# Table of Contents

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>1-1</td>
</tr>
<tr>
<td>Introduction</td>
<td>2-1</td>
</tr>
<tr>
<td>Online Survey</td>
<td>3-1</td>
</tr>
<tr>
<td>Survey Design</td>
<td>3-1</td>
</tr>
<tr>
<td>Methodology</td>
<td>3-2</td>
</tr>
<tr>
<td>Results</td>
<td>3-5</td>
</tr>
<tr>
<td>Cordon Count</td>
<td>4-1</td>
</tr>
<tr>
<td>Introduction</td>
<td>4-1</td>
</tr>
<tr>
<td>Methodology</td>
<td>4-1</td>
</tr>
<tr>
<td>Results</td>
<td>4-3</td>
</tr>
<tr>
<td>Carbon Emissions</td>
<td>5-1</td>
</tr>
<tr>
<td>Introduction</td>
<td>5-1</td>
</tr>
<tr>
<td>Methodology</td>
<td>5-1</td>
</tr>
<tr>
<td>Results</td>
<td>5-4</td>
</tr>
<tr>
<td>Appendix A: Survey Instruments</td>
<td>i</td>
</tr>
<tr>
<td>Online Survey</td>
<td>ii</td>
</tr>
</tbody>
</table>
# Table of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-1</td>
<td>Adjusted Faculty/Staff and Student Responses</td>
<td>3-4</td>
</tr>
<tr>
<td>3-2</td>
<td>Population Scale</td>
<td>3-4</td>
</tr>
<tr>
<td>3-3</td>
<td>Mode of Arrival to Campus</td>
<td>3-5</td>
</tr>
<tr>
<td>3-4</td>
<td>Number of Legs in Journey to Campus</td>
<td>3-6</td>
</tr>
<tr>
<td>3-5</td>
<td>All Modes Used to Get to Campus</td>
<td>3-7</td>
</tr>
<tr>
<td>3-6</td>
<td>Mode Split by Affiliation</td>
<td>3-8</td>
</tr>
<tr>
<td>3-7</td>
<td>Cost of Commute</td>
<td>3-9</td>
</tr>
<tr>
<td>3-8</td>
<td>Daily Estimated Number of Muni trips by Muni route</td>
<td>3-10</td>
</tr>
<tr>
<td>3-9</td>
<td>Peak Hour Estimated Number of Muni Trips for the SF State Peak Period</td>
<td>3-10</td>
</tr>
<tr>
<td>3-10</td>
<td>Peak Hour Estimated Number of Muni Trips for the Muni System Wide Peak Period of 5:00 PM to 6:00 PM</td>
<td>3-11</td>
</tr>
<tr>
<td>3-11</td>
<td>Peak Hour, Estimated Number of Peak Direction Riders for M line</td>
<td>3-11</td>
</tr>
<tr>
<td>3-12</td>
<td>Peak Hour, Estimated Number of Peak Direction Riders for Bus Route 28/28R</td>
<td>3-12</td>
</tr>
<tr>
<td>3-13</td>
<td>Muni Route 18-46th Ave and 57-Parkmerced Route Change Map</td>
<td>3-13</td>
</tr>
<tr>
<td>3-14</td>
<td>Muni 28-19th Avenue Proposal, Approved July 2015</td>
<td>3-14</td>
</tr>
<tr>
<td>3-15</td>
<td>Home County of BART Riders</td>
<td>3-15</td>
</tr>
<tr>
<td>3-16</td>
<td>Estimated Parking On and Near Campus</td>
<td>3-17</td>
</tr>
<tr>
<td>3-17</td>
<td>Parking Costs</td>
<td>3-18</td>
</tr>
<tr>
<td>3-18</td>
<td>Programs to Encourage Drivers to Use Alternative Modes</td>
<td>3-18</td>
</tr>
<tr>
<td>3-19</td>
<td>Affiliation with San Francisco State University</td>
<td>3-19</td>
</tr>
<tr>
<td>3-20</td>
<td>Place of Residence</td>
<td>3-19</td>
</tr>
<tr>
<td>3-21</td>
<td>Campus Affiliates by Zip code</td>
<td>3-21</td>
</tr>
<tr>
<td>4-2</td>
<td>Cordon Count Locations</td>
<td>4-2</td>
</tr>
<tr>
<td>4-3</td>
<td>Number of Vehicles Entering and Exiting by Location</td>
<td>4-3</td>
</tr>
<tr>
<td>4-4</td>
<td>Count of Vehicles Entering and Exiting by Location and Time in 2016</td>
<td>4-4</td>
</tr>
<tr>
<td>4-5</td>
<td>Percent Change in the Count of Vehicles Entering and Exiting from 2014 to 2016</td>
<td>4-4</td>
</tr>
<tr>
<td>4-6</td>
<td>Count of Persons Entering and Exiting by Mode and by Hour</td>
<td>4-6</td>
</tr>
<tr>
<td>4-7</td>
<td>Peak Hour and Total Auto Trips</td>
<td>4-7</td>
</tr>
<tr>
<td>5-1</td>
<td>Total Passenger Miles Travelled per Day by Mode</td>
<td>5-5</td>
</tr>
<tr>
<td>5-2</td>
<td>Total Pounds of CO2-e per Day by Mode</td>
<td>5-7</td>
</tr>
<tr>
<td>5-3</td>
<td>Pounds of CO2 Emissions per Passenger Mile</td>
<td>5-8</td>
</tr>
<tr>
<td>5-4</td>
<td>Total Miles Travelled and CO2 Emissions per Day 2016</td>
<td>5-9</td>
</tr>
<tr>
<td>5-5</td>
<td>Passenger-miles travelled, pounds CO2 per mile, and total CO2 per year by mode</td>
<td>5-10</td>
</tr>
</tbody>
</table>
1 EXECUTIVE SUMMARY

In October 2007, the City and County of San Francisco and San Francisco State University (SF State) entered into a Memorandum of Understanding (MOU) to address the impact on the City and County of San Francisco from the implementation of the University’s campus master plan and anticipated increase in enrollment on the campus. The MOU identifies a number of measures that the University must take, including the establishment of a traffic monitoring and mitigation program.

In response to the requirements of the MOU, SF State has conducted an online transportation survey and cordon count at least every three years beginning in April 2008 with subsequent surveys taking place in April 2011, April 2014, and April 2016. The most recent survey was conducted in April 2016 instead of 2017 to align with ongoing CEQA analysis. There was a 9% response rate to the survey. Survey data is used to track a number of key factors such as mode split, peak hour vehicle trips, peak hour Muni ridership, and GHG emissions.

Key Findings

Key findings from the 2016 transportation survey include the following:

- Since 2008, the drive-alone rate for commute trips to the University has decreased by 23%, with 26% of campus affiliates driving alone to campus in 2008 compared to 20% in 2016.

- The percentage of campus affiliates who arrive on campus on foot has increased by 42% between 2008 and 2014.

- Transit usage has increased, with 45% of campus affiliates using Muni and 27% using BART for a portion of their trip to campus. This is an increase of 24% and 25% respectively, since 2008. Muni is also the most common arrival mode to campus for all students.

- Between 2008 and 2014, the number of automobile trips per day has decreased by 22%. The number of peak hour trips has decreased by 3%.

- On a typical travel day in 2016, University affiliates commuted approximately 201,400 miles to and from the campus, a 1.2% decrease in daily passenger miles between 2014 and 2016 and a 1.7% decrease in daily passenger miles between 2008 and 2016.

- Private vehicles have the highest levels of CO$_2$-e emissions per passenger mile. Drive-alone commuters are the largest contributors to San Francisco State University’s CO$_2$-e commute travel emissions, representing approximately 80% of the total daily pounds of CO$_2$-e emissions.
• BART commuters travel only slightly fewer total miles per day than car drivers but emit far lower levels of CO₂-e per day; BART commuters emit an estimated 650 pounds of CO₂-e in a day, compared to approximately 6,000 pounds of CO₂-e emitted by those who drive alone.
2 INTRODUCTION

In 2007, San Francisco State University developed its campus master plan to accommodate a 25% increase in its student population through infill and renovation of its compact campus. Many community members raised concerns that campus growth would result in traffic congestion and parking scarcity.

Nelson\Nygaard helped SF State and the City and County of San Francisco negotiate a Memorandum of Understanding (MOU) in October 2007. The MOU includes the University’s “fair share” funding commitment to address the impacts of campus growth on the surrounding neighborhood and the transportation network. The University committed to almost $2 million in transit improvements, along with an extensive list of programs and projects to minimize vehicle trips.

The MOU includes the establishment of a traffic monitoring and mitigation program to determine whether the University’s expanded Transportation Demand Management (TDM) efforts are successfully minimizing or avoiding new peak hour trips. As part of the traffic monitoring and mitigation program, the University was required to conduct a baseline cordon count and intercept survey no less than 12 months after the certification of the master plan EIR. Furthermore, additional cordon counts must be conducted at intervals of no more than every three years, and no later than when enrollment grows by 1,000 students by headcount.

In fulfillment of the requirements, SF State conducted the baseline cordon count and intercept survey on the main campus at 1600 Holloway Avenue on Wednesday, April 30, 2008. A Wednesday was selected to ensure that the cordon count and intercept survey would be representative of a typical day on campus, when classes are in session and most affiliates are on campus. The cordon count covered 15 vehicle, pedestrian, and bicycle entry points to campus. Intercept surveys were conducted at seven entrances to campus, and a total of 1,400 surveys were completed.

A subsequent cordon count was conducted on Wednesday, April 27, 2011. The second cordon count covered 16 vehicle, pedestrian, and bicycle entry points to campus. In 2014, the cordon count methodology was revised significantly to focus on vehicle entry points to campus. The third cordon count was conducted on Wednesday, April 23, 2014 at nine locations, and the fourth cordon count was conducted on Wednesday, April 7, 2016 at nine locations.

In addition to the cordon count, the University conducted online surveys in 2008, 2011, 2014, and 2016. The online survey, sent to all University affiliates, replaced the intercept survey, per discussions between the University and the San Francisco Municipal Transportation Agency (SFMTA). An online survey can provide more detailed information on travel behavior than can be collected during an intercept survey or cordon count.

This report presents the findings from the online survey and cordon count efforts on Wednesday, April 6, 2016. In total, 3,090 University affiliates responded to the online survey. The report provides an in-depth analysis of the online survey, with a discussion of methodology and a comparison of 2016 survey results to those from previous surveys. The report concludes with a carbon footprint analysis for commute trips using data gathered from the online survey.
3 ONLINE SURVEY

San Francisco State University conducted an online survey that asked University affiliates how they travelled to and from campus on Wednesday, April 6, 2016. A total of 3,090 University affiliates responded to the survey, and of the total, 2,358 stated that they were on campus on Wednesday, April 6.

SURVEY DESIGN

Survey respondents were asked a series of questions about their commutes and general travel behavior for trips to and from SF State’s main campus at 1600 Holloway on Wednesday, April 6, 2016. All respondents were asked a number of background questions, such as their primary affiliation with the University and their zip code. Respondents were then asked to provide travel information for up to four legs of their journey to and from campus.

Each leg of the journey was treated as a separate question, and respondents were asked to identify the mode they took for each leg. For example, someone who drove to BART and then took the SF State shuttle from the Daly City BART station to campus would enter trip information for three legs. Similarly, if a respondent transferred from one Muni route to another Muni route, they would enter trip information for two legs. If respondents took Muni, they were asked to select the Muni route they took, and if a respondent selected BART or Caltrain, they were asked to identify their start and end stations. For each leg, respondents were asked to estimate the distance they traveled, in miles, for that segment of the trip.

Respondents who stated that they drove or carpoled to campus were asked a series of questions related to parking, including their parking location and how much they paid for parking. Respondents were also asked their arrival and departure time to campus, as well as participation and knowledge of different TDM programs and services.

The 2016 survey was similar to the 2014 version. To accommodate the rise of Transportation Network Companies (TNCs) such as Lyft and Uber, TNCs were added as a mode choice option in the 2016 survey. The 2016 survey also included arrival and departure times, which had been left out of the 2014 survey inadvertently. The 2016 survey also included updated Muni routes and names, given SFMTA’s Muni Forward initiative that has included substantial route changes since 2014.

The survey was implemented in the Qualtrics survey platform. A copy of the online survey instrument is provided in the Appendix A for reference.

Constraints and Limitations

In 2016, a total of 3,090 University affiliates responded to the survey, and out of the 3,090 total respondents, 2,358 persons (76% of respondents) stated they were on campus on Wednesday,
April 6. Only those people who stated they were on campus are included in this analysis unless otherwise noted.

The response rate in 2016 (9%) were lower than in previous years (12% in 2014, 11% in 2011, and 13% in 2008), which might be primarily attributed to the timing and marketing of the survey. Other major campus efforts, such as the student transit pass referendum and the anticipation of a possible, but avoided, strike may have added to survey fatigue among campus affiliates. Despite a lower response rate than previous years, the survey sample is still statistically valid. For a campus population of 33,563, a minimum of 1,753 responses is needed to generate results at a 99% confidence level with a confidence interval of +/-3%. The 3,090 survey responses received exceeds this minimum number of survey responses needed for statistical significance.

**METHODOLOGY**

The online survey collected rich data on trip patterns. Data clean-up and restructuring was necessary to allow for data analysis. This section describes the data clean-up and restructuring processes, including assignment of weights to make the survey response distribution among students, staff, and faculty reflect the distribution of those groups among the campus population as a whole.

**Data Clean-up and Data Restructuring**

A number of steps were taken to clean and restructure the online survey responses to properly format them for analysis. Duplicates were removed, and data was cleaned to ensure ease of analysis.

The format of the online survey made it possible for respondents to select up to four legs of their trip. A few respondents did not report on the legs of their trip to campus in a logical or feasible way. For example, a total of 42 respondents stated that they arrived on campus via Caltrain or BART. Since that is not physically possible, the last leg of their journey was adjusted. For respondents with a last leg mode of Caltrain, their record was adjusted to reflect taking BART from Millbrae to Daly City and then transferring to the SF State Shuttle or Muni Route 28. For respondents stating that they arrived on campus via BART, their records were adjusted to reflect the SF State Shuttle or Muni Route 28 as their last mode.¹

**Mode Split**

In order to determine the mode split for University affiliates commuting to and from campus, it was necessary to create several new variables. The newly created variables are as follows:

1. **Arrival Mode** – The “arrival mode” is the mode by which respondents arrived on campus.
2. **Mode prior to arrival mode** – The “mode prior to arrival mode” is the mode respondents used before their arrival mode. This trip may have occurred on leg 1, 2, or 3 of their trip, depending on the total number of legs. Respondents who used only one mode of transportation to arrive on campus have no recorded “mode prior to arrival mode.”

¹ Respondents who stated they arrived by BART or Caltrain were assigned to Muni Route 28 or the SF State Shuttle based on the percentage breakdown of those respondents who said they took BART and selected a mode of arrival of either Muni Route 28 or the SF Shuttle.
3. Departure Mode – The “departure mode” is the mode by which respondents left campus, the first leg of the trip from campus.

In addition to creating new variables, the existing data needed to be restructured in order to meet the requirements of the MOU between the University and the City and County of San Francisco. The MOU requires that all respondents who park and walk within 10 minutes of campus be classified as drivers rather than walkers when determining the mode split and peak hour auto trips. The following steps were taken to address this requirement:

1. Respondents with an arrival mode of walking and a mode prior to arrival of driving or carpooling were identified using the arrival mode variable and the mode prior to arrival variable.
2. An arrival mode distance variable was then calculated using the responses given in the survey to the question “Please estimate the distance you travelled in this segment of your trip.” People whose walk segment was a half mile or less were classified with an auto arrival mode. Half a mile was used because the average speed of walkers is three miles per hour, meaning a 10 minute walk is equivalent to approximately a half mile.
3. For people who did not provide a distance, the location where they parked their car was used. Respondents who drove or carpooled and parked on or near campus were asked to select the zone that corresponded to their parking location on a map of the area surrounding campus. The map covered the area bounded by I-280, Lake Merced Boulevard, Sloat Boulevard, Santa Clara Avenue, Victoria Street, and Head Street. Respondents were given 19 zones from which to choose. Using a half-mile radius, the zones that are within a 10-minute walk to campus were identified. Zones where part but not all of the zone is within a 10-minute walk were considered to be within the half-mile radius. Of the 19 zones, only three are not within the half-mile radius.
4. The same steps were then repeated for the trips from campus.

