



STATE ROUTE 37 IMPROVEMENT PLAN

Summary of SR 37 Survey Results

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I. Introduction

The SR 37 Outreach Team, including Caltrans D4, the Transportation Authorities of Marin, Sonoma, Napa and Solano Counties, and MTC, conducted an online survey to collect input from a broad diversity of SR 37 users. The objective of the survey was to better understand the travel patterns of regular SR 37 users and to collect feedback about users major concerns and priorities for improvements along the highway. The survey was open to the public between December 1, 2017 and January 16, 2018 and over 3750 responses were collected.

II. Survey Outreach Methodology

The Outreach Team conducted a robust outreach effort to publicize the on-line survey including e-blasts, social media and outreach to key partners including local cities, chambers of commerce, neighborhood associations, community-based organizations, and other established civic groups.

The following outreach channels were used to promote the survey:

- TAM, SCTA, NVTA, and STA websites
- TAM, SCTA, NVTA, and STA commissions' mailing lists
- SR 37 Facebook page
- Caltrans Facebook and Twitter pages
- Caltrans website
- E-blasts to the SR 37 mailing list
- Communications via Twitter and Facebook
- Targeted communications with local media outlets

III. Demographics of Survey Respondents

With over 3750 survey respondents, the survey reached a broad range of Marin, Sonoma, Napa and Solano residents. Approximately 41% of respondents were from Solano County, and respectively 21%, 19 % and 11% from Sonoma, Marin and Napa County. Seven percent of respondents were from other counties, including Contra Costa, Sacramento and Yolo County, among others.

In terms of age, nearly 50% of the respondents were between 45 and 64 years old, 31% between 25 and 44 years old, and 18% over 65 years old. The majority of respondents (80%) identified as White, and 7% as Asian, 6% as Hispanic, 3% as African-American, 2% as Native American, and 6% as multi-racial. In terms of household income, about 44% declared earning more than \$100,000, 30% declared earning between \$50,000 and \$100,000, 11% declared earning less than \$25,000 and the remaining 17% declined to state.

The charts that follow provide more detailed demographic information about survey respondents.

