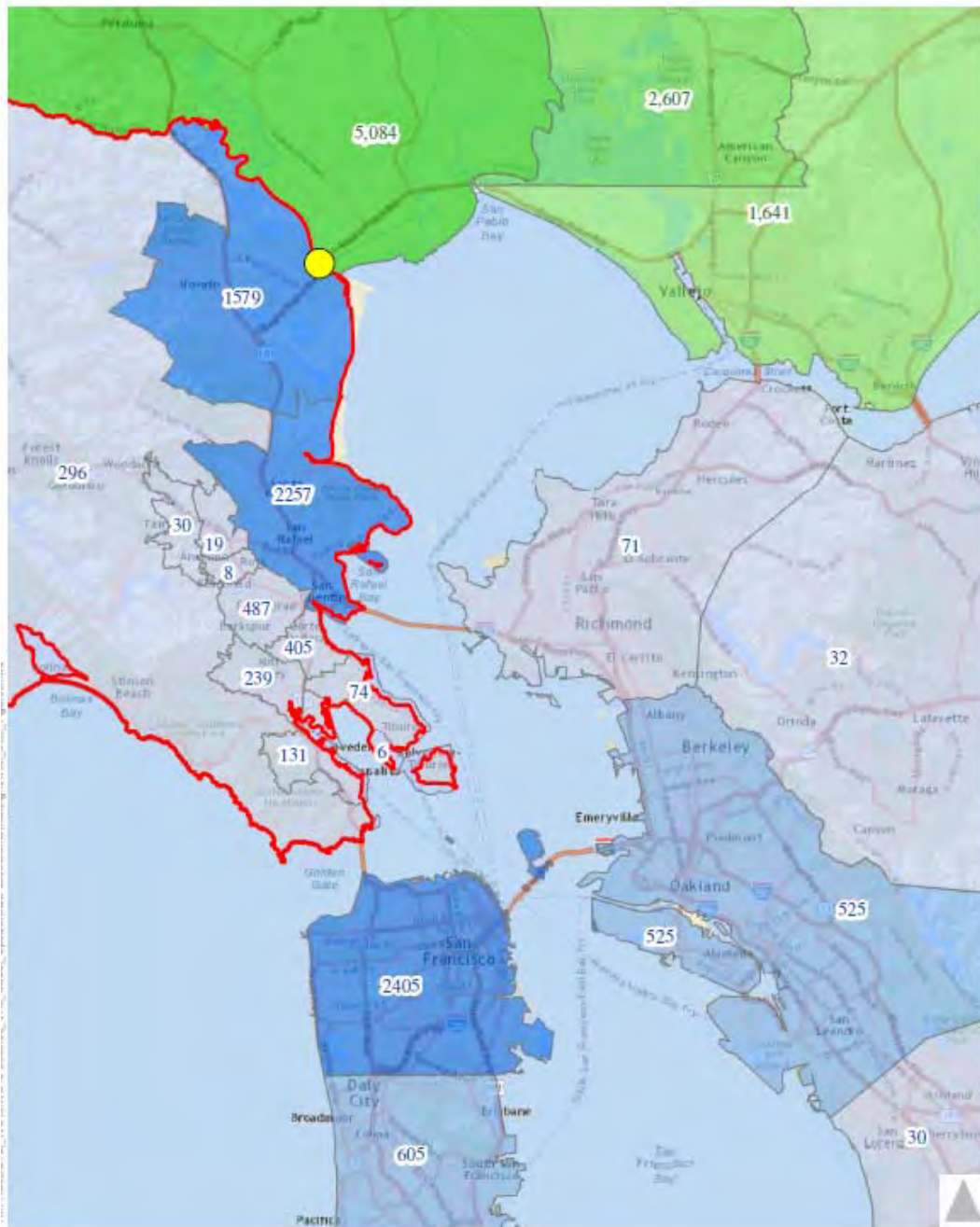
Figure 8 SR 37 at the Marin/Sonoma County Line – Eastbound AM Origins and Destinations



SR 37 at the Marin/Sonoma County Line
Eastbound AM Origins (Green) and Destinations (Blue)

Figure 3

Figure 9 SR 37 at the Marin/Sonoma County Line – Westbound AM Origins and Destinations

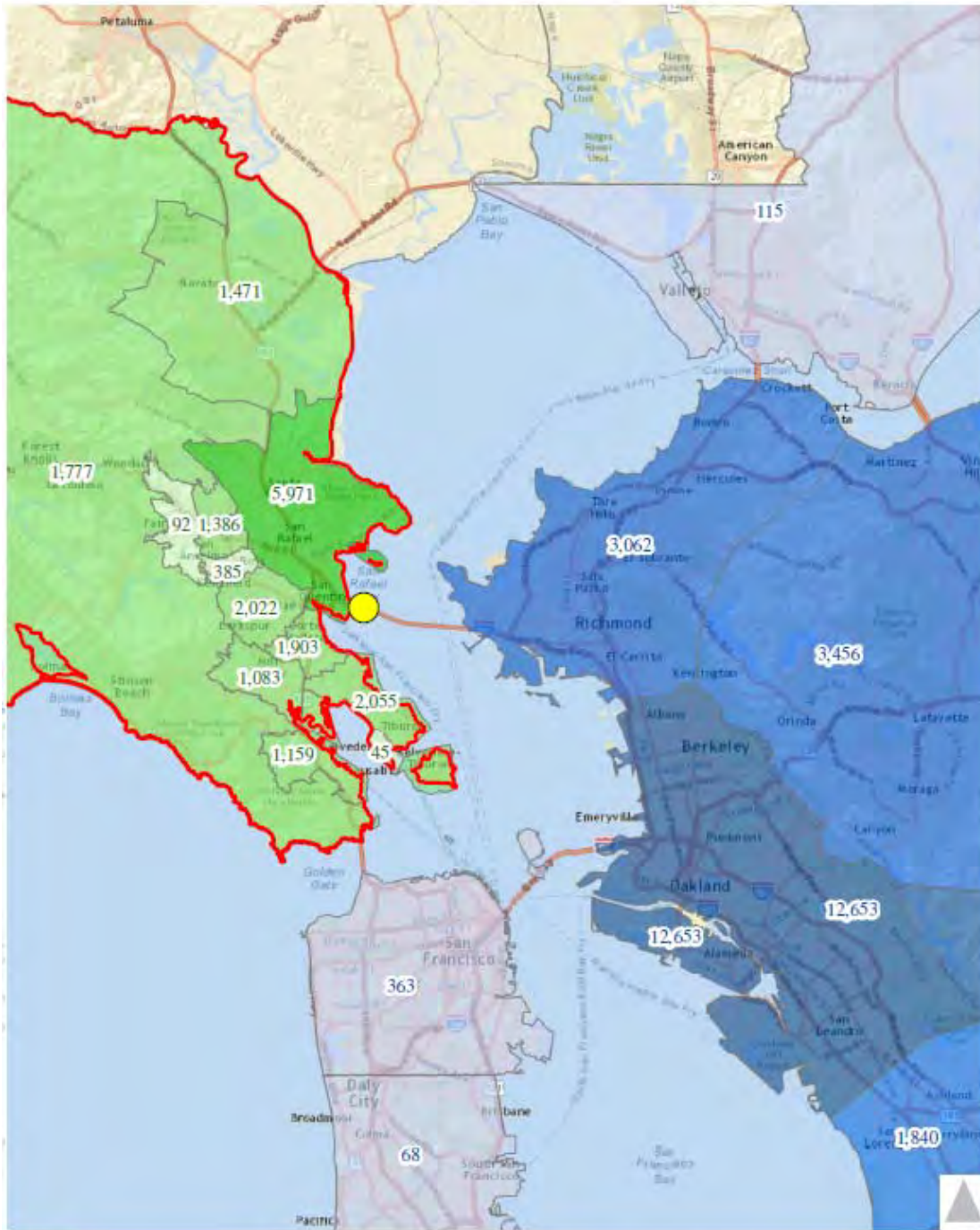


SR 37 at the Marin/Sonoma County Line
Westbound AM Origins (Green) and Destinations (Blue)

Figure 4



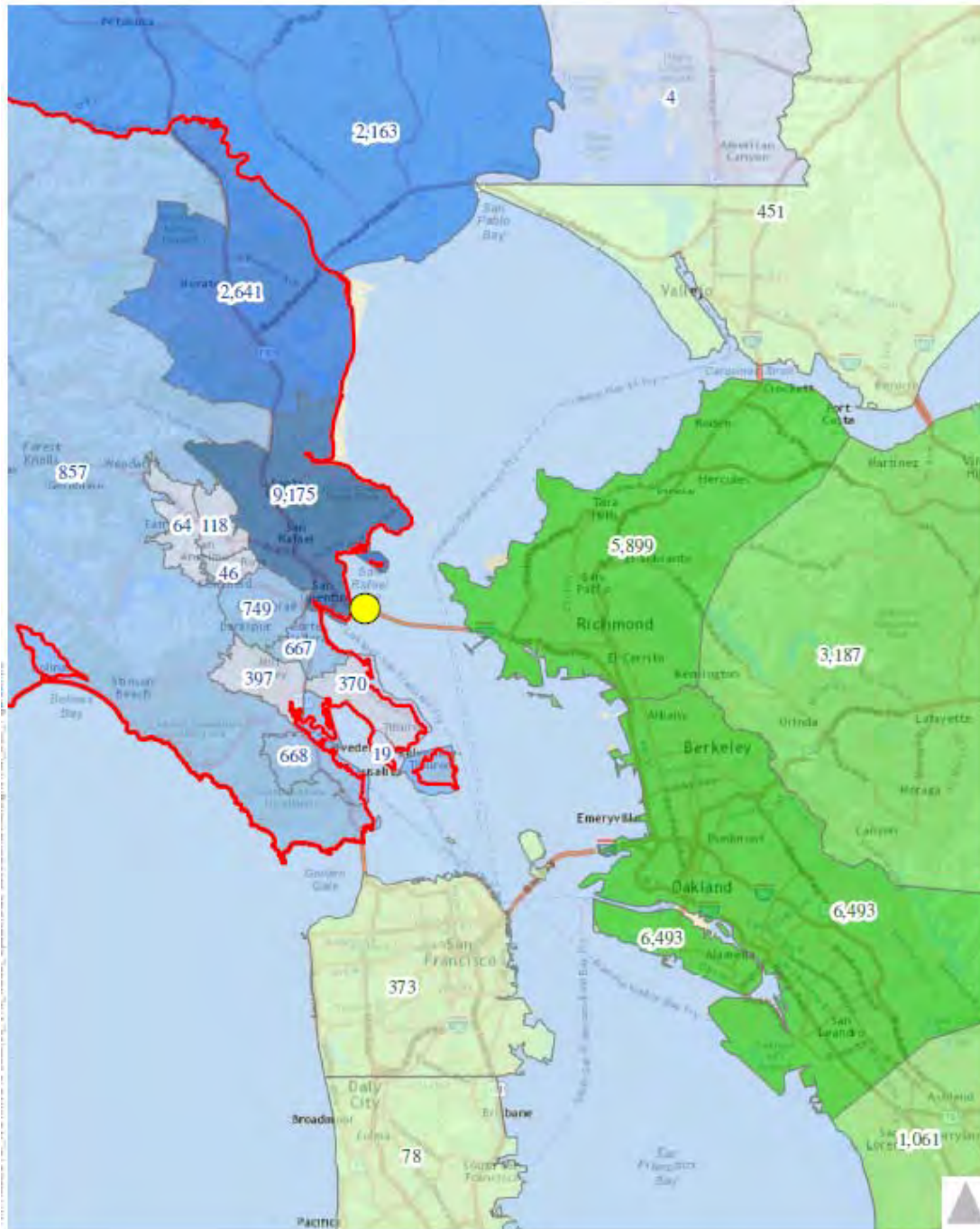
Figure 10 I-580 at the Marin/Contra Costa County Line – Eastbound AM Origins and Destinations