A similar methodology was applied to people whose arrival mode was “walk” and their mode prior to arrival was Muni in order to more accurately determine the number of peak-hour Muni trips, as required by the MOU. The following steps were taken to address this requirement:

1. Using the arrival mode distance variable, respondents whose walk segment was a half-mile or less were reclassified with a Muni arrival mode. For respondents who did not provide an arrival mode distance, the “Muni route taken” was used. People travelling on routes directly serving campus (M-Ocean View, 57-Parkmerced, 18-46th Avenue, 28-19th Avenue, 28R-19th Avenue Rapid, and 29-Sunset) were reclassified with a Muni arrival mode. Persons travelling on any other Muni routes retained “walk” as their arrival mode.
2. The same steps were then repeated for the trips from campus.

Weights

Based on the distribution of responses between students and faculty/staff, a weight was created and applied to all responses for the analysis.

As of Spring 2016, there were approximately 30,000 students and 3,300 faculty and staff members are on campus (Figure 3-1 and Figure 3-2). The analysis team weighted survey responses to yield an equivalent ratio. It should be noted weights were applied to responses from people who stated they were on campus on Wednesday, April 6, 2016, as respondents who stated they were not on campus on April 6 were not included in this analysis.
Scaling to the Campus Population

In order to scale the online survey data to represent the San Francisco State University population as a whole, it was necessary to determine how many faculty, staff, and students are on campus on an average day. The total campus population was obtained from the University Facts brochure, and the online survey was used to determine the percentage breakdown by affiliation of those who were on campus. From this, an adjustment factor was established.

The total population was then multiplied by the adjustment factor to determine the daily population for students and faculty/staff. The daily population was used to scale the survey results to represent the actual San Francisco State University population and estimate total trips by mode and greenhouse gas emissions.

---

**Figure 3-1: Adjusted Faculty/Staff and Student Responses**

<table>
<thead>
<tr>
<th></th>
<th>Total Population</th>
<th>Online Responses (On Campus April 6)</th>
<th>Adjusted Weight</th>
<th>Weighted Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>30,256</td>
<td>1,670</td>
<td>1.2658</td>
<td>2,114</td>
</tr>
<tr>
<td>Faculty/Staff</td>
<td>3,307</td>
<td>675</td>
<td>0.3423</td>
<td>231</td>
</tr>
<tr>
<td>Total</td>
<td>33,563</td>
<td>2,345</td>
<td></td>
<td>2,345</td>
</tr>
</tbody>
</table>

**Figure 3-2: Population Scale**

<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Total Population</th>
<th>Adjustment Factor</th>
<th>Daily Population on Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>30,256</td>
<td>75%</td>
<td>22,692</td>
</tr>
<tr>
<td>Faculty/Staff</td>
<td>3,307</td>
<td>82%</td>
<td>2,712</td>
</tr>
<tr>
<td>Total</td>
<td>33,563</td>
<td></td>
<td>25,404</td>
</tr>
</tbody>
</table>

---

2 Source: Faculty and staff population numbers courtesy of University Facts brochure at http://puboff.sfsu.edu/sfsufact/archive/1516/students and http://puboff.sfsu.edu/sfsufact/archive/1516/facstaff

3 Adjustment factor determined by survey responses sample. In the 2016 sample, 25% of students said they were not on campus on the survey day; 18% of faculty or staff said they were not on campus on the survey day.
RESULTS

The following section discusses the high-level results of the online survey, focusing on mode split, Muni ridership on the lines that directly serve the campus, parking, and demographics. At the end of the chapter, results for a number of demographic questions that were asked of all respondents—regardless of whether they were on campus that day—are presented. Unless otherwise noted, results shown in this section only include those respondents who stated that they were on campus on Wednesday, April 6, 2016, with weights for the student to faculty/staff ratio taken into account.

Commute

Figure 3-3 shows the mode people used to arrive to campus. Muni was the most common mode, at approximately 31.3%, followed by driving alone at 20.1%.

Mode split results from the 2016 survey were generally consistent with the 2014 results, with a slight increase in Muni, drive alone, walk, and shuttle rates a small drop in the bicycling rate, and a larger drop in carpooling and drop-offs.4 “Taxi or TNCs” was a new option in 2016, and it represents 1.7% of the mode split.

From 2008 and 2016, the percentage of respondents driving alone has decreased by nearly 23%. Walking has increased by 42%, and represents the fourth most popular way to arrive on campus, after Muni, drive alone, and the SF State shuttle.

Figure 3-3: Mode of Arrival to Campus

<table>
<thead>
<tr>
<th>How Online Survey Respondents Get to SF State</th>
<th>2016 (n=2,238)</th>
<th>2014 (n=3,013)</th>
<th>2011 (n=2,684)</th>
<th>2008 (n=3,292)</th>
<th>% Change 2008 - 2016</th>
<th>% Point Change 2008 - 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muni</td>
<td>31.3%</td>
<td>29.8%</td>
<td>29.4%</td>
<td>30.6%</td>
<td>2.3%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Drive alone</td>
<td>20.1%</td>
<td>19.7%</td>
<td>23.0%</td>
<td>26.0%</td>
<td>-22.6%</td>
<td>-5.9%</td>
</tr>
<tr>
<td>Walk</td>
<td>17.5%</td>
<td>17.0%</td>
<td>13.7%</td>
<td>12.3%</td>
<td>42.2%</td>
<td>5.2%</td>
</tr>
<tr>
<td>SF State Shuttle</td>
<td>17.9%</td>
<td>16.7%</td>
<td>18.7%</td>
<td>16.9%</td>
<td>6.1%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Bike</td>
<td>3.4%</td>
<td>3.8%</td>
<td>4.1%</td>
<td>3.5%</td>
<td>-2.5%</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Carpool</td>
<td>1.8%</td>
<td>3.9%</td>
<td>4.5%</td>
<td>4.9%</td>
<td>-62.7%</td>
<td>-3.1%</td>
</tr>
<tr>
<td>Dropped off</td>
<td>2.4%</td>
<td>4.7%</td>
<td>3.0%</td>
<td>2.4%</td>
<td>-0.6%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Other bus provider (AC Transit/Golden Gate Transit/SamTrans)</td>
<td>2.1%</td>
<td>2.8%</td>
<td>2.0%</td>
<td>1.5%</td>
<td>41.3%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Taxi or TNC</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.7%</td>
<td>1.7%</td>
<td></td>
<td>1.7%</td>
</tr>
<tr>
<td>Other</td>
<td>1.2%</td>
<td>1.0%</td>
<td>0.5%</td>
<td>1.1%</td>
<td>7.8%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Motorcycle/Moped</td>
<td>0.6%</td>
<td>0.4%</td>
<td>1.2%</td>
<td>0.7%</td>
<td>-17.6%</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4 The slight increase in Muni, drive alone, walk, and shuttle rates in 2016 are all within the margin of error of 3%, and may be attributed to sampling error.
Figure 3-4 summarizes the unweighted number of legs in respondents' journeys to campus. The majority of respondent’s reported using two get to campus (approximately 39%). After that the second most common number of legs used by respondent’s was four legs (approximately 35%). About 24% reported their trip taking 3 legs and only 1% reported their trip to campus taking only one leg.

**Figure 3-4: Number of Legs in Journey to Campus**

<table>
<thead>
<tr>
<th>Number of Legs</th>
<th>Percentage of Respondents (n=2,255)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>2</td>
<td>39%</td>
</tr>
<tr>
<td>3</td>
<td>24%</td>
</tr>
<tr>
<td>4</td>
<td>35%</td>
</tr>
</tbody>
</table>

Figure 3-5 shows the weighted percent of all modes used in all legs for students, faculty, and staff respondents’ on their trips to campus. Respondents could select up to four legs for their journey to campus. In 2016, approximately 45.1% of all respondents used Muni for a portion of their journey to campus compared to 36% in 2008. The percentage of respondents stating they drove alone for a portion of their trip to San Francisco State University increased marginally from 34% in 2008 to 38% in 2016. In 2016, approximately 28% of respondents took BART compared to 21% in 2008, and 25% took the San Francisco State University shuttle for one leg of their trip compared to 21% in 2008.

Interestingly, the percentage of respondents who reported walking as a part of their commute dramatically increased in 2016. This may be due to a clarification of the commute mode question and example of trip segments in the survey instrument, which made selecting a segment for walking more explicit. In past years, walking may have been overlooked as a commute mode.
Figure 3-5: All Modes Used to Get to SF State

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Muni</td>
<td>45.1%</td>
<td>46.8%</td>
<td>38.9%</td>
<td>36.3%</td>
<td>24.2%</td>
<td>8.8%</td>
</tr>
<tr>
<td>Drive alone</td>
<td>36.0%</td>
<td>29.9%</td>
<td>31.1%</td>
<td>33.6%</td>
<td>7.1%</td>
<td>2.4%</td>
</tr>
<tr>
<td>SF State Shuttle</td>
<td>23.8%</td>
<td>24.7%</td>
<td>23.2%</td>
<td>20.7%</td>
<td>15.0%</td>
<td>3.1%</td>
</tr>
<tr>
<td>BART</td>
<td>26.7%</td>
<td>26.4%</td>
<td>22.7%</td>
<td>21.3%</td>
<td>25.4%</td>
<td>5.4%</td>
</tr>
<tr>
<td>Walk</td>
<td>46.9%</td>
<td>32.4%</td>
<td>21.2%</td>
<td>18.6%</td>
<td>152.2%</td>
<td>28.3%</td>
</tr>
<tr>
<td>Bike</td>
<td>4.8%</td>
<td>7.3%</td>
<td>7.1%</td>
<td>5.5%</td>
<td>-12.7%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>Carpool</td>
<td>3.1%</td>
<td>6.7%</td>
<td>5.8%</td>
<td>6.8%</td>
<td>-54.4%</td>
<td>-3.7%</td>
</tr>
<tr>
<td>Dropped off</td>
<td>7.1%</td>
<td>8.4%</td>
<td>5.4%</td>
<td>4.2%</td>
<td>69.0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Other bus provider (AC Transit/Golden Gate Transit/SamTrans)</td>
<td>7.8%</td>
<td>6.6%</td>
<td>4.7%</td>
<td>3.2%</td>
<td>143.8%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Motorcycle/Moped</td>
<td>0.9%</td>
<td>0.9%</td>
<td>2.0%</td>
<td>1.0%</td>
<td>-10.0%</td>
<td>-0.1%</td>
</tr>
<tr>
<td>Other</td>
<td>2.3%</td>
<td>1.7%</td>
<td>1.0%</td>
<td>1.6%</td>
<td>43.8%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Caltrain</td>
<td>1.7%</td>
<td>2.0%</td>
<td>0.7%</td>
<td>1.1%</td>
<td>54.5%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Taxi or TNC</td>
<td>3.1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 3-6 provides a mode split breakdown by campus affiliation and commute mode used to arrive at campus. Muni was the most common mode of transport for students of all kinds. Nearly a third of freshman walk to campus, likely a result of the fact that freshmen live on campus in larger numbers than do other groups.

Drive alone rates for all students decreased between 2008 and 2016. For freshman, drive alone rates dropped by nearly half, while for other undergraduates, drive alone rates decreased by a little less than a quarter. For graduate students, driving alone is no longer the most popular mode to arrive to campus; between 2008 and 2016, driving alone decreased from 31% to 28%, and commuting by Muni increased from 28% to 31%.

Driving alone remained the most popular mode for faculty and staff, marginally increasing between 2008 and 2016.

Reported use of the SF State Shuttle increased for undergraduates but decreased among all other groups. Reported participation in carpools and vanpools decreased among all groups. Bicycling mode share stayed below 5% for all groups. However, bicycling among faculty and staff doubled from 2008 to 2016, while bicycling marginally dropped or remained the same among all other groups.
### Figure 3-6: Mode Split by Affiliation

| How Online Survey Respondents Get to SF State | Freshman 2016 | Freshman 2014 | Freshman 2011 | Freshman 2008 | Other Undergraduate 2016 | Other Undergraduate 2014 | Other Undergraduate 2011 | Other Undergraduate 2008 | Graduate Student 2016 | Graduate Student 2014 | Graduate Student 2011 | Graduate Student 2008 | Staff/Admin Faculty 2016 | Staff/Admin Faculty 2014 | Staff/Admin Faculty 2011 | Staff/Admin Faculty 2008 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Muni | 32.2% | 34.6% | 33.6% | 31.7% | 32.7% | 31.5% | 29.8% | 33.0% | 32.1% | 22.3% | 30.2% | 28.1% | 20.6% | 18.8% | 26.1% | 21.0% |
| Drove Alone | 5.9% | 5.3% | 8.5% | 11.1% | 18.5% | 17.6% | 21.0% | 23.5% | 27.5% | 30.2% | 25.9% | 30.8% | 45.7% | 41.4% | 38.4% | 45.1% |
| Walk | 31.1% | 23.9% | 24.3% | 25.3% | 16.2% | 17.3% | 13.7% | 12.8% | 11.4% | 12.2% | 9.6% | 5.8% | 9.8% | 10.6% | 11.8% | 7.1% |
| SF State Shuttle | 18.7% | 18.4% | 21.6% | 17.9% | 19.2% | 17.0% | 20.4% | 17.6% | 18.6% | 15.8% | 16.9% | 18.9% | 8.1% | 13.4% | 8.9% | 10.8% |
| Bike | 1.7% | 1.9% | 3.1% | 2.8% | 3.7% | 3.8% | 3.8% | 3.4% | 3.1% | 5.8% | 6.3% | 4.8% | 4.6% | 5.2% | 2.0% | 2.6% |
| Car/Vanpool | 0.7% | 4.1% | 2.7% | 4.4% | 1.5% | 3.3% | 4.1% | 4.0% | 2.1% | 5.8% | 5.8% | 7.1% | 5.2% | 6.1% | 7.4% | 7.6% |
| Dropped off | 1.7% | 6.0% | 4.2% | 4.4% | 2.4% | 5.1% | 3.1% | 2.0% | 3.1% | 3.6% | 1.8% | 2.2% | 2.3% | 2.4% | 3.0% | 2.9% |
| Other bus provider (AC Transit/Golden Gate Transit/SamTrans) | 3.8% | 3.8% | 1.2% | 1.2% | 2.0% | 2.9% | 2.2% | 1.8% | 1.6% | 2.9% | 2.0% | 0.6% | 0.8% | 1.4% | 1.5% | 1.1% |
| Taxi/TNC | 2.1% | - | - | - | 1.9% | - | - | - | 0.5% | - | - | - | 0.6% | - | - | - |
| Other | 2.1% | 2.1% | 0.4% | 1.2% | 1.2% | 0.9% | 0.6% | 1.3% | 0.0% | 0.7% | 0.0% | 0.4% | 1.1% | 0.5% | 0.5% | 0.6% |
| Motorcycle/Moped | 0.0% | 0.0% | 0.4% | 0.0% | 0.7% | 0.5% | 1.3% | 0.6% | 0.0% | 0.7% | 1.5% | 1.2% | 1.2% | 0.2% | 0.5% | 1.2% |
All University affiliates participating in the survey were asked how much they spend each day on their commute to and from campus, regardless of whether they traveled to the main campus on April 6. As displayed in Figure 3-7, 16% reported not spending anything on their commute, while nearly 50% reported spending between $1 to $9 on their commute per day.