Figure 1 – County of Residence

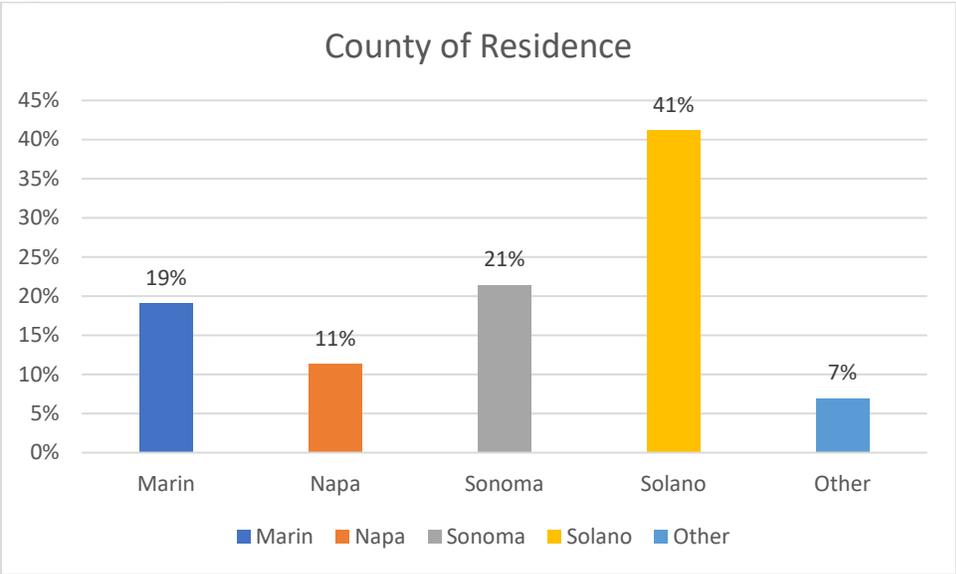


Figure 2 – Age of Survey Respondents

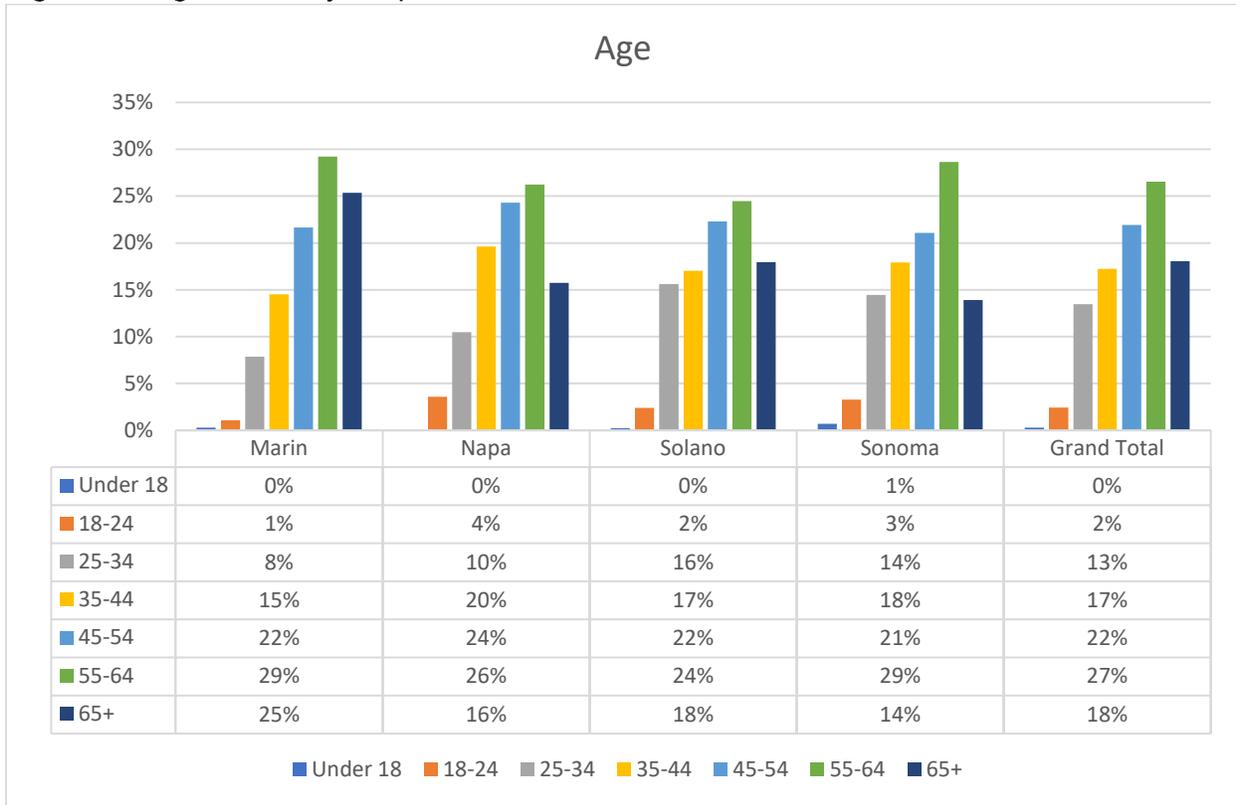


Figure 3 – Race/Ethnicity of Survey Respondents

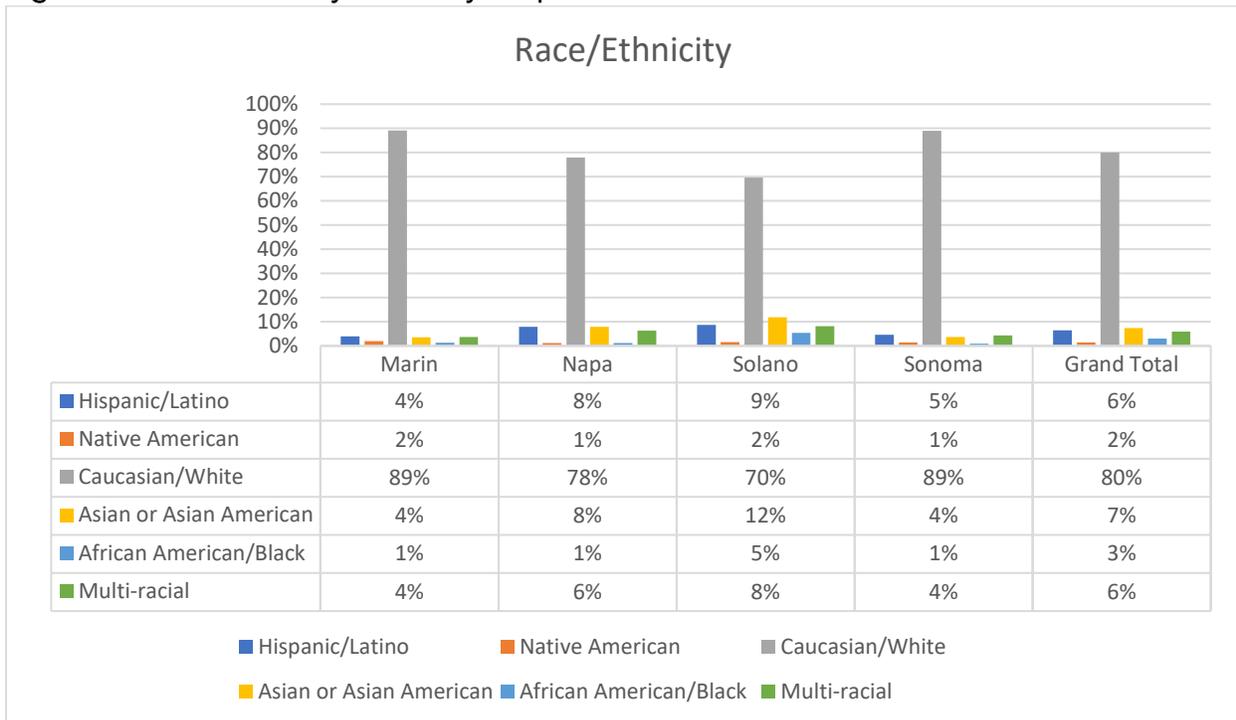
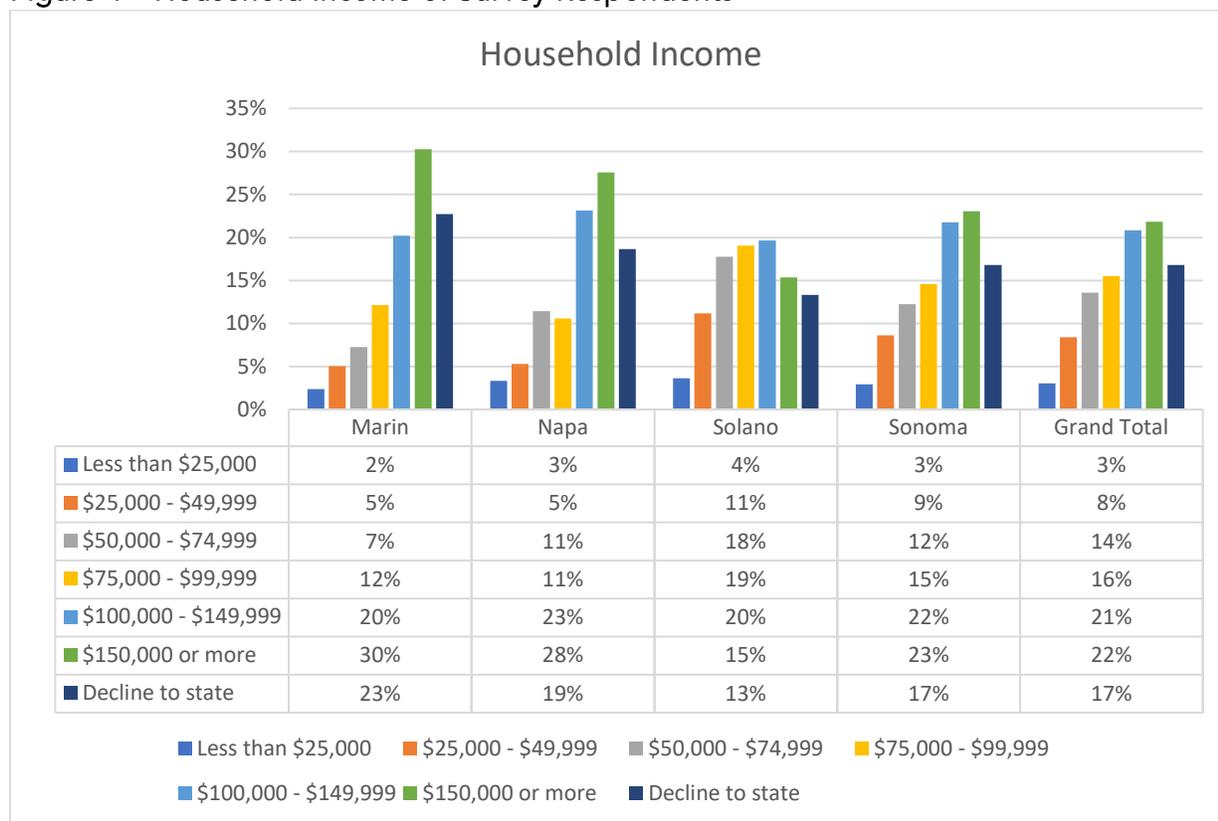


Figure 4 – Household Income of Survey Respondents



IV. Survey Results

This section provides an overview and analysis of the survey responses by theme. Respondents’ current travel patterns and habits along SR 37 will be analyzed first, before looking at potential changes to travel along SR 37, major concerns and ideas for improvements, and finally analyzing respondents’ willingness to consider alternative funding options. Survey questions included multiple choice questions, short answer questions, and map-based questions. The map-based questions allowed respondents to place a pin on the map to identify specific locations along the corridor where they think improvements are needed.

The charts included in the section provide response data at the county level. Additionally, in certain cases, response data was analyzed in terms of respondents’ frequency of travel on SR 37.

A. Travel Patterns

Respondents were asked to answer several questions about their travel habits along SR 37. Key findings from this section include:

- *Live/Work*
 - Most respondents work in Marin County (Novato, San Rafael) and San Francisco (see figure 5 for a map illustrating where respondents work).

- o Most respondents live in the Vallejo area, and many others live in the main North Bay cities and towns, including Napa, Sonoma, Novato and Petaluma (see figure 6 for a map illustrating where respondents live).
- o 45% of respondents use SR 37 to go to work, 40% for recreation and the remaining 15% use SR 37 for school or to run errands (see figure 9).
- o The majority (79%) of respondents drive alone, and 19% carpool (see figure 11).
- *Travel Frequency:*
 - o 52% of respondents travel on SR 37 either daily or a few times a week (see figure 7).
 - o 30% of respondents use SR 37 on weekdays only, and 50% on both weekends and weekdays (see figure 8).
 - o Segment A is the most frequently travelled segment for survey respondents (see figure 12).
- *Alternative Routes:*
 - o Many respondents declared using alternate routes to avoid congestion on SR 37, including Lakeville Highway (16%) and Highway 121 (12%) (see figure 13).

Figure 5 – Heatmap illustrating responses to the survey question “Where do you work?”
 (A total of 1509 pins were dropped on the map)

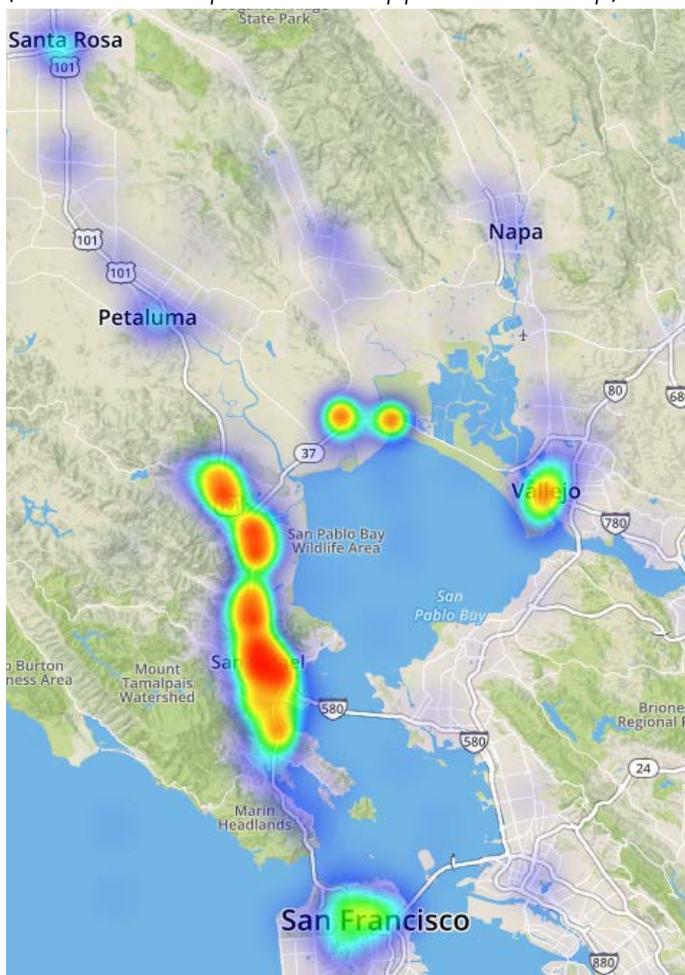


Figure 6 – Heatmap illustrating responses to the survey question “Where is home?”
(A total of 2109 pins were dropped on the map)