I-580 at the Marin/Contra Costa County Line
Eastbound AM Origins (Green) and Destinations (Blue)

Figure 5

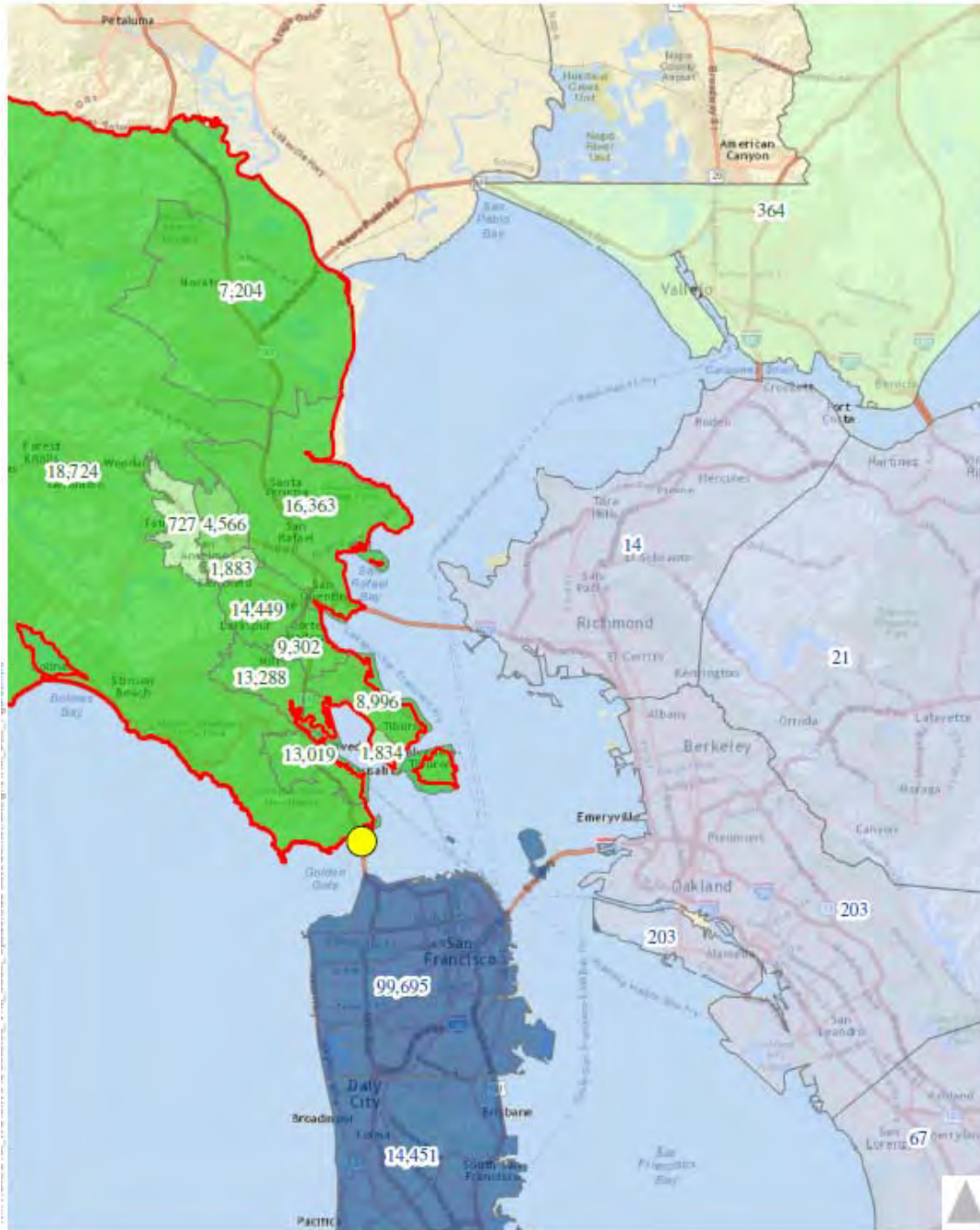
Figure 11 I-580 at the Marin/Contra Costa County Line – Westbound AM Origins and Destinations



I-580 at the Marin/Contra Costa County Line
Westbound AM Origins (Green) and Destinations (Blue)

Figure 6

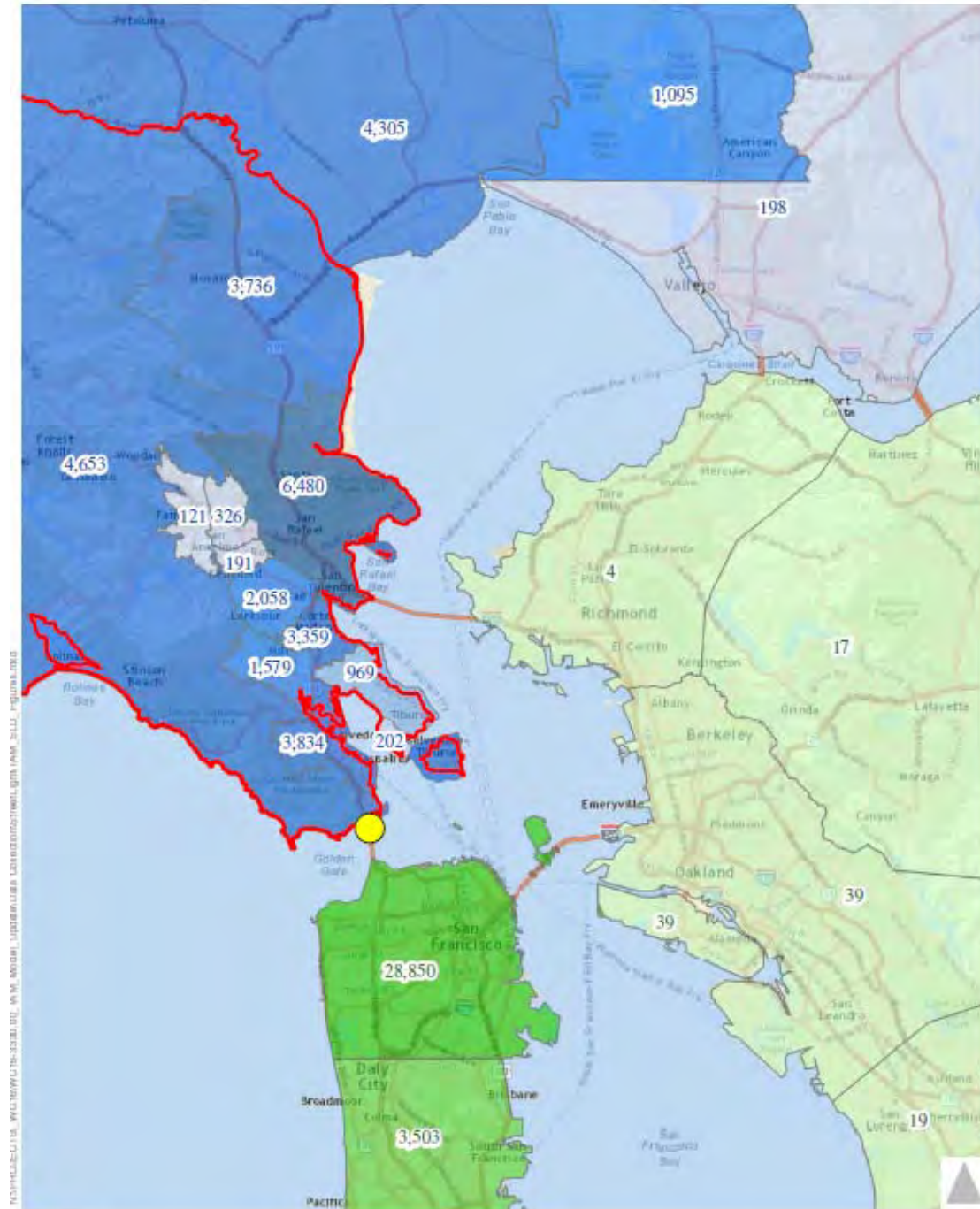
Figure 12 US 101 at the Marin/San Francisco County Line – Southbound AM Origins and Destinations



U.S. 101 at the Marin/San Francisco County Line
Southbound AM Origins (Green) and Destinations (Blue)

Figure 7

Figure 13 US 101 at the Marin/San Francisco County Line – Northbound AM Origins and Destinations



U.S. 101 at the Marin/San Francisco County Line
Northbound AM Origins (Green) and Destinations (Blue)

Figure 8

CONCLUSIONS

The TAM Origin and Destination study collected OD data specific to Marin County to provide an updated understanding of Marin County travel patterns and to support the development of the TAM Travel Demand Model (TAMDM). OD data was obtained passively and anonymously from mobile devices, providing a very large sample of empirical data that included the origins and destination of individual trips as well as the home and work locations associated with individual devices. Analysis of this data provided an understanding of Marin inter-county travel patterns on our national highway system as well as local travel behaviors generated from communities and towns within Marin County.