Figure 3-7: Cost of Commute

<table>
<thead>
<tr>
<th>Amount Spent on Daily Commute (roundtrip)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>15.7%</td>
</tr>
<tr>
<td>$1 - $4</td>
<td>17.0%</td>
</tr>
<tr>
<td>$5 - $9</td>
<td>32.9%</td>
</tr>
<tr>
<td>$10 - $14</td>
<td>19.0%</td>
</tr>
<tr>
<td>$15 - $19</td>
<td>7.4%</td>
</tr>
<tr>
<td>$20 - $24</td>
<td>4.6%</td>
</tr>
<tr>
<td>More than $25</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

**Transit**

Muni and BART are the transit systems most heavily utilized by the campus population, with an estimated 45% of SF State commuters riding Muni and 27% riding BART for some portion of their journey to campus. An estimated 80% of campus affiliates take some form of public transportation to get to campus.5

**Muni**

Figure 3-8 shows the estimated percentage of Muni trips that were taken to and from campus via the six Muni routes that directly serve the University. Of those commuters who ride Muni to campus, the most heavily traveled route is estimated to be the M-Ocean View, which made up 33% of all Muni trips. The percentage of commuters coming to campus by Muni routes 28-19th Avenue/28R-19th Avenue Rapid decreased between 2014 and 2016, most likely due to Muni Forward rerouting on the rapid line (the line no longer serves BART’s Daly City Station). The percentage of commuters taking the M-Ocean View continued to decline, from a high of 45% in 2008 to 33% in 2016. The decrease may be in part related to changes in where SF State affiliates are living. Increased frequencies and longer buses on the SF State Shuttle may also have caused some BART riders from the East Bay to transfer to the shuttle at Daly City instead of transferring to the M-Ocean View downtown.

---

5 This calculation includes BART, Muni, Caltrain, and other bus providers. It does not include the SF State Shuttle.
Figure 3-8: Daily Estimated Number of Muni trips by Muni Route

<table>
<thead>
<tr>
<th>Muni Route</th>
<th>Estimated Number of trips 2016</th>
<th>% of all Muni Trips 2016</th>
<th>Number of trips 2014</th>
<th>% of all Muni Trips 2014</th>
<th>Number of trips 2011</th>
<th>% of all Muni Trips 2011</th>
<th>Number of trips 2008</th>
<th>% of all Muni Trips 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-46th Avenue</td>
<td>650</td>
<td>6%</td>
<td>620</td>
<td>5%</td>
<td>520</td>
<td>4%</td>
<td>600</td>
<td>4%</td>
</tr>
<tr>
<td>28-19th Avenue and 28R-19th Avenue Rapid</td>
<td>1,800</td>
<td>16%</td>
<td>4,300</td>
<td>34%</td>
<td>5,400</td>
<td>38%</td>
<td>4,800</td>
<td>32%</td>
</tr>
<tr>
<td>29-Sunset</td>
<td>2,800</td>
<td>24%</td>
<td>2,800</td>
<td>22%</td>
<td>2,500</td>
<td>18%</td>
<td>2,200</td>
<td>15%</td>
</tr>
<tr>
<td>57-Parkmerced</td>
<td>300</td>
<td>3%</td>
<td>300</td>
<td>2%</td>
<td>130</td>
<td>1%</td>
<td>160</td>
<td>1%</td>
</tr>
<tr>
<td>M-Ocean View</td>
<td>3,700</td>
<td>33%</td>
<td>4,000</td>
<td>31%</td>
<td>5,000</td>
<td>35%</td>
<td>6,700</td>
<td>45%</td>
</tr>
</tbody>
</table>

Note: N = Total Campus Population

For campus affiliates arriving or departing campus via Muni, the 2016 morning peak hour for Muni trips was estimated to be between 8:00 a.m. to 9:00 a.m., a shift from 2014 and 2011 when the peak hour of Muni trips was estimated to be between 9:00 a.m. and 10:00 a.m.. Figure 3-9 and Figure 3-10 show the estimated number of trips to and from campus on the routes serving campus during both the San Francisco State University Muni peak and the system-wide Muni peak. Estimated peak-hour use by line mirrored daily patterns, with the M and 29 estimated to be the most heavily utilized.

Figure 3-9: Peak Hour Estimated Number of Muni Trips for the SF State Peak Period

<table>
<thead>
<tr>
<th>Muni Route</th>
<th>Number of trips 8:00 AM – 9:00 AM 2016</th>
<th>Number of trips 9:00 AM – 10:00 AM 2014</th>
<th>Number of trips 9:00 AM – 10:00 AM 2011</th>
<th>Number of trips 8:00 AM – 9:00 AM 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-46th Avenue</td>
<td>250</td>
<td>70</td>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>28-19th Avenue</td>
<td>330</td>
<td>450</td>
<td>560</td>
<td>560</td>
</tr>
<tr>
<td>28R-19th Avenue Rapid</td>
<td>40</td>
<td>30</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>29-Sunset</td>
<td>350</td>
<td>310</td>
<td>270</td>
<td>260</td>
</tr>
<tr>
<td>57-Parkmerced</td>
<td>50</td>
<td>30</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>M-Ocean View</td>
<td>620</td>
<td>440</td>
<td>540</td>
<td>800</td>
</tr>
<tr>
<td>Total</td>
<td>1,640</td>
<td>1,330</td>
<td>1,460</td>
<td>1,720</td>
</tr>
</tbody>
</table>

Note: N = Total Campus Population
Figure 3-10: Peak Hour Estimated Number of Muni Trips for the Muni System Wide Peak Period of 5:00 PM to 6:00 PM

<table>
<thead>
<tr>
<th>Muni Route</th>
<th>Number of trips 2016</th>
<th>Number of trips 2014</th>
<th>Number of trips 2011</th>
<th>Number of trips 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-46th Avenue</td>
<td>100</td>
<td>50</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>28-19th Avenue</td>
<td>100</td>
<td>290</td>
<td>390</td>
<td>290</td>
</tr>
<tr>
<td>28R-19th Avenue Rapid</td>
<td>50</td>
<td>20</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>29-Sunset</td>
<td>190</td>
<td>200</td>
<td>180</td>
<td>130</td>
</tr>
<tr>
<td>57-Parkmerced</td>
<td>60</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>M-Ocean View</td>
<td>120</td>
<td>280</td>
<td>370</td>
<td>410</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>620</strong></td>
<td><strong>860</strong></td>
<td><strong>1,010</strong></td>
<td><strong>880</strong></td>
</tr>
</tbody>
</table>

Note: N = Total Campus Population

Figure 3-11: Peak Hour, Estimated Number of Peak Direction Riders for M Line shows the AM and PM peak-hour ridership estimates for the M-Ocean View. It appears that more people are coming to and leaving campus earlier in 2016 than they were in 2014 or 2011, which could be related to schedule changes. This shift is particularly important in the inbound direction, as it is the overall peak direction in the morning (into Downtown San Francisco) and the 8 a.m. hour is the generally more crowded than the 9 a.m. hour. This might simply mean that more SF State affiliates are dealing with crowded conditions in the morning peak and that they are contributing to a greater extent to the overall morning inbound crowding issues at Castro and Church stations.

Figure 3-11: Peak Hour, Estimated Number of Peak Direction Riders for M Line

<table>
<thead>
<tr>
<th>M Line</th>
<th>Inbound Trips</th>
<th>Outbound Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM – 9:00 AM</td>
<td>270</td>
<td></td>
</tr>
<tr>
<td>9:00 AM – 10:00 AM</td>
<td></td>
<td>190</td>
</tr>
<tr>
<td>5:00 PM – 6:00 PM</td>
<td>80</td>
<td>190</td>
</tr>
</tbody>
</table>

Note: N = Total Campus Population

---

There were insufficient data points regarding arrival times, departure times, zip codes, and transit use in 2016 and 2014 so 2011 directionality percentages were used for the analysis. Inbound and outbound trips for the M line during the AM peak hour were determined by applying a 44% inbound - 56% outbound ratio to the total number of M line trips, scaled to represent the campus population, during the AM peak hour. This ratio was determined by using the home zip codes of online survey respondents to determine their direction of travel and the number of trips in each direction. The same methodology was used in the PM peak and a ratio of 66% inbound – 34% outbound was applied.
Figure 3-12: Peak Hour, Estimated Number of Peak Direction Riders for Bus Route 28/28R

<table>
<thead>
<tr>
<th>28/28R Line</th>
<th>Northbound Trips</th>
<th>Southbound Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM – 9:00 AM</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>9:00 AM – 10:00 AM</td>
<td></td>
<td>230</td>
</tr>
<tr>
<td>5:00 PM – 6:00 PM</td>
<td>70</td>
<td>150</td>
</tr>
</tbody>
</table>

Note: N = Total Campus Population

The changes in Muni ridership levels on different routes, including the increases seen on the 18-46th Avenue and 57-Parkmerced, may be attributed to changes in SF State affiliates’ residential choices as well as service changes made as part of the Muni Forward initiative. For example, as of September 2015, the 57 (previously the 17-Parkmerced route) runs every 20 minutes instead of every 30 minutes. The 57 also now serves Daly City BART. Figure 3-13 shows the changes for routes 18 and 57. A free roundtrip transfer loaded to one’s Clipper card when exiting Daly City BART now also applies to the 57, as it does to all Muni lines serving Daly City BART Station. This free transfer is no longer available when transferring from the 28R to BART – Muni Forward rerouted the 28R to serve Balboa Park BART, rather than Daly City BART.

---

7 There were insufficient data points regarding arrival times, departure times, zip codes, and transit use in 2016 and 2014 so 2011 directionality percentages were used for the analysis. Northbound and southbound trips for the 28/28R line during the AM peak hour were determined by applying a 48% northbound - 52% southbound ratio to the total number of 28/28L line trips, scaled to represent the campus population, during the AM peak hour. This ratio was determined by using the home zip codes of online survey respondents to determine their direction of travel and the number of trips in each direction. The same methodology was used in the PM peak and a ratio of 49% northbound – 51% southbound was applied.
The lower number of trips on the 28 and 28R may also be attributed to service changes as part of the Muni Forward initiative. As of April 23, 2016, the 28R provides rapid service every 10 minutes between 7 a.m. and 7 p.m. Monday through Friday. However, 28R service to Daly City is discontinued and is to be covered by the 28 local. A series of changes were also proposed for the 28 route, which is in progress. **Figure 3-14** presents Muni’s approved proposal for 28.
Figure 3-14: Muni 28-19th Avenue Proposal, Approved July 2015

Source: San Francisco Municipal Transportation Agency 2015. The 28 19th Avenue Rapid Project was approved on July 7, 2015. Next steps include detailed design through summer 2016, construction following through 2018, and a street repaving in summer 2018.
BART

An estimated 27% of respondents used BART for some portion of their journey to campus. Figure 3-15 shows the home end of BART riders’ trips to and from campus. The majority of SF State BART riders reported living in Alameda County (38.4%), followed by Contra Costa County (29%). Approximately 21% reported living in San Francisco, and 12% reported living in San Mateo County.

Figure 3-15: Home County of BART Riders

<table>
<thead>
<tr>
<th>County</th>
<th>Percentage of BART Riders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alameda</td>
<td>38.4%</td>
</tr>
<tr>
<td>Contra Costa</td>
<td>29.1%</td>
</tr>
<tr>
<td>San Francisco</td>
<td>20.9%</td>
</tr>
<tr>
<td>San Mateo</td>
<td>11.6%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
Parking

An estimated 20% of commuters arrived on campus by single-occupancy vehicle. Forty nine percent of those University affiliates who reported driving parked on campus, and 32% reported parking near campus. Three percent of drivers stated that they parked at Daly City BART, while two percent of drivers said they parked at a park and ride lot. Approximately three percent of drivers selected “other” with regards to their parking location.

The survey asked respondents who stated that they parked on or near campus to identify where they parked. The number of responses was scaled to reflect the entire population of the University. Figure 3-16 provides a breakdown of parkers by location. Nearly 49% of on-campus parkers reported parking in the main parking garage at the center of campus. Close to campus, approximately 11% parked in Parkmerced, and 10% parked along Junipero Serra Boulevard. This marks a shift in where campus affiliates are predominantly parking near campus. In 2014, a higher percentage of parkers were parking on Holloway Avenue or Font Boulevard, and Lake Merced Boulevard. The decrease in the number of people parking on Font Boulevard may be attributed to the construction of the Mashouf Wellness Center. In 2011, a higher percentage of drivers parked on 19th Avenue.
Figure 3-16: Estimated Parking On and Near Campus
Survey respondents who stated that they drove to campus were also asked how much they paid to park. Figure 3-17 presents the weighted percentage of students, faculty, and staff who drove to campus, including those who parked either on-campus and off-campus. Per the weighted data, a majority of campus affiliates did not pay to park. An estimated quarter of students, faculty, and staff had a SF State Semester or Yearly Pass, which is a 13% increase from 2008.

### Figure 3-17: Parking Costs

<table>
<thead>
<tr>
<th>Cost</th>
<th>% of Respondents 2016 (n=492)</th>
<th>% of Respondents 2014 (n=845)</th>
<th>% of Respondents 2011 (n=1,042)</th>
<th>% of Respondents 2008 (n=1,373)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free</td>
<td>48.8%</td>
<td>52.1%</td>
<td>56.7%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Less than $1</td>
<td>0.6%</td>
<td>1.3%</td>
<td>1.2%</td>
<td>0.7%</td>
</tr>
<tr>
<td>$1 - $2</td>
<td>1.0%</td>
<td>1.5%</td>
<td>3.8%</td>
<td>3.9%</td>
</tr>
<tr>
<td>$2 - $4</td>
<td>1.4%</td>
<td>3.0%</td>
<td>5.9%</td>
<td>6.5%</td>
</tr>
<tr>
<td>$4 - $7</td>
<td>12.7%</td>
<td>19.9%</td>
<td>18.1%</td>
<td>20.0%</td>
</tr>
<tr>
<td>$7 - $10</td>
<td>11.2%</td>
<td>0.4%</td>
<td>0.6%</td>
<td>0.5%</td>
</tr>
<tr>
<td>More than $10</td>
<td>0.5%</td>
<td>1.1%</td>
<td>0.5%</td>
<td>0.8%</td>
</tr>
<tr>
<td>SF State Semester/Yearly Pass</td>
<td>23.8%</td>
<td>20.7%</td>
<td>13.3%</td>
<td>13.8%</td>
</tr>
</tbody>
</table>

### Incentives to Use Other Modes

University affiliates participating in the online survey who stated that they drove to campus on April 6 were asked what programs would encourage them to use a mode other than driving alone to get to campus. They were asked to select their first, second, and third choices from the list of programs shown in Figure 3-18.

### Figure 3-18: Programs to Encourage Drivers to Use Alternative Modes

<table>
<thead>
<tr>
<th>Incentives (n=1,030)</th>
<th>1st Choice</th>
<th>2nd Choice</th>
<th>3rd Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rideshare or carpool with someone who lives near me</td>
<td>31.7%</td>
<td>17%</td>
<td>12%</td>
</tr>
<tr>
<td>Reduced transit fare pass for MUNI and BART</td>
<td>29.8%</td>
<td>24%</td>
<td>12%</td>
</tr>
<tr>
<td>Improved shuttle service from BART to the university</td>
<td>12.0%</td>
<td>19%</td>
<td>14%</td>
</tr>
<tr>
<td>Improved bicycle amenities</td>
<td>4.9%</td>
<td>5%</td>
<td>6%</td>
</tr>
<tr>
<td>Emergency guaranteed ride home program</td>
<td>3.3%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Improved pedestrian amenities</td>
<td>0.9%</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>None</td>
<td>17.3%</td>
<td>23%</td>
<td>39%</td>
</tr>
</tbody>
</table>
“Rideshare or carpool with someone who lives near me” was the top choice. While the mode share for carpooling and ridesharing has gone down since 2008, there is openness for this option. The high interest in the rideshare and carpool modes suggests that the university could strengthen its rideshare program. In 2014 and 2011, a reduced transit fare pass for Muni and BART was the most popular first choice. In 2016, this also ranked highly. Improved shuttle service from BART to the university is another factor that may encourage people who drive alone to use a mode other than drive alone.