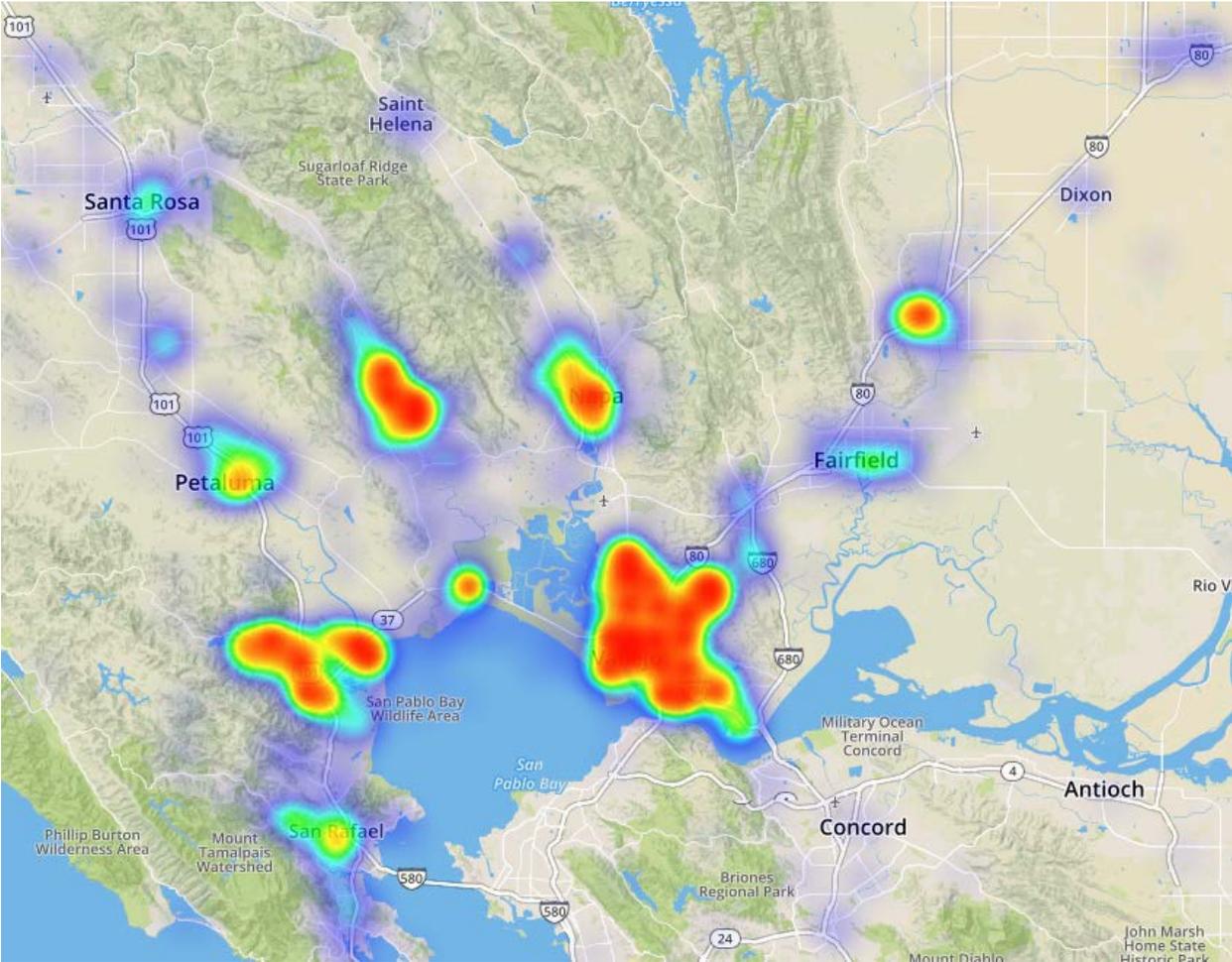


Figure 7 – Frequency of Travel on SR 37

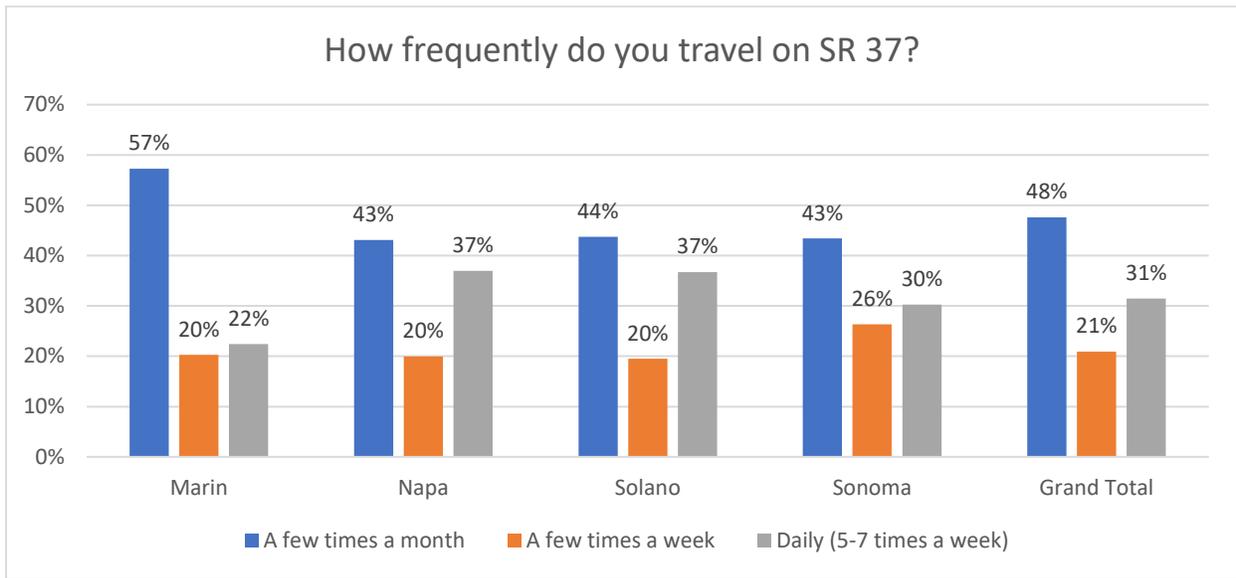


Figure 8 – Days of Travel on SR 37

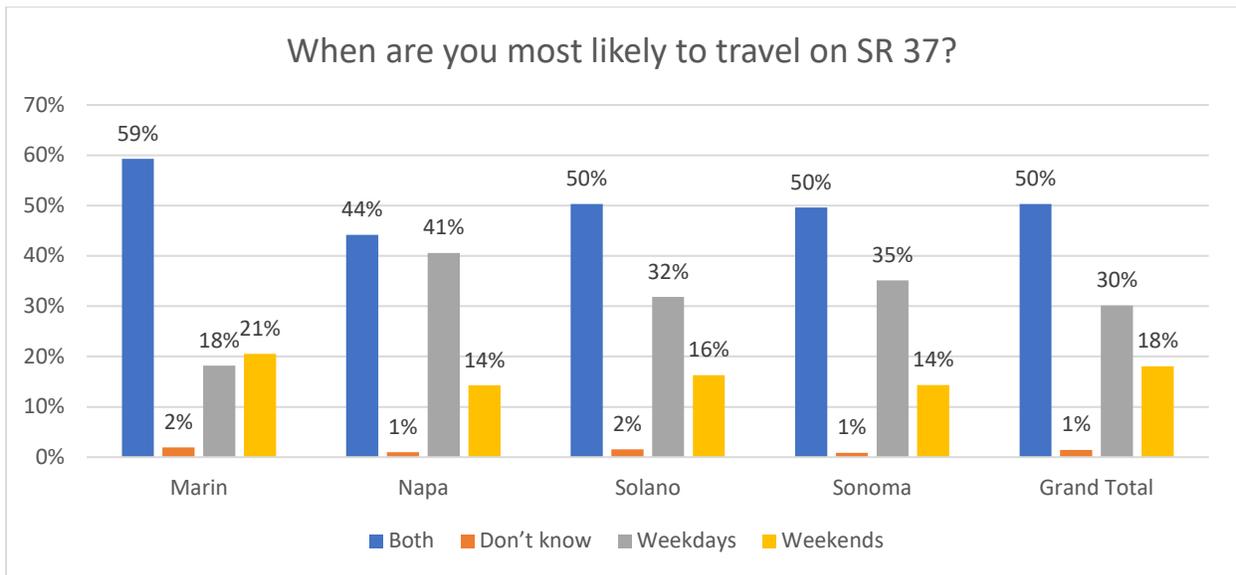


Figure 9 – Reason for Travel on SR 37

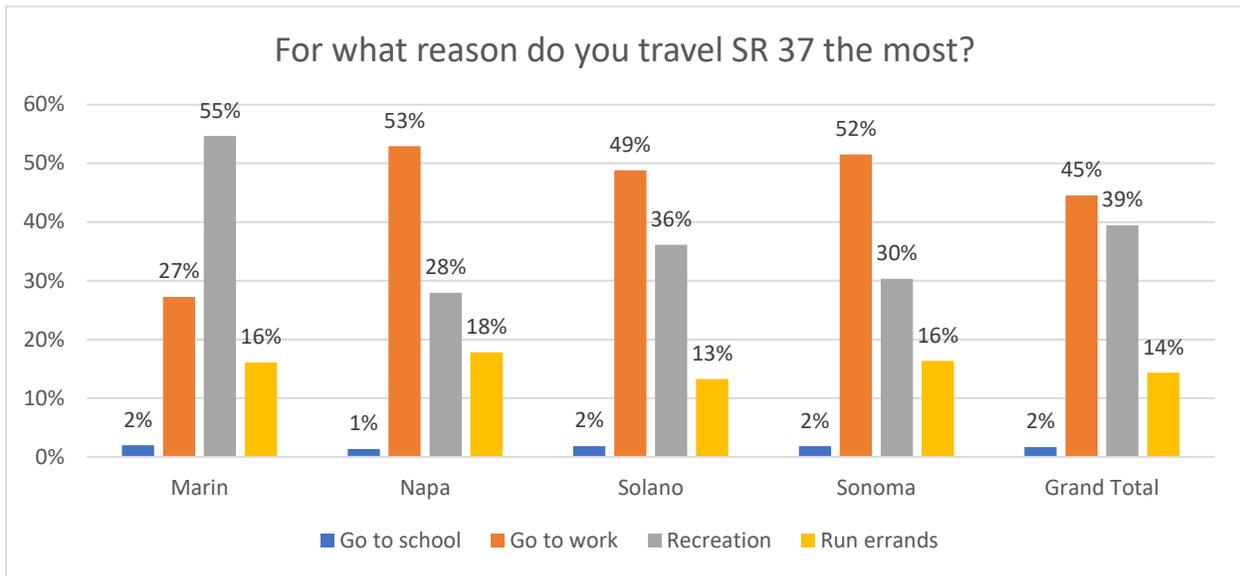


Figure 10 – Reason for Travel on SR 37 by Reason for Travel

In order to better understand the travel patterns of SR 37 users, respondents' frequency of travel was analyzed in terms of their reason for travel. This level of analysis provides more detailed information about how frequently respondents use SR 37. For instance, of respondents who use SR 37 primarily for work, only 64% use it daily and nearly a quarter (22%) use SR 37 a few times a week. The relatively low proportion of respondents travelling on SR 37 daily can be explained