Below is a list of key questions answered by the TAM Origin and Destination study.

What types of trips are occurring within Marin County?

- Approximately 72 percent of total trips are intra-Marin County trips, four percent of total trips are passing through Marin County, and 24 percent of total trips are inter-county trips in the morning and afternoon peak periods.

Do more trips occur in the morning or afternoon peak period?

- Traffic count data indicates there is on average 11 percent more traffic in the afternoon peak period than the morning peak period.
- Mobile device data indicates that approximately 13 percent more total trips occur in the afternoon peak period than the morning peak period, with a majority of those trips being intra-Marin County trips likely representing shopping, recreational, or visitor trips.

Does Marin County import or export workers?

- Traffic count data indicates that Marin County imports workers, with 9,000 more vehicles or 27 percent more traffic coming into Marin County in the morning peak period and 3,000 more vehicles or eight percent more traffic leaving Marin County in the afternoon peak period.
- Through a comparison of "trips into Marin County" and "trips out of Marin County," mobile device data indicates that in the morning peak period Marin County imports 10,647 trips (and exports 4,990 trips) from Sonoma and other North Bay counties on US 101 and SR 37, exports 15,865 trips (and imports 7,894 trips) to San Francisco County on US 101, and imports 11,750 trips (and exports 4,235 trips) from the East Bay on I-580.

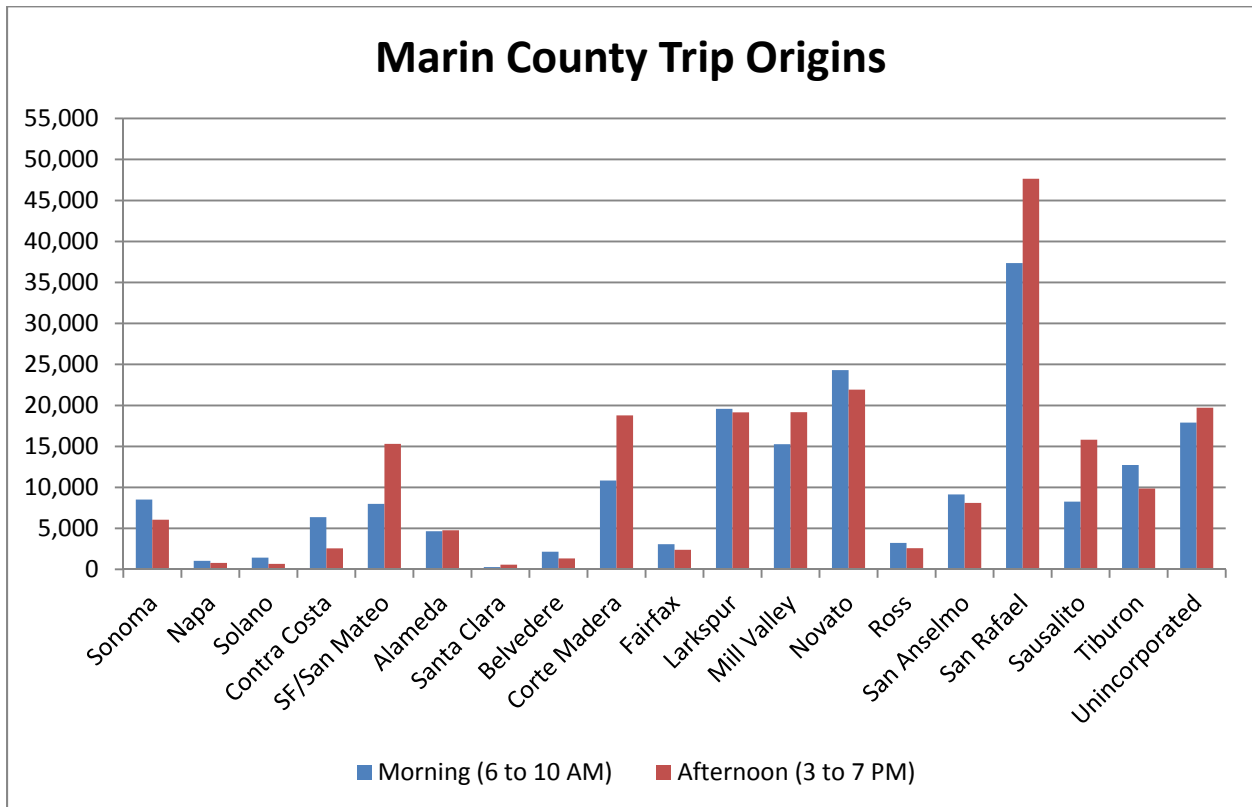
Where are morning peak period trips into Marin County coming from?

- Approximately 52 percent of morning peak period trips into Marin County are coming from Sonoma (24 percent) or San Francisco (28 percent) counties, while 14 percent are coming from West Contra Costa County and 13 percent are coming from North Alameda County.

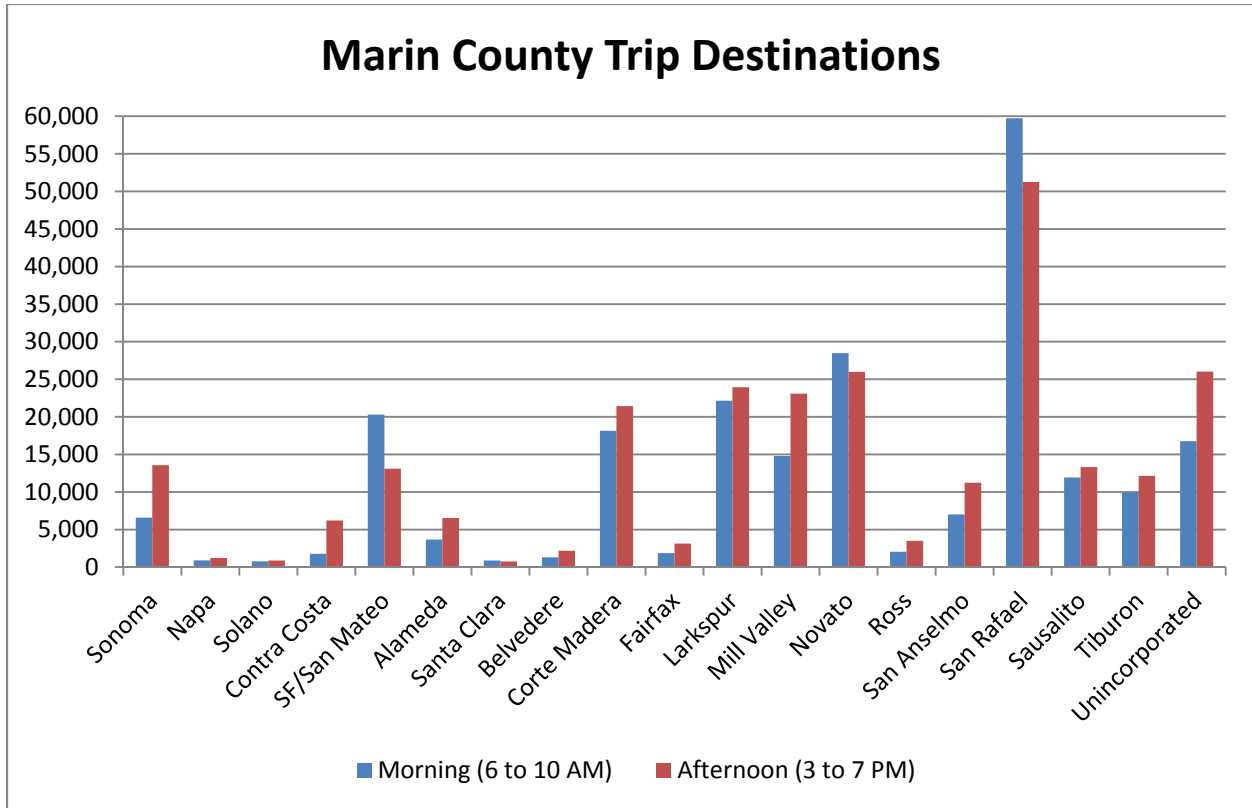
Where are morning peak period trips out of Marin County going to?

- Approximately 67 percent of all morning peak period trips out of Marin County are going to Sonoma (15 percent) or San Francisco (52 percent) counties, while ten percent are going to North Alameda County and eight percent are going to San Mateo County.

Where are Marin County trips originating?



Where are the destinations of Marin County trips?



What is the average daily trip length of Marin County trips? How does it vary by city? How does it compare to the Bay Area average?

- The average daily trip length for Marin County trips is 8.1 miles, 17 percent longer than the average daily trip length for Bay Area trips.
- Mill Valley has the longest average daily trip length at 10.2 miles and Mill Valley has the shortest average daily trip length at 6.6 miles.
- Additionally, 57 percent of Marin County trips are less than five miles in length, while 34 percent of trips are between five and 20 miles in length.

What types of trips are occurring on the Richmond-San Rafael Bridge?

- Approximately 16 percent of trips are passing through Marin County, 62 percent of trips are travelling into Marin County, and 22 percent of trips are travelling out of Marin County in the morning peak period.

- Approximately 16 percent of trips are passing through Marin County, 33 percent of trips are travelling into Marin County, and 51 percent of trips are travelling out of Marin County in the afternoon peak period.
- The largest cut-through traffic movement is between Sonoma County and the East Bay, representing approximately seven and six percent of total trips in the morning and afternoon peak periods, respectively.

What types of trips are occurring on the Golden Gate Bridge?