Background Information for All Survey Respondents

All survey respondents, regardless of whether they were on campus on Wednesday, April 6th, were asked to provide their affiliation with the University as well as information on where they live. In Figure 3-19 and Figure 3-20 respondents who were not on campus on the 6th are referred to as “No Respondents,” and respondents who traveled to the main campus on the 6th are referred to as “Yes Respondents.”

The majority of “Yes Respondents” were undergraduates (62%). “Staff or administrator” was the second most common affiliation at 19%, followed by faculty at 9%. Undergraduates also made up a majority of “No Respondents” (54%), followed by graduate students at 22%. Figure 3-19 presents a breakdown of survey responses by affiliation.

Figure 3-19: Affiliation with San Francisco State University

<table>
<thead>
<tr>
<th>Affiliation</th>
<th>Percentage Yes Respondents (n=2,358)</th>
<th>Percentage No Respondents (n=732)</th>
<th>Percentage Overall (n=3,090)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshmen</td>
<td>12.9%</td>
<td>6.0%</td>
<td>11.3%</td>
</tr>
<tr>
<td>Other Undergraduate</td>
<td>49.4%</td>
<td>48.0%</td>
<td>49.0%</td>
</tr>
<tr>
<td>Graduate Student</td>
<td>8.5%</td>
<td>21.7%</td>
<td>11.7%</td>
</tr>
<tr>
<td>Staff/Admin</td>
<td>19.1%</td>
<td>5.7%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Faculty</td>
<td>9.3%</td>
<td>14.9%</td>
<td>10.6%</td>
</tr>
<tr>
<td>Visitor/Contractor</td>
<td>0.2%</td>
<td>0.8%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Other</td>
<td>0.6%</td>
<td>2.9%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

The majority of respondents stated that they reside off-campus, as shown in Figure 3-20.

Figure 3-20: Place of Residence

<table>
<thead>
<tr>
<th></th>
<th>Percentage Yes Respondents</th>
<th>Percentage No Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>On-Campus</td>
<td>10.0%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Off-Campus</td>
<td>90.0%</td>
<td>97.7%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
All survey respondents were asked their home zip code. Responses to this question were mapped to show what parts of the Bay Area SF State affiliates live in. As shown in Figure 3-21, the largest concentration of SF State affiliates reported living within San Francisco. Outside of San Francisco, the largest concentration of University affiliates are estimated to be in Oakland, Daly City, Berkeley, South San Francisco, San Mateo, Pacifica, and Hayward.
Figure 3-21: Campus Affiliates by County
Using the zip code data, University affiliates were grouped into four geographic regions: San Francisco, East Bay, North Bay, and Peninsula. As illustrated in Figure 3-21 and Figure 3-22, the largest concentration of SF State affiliates is in San Francisco, with nearly half living in the same city as the University. Nearly a third of affiliates live in the East Bay, and approximately 15% live on the Peninsula. Only 5% of SF State affiliates live to the north of San Francisco in Sonoma or Marin counties.

Figure 3-22: Location of SF State University Affiliates

<table>
<thead>
<tr>
<th>Location</th>
<th>Percentage Yes Respondents</th>
<th>Percentage No Respondents</th>
<th>Percentage Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Bay</td>
<td>28.4%</td>
<td>44.3%</td>
<td>32.5%</td>
</tr>
<tr>
<td>North Bay</td>
<td>4.3%</td>
<td>5.5%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Peninsula</td>
<td>15.3%</td>
<td>14.5%</td>
<td>15.1%</td>
</tr>
<tr>
<td>San Francisco</td>
<td>52.0%</td>
<td>35.8%</td>
<td>47.8%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

8 Respondents who did not provide a zip code or are located outside of the Bay Area are not included in this analysis. Approximately 17% of respondents are not included in this analysis.
4 CORDON COUNT

INTRODUCTION

As part of the University’s effort to comply with the MOU, the University sponsored a cordon count on Wednesday, April 6, 2016 to accompany the survey effort. The cordon count provides information on where University affiliates are entering and exiting the campus, and at what times of day they enter and exit. The data collected from the cordon count provides a sense of how many people come to campus each day. This year’s count represents the fourth conducted in recent years per the MOU between the University and City and County of San Francisco.

METHODOLOGY

The count was conducted from 7:00 a.m. to 7:30 p.m. at nine locations around the campus, as shown in Figure 4-1. This is the same time period used in 2014 and 2011. The locations were selected as they represent all public vehicle entry access points, including access to interior roadways and parking facilities. Eight of the nine locations used for the cordon counts in 2016 were in the same locations as those used in 2014 and 2011. The only location that changed can be seen in Figure 4-1.

At each location, vehicles were counted in 15-minute increments. Surveyors were instructed to distinguish between vehicles with only a single driver, carpools (vehicles with two or more persons), motorcycles, and other vehicles. Other vehicles included campus vehicles, delivery trucks, transit vehicles, and security vehicles. Surveyors were instructed to include drop-offs as a carpool vehicle. One surveyor was stationed at each location.
Figure 4-1: Cordon Count Locations

9 The cordon count locations are the same in 2016 as in 2014, with the exception of location 9, which has moved southwest on Winston Drive.
RESULTS

A total of 10,201 unique vehicle entries were counted entering and exiting campus during the count period. This is an approximate 6% increase in vehicle activity from the last cordon count, in 2014.

Figure 4-2 provides a breakdown of vehicles entering and exiting the campus by the nine cordon locations. Similar to 2014, the entry point at State Drive and Lake Merced Boulevard saw the largest number of vehicles entering and exiting, largely due to the fact that State Drive connects to the primary parking facility on campus. Holloway Avenue at Tapia Drive and Font Boulevard at Tapia Drive saw the second highest number of vehicle trips, partially due to the fact the area is a popular area for drop-offs. These three locations all saw increases in vehicle entries and exits from 2014 to 2016. The greatest increase in vehicle entries and exits occurred at Holloway Avenue and Administration Building, nearly doubling in activity.

Figure 4-2: Number of Vehicles Entering and Exiting by Location

<table>
<thead>
<tr>
<th>Location</th>
<th>2016 Enter</th>
<th>2014 Enter</th>
<th>% Change in Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Holloway Ave &amp; Administration Bldg</td>
<td>108</td>
<td>55</td>
<td>88%</td>
</tr>
<tr>
<td>2 Holloway Ave &amp; Cardenas</td>
<td>54</td>
<td>53</td>
<td>-1%</td>
</tr>
<tr>
<td>3 Holloway Ave &amp; Arella</td>
<td>93</td>
<td>82</td>
<td>13%</td>
</tr>
<tr>
<td>4 Holloway Ave &amp; Tapia Dr</td>
<td>1,210</td>
<td>1,066</td>
<td>13%</td>
</tr>
<tr>
<td>5 Font Blvd &amp; Tapia Dr</td>
<td>1,181</td>
<td>1,027</td>
<td>15%</td>
</tr>
<tr>
<td>6 Font Blvd &amp; Mary Wald Hall</td>
<td>110</td>
<td>129</td>
<td>-23%</td>
</tr>
<tr>
<td>7 State Dr. &amp; Lake Merced Blvd</td>
<td>3,311</td>
<td>3,201</td>
<td>6%</td>
</tr>
<tr>
<td>8 N. State Dr. &amp; Lake Merced Blvd</td>
<td>394</td>
<td>435</td>
<td>-10%</td>
</tr>
<tr>
<td>9 Winston Dr. &amp; Lot 25</td>
<td>32</td>
<td>42</td>
<td>-19%</td>
</tr>
<tr>
<td>Total</td>
<td>5,312</td>
<td>5,063</td>
<td>6%</td>
</tr>
</tbody>
</table>

10 Vehicles may only enter at Holloway Avenue and Tapia
11 Vehicles may only exit at Font and Tapia
12 Location 9 changed in 2016 from 2014.
The distribution of vehicles entering and exiting by time varied by cordon count location. However, at most locations, vehicles peaked between 9:00 a.m. and 11:00 a.m. and 5:00 p.m. to 7:30 p.m.. Figure 4-3 highlights the number of vehicles entering and exiting by time for the 2016 cordon count, and Figure 4-4 illustrates the percent change in the count of vehicles entering and exiting from 2014 to 2016.

**Figure 4-3: Count of Vehicles Entering and Exiting by Location and Time in 2016**

<table>
<thead>
<tr>
<th>Location</th>
<th>7:00 AM - 9:00 AM</th>
<th>9:00 AM - 11:00 AM</th>
<th>11:00 AM - 1:00 PM</th>
<th>1:00 PM - 3:00 PM</th>
<th>3:00 PM - 5:00 PM</th>
<th>5:00 PM - 7:30 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Holloway Ave &amp; Administration Bldg</td>
<td>24</td>
<td>23</td>
<td>47</td>
<td>23</td>
<td>45</td>
<td>52</td>
</tr>
<tr>
<td>2 Holloway Ave &amp; Cardenas</td>
<td>19</td>
<td>15</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>41</td>
</tr>
<tr>
<td>3 Holloway Ave &amp; Arella</td>
<td>14</td>
<td>26</td>
<td>34</td>
<td>37</td>
<td>37</td>
<td>38</td>
</tr>
<tr>
<td>4 Holloway Ave &amp; Tapia Dr</td>
<td>111</td>
<td>274</td>
<td>189</td>
<td>184</td>
<td>188</td>
<td>265</td>
</tr>
<tr>
<td>5 Font Blvd &amp; Tapia Dr</td>
<td>71</td>
<td>268</td>
<td>194</td>
<td>170</td>
<td>197</td>
<td>281</td>
</tr>
<tr>
<td>6 Font Blvd &amp; Mary Wald Hall</td>
<td>23</td>
<td>17</td>
<td>26</td>
<td>31</td>
<td>42</td>
<td>53</td>
</tr>
<tr>
<td>7 State Dr. &amp; Lake Merced Blvd</td>
<td>1,061</td>
<td>1,043</td>
<td>951</td>
<td>807</td>
<td>1,090</td>
<td>1,028</td>
</tr>
<tr>
<td>8 N. State Dr. &amp; Lake Merced Blvd</td>
<td>169</td>
<td>140</td>
<td>120</td>
<td>112</td>
<td>220</td>
<td>314</td>
</tr>
<tr>
<td>9 Winston Dr. &amp; Lot 25</td>
<td>5</td>
<td>13</td>
<td>8</td>
<td>13</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,497</strong></td>
<td><strong>1,819</strong></td>
<td><strong>1,577</strong></td>
<td><strong>1,384</strong></td>
<td><strong>1,842</strong></td>
<td><strong>2,082</strong></td>
</tr>
</tbody>
</table>

For the entry point at State Drive and Lake Merced Boulevard, which has the largest numbers of vehicles entering and exiting, there was an increase in the number of vehicles entering and exiting between 7:00 a.m. – 9:00 a.m., as well as 1:00 p.m. – 7:30 p.m., from 2014 to 2016. This may suggest that students, faculty, staff, and visitors to campus may be shifting driving behaviors earlier to secure a parking space at the primary parking facility on campus. This pattern is also notable at the Holloway Avenue at Tapia Drive and Font Boulevard at Tapia Drive entry and exit points.

**Figure 4-4: Percent Change in the Count of Vehicles Entering and Exiting from 2014 to 2016**

<table>
<thead>
<tr>
<th>Location</th>
<th>7:00 AM - 9:00 AM</th>
<th>9:00 AM - 11:00 AM</th>
<th>11:00 AM - 1:00 PM</th>
<th>1:00 PM - 3:00 PM</th>
<th>3:00 PM - 5:00 PM</th>
<th>5:00 PM - 7:30 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Holloway Ave &amp; Administration Bldg</td>
<td>41%</td>
<td>-18%</td>
<td>194%</td>
<td>15%</td>
<td>400%</td>
<td>117%</td>
</tr>
<tr>
<td>2 Holloway Ave &amp; Cardenas</td>
<td>-27%</td>
<td>15%</td>
<td>0%</td>
<td>0%</td>
<td>14%</td>
<td>8%</td>
</tr>
<tr>
<td>3 Holloway Ave &amp; Arella</td>
<td>-30%</td>
<td>-19%</td>
<td>-15%</td>
<td>76%</td>
<td>12%</td>
<td>100%</td>
</tr>
</tbody>
</table>
When counting vehicles entering and exiting campus, surveyors noted if they were single occupancy vehicles (drive alone), carpools, motorcycles, or other vehicles such as campus vehicles, delivery trucks, or security vehicles. Figure 4-5 provides a count of vehicles by vehicle type for every hour of the cordon count. While the largest percentage of vehicle trips were single occupancy vehicle trips (77%), carpool trips made up more than 17% of all vehicle trips. Additionally, this was nearly a 4% reduction in single occupancy vehicle trips from 2014.

Overall, the highest number of vehicles entering and exiting campus occurred between 9:00 a.m. and 10:00 a.m., with 9.8% of vehicle trips occurring during this time period. This is slightly different to the peak hour for traffic in the area, which according to 511.org is about 7:45 am to 8:45 am. The afternoon/evening peak period for vehicle trips occurred between 4:00 p.m. and 5:00 p.m., with 9.5% of vehicle trips occurring during this time period. This overlaps with area’s peak hour, which 511.org reports as 4:30 pm to 5:30 pm.