by commuters changing their travel itineraries and schedules due to traffic congestion on SR 37, such as using alternate routes or telecommuting.

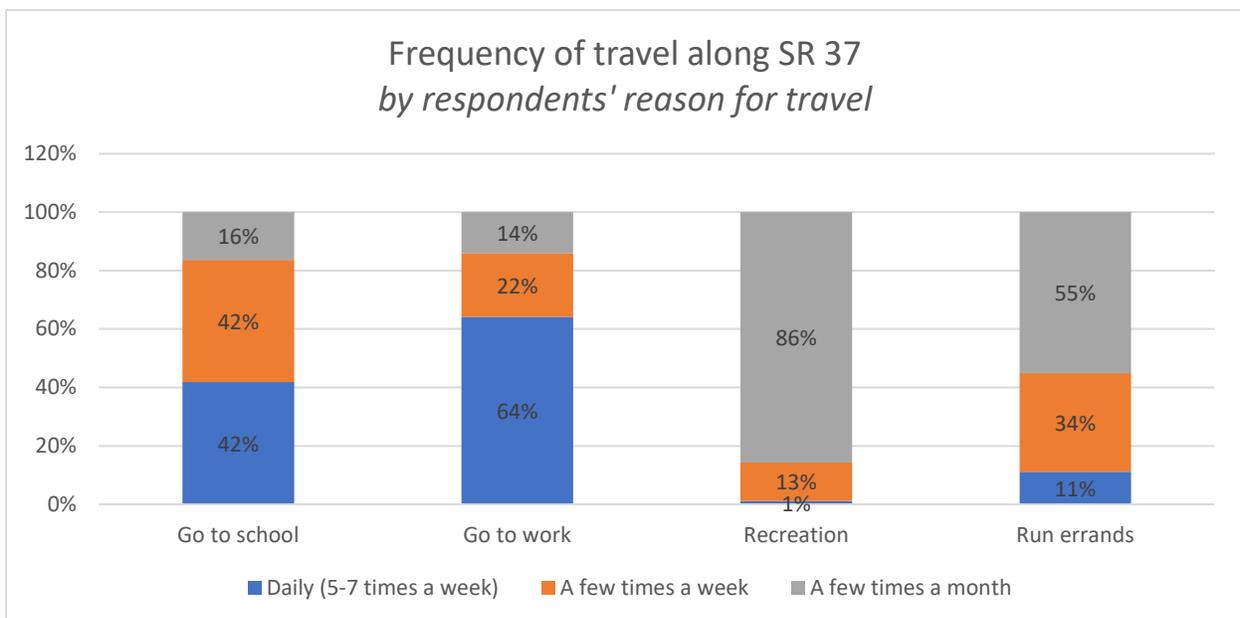


Figure 11 – Mode of Transportation

Please note: respondents were allowed to select several answer choices. Results are expressed in percentage of total respondents and totals can therefore exceed 100%.

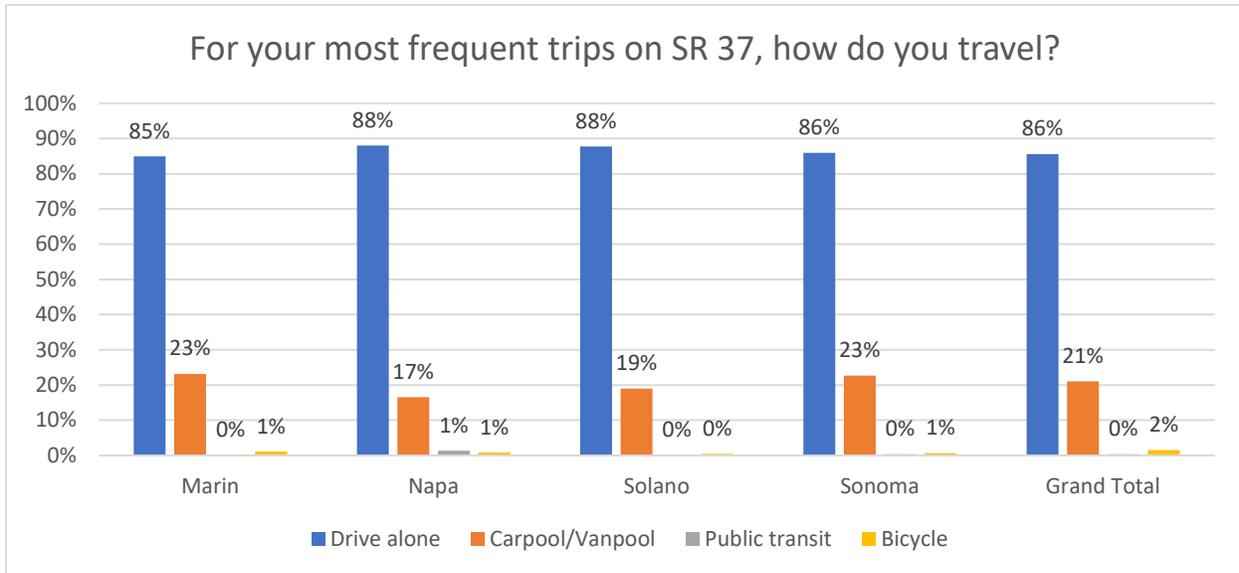


Figure 12 – Most Frequently Travelled Segments

Segment A: between US 101 in Novato and SR 121 (Sears Point)

Segment B: between SR 121 (Sears Point) and Mare Island

Segment C: between Mare Island and I-80 in Vallejo

Please note: respondents were allowed to select several answer choices. Results are expressed in percentage of total respondents and totals can therefore exceed 100%.