- Approximately 21 percent of trips are passing through Marin County, 26 percent of trips are travelling into Marin County, and 53 percent of trips are travelling out of Marin County in the morning peak period.
- Approximately 20 percent of trips are passing through Marin County, 49 percent of trips are travelling into Marin County, and 31 percent of trips are travelling out of Marin County in the afternoon peak period.
- Approximately 84 percent of southbound trips in the morning peak period have a destination in San Francisco, while 83 percent of northbound trips in the afternoon peak period have a destination in Marin County.

What types of trips are occurring at the Marin/Sonoma County Line (US 101 and SR 37)?

- Approximately 40 percent of trips are passing through Marin County, 41 percent of trips are travelling into Marin County, and 19 percent of trips are travelling out of Marin County in the morning peak period.
- Approximately 36 percent of trips are passing through Marin County, 26 percent of trips are travelling into Marin County, and 38 percent of trips are travelling out of Marin County in the afternoon peak period.

Where do Marin County residents work? How does it vary by city?

- Census data indicates there are approximately 120,000 workers who live in Marin County with approximately 34 percent travelling outside of Marin County for work (28 percent of residents work in San Francisco County).
- Factoring of the census data based on the home and work zone data indicates that approximately 70,000 Marin County residents work in Marin County while approximately 34,000 work in San Francisco County.
- The city with the highest percentage of residents working in San Francisco is Sausalito (57 percent) and the city with the lowest percentage of residents working in San Francisco is Terra Linda/Northern San Rafael (16 percent).

Where do Marin County workers live?

- Census data indicates there are approximately 125,000 workers who work in Marin County with approximately 35 percent living outside of Marin County.

APPENDIX A: ORIGIN-DESTINATION DATA



Non-Summer AM		Destination																							Total	Trips	Percent		
	Origin	Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael	Sausalito	Tiburon	Unincorporated Marin						
Sonoma		0	0	18	225	18	704	2,474	752	135	160	7	321	7	527	92	2,962	10	75	2,019	96	50	322	6,489	10,975	6,405	40%	Marin County Pass-Through Trips	
Napa		2	0	0	0	0	0	11	4	0	1	0	0	0	0	0	1	0	0	3	1	0	1	6	25	6,498	41%	Trips in to Marin County	
Solano		31	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3	34	3,097	19%	Trips out of Marin County	
West Contra Costa		121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121	0	0%	Intra-County Trips
East Contra Costa		140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140	0	0%	Intra-County Trips
North Alameda		341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	341	16,000	100%	Total Trips
San Francisco		891	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	905	4,486	28%	Sonoma County Pass-Through
San Mateo		204	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	205	6,489	41%	Sonoma County to Marin County
South Alameda		56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	3,080	19%	Marin County to Sonoma County
Santa Clara		102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	905	6%	San Francisco County Pass-Through
Belvedere		11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0%	Marin County to San Francisco County
Corte Madera		132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132	0	0%	Marin County to San Francisco County
Fairfax		5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0%	Marin County to San Francisco County
Larkspur		102	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	103	0	0%	Marin County to San Francisco County
Mill Valley		65	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	0	0%	Marin County to San Francisco County
Novato		1,581	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,585	0	0%	Marin County to San Francisco County
Ross		42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	0	0%	Marin County to San Francisco County
San Anselmo		51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	0	0%	Marin County to San Francisco County
San Rafael		741	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	742	0	0%	Marin County to San Francisco County
Sausalito		83	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	89	0	0%	Marin County to San Francisco County
Tiburon		69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	0	0%	Marin County to San Francisco County
Unincorporated		199	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	200	0	0%	Marin County to San Francisco County
Marin		3,080	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,097	0	0%	Marin County to San Francisco County
Total		4,967	32	19	225	18	704	2,485	756	135	161	7	321	7	527	92	2,966	10	75	2,022	97	50	324	6,498	16,000	0	0%	Marin County to San Francisco County	

Non-Summer PM		Destination																							Total	Trips	Percent		
	Origin	Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael	Sausalito	Tiburon	Unincorporated Marin						
Sonoma		0	1	19	147	69	559	1,502	301	123	260	13	316	34	199	172	2,299	38	88	1,132	146	97	412	4,945	7,926	6,613	37%	Marin County Pass-Through Trips	
Napa		1	0	0	0	0	1	26	7	2	1	0	3	0	0	1	6	1	0	10	11	1	4	36	74	4,983	28%	Trips in to Marin County	
Solano		9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	11	6,404	36%	Trips out of Marin County	
West Contra Costa		259	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	259	0	0%	Intra-County Trips
East Contra Costa		18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	0	0%	Intra-County Trips
North Alameda		561	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	561	18,000	100%	Total Trips
San Francisco		1,961	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,984	2,980	17%	Sonoma County Pass-Through
San Mateo		472	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	478	4,945	27%	Sonoma County to Marin County
South Alameda		107	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	6,362	35%	Marin County to Sonoma County
Santa Clara		178	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	179	1,984	11%	San Francisco County Pass-Through
Belvedere		8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0%	Marin County to San Francisco County
Corte Madera		430	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	433	0	0%	Marin County to San Francisco County
Fairfax		5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0%	Marin County to San Francisco County
Larkspur		327	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	330	1,984	11%	San Francisco County Pass-Through
Mill Valley		156	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	158	478	3%	San Mateo
Novato		2,927	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,935	108	1%	South Alameda
Ross		20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	179	1%	Santa Clara
San Anselmo		81	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84	6,404	36%	Marin
San Rafael		1,512	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,516	2,980	17%	Sonoma County Pass-Through
Sausalito		165	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	171	4,945	27%	Sonoma County to Marin County
Tiburon		64	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	6,362	35%	Marin County to Sonoma County
Unincorporated		666	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	673	1,984	11%	San Francisco County Pass-Through
Marin		6,362	41	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,404	0	0%	Marin County to San Francisco County
Total		9,927	73	20	147	69	560	1,528	308	124	261	13	319	34	199	173	2,305	39	88	1,142	157	98	416	4,983	18,000	0	0%	Marin County to San Francisco County	

Non-Summer		Destination																				Total				
AM		Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael	Sausalito	Tiburon	Unincorporated	Marin	Total	
Sonoma	0	0	0	0	1	1	3,411	398	2	52	0	3	0	0	1	1	0	0	0	0	42	0	19	67	3,932	
Napa	1	0	0	0	0	0	214	58	0	0	0	0	0	0	0	0	0	0	0	0	5	0	3	8	289	
Solano	0	0	0	0	0	0	86	1	0	0	0	0	0	0	0	0	0	0	0	0	6	0	4	10	97	
West Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	0	0	3	3	
East Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2	2	
North Alameda	1	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	0	0	2	3	
San Francisco	1,152	252	44	0	0	0	0	0	0	0	45	680	26	421	237	700	42	68	1,246	0	216	0	0	3,681	5,129	
San Mateo	192	11	5	0	0	0	0	0	0	0	1	63	3	34	11	144	4	11	191	0	21	0	0	483	691	
South Alameda	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	2	
Santa Clara	54	2	0	0	0	0	0	0	0	0	1	4	0	7	3	7	1	0	24	0	2	0	0	48	104	
Belvedere	0	0	0	0	0	0	327	27	0	10	0	0	0	0	2	0	0	0	0	40	1	15	58	422		
Corte Madera	1	0	0	0	1	2	1,517	259	0	93	0	12	0	2	39	0	0	1	7	439	4	120	625	2,497		
Fairfax	0	0	0	0	0	0	121	17	0	8	0	0	0	0	0	0	0	0	1	5	0	3	9	154		
Larkspur	1	0	0	0	0	1	2,463	368	0	69	0	45	0	53	11	0	7	0	13	221	7	48	404	3,307		
Mill Valley	2	2	2	1	3	4	1,405	263	3	72	2	22	0	7	33	9	0	2	70	401	8	105	659	2,416		
Novato	0	0	0	0	0	2	1,154	211	0	95	0	2	0	0	3	6	0	0	2	87	1	20	120	1,582		
Ross	0	0	0	0	0	0	338	30	0	10	0	1	0	7	3	0	2	2	0	12	1	10	38	415		
San Anselmo	0	0	0	0	0	1	703	131	1	103	0	5	0	3	4	0	1	0	2	47	0	15	77	1,017		
San Rafael	0	0	1	1	0	3	2,688	404	1	102	2	8	0	0	12	2	0	0	53	389	4	106	576	3,775		
Sausalito	94	30	10	0	0	0	0	0	0	0	13	405	5	321	160	82	11	14	701	0	198	0	1,910	2,045		
Tiburon	0	0	0	0	0	1	1,438	258	1	119	1	7	0	2	19	1	0	0	13	416	18	94	570	2,387		
Unincorporated	39	8	14	0	0	0	0	0	0	0	3	155	4	102	71	80	6	11	200	0	37	0	668	729		
Marin	136	40	26	3	4	14	12,154	1,968	8	681	20	662	9	497	356	180	27	30	1,062	2,056	279	535	5,714	20,749		
Total	1,536	305	75	4	5	16	15,865	2,425	10	739	67	1,414	38	959	613	1,032	74	109	2,525	2,109	518	561	10,020	31,000		

Trips	Percent
5,946	19% Marin County Pass-Through Trips
4,306	14% Trips in to Marin County
15,034	48% Trips out of Marin County
5,714	18% Intra-County Trips
31,000	100% Total Trips

Total Origins	County
3,932	13% Sonoma
289	1% Napa
97	0% Solano
58	0% West Contra Costa
2	0% East Contra Costa
3	0% North Alameda
5,129	17% San Francisco
691	2% San Mateo
2	0% South Alameda
104	0% Santa Clara
20,749	67% Marin

3,865	12% Sonoma County Pass-Through
67	0% Sonoma County to Marin County
136	0% Marin County to Sonoma County
1,448	5% San Francisco County Pass-Through
3,681	12% San Francisco County to Marin County
12,154	39% Marin County to San Francisco County