Surveyors also noted the number of people in each vehicle, including the number of people for each carpool or in other campus vehicles. Figure 4-6 provides a count of person trips by vehicle type for every hour of the cordon count. In considering the number of person trips, 64% of all person trips were drive alone, while 30% of all person trips were carpools. In other words, from the cordon count, nearly a third of all person trips were conducted by carpool.
Figure 4-5: Count of Vehicles Entering and Exiting by Mode and by Hour

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Drive Alone</th>
<th>Carpool</th>
<th>Motorcycle</th>
<th>Other</th>
<th>Total</th>
<th>Total Trips</th>
<th>% Trips by Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enter</td>
<td>Exit</td>
<td>Enter</td>
<td>Exit</td>
<td>Enter</td>
<td>Exit</td>
<td></td>
</tr>
<tr>
<td>7:00 - 7:59</td>
<td>362</td>
<td>58</td>
<td>132</td>
<td>31</td>
<td>10</td>
<td>2</td>
<td>622</td>
</tr>
<tr>
<td>8:00 - 8:59</td>
<td>655</td>
<td>135</td>
<td>256</td>
<td>28</td>
<td>4</td>
<td>1</td>
<td>1,137</td>
</tr>
<tr>
<td>9:00 - 9:59</td>
<td>590</td>
<td>219</td>
<td>216</td>
<td>48</td>
<td>2</td>
<td>2</td>
<td>1,153</td>
</tr>
<tr>
<td>10:00-10:59</td>
<td>452</td>
<td>205</td>
<td>180</td>
<td>78</td>
<td>4</td>
<td>9</td>
<td>981</td>
</tr>
<tr>
<td>11:00-11:59</td>
<td>286</td>
<td>231</td>
<td>116</td>
<td>103</td>
<td>2</td>
<td>3</td>
<td>792</td>
</tr>
<tr>
<td>12:00-12:59</td>
<td>315</td>
<td>334</td>
<td>244</td>
<td>179</td>
<td>4</td>
<td>1</td>
<td>1,164</td>
</tr>
<tr>
<td>1:00 - 1:59</td>
<td>294</td>
<td>281</td>
<td>152</td>
<td>183</td>
<td>5</td>
<td>3</td>
<td>938</td>
</tr>
<tr>
<td>2:00 - 2:59</td>
<td>227</td>
<td>272</td>
<td>126</td>
<td>148</td>
<td>3</td>
<td>0</td>
<td>791</td>
</tr>
<tr>
<td>3:00 - 3:59</td>
<td>293</td>
<td>390</td>
<td>137</td>
<td>175</td>
<td>5</td>
<td>6</td>
<td>1,048</td>
</tr>
<tr>
<td>4:00 - 4:59</td>
<td>251</td>
<td>520</td>
<td>196</td>
<td>176</td>
<td>0</td>
<td>7</td>
<td>1,200</td>
</tr>
<tr>
<td>5:00 - 5:59</td>
<td>206</td>
<td>541</td>
<td>107</td>
<td>236</td>
<td>4</td>
<td>6</td>
<td>1,186</td>
</tr>
<tr>
<td>6:00 - 6:59</td>
<td>162</td>
<td>391</td>
<td>114</td>
<td>204</td>
<td>4</td>
<td>6</td>
<td>908</td>
</tr>
<tr>
<td>7:00 - 7:30</td>
<td>72</td>
<td>210</td>
<td>79</td>
<td>133</td>
<td>0</td>
<td>2</td>
<td>510</td>
</tr>
<tr>
<td>Total</td>
<td>4,165</td>
<td>3,787</td>
<td>2,055</td>
<td>1,722</td>
<td>47</td>
<td>48</td>
<td>12,430</td>
</tr>
</tbody>
</table>

% of Total: 77.2% Drive Alone, 17.2% Carpool, 0.9% Motorcycle, 4.7% Other, 100% Total
### Figure 4-6: Count of Persons Entering and Exiting by Mode and by Hour

<table>
<thead>
<tr>
<th>Mode</th>
<th>Enter</th>
<th>Exit</th>
<th>Enter</th>
<th>Exit</th>
<th>Enter</th>
<th>Exit</th>
<th>Enter</th>
<th>Exit</th>
<th>Total Trips</th>
<th>% Trips by Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>622</td>
<td>5.0%</td>
<td>362</td>
<td>58</td>
<td>132</td>
<td>31</td>
<td>10</td>
<td>2</td>
<td>101</td>
<td></td>
</tr>
<tr>
<td>Carpool</td>
<td>1,137</td>
<td>9.1%</td>
<td>655</td>
<td>135</td>
<td>256</td>
<td>28</td>
<td>4</td>
<td>1</td>
<td>181</td>
<td></td>
</tr>
<tr>
<td>Motorcycle</td>
<td>1,153</td>
<td>9.3%</td>
<td>590</td>
<td>219</td>
<td>216</td>
<td>48</td>
<td>2</td>
<td>2</td>
<td>292</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>981</td>
<td>7.9%</td>
<td>452</td>
<td>205</td>
<td>180</td>
<td>78</td>
<td>4</td>
<td>9</td>
<td>317</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>785</td>
<td></td>
<td>286</td>
<td>231</td>
<td>116</td>
<td>103</td>
<td>2</td>
<td>3</td>
<td>362</td>
<td></td>
</tr>
</tbody>
</table>

Total 4,165 3,787 2,055 1,722 47 48 254 352 6,521 5,909 12,430 100%

% of Total 64.0% 30.4% 0.8% 4.9% 100%
The data collected in April 2008 was used to establish a baseline number of automobile trips for the entire campus population. **Figure 4-7** shows the number of peak hour and total daily auto trips. The peak hour has changed throughout the years, from 4:00 p.m. to 5:00 p.m. in 2008, to 5:00 p.m. to 6:00 p.m. in 2011, to 3:00 p.m. to 4:00 p.m. in 2014, and back to 4:00 p.m. to 5:00 p.m. in 2016.

The number of peak hour trips decreased by 3% between 2008 and 2016, and the number of automobile trips per day decreased by 22% between 2008 and 2016.

**Figure 4-7: Peak Hour and Total Auto Trips**

<table>
<thead>
<tr>
<th>Time</th>
<th>Peak Hour Auto Trips</th>
<th>% of Total Daily Auto Trips</th>
<th>Total Daily Auto Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00 PM – 4:00 PM</td>
<td>1,107</td>
<td></td>
<td>1,107</td>
</tr>
<tr>
<td>4:00 PM – 5:00 PM</td>
<td>1,200</td>
<td>1,239</td>
<td></td>
</tr>
<tr>
<td>5:00 PM – 6:00 PM</td>
<td>1,198</td>
<td></td>
<td>1,198</td>
</tr>
</tbody>
</table>
5 CARBON EMISSIONS

INTRODUCTION

San Francisco State University has committed to pursuing greenhouse gas (GHG) emissions reductions since 2007, a commitment that was reasserted in August 2012 when President Les Wong signed the American College & University Presidents Climate Commitment (ACUPCC).[1] The University created an inventory of greenhouse gas (GHG) emissions from 1990 to 2006 and conducted a second GHG inventory with data through 2008.

The GHG inventory shows that commuting accounts for almost 49% of the total emissions generated by the campus. After the 2008 GHG emissions inventory, Nelson\Nygaard analyzed surveys from 1970 and 1992 to compare results to historical patterns. Compared to the 2008 travel survey commute related emissions had decreased by an estimated 53% from 1990 levels.13 Recognizing the important role that transportation plays in GHG emissions and the potential for reducing GHG emissions through changes in travel behavior, the online survey was designed to provide data which could be used to better understand University affiliates’ travel behavior, and help develop a strategic action plan for reducing GHG emissions.

Utilizing the data gathered in the online survey, this chapter provides an analysis of GHG emissions resulting from commute trips to and from campus. GHG emissions were measured in carbon dioxide equivalents (CO2-e), which is a total of all GHGs converted into CO2 at a rate based on the gas’ impact on ozone depletion.

METHODOLOGY

The online survey was designed in part to enable the University to calculate the emissions related to transportation. For each leg of their commute journeys, respondents were asked to provide both the mode they used and the distance travelled. The average distance traveled by students and staff on each mode was calculated, and each resulting value was multiplied by the weighted number of students and staff taking each mode on April 6, 2016. Data from the survey was scaled to estimate travel behavior for the entire population of students, faculty, and staff at the university in order to determine distances collectively traveled on each mode. Carbon intensities (pounds of emissions per vehicle mile traveled measured in pounds of CO2-e ) were then calculated for each mode (assumptions are listed in the following section).

[1] www.presidentsclimatecommitment.org
13 San Francisco State University Climate Action Plan 2010
The product of distance traveled on each mode and the mode’s carbon intensity provide the total emissions attributable to the SF State commute for that mode on a given day.

\[ \text{Miles} \times \text{CO}_2\text{-e/mile} = \text{CO}_2\text{-e (for each mode)} \]

Using the daily CO\(_2\)e inventory, an annual CO\(_2\)e inventory was determined.\(^{14}\)

The scaling factor used in the previous reports was adjusted this year in order to reflect a per mode weighted scaling factor. All data from previous years was adjusted under the same methodology. In addition, the unit of measurement for CO\(_2\) emissions was changed in 2014 to metric tons, which is the industry standard. This was maintained in the 2016 analysis. In previous survey years, short tons was used as the unit of measurement. The 2008 and 2011 numbers shown in this report reflect this change in metrics.

**Assumptions**

The following assumptions were used in creating the emissions inventory for SF State:

- For all modes except BART, only tailpipe emissions are counted. Other emissions, such as those associated with fuel production and refining, vehicle manufacture, construction and maintenance of roadway/brideway, etc., are excluded. It should be noted that, taken together, these add approximately 30\% (bus) to 60\% (private motor vehicle) to a mode’s average per-mile emissions (Chester & Horvath, 2008). In the one exception to this, emissions from the production of electricity used to power the BART system, including stations, trains, and other facilities, was counted.

- Average automobile fuel efficiency in 2016 is 21.6 MPG (Source: US EPA)

- Electric vehicle usage is assumed to be integrated into the US EPA MPG average fuel efficiency.

- Average carbon coefficients for a typical passenger vehicle in 2016 is 19.59 lbs CO\(_2\) per gallon, respectively (Source: US EPA)

- Bus emissions:
  - Emissions from bus facilities excluded (due to lack of data)
  - Bus fuel efficiency of 4.5 MPG (typical for a 40-seat bus)
  - Trolleybus operation is assumed to produce zero emissions due to Muni’s use of exclusively hydroelectric power (Source: Muni)
  - Average overall bus ridership is calculated from Muni surveys on routes which directly serve the SF State campus (calculated per bus average on those lines was 14.4 passengers). Bus emissions divided by average load factor gives per passenger-mile emissions. It was assumed that the SamTrans line feeding SF State has similar ridership
  - Bus emissions were calculated from these assumptions to be 0.30 lbs of CO\(_2\)-e per passenger mile (Source: Muni)

- BART pounds of CO\(_2\)-e emissions per passenger mile are 0.11394. These include facilities energy use. (Source: BART)

\(^{14}\) The annual CO\(_2\) emissions inventory is based on 174 days. This includes all regular school days and excludes weekends, holidays, summer break, winter break and spring break.
• Caltrain emissions of 0.12018 lbs of CO₂-e per passenger mile (Source: Caltrain)

• SF State Shuttle buses were upgraded in January 2015 to CNG buses with a capacity of 60 passengers. Assumptions were made that there are 6,000 daily rides (Source: SFSU campus shuttle improved bigger better buses), an assumed average of two miles traveled on the shuttle, a calculated average occupancy of 48 passengers. Occupancy was calculated by dividing the average daily rides, noted above, by the number of buses per day (hourly frequency by the number of hours of operation) An emissions of 8.06 lbs of CO₂-e per mile was used for SF State Shuttle was assumed (Source: US Department of Energy Wells-to-wheels GHG emissions)
RESULTS

On a typical travel day in 2016, University affiliates travelled approximately 201,400 miles commuting to and from the SF State compared to approximately 203,900 in 2014, approximately 185,200 miles in 2011, and approximately 204,900 miles in 2008 (Figure 5-1). This represents a 1.23% decrease in daily passenger miles between 2014 and 2016 and a 1.7% decrease in daily passenger miles between 2008 and 2016.

Of the total miles traveled in 2016, 38% (75,800 miles) were travelled on BART, which is the same percentage as in 2014. This represents a slight increase in mode share from 2008, when approximately 37% of daily miles were on BART. Forty-one percent of the average 2016 day’s miles are travelled in private vehicles, slightly more than 2014 and 2008 when 37% of daily miles were travelled in private vehicles. However, the overall numbers of miles travelled by drive alone vehicles has increased.
Figure 5-1: Total Passenger Miles Travelled per Day by Mode

BART commuters to SF State travel about 7,500 fewer miles per day than car drivers, but each emit only 650 pounds of CO$_2$-e in a day compared to approximately 6,000 pounds of CO$_2$-e emitted by those who drive alone. There was a decrease of approximately 20 pounds of CO$_2$-e emitted per day by BART riders between 2008 and 2016, which correlates with a decrease in BART ridership over the same time period (Figure 5-2).

The SF State Shuttle emits 75 pounds of CO$_2$-e per day, an almost one to 10 relationship to the number of passenger miles travelled (5,500 miles). The 2016 total represents a decrease in miles travelled over the last few years and a decrease in emissions. Part of the decrease could also be attributed due to the University obtaining new 60-passenger CNG buses in January of 2015. Muni electric vehicles do not produce any CO$_2$-e emissions given that they use hydroelectric power produced by Hetch Hetchy Dam. CO$_2$-e emissions generated by Caltrain are about the same as in 2016 as they were in 2008, as daily passenger miles have increased.
Figure 5-2: Total Pounds of CO2-e per Day by Mode

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>5,740</td>
<td>5,740</td>
<td>5,160</td>
<td>5,980</td>
</tr>
<tr>
<td>TNC/Taxi</td>
<td>170</td>
<td>N/A</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Caltrain</td>
<td>70</td>
<td>530</td>
<td>360</td>
<td>460</td>
</tr>
<tr>
<td>SF State Shuttle Bus</td>
<td>210</td>
<td>210</td>
<td>210</td>
<td>210</td>
</tr>
<tr>
<td>Carpool</td>
<td>130</td>
<td>450</td>
<td>360</td>
<td>460</td>
</tr>
<tr>
<td>Muni (Electric Vehicles)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Muni (Diesel Vehicles)</td>
<td>450</td>
<td>640</td>
<td>640</td>
<td>670</td>
</tr>
<tr>
<td>BART</td>
<td>660</td>
<td>660</td>
<td>660</td>
<td>660</td>
</tr>
</tbody>
</table>
Private vehicles have the highest levels of average-day CO₂-e emissions per passenger mile (Figure 5-3) of all the modes evaluated. More than half of all daily passenger miles are travelled on BART, but only 12% of the total daily pounds of CO₂-e emissions are generated by BART. Thirty-eight percent of the total daily passenger miles are from drive alone, however persons driving alone are the largest contributors to SF State’s CO₂-e commute travel emissions, representing 70% of the total daily pounds of CO₂-e emissions (Figure 5-4).

Figure 5-3: Pounds of CO₂ Emissions per Passenger Mile
On an annual basis in 2016, University affiliates commute more than 35 million miles, compared to the approximately 35.4 million miles in 2014, 32.2 million miles in 2011, and 35.6 million miles in 2008. This represents a 65% change between 2008 and 2016 (Figure 5-4).

As result, in 2016, a total of 7,500 metric tons of CO2-e were produced by university affiliates’ commutes compared to 7,700 metric tons of CO2-e in 2014, 7,000 metric tons of CO2-e in 2011, and 8,000 metric tons of CO2-e in 2008, a 6% decrease in CO2-e emissions between 2008 and 2016.