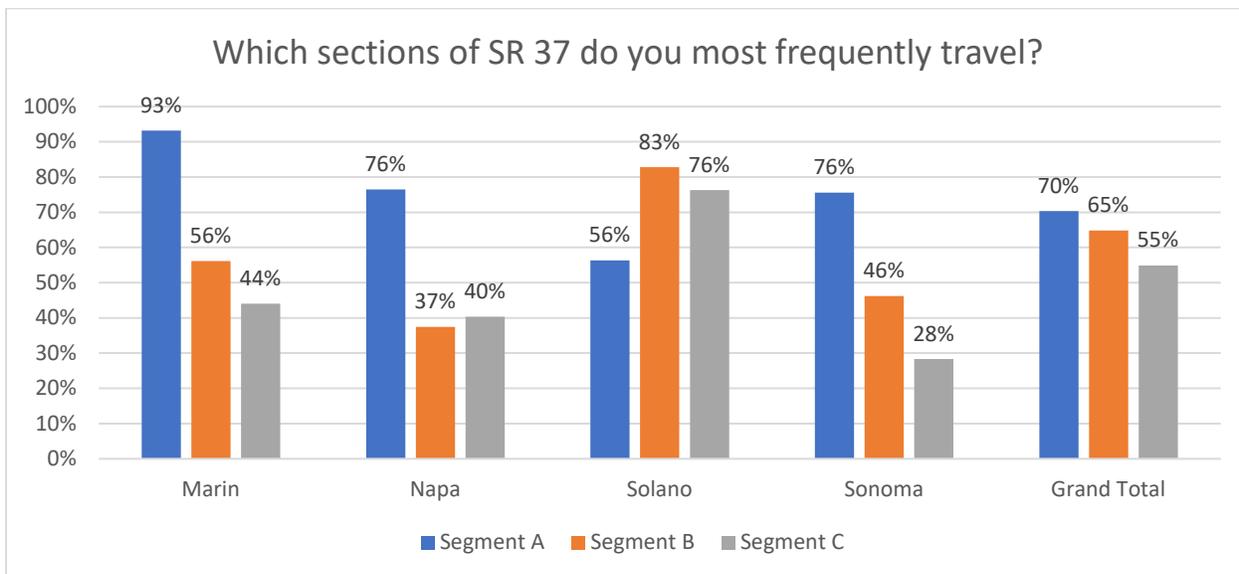
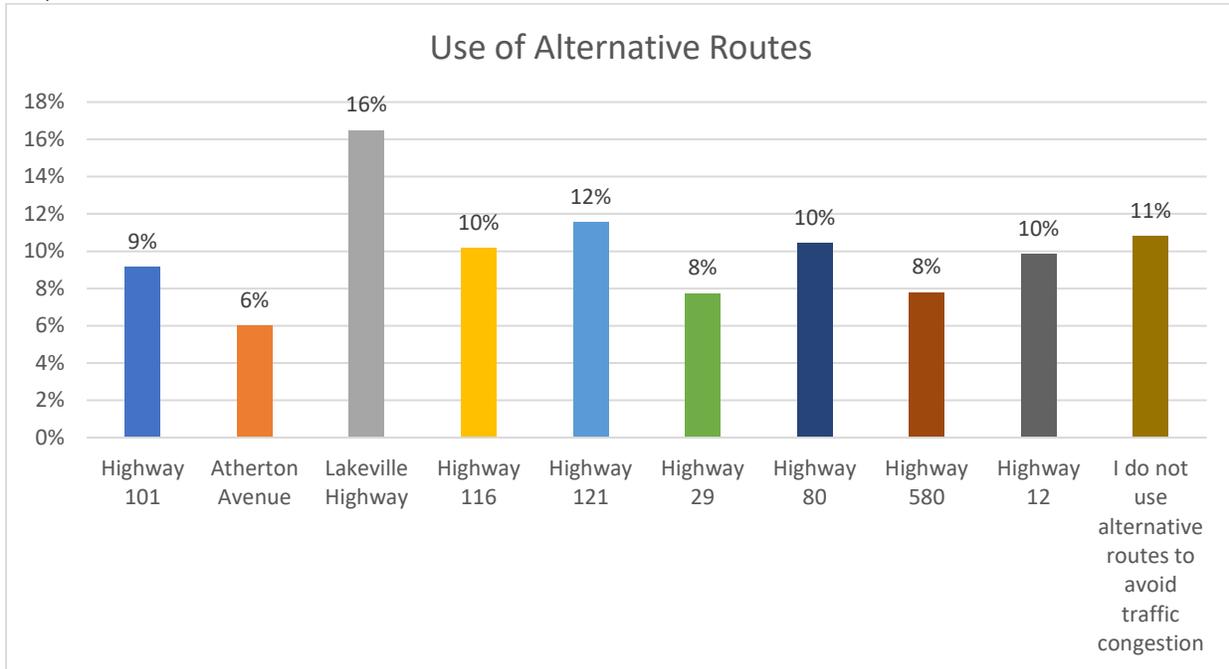


Figure 13 – Use of Alternative Routes

Please note: respondents were asked to “select all that apply” to answer this question. Results therefore reflect percentage of total responses received for this question, not percentage of respondents.



B. Potential Changes in Travel Patterns

Survey participants were asked to answer several questions about their likelihood to change their travel habits along SR 37. Key findings from this section include:

- 29% of respondents are likely to use public transit if better options are available, 41% stated they were not likely to use public transit, and the remaining 30% answered “it depends”.
- Respondents’ likelihood to use public transit increased with their frequency of travel on SR 37: 40% of daily commuters stated they were likely to use public transit if better options were available (see figure 15).
- 14% of respondents stated they would be likely to travel by bicycle along SR 37 if a safe route were available (see figure 16).

Figure 14 – Likelihood of Using Public Transit

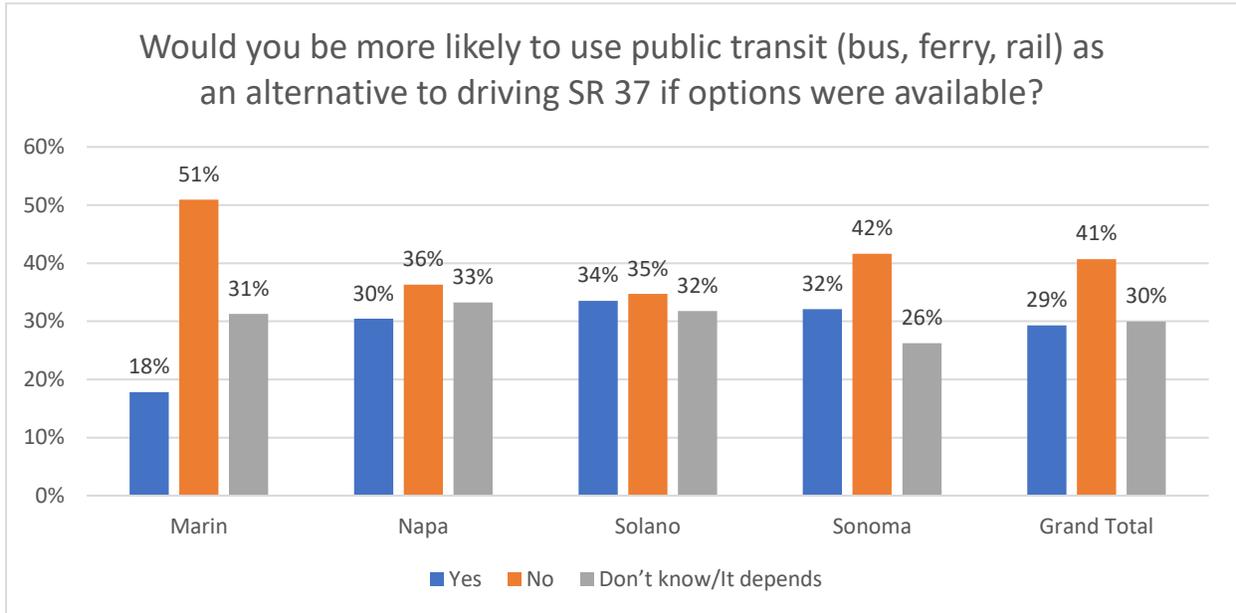


Figure 15 – Likelihood of Using Public Transit by Respondents’ Frequency of Travel

Respondents’ likelihood of using public transit was analyzed in terms of their frequency of travel on SR 37. This level of analysis provides more detailed information about how likely regular commuters are to use public transit if options were available. Daily commuters are the most likely to use public transit, with 40% stating they would use public transit compared to only 28% of respondents who use SR 37 a few times a week.