Non-Summer		Destination																				Total				
PM		Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael	Sausalito	Tiburon	Unincorporated	Marin	Total	
Sonoma	0	1	0	0	0	3	2,079	270	1	85	0	1	0	0	4	0	0	0	0	1	146	1	79	232	2,671	
Napa	1	0	0	0	1	1	391	42	0	5	0	1	0	0	2	0	0	0	0	0	40	1	24	67	507	
Solano	0	0	0	0	0	0	130	4	0	0	0	1	0	0	0	0	0	0	1	24	0	10	35	170		
West Contra Costa	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	0	3	4		
East Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	4	4		
North Alameda	2	0	0	0	0	0	0	0	0	0	0	2	0	1	3	1	0	1	0	0	0	1	0	11	14	
San Francisco	2,732	111	47	0	0	0	0	0	0	0	225	1,236	75	1,067	743	560	246	407	1,518	0	606	0	6,682	9,573		
San Mateo	173	23	2	0	0	0	0	0	0	0	18	186	7	113	90	111	20	53	219	0	121	0	938	1,137		
South Alameda	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	4	5		
Santa Clara	36	5	0	0	0	0	0	0	0	0	7	49	2	34	22	42	8	21	50	0	29	0	265	306		
Belvedere	0	0	0	0	0	1	134	5	0	1	3	0	0	0	2	0	0	0	0	42	0	12	59	200		
Corte Madera	0	0	0	1	1	3	1,056	89	1	19	0	14	0	3	52	3	1	1	4	743	18	252	1,091	2,259		
Fairfax	0	0	0	0	0	0	80	10	0	3	0	0	0	0	2	1	0	0	0	24	0	14	40	133		
Larkspur	0	0	0	0	0	1	822	65	0	28	1	9	0	3	12	0	0	0	3	415	3	127	571	1,486		
Mill Valley	3	1	0	1	1	5	674	45	1	11	7	191	2	39	162	7	3	7	93	557	49	280	1,395	2,136		
Novato	0	0	0	0	1	1	888	189	1	21	0	0	1	0	0	7	4	0	1	142	2	113	270	1,370		
Ross	0	0	0	0	0	0	136	9	0	3	0	0	0	0	1	4	0	0	1	0	25	0	9	40	187	
San Anselmo	0	0	0	0	0	0	272	28	0	5	0	0	0	1	8	3	0	3	2	66	1	24	107	412		
San Rafael	1	0	0	0	3	3	1,862	243	1	43	2	7	0	0	95	4	1	1	41	845	3	258	1,256	3,413		
Sausalito	68	13	5	0	0	0	0	0	0	0	37	1,197	11	314	900	74	17	47	553	0	329	0	3,479	3,564		
Tiburon	0	0	0	0	1	2	677	60	1	20	4	12	0	4	25	0	0	0	3	413	66	135	662	1,423		
Unincorporated	31	10	9	0	0	0	0	0	0	0	9	342	5	95	264	23	6	19	152	0	62	0	977	1,027		
Marin	104	23	14	1	6	14	6,601	743	4	153	62	1,773	17	459	1,532	117	27	79	851	3,272	533	1,224	9,946	17,610		
Total	3,050	165	63	1	6	18	9,201	1,059	5	244	311	3,250	101	1,676	2,398	832	301	563	2,641	3,483	1,295	1,336	18,187	32,000		

Trips	Percent
6,148	19% Marin County Pass-Through Trips
8,242	26% Trips in to Marin County
7,665	24% Trips out of Marin County
9,946	31% Intra-County Trips
32,000	100% Total Trips

Total Origins	County
2,671	8% Sonoma
507	2% Napa
170	1% Solano
4	0% West Contra Costa
4	0% East Contra Costa
14	0% North Alameda
9,573	30% San Francisco
1,137	4% San Mateo
5	0% South Alameda
306	1% Santa Clara
17,610	55% Marin

2,438	8% Sonoma County Pass-Through
232	1% Sonoma County to Marin County
104	0% Marin County to Sonoma County
2,890	9% San Francisco County Pass-Through
6,682	21% San Francisco County to Marin County
6,601	21% Marin County to San Francisco County

Non-Summer		Destination																				Total	Trips	Percent							
AM		Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael	Sausalito				Tiburon	Unincorporated Marin					
Origin	Sonoma	0	0	0	0	1	3,411	288	2	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,740	6,241	21%	Marin County Pass-Through Trips	
	Napa	1	0	0	0	0	1	155	42	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	203	7,894	26%	Trips in to Marin County	
	Solano	0	0	0	0	0	0	60	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	15,865	53%	Trips out of Marin County	
	West Contra Costa	0	0	0	0	0	0	96	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	97	0	0%	Intra-County Trips	
	East Contra Costa	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	1	1	0	3	5	12	5	12	30,000	100%	Total Trips	
	North Alameda	1	0	0	0	0	0	30	0	0	0	1	0	0	0	0	1	0	0	1	6	0	3	10	41	0	41				
	San Francisco	1,152	305	53	264	3	16	0	0	0	0	57	871	32	540	412	885	50	81	1,613	1,013	259	1,147	6,959	8,751	6,959		Total Origins			
	San Mateo	227	14	6	0	0	0	0	0	0	0	1	78	4	41	32	171	5	15	229	56	24	126	782	1,028	3,740	12%	Sonoma			
	South Alameda	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	5	6	0	6	203	1%	Napa	
	Santa Clara	62	3	0	0	0	0	0	0	0	0	1	7	0	8	4	9	1	0	28	18	2	54	133	197	61	0%	Solano			
	Belvedere	0	0	0	0	0	0	238	20	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	265	97	0%	West Contra Costa
	Corte Madera	0	0	0	0	0	2	1,105	187	0	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,361	12	0%	East Contra Costa
	Fairfax	0	0	0	0	0	0	88	13	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	106	41	0%	North Alameda
	Larkspur	0	0	0	0	0	1	1,782	268	0	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,102	8,751	29%	San Francisco
	Mill Valley	0	0	0	0	1	1	1,614	252	1	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,938	1,028	3%	San Mateo
	Novato	0	0	0	0	0	1	830	155	0	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,058	6	0%	South Alameda
	Ross	0	0	0	0	0	0	243	22	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	272	197	1%	Santa Clara
	San Anselmo	0	0	0	0	0	1	505	94	1	73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	675	15,865	53%	Marin
	San Rafael	0	0	0	1	0	0	2,010	294	1	76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,382	3,740	12%	Sonoma County Pass-Through
	Sausalito	0	0	0	0	2	20	1,511	295	2	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,911	0	0%	Sonoma County to Marin County
	Tiburon	0	0	0	0	0	1	1,041	190	1	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,321	0	0%	Marin County to Sonoma County
	Unincorporated	0	0	0	0	0	6	2,082	296	3	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,475	0	0%	Marin County to Sonoma County
Total	1,443	321	58	266	6	50	16,806	2,417	11	726	59	956	36	589	448	1,067	56	96	1,872	1,095	284	1,336	7,894	30,000	1,792	6%	San Francisco County Pass-Through				

Non-Summer		Destination																				Total	Trips	Percent							
PM		Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael	Sausalito				Tiburon	Unincorporated Marin					
Origin	Sonoma	0	0	0	0	0	3	2,079	221	0	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,372	6,343	20%	Marin County Pass-Through Trips	
	Napa	2	0	0	0	0	0	312	33	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	351	15,715	49%	Trips in to Marin County	
	Solano	0	0	0	0	0	0	103	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107	9,941	31%	Trips out of Marin County	
	West Contra Costa	1	0	0	0	0	0	195	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	3	199	0	0%	Intra-County Trips			
	East Contra Costa	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	1	2	2	3	9	16	3	16	32,000	100%	Total Trips	
	North Alameda	2	0	0	0	0	0	28	0	0	0	0	2	0	2	1	1	0	1	0	15	1	8	29	60	0	60				
	San Francisco	2,732	114	46	105	9	27	0	0	0	0	231	1,470	79	1,289	1,831	655	263	435	1,765	1,937	765	2,834	13,553	16,587	13,553		Total Origins			
	San Mateo	177	25	3	0	0	0	0	0	0	0	19	202	8	125	187	117	22	58	233	245	125	299	1,638	1,843	351	7%	Sonoma			
	South Alameda	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3	2	4	12	12	0	12	107	1%	Napa	
	Santa Clara	36	5	0	0	0	0	0	0	0	0	7	52	2	38	54	43	9	24	53	65	29	97	471	512	199	1%	West Contra Costa			
	Belvedere	0	0	0	0	0	0	109	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	114	16	0%	East Contra Costa
	Corte Madera	0	0	0	0	0	2	856	73	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	947	60	0%	North Alameda
	Fairfax	0	0	0	0	0	0	63	8	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	16,587	52%	San Francisco
	Larkspur	0	0	0	0	0	0	667	53	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	742	1,843	6%	San Mateo
	Mill Valley	0	0	0	0	0	3	827	68	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	911	12	0%	South Alameda
	Novato	0	0	0	0	0	0	713	155	0	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	887	512	2%	Santa Clara
	Ross	0	0	0	0	0	0	113	7	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122	9,941	31%	Marin
	San Anselmo	0	0	0	0	0	0	216	22	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242	2,372	7%	Sonoma County Pass-Through
	San Rafael	0	0	0	0	2	2	1,512	198	1	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,749	0	0%	Sonoma County to Marin County
	Sausalito	0	0	0	0	1	12	1,436	120	6	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,626	0	0%	Marin County to Sonoma County
	Tiburon	0	0	0	0	0	3	1,619	180	12	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,910	0	0%	Marin County to Sonoma County
	Unincorporated	0	0	0	0	0	3	14	1,619	180	12	81	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,910	0	0%	Marin County to Sonoma County
Total	2,950	145	49	105	17	66	11,405	1,192	21	334	257	1,726	88	1,454	2,074	816	293	519	2,052	2,267	924	3,245	15,715	32,000	3,033	9%	San Francisco County Pass-Through				

Appendix A - Origin-Destination Data (Select-Link 7 - SR 37 at the Sonoma/Marin County Line)