With the increase in the population, the raw number of University affiliates driving for some portion of their journey has increased, though the overall percentage of the population that drives alone has increased by 11% since 2008. The number of miles travelled by BART commuters has decreased by approximately 1,000 miles since 2008 but only resulted in a decrease of approximately 20 metric tons of CO2-e since 2008.
Figure 5-5: Passenger-miles travelled, pounds CO₂ per mile, and total CO₂ per year\(^\text{15}\) by mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Daily Passenger Miles</th>
<th>Annual Passenger Miles</th>
<th>Total Metric Tons CO₂ per Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>83,300</td>
<td>76,000</td>
<td>68,300</td>
</tr>
<tr>
<td>BART</td>
<td>75,800</td>
<td>77,100</td>
<td>74,200</td>
</tr>
<tr>
<td>Muni (Diesel Vehicles)</td>
<td>16,800</td>
<td>23,600</td>
<td>21,600</td>
</tr>
<tr>
<td>Muni (Electric Vehicles)</td>
<td>10,100</td>
<td>3,800</td>
<td>2,500</td>
</tr>
<tr>
<td>Carpool</td>
<td>4,900</td>
<td>14,500</td>
<td>11,300</td>
</tr>
<tr>
<td>SF State Shuttle Bus</td>
<td>5,500</td>
<td>5,500</td>
<td>5,500</td>
</tr>
<tr>
<td>Caltrain</td>
<td>2,600</td>
<td>3,300</td>
<td>1,700</td>
</tr>
<tr>
<td>TNC/Taxi</td>
<td>2,400</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Walk</td>
<td>11,600</td>
<td>9,500</td>
<td>4,100</td>
</tr>
<tr>
<td>Bike</td>
<td>4,600</td>
<td>5,800</td>
<td>5,300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>217,600</strong></td>
<td><strong>219,200</strong></td>
<td><strong>194,500</strong></td>
</tr>
</tbody>
</table>

\(^{15}\) The annual CO₂ emissions inventory is based on 174 days. This includes all regular school days and excludes weekends, holidays, summer break, winter break and spring break.
APPENDIX A: SURVEY INSTRUMENTS
ONLINE SURVEY

SF State Transportation Survey 2016 - Nelson\Nygaard

SF State Transportation Survey. Please complete this survey about your commute and general travel to and from SF State's main campus at 1600 Holloway on Wednesday, April 6, 2016. The survey takes approximately 5 minutes to complete, and your response is greatly appreciated. The survey will close on April 14, 2016. Upon completing the survey you will have an opportunity to enter for a chance to win a $100 gift card to the SF State Bookstore. Thank you for helping us improve the quality of our campus!

q1 What is your primary affiliation with SF State?
   - Freshman (1)
   - Other undergraduate (2)
   - Graduate student (3)
   - Staff or Administrator (4)
   - Faculty (5)
   - Visitor/contractor (6)
   - Other (7)

q2 Are you full-time or part-time?
   - Full-time (1)
   - Part-time (2)
   - Not Applicable (3)

q3 On average, how many days a week do you come to the SF State main campus at 1600 Holloway?
   - 0 (0)
   - 1 (1)
   - 2 (2)
   - 3 (3)
   - 4 (4)
   - 5 (5)
   - 6 (6)
q4 Where do you live?
On campus (1)
Off campus (2)

Answer If Where do you live? On campus Is Selected
q4a Specify dorm/apartment
   Mary Ward Hall (1)
   Mary Park Hall (2)
   Towers at Centennial Square (3)
   Science & Technology Theme Community (4)
   University Park North (5)
   University Park South (6)
   Village at Centennial Square (7)

Answer If Where do you live? Off campus Is Selected
q4b Specify zip code

q4c What is your average cost for your round trip commute to and from SF State? Please round to the nearest dollar.
   No Cost (0)
   $1 (1)
   $2 (2)
   $3 (3)
   $4 (4)
   $5 (5)
   $6 (6)
   $7 (7)
   $8 (8)
   $9 (9)
   $10 (10)
   $11 (11)
Q151 Were you on campus on Wednesday, April 6th 2016?
   Yes (1)
   No (2)

Answer If Were you on campus on Wednesday, April 6th 2016? No Is Selected

Q159 Have you participated in or used / do you currently participate in or use any of the following programs and services?
   I wasn't aware of this service (1) I've heard of this service but never used it (2) I occasionally (1-2 times a week) use this service (3) I frequently (3-5 days a week) use this service (4)

   Free round trip transfer on Muni 28/28R from Daly City BART when using Clipper Card (1)

   Bike Barn (2)
   Bike Racks (7)
   511 RideMatch Service (3)
   Zipcar (9)
   Electric Vehicle Charging Stations (10)
Answer If What is your primary affiliation with SF State? Staff or Administrator Is Selected Or What is your primary affiliation with SF State? Faculty Is Selected And Were you on campus on Wednesday, April 6th 2016? No Is Selected

Q160 For Employees: Have you participated in or used / do you currently participate in or use any of the following programs and services?

I wasn't aware of this service (1) I've heard of this service but never used it (2) I occasionally (1-2 times a week) use this service (3) I frequently (3-5 days a week) use this service (4)

Commuter Check Pre-Tax Transit Benefit (pre-tax purchase of transit passes) (1)

Vanpool (2)

Emergency Ride Home Program (3)

Pre-Tax Parking Benefit (pre-tax purchase of parking) (4)

Answer If Were you on campus on Wednesday, April 6th 2016? No Is Selected

Q156 Do you know where to go if you have questions about your commute or need other transportation information?

Yes, and I have used the resources available to me before (1)

Yes, but I have not used the resources available to me (2)

No, I do not know what resources are available to me (3)

Answer If Were you on campus on Wednesday, April 6th 2016? No Is Selected

Q157 Which resources have you used to get transportation and commute information? (please check all that apply)

" SF State Website home page (1)
" Parking & Transportation Website (2)
" Word of mouth (fellow student or coworker) (3)
" My manager (5)
" Human resources (6)
" Hiring materials (7)
" A distribution list that I signed up for (8)
" Digital screens found around campus (9)
" Other (please specify) (10) ____________________
Q158 In an effort to reduce parking demand and to expand affordable transportation options, SF State is exploring the possibility of pursuing discounts for our students, faculty, and staff for on-demand taxi services known as TNCs such as Uber and Lyft. Would you be interested in such a benefit?

Yes (1)
No (2)

Q153 Please provide any additional comments about transportation issues that relate to SF State.

Q154 If you would like to be entered for a chance to receive a $100 gift card to the SF State Bookstore, please enter your email address.

Your Trip to Campus  The following questions are about your trip to the main campus at 1600 Holloway. You will be asked to describe your commute by indicating the mode of transportation used for each segment of the trip. For example, your commute might have only one segment if you drove, walked, or biked directly to campus. Or, it might have three segments if you 1) drove and parked at your closest BART station, 2) took BART to Daly City, and 3) took the shuttle to campus. Please describe your commute to the main campus on Wednesday, April 6, 2016. If you took more than one mode/ have multiple segments, please start the survey by selecting your first segment.

Q133 For your trip to the main campus, where did you start your trip?(For example, Main Campus and On-Campus Dorms = 94132).

Zipcode (1)

Q136 For your trip to the main campus, what time did you arrive at the main campus?Please enter time in the following format: HH:MM AM

HH (9)
MM (10)
AM/PM (11)

q5pre Select the mode of transportation for your first segment:

Walk, bike, or other active transport (1)
Public transportation / shuttle (2)
Private vehicle (cars, carpool, motorcycle, etc.) (3)
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs (4)

q5 Which mode of transportation did you use?
If Select your first mode of transportation: Walk, bike, or other active transport Is Selected
   Walk (1)
   If Describe your trip to the main campus on Wednesday, April 23, 2014. If you used more than one mode of transportation, please start with the first mode. 5. Select your first mode of transport. Walk, Bike, or Other-Self Propelled Is Selected
   Bicycle (2)
   If Describe your trip to the main campus on Wednesday, April 23, 2014. If you used more than one mode of transportation, please start with the first mode. 5. Select your first mode of transport. Walk, Bike, or Other-Self Propelled Is Selected
   Other (3)
   If Describe your trip to the main campus on Wednesday, April 23, 2014. If you used more than one mode of transportation, please start with the first mode. 5. Select your first mode of transport. Public Transportation Is Selected
   Muni (4)
   If Describe your trip to the main campus on Wednesday, April 23, 2014. If you used more than one mode of transportation, please start with the first mode. Select your first mode of transport. Public Transportation Is Selected
   BART (5)
   If Describe your trip to the main campus on Wednesday, April 23, 2014. If you used more than one mode of transportation, please start with the first mode. Select your first mode of transport. Public Transportation Is Selected
   SF State Shuttle (6)
   If Describe your trip to the main campus on Wednesday, April 23, 2014. If you used more than one mode of transportation, please start with the first mode. Select your first mode of transport. Public Transportation Is Selected
   Caltrain (7)
   If Describe your trip to the main campus on Wednesday, April 23, 2014. If you used more than one mode of transportation, please start with the first mode. Select your first mode of transport. Public Transportation Is Selected
   Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) (8)
If describe your trip to the main campus on Wednesday, April 23, 2014. If you used more than one mode of transportation, please start with the first mode.

5. Select your first mode of transportation: Private Vehicle Is Selected

   Drove Alone (9)

If describe your trip to the main campus on Wednesday, April 23, 2014. If you used more than one mode of transportation, please start with the first mode.

Private Vehicle Is Selected

   Dropped Off / Picked Up (10)

If describe your trip to the main campus on Wednesday, April 23, 2014. If you used more than one mode of transportation, please start with the first mode.

Private Vehicle Is Selected

   Motorcycle/Moped (11)

If describe your trip to the main campus on Wednesday, April 23, 2014. If you used more than one mode of transportation, please start with the first mode.

Private Vehicle Is Selected

   Carpool/Vanpool (12)

If select your first mode of transportation: Taxi or TNC (Uber, Lyft, etc.) Is Selected

   Taxi (19)

If select your first mode of transportation: Taxi or TNC (Uber, Lyft, etc.) Is Selected

   Uber (20)

If select your first mode of transportation: Taxi or TNC (Uber, Lyft, etc.) Is Selected

   Lyft (21)

If select your first mode of transportation: Taxi or TNC (Uber, Lyft, etc.) Is Selected

   Other on-demand taxi or real-time ride-sharing service (22)

Answer If Which mode of transportation did you use? Walk Is Selected Or Which mode of transportation did you use? Bicycle Is Selected Or Which mode of transportation did you use? Other Is Selected

q5a Please estimate (in miles) the distance you traveled for this segment of your trip (E.g. If you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? Muni Is Selected

q5b Specify Muni Line

   1-California (1)
   1AX-California 'A' Express (2)
   1BX-California 'B' Express (3)
2-Clement (4)
3-Jackson (5)
5-Fulton (7)
5R-Fulton Rapid (98)
6-Haight-Parnassus (8)
7-Haight-Noriega (61)
7R-Haight-Noriega Rapid (62)
7X-Noriega Express (75)
8AX Bayshore 'A' Express (90)
8BX Bayshore 'B' Express (91)
8-Bayshore (92)
9-San Bruno (10)
9R-San Bruno Rapid (93)
10-Townsend (14)
12-Folsom/Pacific (15)
14-Mission (16)
14R-Mission Rapid (17)
14X-Mission Express (18)
18-46th Avenue (94)
19-Polk (23)
21-Hayes (25)
22-Fillmore (26)
23-Monterey (27)
24-Divisadero (28)
25-Treasure Island (76)
27-Bryant (30)
28-19th Avenue (77)
28R-19th Avenue Rapid (32)
29-Sunset (78)
30-Stockton (30)
30X-Marina Express (35)
31-Balboa (36)
31AX-Balboa 'A' Express (37)
31BX-Balboa 'B' Express (38)
33-Ashbury-18th (39)
35-Eureka (40)
36-Teresita (41)
37-Corbett (42)
38-Geary (43)
38AX-Geary 'A' Express (44)
38BX-Geary 'B' Express (45)
38R-Geary Rapid (46)
39-Coit Tower (47)
41-Union (48)
43-Masonic (49)
44-O'Shaughnessy (50)
45-Union-Stockton (51)
47-Van Ness (52)
48-24th Street (53)
49-Van Ness-Mission (54)
52-Excelsior (55)
54-Felton (57)
55-16th Street (101)
56-Rutland (58)
57-Parkmerced (12)
66-Quintara (59)
67-Bernal Heights (60)
76X-Marin Headlands Express (63)
81X-Caltrain Express (65)
82X-Levi Plaza Express (66)
83X-Mid-Market Express (99)
88-BART Shuttle (67)
90-San Bruno Owl (69)
91-Owl (70)
108-Treasure Island (73)
F-Market & Wharves (79)
J-Church (80)
KT-Ingleside/Third Street (100)
L-Taraval (82)
M-Ocean View (74)
N-Judah (84)
California-Cable Car (87)
Powell-Hyde-Cable Car (88)
Powell-Mason-Cable Car (89)

Answer If Which mode of transportation did you use? Muni Is Selected
q5c Please estimate (in miles) the distance you traveled in this segment of your trip (E.g. If you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? BART Is Selected
q5d Specify BART start station
   12th St. Oakland City Center (1)
   16th St. Mission (2)
   19th St. Oakland (3)
   24th St. Mission (4)
   Ashby (5)
   Balboa Park (6)
   Bay Fair (7)
   Castro Valley (8)
   Civic Center (9)
   Coliseum/Oakland Airport (10)
   Colma (11)
   Concord (12)
   Daly City (13)
   Downtown Berkeley (14)
   Dublin/Pleasanton (15)
   El Cerrito del Norte (16)
   El Cerrito Plaza (17)
   Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int'l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of transportation did you use? BART Is Selected
q5e Specify BART end station
   12th St. Oakland City Center (1)
   16th St. Mission (2)
   19th St. Oakland (3)
   24th St. Mission (4)
Ashby (5)
Balboa Park (6)
Bay Fair (7)
Castro Valley (8)
Civic Center (9)
Coliseum/Oakland Airport (10)
Colma (11)
Concord (12)
Daly City (13)
Downtown Berkeley (14)
Dublin/Pleasanton (15)
El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int’l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of transportation did you use? Caltrain Is Selected
q5f Specify Caltrain start station
  22nd Street (1)
  Atherton (2)
  Bayshore (3)
  Belmont (4)
  Blossom Hill (5)
  Broadway (6)
  Burlingame (7)
  California Ave (8)
  Capitol (9)
  College Park (10)
  Diridon (11)
  Gilroy (12)
  Hayward Park (13)
  Hillsdale (14)
  Lawrence (15)
  Menlo Park (16)
  Millbrae (17)
  Morgan Hill (18)
  Mountain View (19)
  Palo Alto (20)
  Redwood City (21)
  San Antonio (22)
  San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

Answer If Which mode of transportation did you use? Caltrain Is Selected
q5g Specify Caltrain end station
  22nd Street (1)
  Atherton (2)
  Bayshore (3)
  Belmont (4)
  Blossom Hill (5)
  Broadway (6)
  Burlingame (7)
  California Ave (8)
  Capitol (9)
  College Park (10)
  Diridon (11)
  Gilroy (12)
  Hayward Park (13)
  Hillsdale (14)
  Lawrence (15)
  Menlo Park (16)
  Millbrae (17)
  Morgan Hill (18)
  Mountain View (19)
  Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

**Answer If Which mode of transportation did you use? Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) Is Selected**

q5h Please estimate (in miles) the distance you traveled for this segment of your trip (E.g. If you traveled 1 1/2 miles, enter 1.5)

**Answer If Which mode of transportation did you use? Carpool/Vanpool Is Selected**

q5i I was the:

   Passenger (1)
   Driver (2)

**Answer If Which mode of transportation did you use? Carpool/Vanpool Is Selected**

q5i Number of people in the carpool/vanpool on Wednesday April, 6, 2016:

   2 (2)
   3 (3)
   4 (4)
   5 (5)
   6 (6)
   7 (7)
   More than 7 (8)
Answer If Select your first mode of transportation: Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

q5j Please estimate (in miles) the distance you traveled for this segment of your trip (E.g. If you traveled 1 1/2 miles, enter 1.5)

Answer If Select your first mode of transportation: Taxi, Uber, Lyft, or other on-demand taxi or real-time ridesharing services known as TNCs Is Selected

Q137 Please estimate (in miles) the distance you traveled for this segment of your trip (E.g. If you traveled 1 1/2 miles, enter 1.5)

Q230 On your trip to SF State's main campus, what was the mode of transportation for your second segment? If you used BART previously, please use this question to tell us how you got from BART to campus.

   Walk, bike, or other active transport (1)
   Public transportation / shuttle (2)
   Private vehicle (cars, carpool, motorcycle, etc.) (3)
   Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs (4)
   None (5)

If None Is Selected, Then Skip To End of Block

Q231 Which mode of transportation did you use?

If On your trip to SF State's main campus, what was your second mode of transportation? (If your previous segment was via BART please use this question as an opportunity to tell us how you g... Walk, bike, or other active transport Is Selected

   Walk (1)

If On your trip to SF State's main campus, what was your second mode of transportation? (If your previous segment was via BART please use this question as an opportunity to tell us how you g... Walk, bike, or other active transport Is Selected

   Bicycle (2)

If On your trip to SF State's main campus, what was your second mode of transportation? (If your previous segment was via BART please use this question as an opportunity to tell us how you g... Walk, bike, or other active transport Is Selected

   Other (3)

If On your trip to SF State's main campus, what was your second mode of transportation? (If your previous segment was via BART please use this question as an opportunity to tell us how you g... Public transportation / shuttle Is Selected

   Muni (4)
If On your trip to SF State's main campus, what was your second mode of transportation? (If your previous segment was via BART please use this question as an opportunity to tell us how you g...)