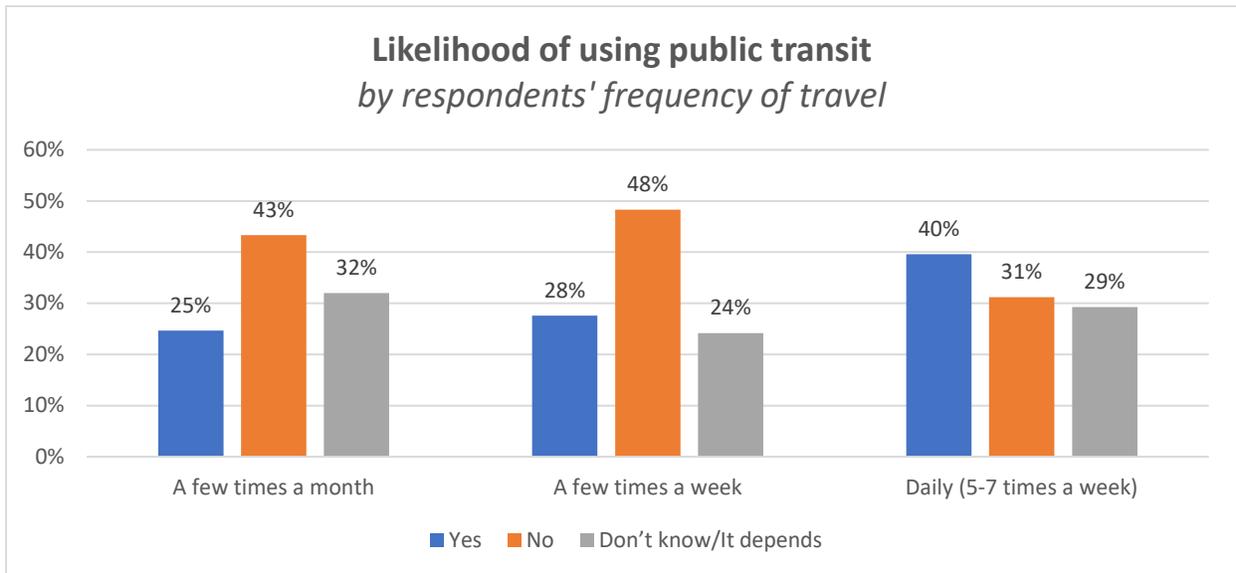
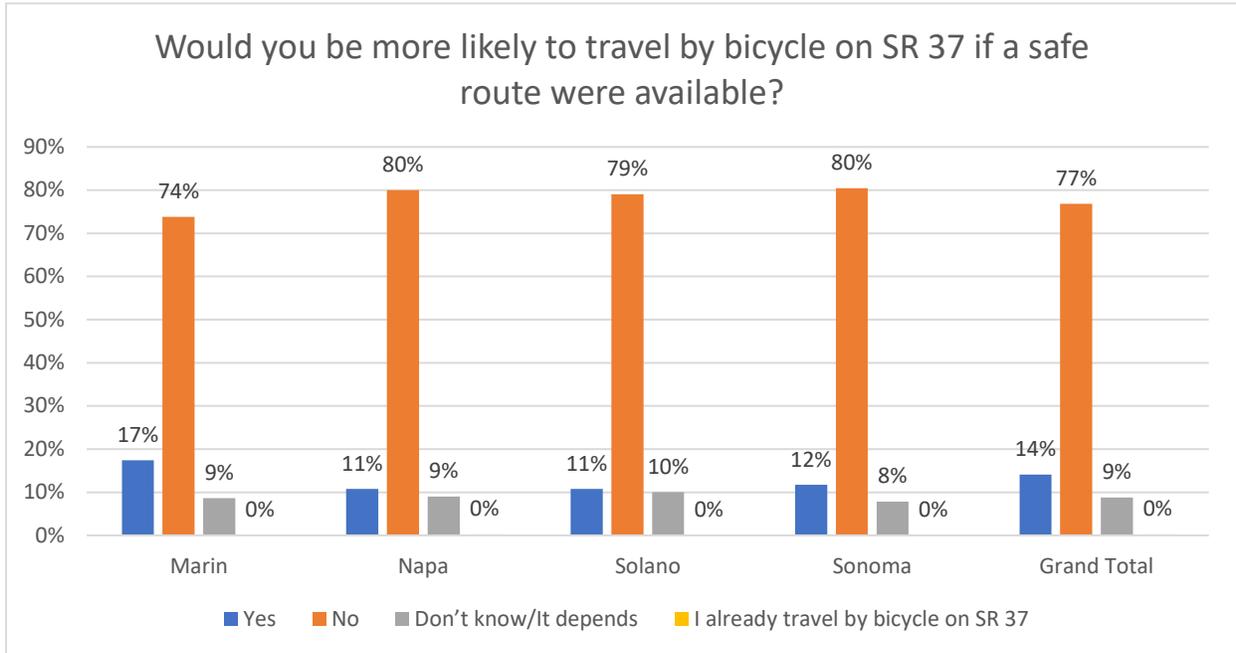


Figure 16 – Likelihood of Travelling by Bicycle



C. Alternative Funding Options

Respondents were asked to answer several questions about their willingness to consider alternative funding options for improvements to SR 37. Key findings from this section include:

- 53% of respondents were willing to consider alternative funding options and 12% stated they weren't willing to do so.
- Respondents' willingness to consider alternative funding options is not affected by their frequency of travel along SR 37.
- The preferred funding option identified by respondents is a local sales tax measure (37% of responses) and second preferred options were tolls collected on specific sections and tolls collected for the full route, each collected 24% of responses.

Figure 17 – Willingness to Consider Alternative Funding Options

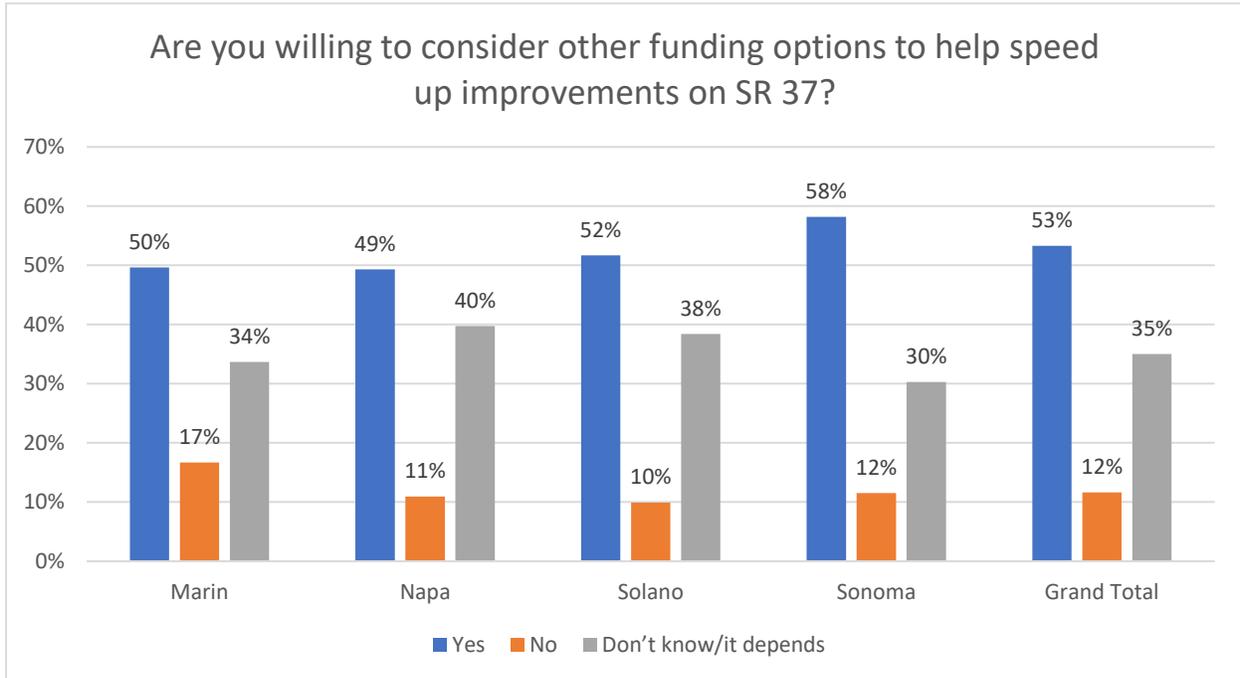


Figure 18 – Willingness to Consider Alternative Funding Options by Respondents' Frequency of Travel

Respondents' willingness to consider alternative funding options was analyzed in terms of their frequency of travel on SR 37. This level of analysis provides more detailed information about how willing regular commuters are to consider alternative funding options. Figure 18 indicates that the frequency with which a survey participant travels on SR 37 does not affect their willingness to consider alternative funding options. In other words, daily commuters are as inclined to seek alternative funding options as respondents who use SR 37 just a few times a month.