Item 7 - Attachment A

Non-Summer		Destination																								
AM		Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael	Sausalito	Tiburon	Unincorporated	Marin	Total	
Origin	Sonoma	0	0	21	52	24	391	938	283	21	56	2	238	2	196	52	563	3	2	781	62	8	122	2,028	3,814	
	Napa	4	0	0	2	0	3	729	168	2	23	2	45	3	160	107	252	3	5	377	23	7	48	1,030	1,960	
	Solano	52	1	0	0	0	0	137	3	0	0	2	21	18	10	21	370	0	8	535	14	41	52	1,091	1,284	
	West Contra Costa	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	East Contra Costa	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	122
	North Alameda	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
	San Francisco	261	438	69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	769
	San Mateo	59	16	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83
	South Alameda	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	Santa Clara	33	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	34
	Belvedere	11	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	Corte Madera	97	20	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	177
	Fairfax	1	1	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	Larkspur	57	62	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140
	Mill Valley	35	82	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	131
	Novato	260	87	128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	475
	Ross	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	San Anselmo	14	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43
	San Rafael	128	126	204	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	458
	Sausalito	54	37	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	110
	Tiburon	29	21	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71
	Unincorporated	55	41	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	251
	Marin	748	494	650	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,893
	Total	1,321	951	749	53	24	394	1,804	454	23	79	5	304	23	365	179	1,184	6	14	1,693	98	56	222	4,149	10,000	

Trips	Percent	
3,959	40%	Marin County Pass-Through Trips
4,149	41%	Trips in to Marin County
1,893	19%	Trips out of Marin County
0	0%	Intra-County Trips
10,000	100%	Total Trips
Total Origins		County
3,814	38%	Sonoma
1,960	20%	Napa
1,284	13%	Solano
7	0%	West Contra Costa
122	1%	East Contra Costa
30	0%	North Alameda
769	8%	San Francisco
83	1%	San Mateo
5	0%	South Alameda
34	0%	Santa Clara
1,893	19%	Marin
1,785	18%	Sonoma County Pass-Through
2,028	20%	Sonoma County to Marin County
748	7%	Marin County to Sonoma County
769	8%	San Francisco County Pass-Through
0	0%	San Francisco County to Marin County
0	0%	Marin County to San Francisco County

Non-Summer		Destination																							
PM		Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael	Sausalito	Tiburon	Unincorporated	Marin	Total
Origin	Sonoma	0	2	13	11	22	77	577	99	8	23	13	158	8	53	56	342	11	11	259	75	39	78	1,102	1,935
	Napa	6	0	0	0	1	2	526	56	1	6	2	64	7	59	62	189	4	12	210	50	25	67	752	1,350
	Solano	9	0	0	0	0	1	133	6	0	0	2	47	2	39	32	159	2	30	125	20	15	108	581	730
	West Contra Costa	48	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49
	East Contra Costa	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	North Alameda	232	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	234
	San Francisco	771	316	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,162
	San Mateo	161	76	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	243
	South Alameda	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	Santa Clara	43	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
	Belvedere	2	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	Corte Madera	309	100	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	439
	Fairfax	3	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	Larkspur	100	128	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	249
	Mill Valley	71	78	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	162
	Novato	1,322	160	199	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,681
	Ross	5	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	San Anselmo	12	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
	San Rafael	777	207	159	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,143
	Sausalito	103	44	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	158
	Tiburon	30	21	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
	Unincorporated	116	80	44	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	240
	Marin	2,852	851	512	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,215
	Total	4,145	1,263	607	11	22	80	1,236	161	9	30	17	269	17	151	150	689	16	52	595	145	79	254	2,435	10,000

Trips	Percent	
3,350	34%	Marin County Pass-Through Trips
2,435	24%	Trips in to Marin County
4,215	42%	Trips out of Marin County
0	0%	Intra-County Trips
10,000	100%	Total Trips
Total Origins		County
1,935	19%	Sonoma
1,350	14%	Napa
730	7%	Solano
49	0%	West Contra Costa
6	0%	East Contra Costa
13	2%	North Alameda
1,162	12%	San Francisco
162	2%	San Mateo
243	2%	South Alameda
17	0%	Santa Clara
58	1%	Santa Clara
4,215	42%	Marin
833	8%	Sonoma County Pass-Through
1,102	11%	Sonoma County to Marin County
2,852	29%	Marin County to Sonoma County
1,162	12%	San Francisco County Pass-Through
0	0%	San Francisco County to Marin County
0	0%	Marin County to San Francisco County

Appendix A - Origin-Destination Data (Select-Link 8 - I-580 at the Contra Costa/Marin County Line)

Item 7 - Attachment A

Non-Summer		Destination																		Total					
AM		Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael	Sausalito	Tiburon	Unincorporated Marin	Total	
Origin		0	0	0	87	7	346	3	5	43	22	0	1	0	0	0	3	0	0	3	0	0	0	7	521
Sonoma		0	0	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3	9
Napa		0	0	0	0	0	0	42	1	0	0	0	18	21	34	6	1	0	4	220	7	4	19	335	379
Solano		270	0	0	0	0	0	451	0	0	0	7	247	7	262	117	377	4	8	2,586	189	138	183	4,125	4,846
West Contra Costa		128	0	0	0	0	0	43	0	0	0	3	61	4	98	26	364	3	48	1,452	74	25	87	2,246	2,418
East Contra Costa		865	1	0	0	0	0	133	0	0	0	4	130	14	130	79	872	25	14	2,241	125	37	297	3,971	4,971
North Alameda		54	1	8	191	1	10	0	0	0	0	0	1	1	4	0	101	0	3	95	0	0	7	214	481
San Francisco		19	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	0	3	27	0	0	3	39	58
San Mateo		130	0	0	0	0	0	0	0	0	0	0	37	0	22	68	142	1	7	173	101	71	38	660	790
South Alameda		143	0	0	0	0	0	0	0	0	0	0	0	0	7	0	103	0	0	37	1	0	1	150	293
Santa Clara		0	0	0	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Belvedere		0	0	2	72	28	253	0	0	59	2	0	0	0	0	0	0	0	0	0	0	0	0	0	417
Corte Madera		0	0	1	2	1	12	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
Fairfax		0	0	12	73	47	270	2	0	30	9	0	0	0	0	0	0	0	0	0	0	0	0	0	443
Larkspur		0	0	1	24	83	113	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	237
Mill Valley		0	0	0	21	13	257	1	0	12	17	0	0	0	0	0	0	0	0	0	0	0	0	0	322
Novato		0	0	0	3	62	16	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	84
Ross		0	0	0	71	59	107	0	1	61	4	0	0	0	0	0	0	0	0	0	0	0	0	0	303
San Anselmo		0	0	2	240	170	741	25	4	107	16	0	0	0	0	0	0	0	0	0	0	0	0	0	1,307
San Rafael		0	0	0	29	74	133	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	254
Sausalito		0	0	1	23	158	234	0	0	32	1	0	0	0	0	0	0	0	0	0	0	0	0	0	450
Tiburon		0	0	3	25	53	280	2	1	19	5	0	0	0	0	0	0	0	0	0	0	0	0	0	389
Unincorporated		0	1	25	583	749	2,422	32	7	360	56	0	0	0	0	0	0	0	0	0	0	0	0	0	4,235
Total		1,612	4	33	861	758	2,780	707	15	403	78	14	497	48	558	296	1,968	34	88	6,836	498	276	638	11,750	19,000

Non-Summer		Destination																		Total					
PM		Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael	Sausalito	Tiburon	Unincorporated Marin	Total	
Origin		0	0	3	230	84	920	25	10	189	185	0	0	0	0	0	0	0	0	1	0	0	2	2	1,648
Sonoma		0	0	0	0	0	4	3	1	4	1	0	0	0	0	1	0	0	0	1	0	0	1	2	16
Napa		0	0	0	0	0	1	80	0	0	0	0	3	2	21	6	2	0	1	29	11	5	5	84	166
Solano		206	0	2	0	0	0	333	0	0	0	3	148	6	128	63	81	8	114	679	53	57	49	1,390	1,931
West Contra Costa		9	0	0	0	0	0	13	0	0	0	7	85	2	161	129	32	65	66	297	95	118	111	1,170	1,192
East Contra Costa		535	2	0	0	0	0	47	0	0	0	6	502	25	522	448	437	21	196	1,295	234	167	380	4,234	4,819
North Alameda		16	6	60	398	34	109	0	0	0	0	0	2	0	5	2	8	0	2	96	0	1	2	117	740
San Francisco		13	1	2	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	7	0	1	0	10	25
San Mateo		79	1	0	0	0	0	0	0	0	0	2	47	3	66	31	31	4	54	168	21	18	54	501	580
South Alameda		53	0	0	0	0	0	0	0	0	0	0	11	4	8	1	25	2	5	45	0	2	7	111	164
Santa Clara		0	0	0	46	3	113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	162
Belvedere		0	0	21	305	85	292	4	4	36	9	0	0	0	0	0	0	0	0	0	0	0	0	0	757
Corte Madera		0	0	3	15	4	40	1	1	7	10	0	0	0	0	0	0	0	0	0	0	0	0	0	82
Fairfax		0	1	10	184	107	273	4	0	26	6	0	0	0	0	0	0	0	0	0	0	0	0	0	612
Larkspur		0	1	9	91	42	217	0	0	36	3	0	0	0	0	0	0	0	0	0	0	0	0	0	399
Mill Valley		0	1	3	357	298	854	5	1	91	73	0	0	0	0	0	0	0	0	0	0	0	0	0	1,683
Novato		0	0	1	10	1	30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44
Ross		0	1	1	21	38	136	3	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	207
San Anselmo		0	13	153	2,353	1,001	2,281	58	15	194	77	0	0	0	0	0	0	0	0	0	0	0	0	0	6,145
San Rafael		0	0	7	83	87	158	1	1	48	7	0	0	0	0	0	0	0	0	0	0	0	0	0	392
Sausalito		0	1	17	130	50	171	3	1	39	3	0	0	0	0	0	0	0	0	0	0	0	0	0	416
Tiburon		0	4	26	227	96	348	5	5	87	21	0	0	0	0	0	0	0	0	0	0	0	0	0	820
Unincorporated		0	23	252	3,823	1,811	4,913	85	30	569	210	0	0	0	0	0	0	0	0	0	0	0	0	0	11,719
Total		912	33	319	4,452	1,929	5,947	586	42	763	397	18	799	42	913	680	616	101	438	2,618	414	369	611	7,621	23,000