Public transportation / shuttle Is Selected

BART (5)

SF State Shuttle (6)

Caltrain (7)

Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) (8)

Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Drove Alone (9)

Dropped Off / Picked Up (10)

Motorcycle/Moped (11)

Carpool/Vanpool (12)

Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Taxi (19)

If On your trip to SF State's main campus, what was your second mode of transportation? (If your previous segment was via BART please use this question as an
opportunity to tell us how you g... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Uber (20)

If On your trip to SF State's main campus, what was your second mode of transportation? (If your previous segment was via BART please use this question as an opportunity to tell us how you g... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Lyft (21)

If On your trip to SF State's main campus, what was your second mode of transportation? (If your previous segment was via BART please use this question as an opportunity to tell us how you g... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Other on-demand taxi or real-time ride-sharing service (22)

Answer If Which mode of transportation did you use? Walk Is Selected Or Which mode of transportation did you use? Bicycle Is Selected Or Which mode of transportation did you use? Other Is Selected

Q232 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? Muni Is Selected

Q205 Specify Muni Line

1-California (1)
1AX-California 'A' Express (2)
1BX-California 'B' Express (3)
2-Clement (4)
3-Jackson (5)
5-Fulton (7)
5R-Fulton Rapid (98)
6-Haight-Parnassus (8)
7-Haight-Noriega (61)
7R-Haight-Noriega Rapid (62)
7X-Noriega Express (75)
8AX Bayshore 'A' Express (90)
8BX Bayshore 'B' Express (91)
8-Bayshore (92)
9-San Bruno (10)
9R-San Bruno Rapid (93)
10-Townsend (14)
12-Folsom/Pacific (15)
14-Mission (16)
14R-Mission Rapid (17)
14X-Mission Express (18)
18-46th Avenue (94)
19-Polk (23)
21-Hayes (25)
22-Fillmore (26)
23-Monterey (27)
24-Divisadero (28)
25-Treasure Island (76)
27-Bryant (30)
28-19th Avenue (77)
28R-19th Avenue Rapid (32)
29-Sunset (78)
30-Stockton (30)
30X-Marina Express (35)
31-Balboa (36)
31AX-Balboa 'A' Express (37)
31BX-Balboa 'B' Express (38)
33-Ashbury-18th (39)
35-Eureka (40)
36-Teresita (41)
37-Corbett (42)
38-Geary (43)
38AX-Geary 'A' Express (44)
38BX-Geary 'B' Express (45)
38R-Geary Rapid (46)
39-Coit Tower (47)
41-Union (48)
43-Masonic (49)
44-O'Shaughnessy (50)
45-Union-Stockton (51)
47-Van Ness (52)
48-24th Street (53)
49-Van Ness-Mission (54)
52-Excelsior (55)
54-Felton (57)
55-16th Street (101)
56-Rutland (58)
57-Parkmerced (12)
66-Quintara (59)
67-Bernal Heights (60)
76X-Marin Headlands Express (63)
81X-Caltrain Express (65)
82X-Levi Plaza Express (66)
83X-Mid-Market Express (99)
88-BART Shuttle (67)
90-San Bruno Owl (69)
91-Owl (70)
108-Treasure Island (73)
F-Market & Wharves (79)
J-Church (80)
KT-Ingleside/Third Street (100)
L-Taraval (82)
M-Ocean View (74)
N-Judah (84)
California-Cable Car (87)
Powell-Hyde-Cable Car (88)
Powell-Mason-Cable Car (89)

Answer: If Which mode of transportation did you use? Muni Is Selected
Q234 Please estimate (in miles) the distance you traveled in this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? BART Is Selected

Q235 Specify BART start station

1. 12th St. Oakland City Center (1)
2. 16th St. Mission (2)
3. 19th St. Oakland (3)
4. 24th St. Mission (4)
5. Ashby (5)
6. Balboa Park (6)
7. Bay Fair (7)
8. Castro Valley (8)
9. Civic Center (9)
10. Coliseum/Oakland Airport (10)
11. Colma (11)
12. Concord (12)
13. Daly City (13)
14. Downtown Berkeley (14)
15. Dublin/Pleasanton (15)
16. El Cerrito del Norte (16)
17. El Cerrito Plaza (17)
18. Embarcadero (18)
19. Fremont (19)
20. Fruitvale (20)
21. Glen Park (21)
22. Hayward (22)
23. Lafayette (23)
24. Lake Merritt (24)
25. MacArthur (25)
26. Millbrae (26)
27. Montgomery St. (27)
28. North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int'l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of transportation did you use? BART Is Selected
Q236 Specify BART end station
    12th St. Oakland City Center (1)
    16th St. Mission (2)
    19th St. Oakland (3)
    24th St. Mission (4)
    Ashby (5)
    Balboa Park (6)
    Bay Fair (7)
    Castro Valley (8)
    Civic Center (9)
    Coliseum/Oakland Airport (10)
    Colma (11)
    Concord (12)
    Daly City (13)
    Downtown Berkeley (14)
Dublin/Pleasanton (15)
El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int’l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of transportation did you use? Caltrain Is Selected
Q237 Specify Caltrain start station
22nd Street (1)
Atherton (2)
Bayshore (3)
Belmont (4)
Blossom Hill (5)
Broadway (6)
Burlingame (7)
California Ave (8)
Capitol (9)
College Park (10)
Diridon (11)
Gilroy (12)
Hayward Park (13)
Hillsdale (14)
Lawrence (15)
Menlo Park (16)
Millbrae (17)
Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)
Answer If Which mode of transportation did you use? Caltrain Is Selected

Q238 Specify Caltrain end station
- 22nd Street (1)
- Atherton (2)
- Bayshore (3)
- Belmont (4)
- Blossom Hill (5)
- Broadway (6)
- Burlingame (7)
- California Ave (8)
- Capitol (9)
- College Park (10)
- Diridon (11)
- Gilroy (12)
- Hayward Park (13)
- Hillsdale (14)
- Lawrence (15)
- Menlo Park (16)
- Millbrae (17)
- Morgan Hill (18)
- Mountain View (19)
- Palo Alto (20)
- Redwood City (21)
- San Antonio (22)
- San Bruno (23)
- San Carlos (24)
- San Francisco (25)
- San Jose (26)
- San Martin (27)
- San Mateo (28)
- Santa Clara (29)
- South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

Answer If Which mode of transportation did you use? Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) Is Selected
Q239 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? Carpool/Vanpool Is Selected
Q240 I was the:
   Passenger (1)
   Driver (2)

Answer If Which mode of transportation did you use? Carpool/Vanpool Is Selected
Q241 Number of people in the carpool/vanpool on Wednesday April, 6, 2016:
   2 (2)
   3 (3)
   4 (4)
   5 (5)
   6 (6)
   7 (7)
   More than 7 (8)

Answer If On your trip to SF State's main campus, what was your second mode of transportation? (If your las... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected
Q242 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If On your trip to SF State's main campus, what was your second mode of transportation? (If your las... Taxi, Uber, Lyft, or other on-demand taxi or real-time ridesharing services known as TNCs Is Selected
Q243 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)
Q122 On your trip to SF State's main campus, what was the mode of transportation for your third segment? If you used BART previously, please use this question to tell us how you got from BART to campus.

- Walk, bike, or other active transport (1)
- Public transportation / shuttle (2)
- Private vehicle (cars, carpool, motorcycle, etc.) (3)
- Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs (4)
- None (5)

If None Is Selected, Then Skip To End of Block

Q109 Which mode of transportation did you use?

If On your trip to SF State's main campus, what was your third mode of transportation? (If your previous segment was via BART please use this question as an opportunity to tell us how you got from BART to campus)

- Walk (1)
- Bicycle (2)
- Other (3)

If On your trip to SF State's main campus, what was your third mode of transportation? (If your previous segment was via BART please use this question as an opportunity to tell us how you got from BART to campus)

- Public transportation / shuttle (4)
- SF State Shuttle (5)
- Caltrain (6)
If On your trip to SF State's main campus, what was your third mode of transportation? (If your prev...
Public transportation / shuttle Is Selected

Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) (8)

If On your trip to SF State's main campus, what was your third mode of transportation? (If your prev...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Drove Alone (9)

If On your trip to SF State's main campus, what was your third mode of transportation? (If your prev...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Dropped Off / Picked Up (10)

If On your trip to SF State's main campus, what was your third mode of transportation? (If your prev...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Motorcycle/Moped (11)

If On your trip to SF State's main campus, what was your third mode of transportation? (If your prev...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Carpool/Vanpool (12)

If On your trip to SF State's main campus, what was your third mode of transportation? (If your prev...
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Taxi (19)

If On your trip to SF State's main campus, what was your third mode of transportation? (If your prev...
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Uber (20)

If On your trip to SF State's main campus, what was your third mode of transportation? (If your prev...
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Lyft (21)

If On your trip to SF State's main campus, what was your third mode of transportation? (If your prev...
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Other on-demand taxi or real-time ride-sharing service (22)

Answer If Which mode of Transportation did you use? Walk Is Selected Or Which mode of Transportation did you use? Bicycle Is Selected Or Which mode of Transportation did you use? Other Is Selected

Q110 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)
Answer: If Which mode of Transportation did you use? Muni is selected.

Q206 Specify Muni Line

1-California (1)
1AX-California 'A' Express (2)
1BX-California 'B' Express (3)
2-Clement (4)
3-Jackson (5)
5-Fulton (7)
5R-Fulton Rapid (98)
6-Haight-Parnassus (8)
7-Haight-Noriega (61)
7R-Haight-Noriega Rapid (62)
7X-Noriega Express (75)
8AX Bayshore 'A' Express (90)
8BX Bayshore 'B' Express (91)
8-Bayshore (92)
9-San Bruno (10)
9R-San Bruno Rapid (93)
10-Townsend (14)
12-Folsom/Pacific (15)
14-Mission (16)
14R-Mission Rapid (17)
14X-Mission Express (18)
18-46th Avenue (94)
19-Polk (23)
21-Hayes (25)
22-Fillmore (26)
23-Monterey (27)
24-Divisadero (28)
25-Treasure Island (76)
27-Bryant (30)
28-19th Avenue (77)
28R-19th Avenue Rapid (32)
29-Sunset (78)
30-Stockton (30)
30X-Marina Express (35)
31-Balboa (36)
31AX-Balboa 'A' Express (37)
31BX-Balboa 'B' Express (38)
33-Ashbury-18th (39)
35-Eureka (40)
36-Teresita (41)
37-Corbett (42)
38-Geary (43)
38AX-Geary 'A' Express (44)
38BX-Geary 'B' Express (45)
38R-Geary Rapid (46)
39-Coit Tower (47)
41-Union (48)
43-Masonic (49)
44-O'Shaughnessy (50)
45-Union-Stockton (51)
47-Van Ness (52)
48-24th Street (53)
49-Van Ness-Mission (54)
52-Excelsior (55)
54-Felton (57)
55-16th Street (101)
56-Rutland (58)
57-Parkmerced (12)
66-Quintara (59)
67-Bernal Heights (60)
76X-Marin Headlands Express (63)
81X-Caltrain Express (65)
82X-Levi Plaza Express (66)
83X-Mid-Market Express (99)
88-BART Shuttle (67)
90-San Bruno Owl (69)
91-Owl (70)
108-Treasure Island (73)
F-Market & Wharves (79)
J-Church (80)
KT-Ingleside/Third Street (100)
L-Taraval (82)
M-Ocean View (74)
N-Judah (84)
California-Cable Car (87)
Powell-Hyde-Cable Car (88)
Powell-Mason-Cable Car (89)

Answer If Which mode of Transportation did you use? Muni Is Selected

Q112 Please estimate (in miles) the distance you traveled in this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of Transportation did you use? BART Is Selected

Q113 Specify BART start station

12th St. Oakland City Center (1)
16th St. Mission (2)
19th St. Oakland (3)
24th St. Mission (4)
Ashby (5)
Balboa Park (6)
Bay Fair (7)
Castro Valley (8)
Civic Center (9)
Coliseum/Oakland Airport (10)
Colma (11)
Concord (12)
Daly City (13)
Downtown Berkeley (14)
Dublin/Pleasanton (15)
El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int'l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of Transportation did you use? BART Is Selected
Q114 Specify BART end station

12th St. Oakland City Center (1)
16th St. Mission (2)
19th St. Oakland (3)
24th St. Mission (4)
Ashby (5)
Balboa Park (6)
Bay Fair (7)
Castro Valley (8)
Civic Center (9)
Coliseum/Oakland Airport (10)
Colma (11)
Concord (12)
Daly City (13)
Downtown Berkeley (14)
Dublin/Pleasanton (15)
El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int'l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of Transportation did you use? Caltrain Is Selected

Q115 Specify Caltrain start station
  22nd Street (1)
  Atherton (2)
  Bayshore (3)
  Belmont (4)
  Blossom Hill (5)
  Broadway (6)
  Burlingame (7)
  California Ave (8)
  Capitol (9)
  College Park (10)
  Diridon (11)
  Gilroy (12)
  Hayward Park (13)
  Hillsdale (14)
  Lawrence (15)
  Menlo Park (16)
  Millbrae (17)
  Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

Answer If Which mode of Transportation did you use? Caltrain Is Selected
Q116 Specify Caltrain end station
    22nd Street (1)
    Atherton (2)
    Bayshore (3)
    Belmont (4)
    Blossom Hill (5)
    Broadway (6)
    Burlingame (7)
    California Ave (8)
    Capitol (9)
    College Park (10)
    Diridon (11)
    Gilroy (12)
    Hayward Park (13)
    Hillsdale (14)
    Lawrence (15)
Menlo Park (16)
Millbrae (17)
Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

Answer If Which mode of Transportation did you use? Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) Is Selected
Q117 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of Transportation did you use? Carpool/Vanpool Is Selected
Q118 I was the:
   Passenger (1)
   Driver (2)

Answer If Which mode of Transportation did you use? Carpool/Vanpool Is Selected
Q119 Number of people in the carpool/vanpool on Wednesday April, 6, 2016:
   2 (2)
   3 (3)
   4 (4)
Answer If On your trip to SF State's main campus, what was your third mode of transportation? (If your last... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Q120 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If On your trip to SF State's main campus, what was your third mode of transportation? (If your last... Taxi, Uber, Lyft, or other on-demand taxi or real-time ridesharing services known as TNCs Is Selected

Q121 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Q123 On your trip to SF State's main campus, what was the mode of transportation for your fourth segment? If you used BART previously, please use this question to tell us how you got from BART to campus.