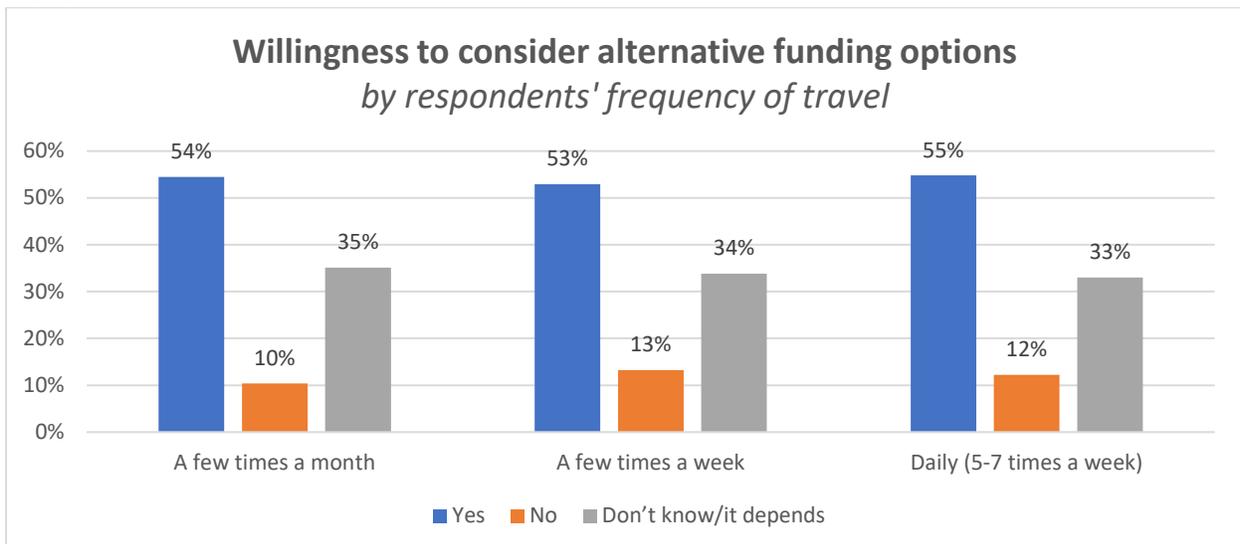
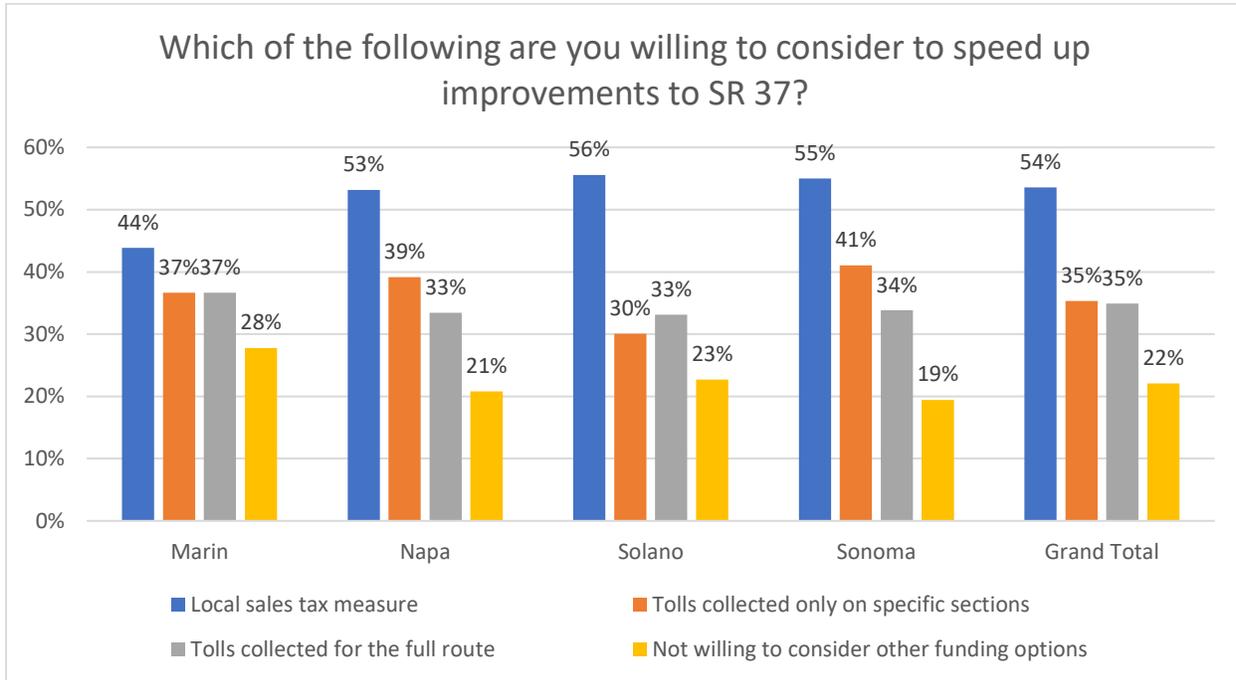


Figure 19 – Preferred Alternative Funding Options

Please note: respondents were allowed to select several answers. Results are expressed in percentage of total respondents and totals can therefore exceed 100%.



D. Major Concerns and Priorities for Improvement

Survey participants were asked to answer several questions about their major concerns along SR 37 and their priorities for improvements along the route. Key findings from this section include:

- Respondents dropped nearly 5500 pins on the map to identify areas of concern along the route:
 - 75% of the pins identified **traffic concerns** (see figure 22)
 - 35% of the pins identified **road safety concerns** (see figure 23)
 - 15% of the pins identified **flooding concerns** (see figure 24)
 - 8% of the pins identified **environmental concerns** (see figure 25)
- Respondents identified several key locations along SR 37 where priority improvements are needed (see figure 21):
 - Lakeville intersection
 - Sears Point and Sears Point approach coming from the West
 - Sonoma Creek Bridge
 - Mare Island (West of Napa River bridge)

Figure 20 – Ranked Level of Concern for Key Topics

This chart illustrates how respondents ranked the importance of different areas of concern from low to high importance. Respondents were asked to use a sliding scale to share their level of concern about each topic.

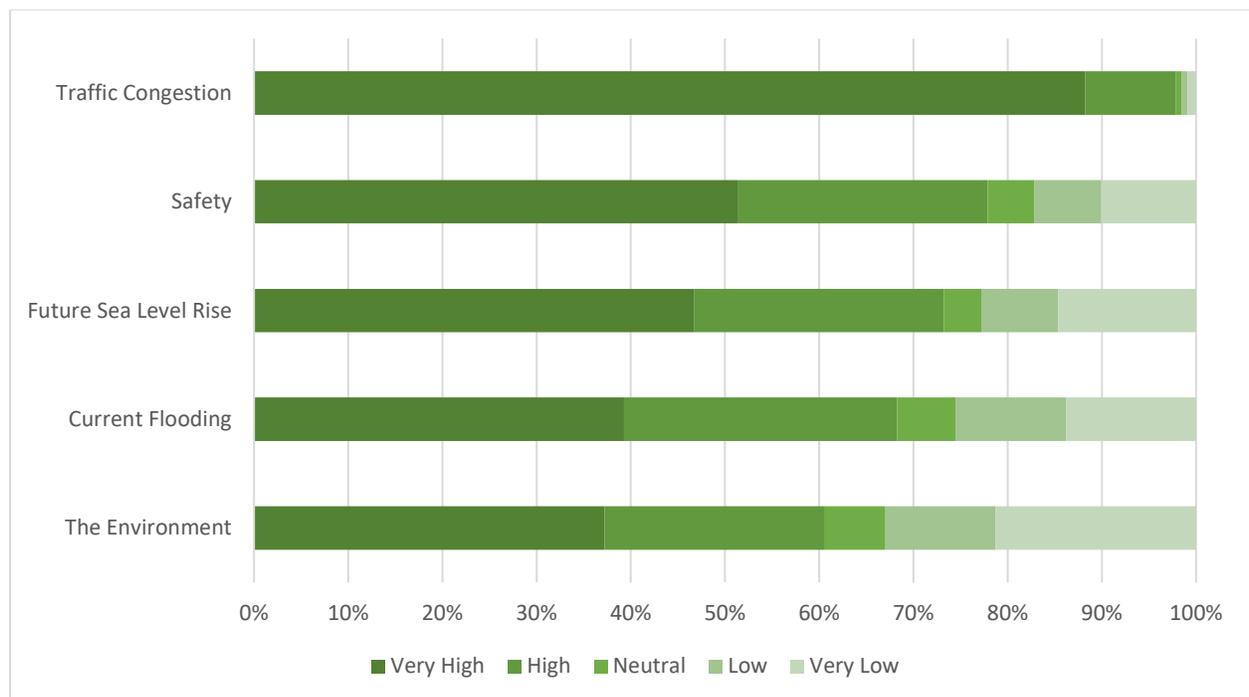


Figure 21 – Heatmap Illustrating Where Improvements are Needed

A total of 5405 pins were dropped on the map.

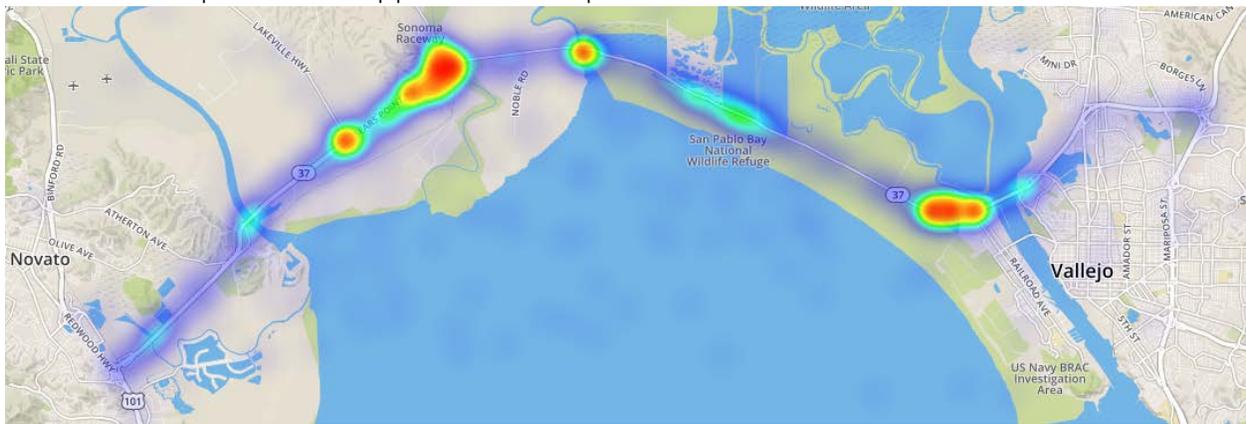
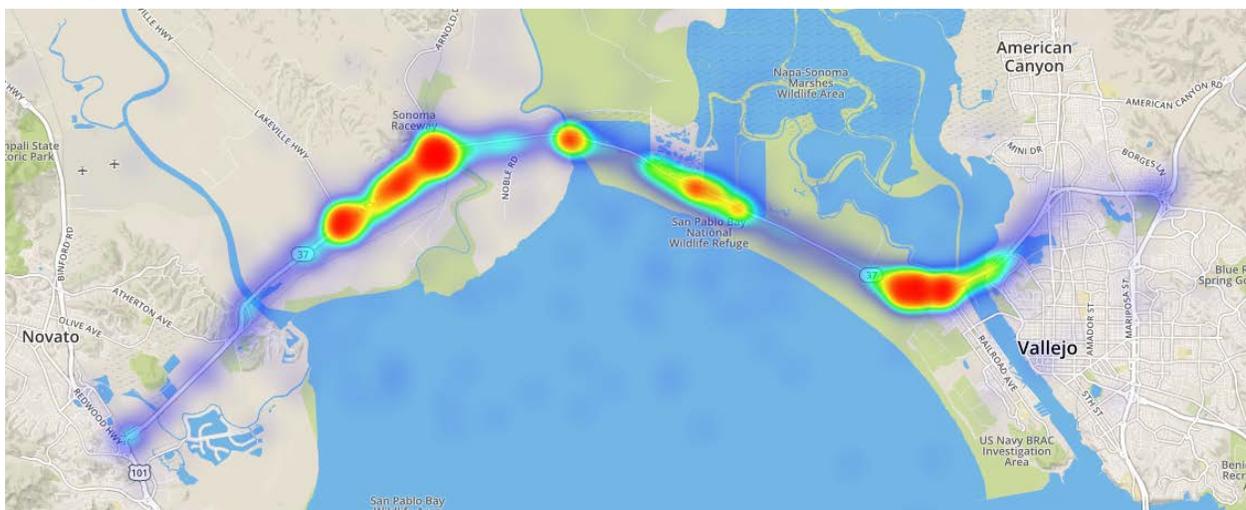