Trips	Percent	Category
3,015	16%	Marin County Pass-Through Trips
11,750	62%	Trips in to Marin County
4,235	22%	Trips out of Marin County
0	0%	Intra-County Trips
19,000	100%	Total Trips

Total Origins	County
521	3% Sonoma
9	0% Napa
379	2% Solano
4,846	26% West Contra Costa
2,418	13% East Contra Costa
4,971	26% North Alameda
481	3% San Francisco
58	0% San Mateo
790	4% South Alameda
293	2% Santa Clara
4,235	22% Marin

Trips	Percent	Category
514	3%	Sonoma County Pass-Through
7	0%	Sonoma County to Marin County
0	0%	Marin County to Sonoma County
267	1%	San Francisco County Pass-Through
214	1%	San Francisco County to Marin County
32	0%	Marin County to San Francisco County

Appendix A - Origin-Destination Data (Select-Link 9 - Sir Francis Drake Boulevard West of US 101)

Item 7 - Attachment A

Origin	Destination																		Total						
	Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo		San Rafael	Sausalito	Tiburon	Unincorporated Marin		
Non-Summer AM																									
Sonoma	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	9	177	179
Napa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	32
Solano	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	10
West Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	36
East Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	20
North Alameda	0	0	0	0	0	0	0	0	0	0	0	0	1	15	0	0	7	0	0	0	0	0	2	25	25
San Francisco	0	0	0	0	0	0	12	0	0	0	0	2	10	149	0	0	36	45	2	0	0	10	10	255	268
San Mateo	0	0	0	0	0	0	0	0	0	0	0	0	1	15	0	0	4	8	0	0	0	0	3	30	30
South Alameda	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	3	3
Santa Clara	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	6	6
Belvedere	0	0	0	0	0	0	0	0	0	0	0	0	0	26	0	0	5	3	1	0	0	0	0	36	36
Corte Madera	0	0	0	0	0	0	3	0	0	0	0	4	9	181	0	0	40	119	9	0	0	0	34	396	400
Fairfax	0	0	0	0	0	1	109	6	0	2	0	28	0	34	2	0	0	0	18	1	1	5	89	207	207
Larkspur	37	24	11	35	25	94	868	101	8	25	7	326	10	1,343	89	92	50	58	802	57	35	59	2,929	4,156	4,156
Mill Valley	0	0	0	0	0	1	6	0	1	0	0	0	6	156	5	0	24	23	0	1	0	8	224	232	232
Novato	4	0	0	0	0	0	1	0	0	0	0	0	0	133	0	2	2	1	2	0	0	1	141	147	147
Ross	16	1	0	3	63	13	308	22	2	9	0	113	0	123	31	2	2	1	126	11	4	19	433	869	869
San Anselmo	1	0	0	2	2	9	357	70	4	50	1	116	1	170	22	0	1	7	91	15	10	12	446	940	940
San Rafael	0	0	0	0	0	4	39	2	0	0	0	14	9	607	5	1	41	42	45	14	1	10	789	836	836
Sausalito	0	0	0	0	0	0	0	0	0	0	0	0	2	102	1	0	10	7	3	1	0	3	130	131	131
Tiburon	0	0	0	0	0	0	0	0	0	0	0	0	0	96	0	0	20	15	3	0	3	9	150	151	151
Unincorporated	0	0	0	0	0	2	29	2	0	1	0	36	3	139	5	1	13	20	23	1	2	9	252	286	286
Marin	58	26	11	42	91	124	1,719	203	15	87	9	638	46	3,110	161	99	206	295	1,122	102	56	170	6,015	8,391	8,391
Total	58	26	11	43	91	124	1,732	203	15	88	9	640	58	3,553	161	100	257	351	1,125	102	57	196	6,610	9,000	9,000

Trips	Percent	County
15	0%	Marin County Pass-Through Trips
595	7%	Trips in to Marin County
2,375	26%	Trips out of Marin County
6,015	67%	Intra-County Trips
9,000	100%	Total Trips
Total Origins		County
179	2%	Sonoma
32	0%	Napa
10	0%	Solano
36	0%	West Contra Costa
20	0%	East Contra Costa
25	0%	North Alameda
268	3%	San Francisco
30	0%	San Mateo
3	0%	South Alameda
6	0%	Santa Clara
8,391	93%	Marin
2	0%	Sonoma County Pass-Through
177	2%	Sonoma County to Marin County
58	1%	Marin County to Sonoma County
13	0%	San Francisco County Pass-Through
255	3%	San Francisco County to Marin County
1,719	19%	Marin County to San Francisco County

Origin	Destination																		Total					
	Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo		San Rafael	Sausalito	Tiburon	Unincorporated Marin	
Non-Summer PM																								
Sonoma	0	0	0	0	0	0	0	0	1	0	0	0	0	67	0	3	13	1	0	0	0	1	85	86
Napa	0	0	0	0	0	0	0	0	0	0	0	0	1	18	0	0	3	1	0	0	0	1	23	23
Solano	0	0	0	0	0	0	1	0	0	0	0	0	1	15	0	0	1	1	0	0	0	0	17	18
West Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0	1	29	0	0	5	5	1	0	1	0	41	41
East Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0	0	41	1	0	44	4	4	0	0	0	93	93
North Alameda	0	0	0	0	0	0	1	0	0	0	0	2	6	97	1	0	15	35	7	0	0	3	165	166
San Francisco	2	0	0	1	1	0	4	0	0	0	1	8	87	824	5	1	367	474	72	1	1	30	1,870	1,877
San Mateo	0	0	1	0	0	0	0	0	0	0	0	0	8	56	0	1	30	67	4	0	0	3	167	168
South Alameda	0	0	0	0	0	0	0	0	0	0	0	0	1	8	1	0	3	3	1	0	0	1	17	17
Santa Clara	1	0	0	0	0	0	0	0	0	0	0	0	3	28	0	0	11	24	1	0	0	0	66	67
Belvedere	0	0	0	0	0	0	0	0	0	0	1	1	1	14	0	1	4	12	5	0	1	1	41	41
Corte Madera	0	0	0	0	0	1	4	0	0	0	1	9	43	646	4	5	106	244	49	1	2	17	1,126	1,131
Fairfax	1	0	0	1	1	3	27	3	0	1	1	25	0	28	12	0	0	1	23	9	5	12	116	151
Larkspur	131	50	4	27	26	51	294	25	7	12	17	455	38	2,118	254	167	167	260	915	102	121	195	4,810	5,436
Mill Valley	0	1	0	0	0	1	1	0	0	0	0	5	8	166	4	0	27	53	24	1	0	5	293	296
Novato	0	0	0	0	0	0	2	0	0	0	0	2	0	232	1	5	21	5	6	0	1	6	279	280
Ross	7	1	1	4	1	11	124	8	1	3	8	78	0	119	40	2	0	1	71	24	24	17	384	542
San Anselmo	3	1	0	3	2	7	167	13	1	3	8	174	0	125	95	4	0	9	73	38	17	45	586	784
San Rafael	0	0	0	0	0	0	8	1	0	0	1	35	47	1,127	7	7	194	225	80	9	4	32	1,768	1,776
Sausalito	0	0	0	0	0	0	0	0	0	0	0	3	10	169	0	1	28	47	23	1	0	2	283	283
Tiburon	0	0	0	0	0	1	1	0	0	0	1	5	8	104	0	0	19	32	12	0	5	7	193	194
Unincorporated	8	1	0	1	1	0	22	3	0	1	1	62	60	202	9	1	36	66	29	6	11	12	493	529
Marin	149	52	5	35	29	74	648	52	8	18	38	855	214	5,049	424	193	604	955	1,310	190	189	351	10,372	11,443
Total	151	52	6	36	30	74	654	52	8	18	38	864	320	6,234	431	197	1,095	1,569	1,399	190	191	389	12,918	14,000

Trips	Percent	County
10	0%	Marin County Pass-Through Trips
2,546	18%	Trips in to Marin County
1,072	8%	Trips out of Marin County
10,372	74%	Intra-County Trips
14,000	100%	Total Trips
Total Origins		County
86	1%	Sonoma
23	0%	Napa
18	0%	Solano
41	0%	West Contra Costa
93	1%	East Contra Costa
166	1%	North Alameda
1,877	13%	San Francisco
168	1%	San Mateo
17	0%	South Alameda
67	0%	Santa Clara
11,443	82%	Marin
1	0%	Sonoma County Pass-Through
85	1%	Sonoma County to Marin County
149	1%	Marin County to Sonoma County
7	0%	San Francisco County Pass-Through
1,870	13%	San Francisco County to Marin County
648	5%	Marin County to San Francisco County

Non-Summer		Destination																			Total			
AM		Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael		Sausalito	Tiburon	Unincorporated Marin
Origin	Sonoma	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	4	6
	Napa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	Solano	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	2
	West Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	6
	East Contra Costa	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	7	9
	North Alameda	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	9	10
	San Francisco	1	0	0	30	1	1	4	0	0	0	0	1	0	2	125	0	0	0	4	19	1	176	326
	San Mateo	0	0	0	0	0	0	0	1	0	0	0	0	0	0	16	0	0	0	0	0	0	28	45
	South Alameda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
	Santa Clara	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	5	6
	Belvedere	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	2	0	5	7
	Corte Madera	0	0	0	0	0	1	26	1	0	1	0	0	0	0	1	0	0	0	1	14	1	44	61
	Fairfax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
	Larkspur	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	13	0	21	34
	Mill Valley	2	3	1	1	3	5	1,262	103	2	25	1	11	0	4	25	4	0	2	37	413	4	82	583
	Novato	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2	0	5	7
	Ross	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	4	7
	San Anselmo	0	0	0	0	0	0	1	0	0	0	0	0	0	1	3	0	0	0	0	5	0	5	13
	San Rafael	0	0	0	0	0	1	6	1	0	0	0	1	0	0	2	0	0	0	9	23	0	71	106
	Sausalito	6	1	6	0	9	17	365	37	7	16	3	28	0	19	182	4	0	3	34	178	33	184	667
	Tiburon	0	0	0	0	0	4	1	0	0	0	0	1	0	0	4	0	0	0	1	12	1	49	68
	Unincorporated	26	5	14	7	13	85	2,072	130	5	48	1	158	2	103	100	83	3	7	190	750	39	235	1,669
	Marin	34	9	21	8	25	109	3,739	273	14	89	4	199	2	127	319	92	3	11	272	1,415	77	705	3,225
	Total	35	9	21	38	25	109	3,744	274	14	89	4	200	2	129	463	92	3	11	276	1,438	78	947	3,642