Figure 22 – Heatmap Illustrating Traffic Concerns Along the Route

A total of 4099 pins were dropped on the map to identify locations with traffic concerns along the route.



In addition to placing pins on the map, survey respondents submitted nearly 2500 written comments describing the specific traffic concerns they identified along the route. A sample of the comments received follows this section.

SAMPLE COMMENTS:

Location	Comment
Overall	This highway is so dangerous, I have stopped going to Marin County to avoid it. The traffic flow seems to cause reckless driving and encourage road rage.
Segment B	Need 2 lanes, the congestion here is atrocious.
Lakeville Intersection	Extend left turn lane onto Lakeville rd. People ride the shoulder regularly.
Sears Point	The lanes should be divided so if you're going to Vallejo you have to stay in that lane and if you're going to Sonoma you would have to stay in that lane instead of dangerously cutting into the Vallejo lane at the last minute
Sears Point	The merging traffic backs up for miles.
Sears Point	Replace traffic signal with grade separated interchange
Sears Point	Traffic circle or overpass to get rid of the traffic light which is a major traffic tie-up.
Mare Island	This is a bottleneck west-bound every day with backups, need two lanes in each direction all the way through on 37.
Mare Island	Super dangerous merge when getting on 37 from mare island when traffic is normal speed. This is also the major pinch point that creates the back ups in the morning.

Figure 23 – Heatmap Illustrating Road Safety Concerns Along the Route

A total of 1936 pins were dropped on the map to identify locations with road safety concerns along the route.



In addition to placing pins on the map, survey respondents submitted over 1200 written comments describing the specific road safety concerns they identified along the route. A sample of the comments received is included below.

SAMPLE COMMENTS:

Location	Comment
Novato/US 101	Heading West on 37, the merge onto 101 is very short sometimes causing evasive actions with drivers trying to exit or even continue on 101 South.
Lakeville	There needs to be a warning lights in both directions on the approach to the Lakeville stoplight to let you know the light is about to change. It's *so dangerous* as it is now, especially on foggy mornings!
Lakeville	Many people drive on the shoulder to bypass those waiting to get the often empty turn lane so as not to miss the light.
Sears Point	There should be a barrier between the Sonoma and Vallejo lane that prevents people from cutting into the Vallejo lane.
Sears Point	Dangerous intersection. Traffic travels at such high speed through light. Would be much safer as an interchange.
Sears Point	Road is really rough over old rail crossing. I've seen vehicles lose traction here in wet conditions.
Mare Island	Lane ends right at the mare island overcrossing - there are a lot of crashes there. There needs to be 2 lanes all the way from Vallejo to Novato!
Overall	Extra law enforcement. Speeding up to dead stop causing accidents
Overall	When traffic is stopped, you can't see the back up in places. Drivers go too fast to stop. Lights would warn of upcoming traffic hazards
Overall	Need multi-modal (bike and ped) safe passage. I've tried riding my bike, and there is no safe place to ride, especially over bridges. Shoulders are not physically separated, and filled with road dirt and trash.

Figure 24 – Heatmap Illustrating Flooding Concerns Along the Route

A total of 822 pins were dropped on the map to identify locations with flooding concerns along the route.



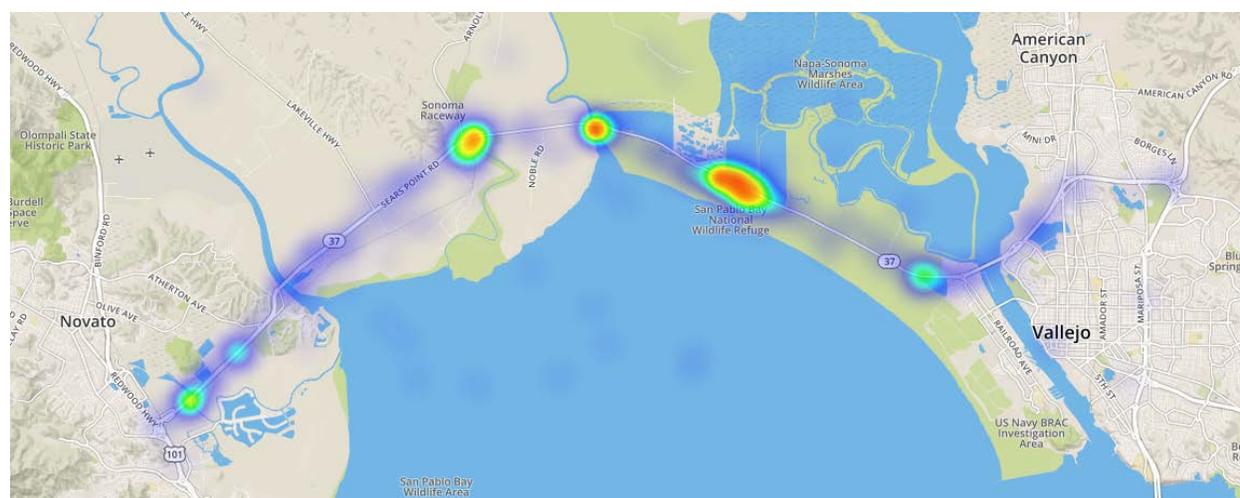
In addition to placing pins on the map, survey respondents submitted over 400 written comments describing the specific flooding concerns they identified along the route. A sample of the comments received is included below.

SAMPLE COMMENTS:

Location	Comment
East of Blackpoint	Due to settling, there's a pronounced dip in the road here that quickly unweights and unsettles vehicles traveling at highway speeds.
Novato/US 101	The bridge needs to be replaced. It flooded last year and traffic backs up from the flyover to 101. It'd be good to draw the S. Novato exit lane as an individual lane on the flyover from 101N.
Segment B	This section frequently floods during heavy rains and high tides. The roadway needs to be elevated, and protected bicycle lanes added. In addition, there should be a rail line that connect with the SMART train, running to Vallejo.
Segment B	This area could be subject to flooding and sea level rise. Traffic comes to sudden stops, is dangerous and could land vehicles in the bay. This road also divides two saltwater marshes and creates a barrier to the movement of wildlife.
Overall	Need to increase number of lanes and raise road to accommodate flooding from rain and sea rise.

Figure 24 – Heatmap Illustrating Environmental Concerns Along the Route

A total of 420 pins were dropped on the map to identify locations with environmental concerns along the route.



In addition to placing pins on the map, survey respondents submitted over 240 written comments describing the specific environmental concerns they identified along the route. A sample of the comments received is included below.

SAMPLE COMMENTS:

Location	Comment
Novato Creek	Roadway and levees constrain Novato Creek causing flooding. The roadway in this area should be a causeway, allowing the creek to flow and tidal changes to occur freely.
General	I worry an expansion would effect wildlife, especially the migrating water birds.
General	The bike path just ends. I think that it's reasonable for CalTrans to ensure that every road has a Class I bike path, especially in such a scenic area. It should be smooth, well designed, and kept clean and maintained.
General	The traffic congestion is causing pollution to the wetlands, please improve the flow of traffic. It will decrease the number of idling cars
General	Widen the road with complete sensitivity to the environment, and the visible nature of the area. Don't loose sight of the beauty, but make the road 2 lanes in each direction.

V. Next Steps

The findings from the survey results will help inform the development of the design alternatives for future improvements to SR 37. In order to collect more in-depth feedback about the travel habits and concerns of frequent SR 37 users, the SR 37 Outreach Team conducted a series of six focus groups following the survey. The feedback received through the focus groups will be analyzed and compiled into a Focus Group Summary that will add a level of detail to some of the responses received through the survey. Together the Survey Summary and the Focus Group Summary will help the Outreach Team better understand where the public has concerns and where they expect to see improvements.