Trips	Percent	
38	0%	Marin County Pass-Through Trips
416	5%	Trips in to Marin County
4,321	54%	Trips out of Marin County
3,225	40%	Intra-County Trips
8,000	100%	Total Trips

Total Origins	County
6	0% Sonoma
3	0% Napa
2	0% Solano
6	0% West Contra Costa
10	0% East Contra Costa
11	0% North Alameda
34	5% San Francisco
45	1% San Mateo
3	0% South Alameda
6	0% Santa Clara
7,546	94% Marin
1	0% Sonoma County Pass-Through
6	0% Sonoma County to Marin County
34	0% Marin County to Sonoma County
35	0% San Francisco County Pass-Through
326	4% San Francisco County to Marin County
3,739	47% Marin County to San Francisco County

Non-Summer		Destination																			Total			
PM		Sonoma	Napa	Solano	West Contra Costa	East Contra Costa	North Alameda	San Francisco	San Mateo	South Alameda	Santa Clara	Belvedere	Corte Madera	Fairfax	Larkspur	Mill Valley	Novato	Ross	San Anselmo	San Rafael		Sausalito	Tiburon	Unincorporated Marin
Origin	Sonoma	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	0	0	0	8	0	19	29
	Napa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	6	8
	Solano	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
	West Contra Costa	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7	9
	East Contra Costa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	5	10
	North Alameda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	11	0	34	50
	San Francisco	4	0	0	0	0	0	5	0	0	0	0	48	1	73	1,574	1	9	9	28	277	7	1,149	3,177
	San Mateo	0	1	0	0	0	0	0	0	0	0	0	0	9	0	10	126	1	0	1	0	21	1	91
	South Alameda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0	4	9
	Santa Clara	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	44	0	0	0	6	0	30	82
	Belvedere	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	7	9
	Corte Madera	0	0	0	0	0	0	4	0	0	0	0	3	0	0	24	0	0	0	1	43	6	134	211
	Fairfax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	5	6
	Larkspur	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	5	0	0	0	27	0	62	96
	Mill Valley	2	0	0	0	1	4	310	33	0	4	4	11	0	5	47	3	1	1	20	396	11	179	679
	Novato	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	10	0	66	79
	Ross	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	3	6
	San Anselmo	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	4	0	9	18
	San Rafael	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	50	0	0	5	52	0	113	220
	Sausalito	3	2	0	3	2	5	71	7	0	1	3	60	1	40	742	4	4	7	45	206	44	624	1,781
	Tiburon	0	0	0	0	0	0	2	0	0	0	1	5	0	0	12	0	0	0	1	34	27	61	143
	Unincorporated	9	7	4	9	6	23	354	39	8	22	4	92	1	32	182	10	1	9	75	335	26	369	1,138
	Marin	14	9	4	12	9	33	748	79	9	27	13	172	3	79	1,071	17	6	19	147	1,110	115	1,633	4,385
	Total	18	10	5	13	9	33	772	79	9	27	13	229	5	163	2,826	19	16	30	176	1,442	123	2,982	8,024

Trips	Percent	
31	0%	Marin County Pass-Through Trips
3,639	40%	Trips in to Marin County
944	10%	Trips out of Marin County
4,385	49%	Intra-County Trips
9,000	100%	Total Trips

Total Origins	County
30	0% Sonoma
8	0% Napa
4	0% Solano
26	0% West Contra Costa
10	0% East Contra Costa
50	1% North Alameda
3,187	35% San Francisco
263	3% San Mateo
9	0% South Alameda
83	1% Santa Clara
5,330	59% Marin
1	0% Sonoma County Pass-Through
29	0% Sonoma County to Marin County
14	0% Marin County to Sonoma County
10	0% San Francisco County Pass-Through
3,177	35% San Francisco County to Marin County
748	8% Marin County to San Francisco County

APPENDIX B: HOME AND WORK LOCATION DATA



Where do people who live in Marin County commute to?

Work Zone	Home Zone										Total
	Sausalito	Tiburon/Belvedere	Mill Valley	Corte Madera/Larkspur	Southern San Rafael/Fairfax/San Anselmo/Ross	Terra Linda/Northern San Rafael	Novato				
Marin County	96	49	740	408	945	128	298				2,663
Tiburon/Belvedere	58	337	162	165	802	141	149				1,815
Mill Valley	352	648	238	509	1,892	267	1,060				4,966
Corte Madera/Larkspur	363	1,470	874	1,328	5,133	1,122	2,533	16,801			12,823
Southern San Rafael/Fairfax/San Anselmo/Ross	392	346	972	2,149	6,776	2,782	4,185				17,601
Terra Linda/Northern San Rafael	17	56	103	753	1,310	1,068	2,095				5,402
Novato	0	316	55	299	913	1,048	6,481				9,111
Outside Marin County	0	83	405	165	307	157	202				1,319
Richmond/San Pablo	189	0	339	99	953	91	224				1,895
Berkeley	64	21	87	208	557	487	424				1,849
Oakland	2,789	2,057	3,044	4,895	7,767	1,594	4,322				26,468
San Francisco	451	64	283	137	632	179	591	8,644			2,337
South San Francisco/Peninsula	91	12	47	76	770	365	960				2,322
Petaluma	17	0	213	534	311	72	1,029				2,176
Santa Rosa	0	0	11	17	43	62	245				378
Sonoma	23	85	0	39	169	173	132				623
Napa	0	6	71	189	403	242	513				1,424
Vallejo/American Canyon											

How many people live in Marin County also work in Marin County?

Home Zone	Work in Marin County
Sausalito	1,277
Tiburon/Belvedere	3,222
Mill Valley	3,144
Corte Madera/Larkspur	5,611
Southern San Rafael/Fairfax/San Anselmo/Ross	17,771
Terra Linda/Northern San Rafael	6,555
Novato	16,801
Total	54,381 57%
Live in Marin County but work outside Marin County	40,789 43%
Total Workers in Marin County	95,170

How many people live in Marin County and work in the same area?

Home Zone	% Work in same zone
Sausalito	96
Tiburon/Belvedere	337
Mill Valley	238
Corte Madera/Larkspur	1,328
Southern San Rafael/Fairfax/San Anselmo/Ross	6,776
Terra Linda/Northern San Rafael	1,068
Novato	6,481
Total	16,324 17%
Live in Marin County but work outside own area	78,846 83%
Total Workers in Marin County	95,170

Where do people who live in Marin County commute to?

Work Zone	Home Zone										Total	
	Sausalito	Tiburon/Belvedere	Mill Valley	Corte Madera/Larkspur	Southern San Rafael/Fairfax/San Anselmo/Ross	Terra Linda/Northern San Rafael	Novato	Richmond/San Pablo	Berkeley	Oakland		San Francisco
Marin County	2%	1%	10%	3%	3%	1%	1%	0%	0%	0%	0%	3%
Tiburon/Belvedere	1%	6%	2%	1%	3%	1%	1%	4%	4%	4%	4%	2%
Mill Valley	7%	12%	3%	4%	6%	3%	4%	5%	5%	5%	5%	5%
Corte Madera/Larkspur	7%	26%	58%	11%	17%	60%	11%	7%	7%	7%	7%	13%
Southern San Rafael/Fairfax/San Anselmo/Ross	8%	6%	13%	18%	23%	60%	18%	18%	18%	18%	18%	18%
Terra Linda/Northern San Rafael	0%	1%	1%	6%	4%	11%	6%	11%	11%	11%	11%	6%
Novato	0%	6%	1%	2%	3%	10%	2%	10%	10%	10%	10%	10%
Outside Marin County	0%	1%	5%	1%	1%	2%	1%	1%	1%	1%	1%	1%
Richmond/San Pablo	0%	1%	5%	1%	1%	2%	1%	1%	1%	1%	1%	1%
Berkeley	4%	0%	4%	1%	3%	1%	4%	4%	4%	4%	4%	2%
Oakland	1%	0%	1%	2%	2%	5%	2%	2%	2%	2%	2%	2%
San Francisco	57%	37%	40%	41%	26%	16%	17%	17%	17%	17%	17%	28%
South San Francisco/Peninsula	9%	1%	4%	1%	2%	2%	2%	2%	2%	2%	2%	2%
Petaluma	2%	0%	1%	1%	3%	4%	4%	4%	4%	4%	4%	2%
Santa Rosa	0%	0%	3%	4%	1%	1%	4%	4%	4%	4%	4%	2%
Sonoma	0%	0%	0%	0%	0%	1%	1%	1%	1%	1%	1%	0%
Napa	0%	2%	0%	0%	1%	2%	1%	2%	2%	2%	2%	1%
Vallejo/American Canyon	0%	0%	1%	2%	1%	2%	2%	2%	2%	2%	2%	1%

What percent of people who live in Marin County work in Marin County?

Home Zone	% Work in Marin County
Sausalito	26%
Tiburon/Belvedere	58%
Mill Valley	41%
Corte Madera/Larkspur	47%
Southern San Rafael/Fairfax/San Anselmo/Ross	60%
Terra Linda/Northern San Rafael	66%
Novato	66%
Marin County	57%

What percent of people who live in Marin County work in the same area?

Home Zone	% Work in same zone
Sausalito	2%
Tiburon/Belvedere	6%
Mill Valley	3%
Corte Madera/Larkspur	11%
Southern San Rafael/Fairfax/San Anselmo/Ross	23%
Terra Linda/Northern San Rafael	11%
Novato	25%