Walk, bike, or other active transport (1)
Public transportation / shuttle (2)
Private vehicle (cars, carpool, motorcycle, etc.) (3)
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs (4)
None (5)

If None Is Selected, Then Skip To End of Block

Q124 Which mode of transportation did you use?
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre... Walk, bike, or other active transport Is Selected

Walk (1)

If On your trip to SF State’s main campus, what was your fourth mode of transportation? (If your pre... Walk, bike, or other active transport Is Selected

Bicycle (2)

If On your trip to SF State’s main campus, what was your fourth mode of transportation? (If your pre... Walk, bike, or other active transport Is Selected

Nelson\Nygaard Consulting Associates Inc. | xxxviii
Other (3)
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre...
Public transportation / shuttle Is Selected

Muni (4)
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre...
Public transportation / shuttle Is Selected

BART (5)
If On your trip to SF State's main campus, what was the mode of transportation for your fourth segme...
Public transportation / shuttle Is Selected

SF State Shuttle (6)
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre...
Public transportation / shuttle Is Selected

Caltrain (7)
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre...
Public transportation / shuttle Is Selected

Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) (8)
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Drove Alone (9)
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Dropped Off / Picked Up (10)
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Motorcycle/Moped (11)
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Carpool/Vanpool (12)
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre...
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Taxi (19)
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre...
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Uber (20)
If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Lyft (21)

If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your pre... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Other on-demand taxi or real-time ride-sharing service (22)

If SF State Shuttle Is Selected, Then Skip To End of Block

Answer If Which mode of transportation did you use? Walk Is Selected Or Which mode of transportation did you use? Bicycle Is Selected Or Which mode of transportation did you use? Other Is Selected

Q125 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? Muni Is Selected

Q207 Specify Muni Line

1-California (1)
1AX-California 'A' Express (2)
1BX-California 'B' Express (3)
2-Clement (4)
3-Jackson (5)
5-Fulton (7)
5R-Fulton Rapid (98)
6-Haight-Parnassus (8)
7-Haight-Noriega (61)
7R-Haight-Noriega Rapid (62)
7X-Noriega Express (75)
8AX-Bayshore 'A' Express (90)
8BX-Bayshore 'B' Express (91)
8-Bayshore (92)
9-San Bruno (10)
9R-San Bruno Rapid (93)
10-Townsend (14)
12-Folsom/Pacific (15)
14-Mission (16)
14R-Mission Rapid (17)
14X-Mission Express (18)
18-46th Avenue (94)
19-Polk (23)
21-Hayes (25)
22-Fillmore (26)
23-Monterey (27)
24-Divisadero (28)
25-Treasure Island (76)
27-Bryant (30)
28-19th Avenue (77)
28R-19th Avenue Rapid (32)
29-Sunset (78)
30-Stockton (30)
30X-Marina Express (35)
31-Balboa (36)
31AX-Balboa 'A' Express (37)
31BX-Balboa 'B' Express (38)
33-Ashbury-18th (39)
35-Eureka (40)
36-Teresita (41)
37-Corbett (42)
38-Geary (43)
38AX-Geary 'A' Express (44)
38BX-Geary 'B' Express (45)
38R-Geary Rapid (46)
39-Coit Tower (47)
41-Union (48)
43-Masonic (49)
44-O'Shaughnessy (50)
45-Union-Stockton (51)
47-Van Ness (52)
48-24th Street (53)
49-Van Ness-Mission (54)
52-Excelsior (55)
54-Felton (57)
55-16th Street (101)
56-Rutland (58)
57-Parkmerced (12)
66-Quintara (59)
67-Bernal Heights (60)
76X-Marin Headlands Express (63)
81X-Caltrain Express (65)
82X-Levi Plaza Express (66)
83X-Mid-Market Express (99)
88-BART Shuttle (67)
90-San Bruno Owl (69)
91-Owl (70)
108-Treasure Island (73)
F-Market & Wharves (79)
J-Church (80)
KT-Ingleside/Third Street (100)
L-Taraval (82)
M-Ocean View (74)
N-Judah (84)
California-Cable Car (87)
Powell-Hyde-Cable Car (88)
Powell-Mason-Cable Car (89)

Answer If Which mode of transportation did you use? Muni Is Selected
Q127 Please estimate (in miles) the distance you traveled in this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? BART Is Selected
Q128 Specify BART start station

12th St. Oakland City Center (1)
16th St. Mission (2)
19th St. Oakland (3)
24th St. Mission (4)
Ashby (5)
Balboa Park (6)
Bay Fair (7)
Castro Valley (8)
Civic Center (9)
Coliseum/Oakland Airport (10)
Colma (11)
Concord (12)
Daly City (13)
Downtown Berkeley (14)
Dublin/Pleasanton (15)
El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int'l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of transportation did you use? BART Is Selected

Q129 Specify BART end station
   12th St. Oakland City Center (1)
   16th St. Mission (2)
   19th St. Oakland (3)
   24th St. Mission (4)
   Ashby (5)
   Balboa Park (6)
   Bay Fair (7)
   Castro Valley (8)
   Civic Center (9)
   Coliseum/Oakland Airport (10)
   Colma (11)
   Concord (12)
   Daly City (13)
   Downtown Berkeley (14)
   Dublin/Pleasanton (15)
   El Cerrito del Norte (16)
   El Cerrito Plaza (17)
   Embarcadero (18)
Answer If Which mode of transportation did you use? Caltrain Is Selected

Q130 Specify Caltrain start station

- 22nd Street (1)
- Atherton (2)
- Bayshore (3)
- Belmont (4)
Blossom Hill (5)
Broadway (6)
Burlingame (7)
California Ave (8)
Capitol (9)
College Park (10)
Diridon (11)
Gilroy (12)
Hayward Park (13)
Hillsdale (14)
Lawrence (15)
Menlo Park (16)
Millbrae (17)
Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

Answer If Which mode of transportation did you use? Caltrain Is Selected
Q131 Specify Caltrain end station
   22nd Street (1)
Atherton (2)
Bayshore (3)
Belmont (4)
Blossom Hill (5)
Broadway (6)
Burlingame (7)
California Ave (8)
Capitol (9)
College Park (10)
Diridon (11)
Gilroy (12)
Hayward Park (13)
Hillsdale (14)
Lawrence (15)
Menlo Park (16)
Millbrae (17)
Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)
Answer If Which mode of transportation did you use? Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) Is Selected

Q132 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? Carpool/Vanpool Is Selected

Q133 I was the:

Passenger (1)

Driver (2)

Answer If Which mode of transportation did you use? Carpool/Vanpool Is Selected

Q134 Number of people in the carpool/vanpool on Wednesday April, 6, 2016:

2 (2)

3 (3)

4 (4)

5 (5)

6 (6)

7 (7)

More than 7 (8)

Answer If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your last... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Q135 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If On your trip to SF State's main campus, what was your fourth mode of transportation? (If your last... Taxi, Uber, Lyft, or other on-demand taxi or real-time ridesharing services known as TNCs Is Selected

Q136 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Select your first mode of transportation: Private vehicle (cars, carpool, motorcycle, etc.) Is Selected Or On your trip to SF State's main campus, what was your third mode of transportation? (If your prev... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected Or On your trip to SF State's main campus, what was your fourth mode of transportation? (If your prev... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected Or On your trip to SF State's main campus, what was your fourth mode of transportation? (If your prev... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected Or On your trip to SF State's main campus, what was your fourth mode of transportation? (If your prev... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected Or On your trip to SF State's main campus, what was your fourth mode of transportation? (If your prev...
campus, what was your second mode of transportation? (If your pre... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

q9 Did you park on the street or in a parking lot / garage?
   Parking lot / garage (1)
   On the street (2)
   I did not drive today. (3)

Answer If Did you park on the street or in a parking lot / garage? Parking lot / garage Is Selected
Or Did you park on the street or in a parking lot / garage? On the street Is Selected

q10 Where did you park when you came to the main campus on Wednesday, April 6, 2016?
   On Campus (1)
   Near Campus (2)
   Near Daly City BART station (3)
   Near another BART station (4)
   Park & Ride lot (5)
   Other (6) ____________________

Answer If Where did you park when you came to the main campus on Wednesday, April 6, 2016? On Campus Is Selected
Or Where did you park when you came to the main campus on Wednesday, April 6, 2016? Near Campus Is Selected

q11 Please choose a zone where you parked (map below)    Enlarge SF State Parking Zones Image (New window)
   A: Lot 25 (1)
   B: SF State Parking Structure (2)
   C: SF State Campus, aside from Parking Structure or Lot 25 (3)
   D: Buckingham Way (4)
   E: Stonestown Galleria Parking Lot (5)
   F: Winston Drive (6)
   G: Lake Shore / Merced Manor (South of Eucalyptus) (20)
   H: Lake Merced Boulevard (8)
   I: Holloway Avenue or Font Boulevard (9)
   J: 19th Avenue (10)
   K: Lakeside (11)
   L: Junipero Serra Boulevard (12)
M: Ingleside Terraces / Ingleside / Oceanview / Merced Heights (13)
N: Lakeshore / Merced Manor (North of Eucalyptus) (14)
O: North of Sloat Boulevard (15)
P: Parkmerced (16)
Q: Lake Merced Hill (17)
R: Oceanview / Merced Heights (18)
S: University Park South (19)

? Answer If Where did you park when you came to the main campus on Wednesday, April 6, 2016? On Campus Is Selected Or Where did you park when you came to the main campus on Wednesday, April 6, 2016? Near Campus Is Selected

q12 How much did it cost you to park on Wednesday, April 6, 2016?
   Free (1)
   Less than $1 (2)
   $1-$2 (3)
   $2-$4 (4)
   $4-$7 (5)
   $7-$10 (6)
   More than $10 (7)
   I have a SF State Semester / Yearly Parking Pass (8)

? q12a1 Which of the following programs, if any, would encourage you to commute to campus via a mode of travel other than driving alone? Please rank your first, second, and third choices. First choice:
   Rideshare or carpool with someone who lives near me (1)
   Reduced transit fare pass for MUNI and BART (2)
   Emergency guaranteed ride home program (3)
   Improved bicycle amenities (4)
   Improved pedestrian amenities (5)
   Improved shuttle service from BART to the university (6)
   None (7)
q12a2 Second choice:
- Rideshare or carpool with someone who lives near me (1)
- Reduced transit fare pass for MUNI and BART (2)
- Emergency guaranteed ride home program (3)
- Improved bicycle amenities (4)
- Improved pedestrian amenities (5)
- Improved shuttle service from BART to the university (6)
- None (7)

q12a3 Third choice:
- Rideshare or carpool with someone who lives near me (1)
- Reduced transit fare pass for MUNI and BART (2)
- Emergency guaranteed ride home program (3)
- Improved bicycle amenities (4)
- Improved pedestrian amenities (5)
- Improved shuttle service from BART to the university (6)
- None (7)

Q155 Your Trip from Campus  The following questions are about your trip from the main campus at 1600 Holloway. You will be asked to describe your commute away from campus by indicating the mode of transportation used for each segment of your trip. For example, your trip might have only one segment if you drove, walked, or biked directly from campus. Or, it might have three segments if you 1) took the shuttle to BART, 2) took BART to the East Bay and 3) walked home. Please describe your trip from campus on Wednesday, April 6, 2016. If you took more than one mode/ have multiple segments, please start the survey by selecting your first segment.

Q279 For your trip from the main campus, what time did you depart from the main campus? Please enter time in the following format: HH:MM AM
- HH (1)
- MM (2)
- AM/PM (3)

Q156 Did you use the exact same means of transportation when you left the campus on Wednesday, April 6, 2016 as you did when coming to campus? If any segment of your trip from campus was different from your trip to campus, please select No.
- Yes (1)
No (2)
If Yes Is Selected, Then Skip To End of Block

Q277 For your trip from the main campus, where did you end your trip?
Zipcode (1)

Q280 Select the mode of transportation for your first segment: If your next segment is via BART, please use this question to tell us how you got from campus to the BART station.
   Walk, bike, or other active transport (1)
   Public transportation / shuttle (2)
   Private vehicle (cars, carpool, motorcycle, etc.) (3)
   Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs (4)

Q281 Which mode of transportation did you use?
If Select your first mode of transportation: (If your next segment is via BART please use this ques... Walk, bike, or other active transport Is Selected
   Walk (1)
If Select your first mode of transportation: (If your next segment is via BART please use this ques... Walk, bike, or other active transport Is Selected
   Bicycle (2)
If Select your first mode of transportation: (If your next segment is via BART please use this ques... Walk, bike, or other active transport Is Selected
   Other (3)
If Select your first mode of transportation: (If your next segment is via BART please use this ques... Public transportation / shuttle Is Selected
   Muni (4)
If Select your first mode of transportation: (If your next segment is via BART please use this ques... Public transportation / shuttle Is Selected
   BART (5)
If Select your first mode of transportation: (If your next segment is via BART please use this ques... Public transportation / shuttle Is Selected
   SF State Shuttle (6)
If Select your first mode of transportation: (If your next segment is via BART please use this ques... Public transportation / shuttle Is Selected
   Caltrain (7)
If Select your first mode of transportation: (If your next segment is via BART please use this ques... Public transportation / shuttle Is Selected

Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) (8)

If Select your first mode of transportation: (If your next segment is via BART please use this ques... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Drove Alone (9)

If Select your first mode of transportation: (If your next segment is via BART please use this ques... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Dropped Off / Picked Up (10)

If Select your first mode of transportation: (If your next segment is via BART please use this ques... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Motorcycle/Moped (11)

If Select your first mode of transportation: (If your next segment is via BART please use this ques... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Carpool/Vanpool (12)

If Select your first mode of transportation: (If your next segment is via BART please use this ques... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Taxi (19)

If Select your first mode of transportation: (If your next segment is via BART please use this ques... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Uber (20)

If Select your first mode of transportation: (If your next segment is via BART please use this ques... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Lyft (21)

If Select your first mode of transportation: (If your next segment is via BART please use this ques... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Other TNC (22)

Answer If Which mode of transportation did you use? Walk Is Selected Or Which mode of transportation did you use? Bicycle Is Selected Or Which mode of transportation did you use? Other Is Selected

Q282 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)
Answer If Which mode of transportation did you use? Muni Is Selected
Q208 Specify Muni Line

1-California (1)
1AX-California 'A' Express (2)
1BX-California 'B' Express (3)
2-Clement (4)
3-Jackson (5)
5-Fulton (7)
5R-Fulton Rapid (98)
6-Haight-Parnassus (8)
7-Haight-Noriega (61)
7R-Haight-Noriega Rapid (62)
7X-Noriega Express (75)
8AX Bayshore 'A' Express (90)
8BX Bayshore 'B' Express (91)
8-Bayshore (92)
9-San Bruno (10)
9R-San Bruno Rapid (93)
10-Townsend (14)
12-Folsom/Pacific (15)
14-Mission (16)
14R-Mission Rapid (17)
14X-Mission Express (18)
18-46th Avenue (94)
19-Polk (23)
21-Hayes (25)
22-Fillmore (26)
23-Monterey (27)
24-Divisadero (28)
25-Treasure Island (76)
27-Bryant (30)
28-19th Avenue (77)
28R-19th Avenue Rapid (32)
29-Sunset (78)
30-Stockton (30)
30X-Marina Express (35)
31-Balboa (36)
31AX-Balboa 'A' Express (37)
31BX-Balboa 'B' Express (38)
33-Ashbury-18th (39)
35-Eureka (40)
36-Teresita (41)
37-Corbett (42)
38-Geary (43)
38AX-Geary 'A' Express (44)
38BX-Geary 'B' Express (45)
38R-Geary Rapid (46)
39-Coit Tower (47)
41-Union (48)
43-Masonic (49)
44-O'Shaughnessy (50)
45-Union-Stockton (51)
47-Van Ness (52)
48-24th Street (53)
49-Van Ness-Mission (54)
52-Excelsior (55)
54-Felton (57)
55-16th Street (101)
56-Rutland (58)
57-Parkmerced (12)
66-Quintara (59)
67-Bernal Heights (60)
76X-Marin Headlands Express (63)
81X-Caltrain Express (65)
82X-Levi Plaza Express (66)
83X-Mid-Market Express (99)
88-BART Shuttle (67)
90-San Bruno Owl (69)
91-Owl (70)
108-Treasure Island (73)
F-Market & Wharves (79)
J-Church (80)
KT-Ingleside/Third Street (100)
L-Taraval (82)
M-Ocean View (74)
N-Judah (84)
California-Cable Car (87)
Powell-Hyde-Cable Car (88)
Powell-Mason-Cable Car (89)

Answer If Which mode of transportation did you use? Muni Is Selected

Q284 Please estimate (in miles) the distance you traveled in this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? BART Is Selected

Q285 Specify BART start station
   12th St. Oakland City Center (1)
   16th St. Mission (2)
   19th St. Oakland (3)
   24th St. Mission (4)
   Ashby (5)
   Balboa Park (6)
   Bay Fair (7)
   Castro Valley (8)
   Civic Center (9)
   Coliseum/Oakland Airport (10)
   Colma (11)
   Concord (12)
   Daly City (13)
Downtown Berkeley (14)
Dublin/Pleasanton (15)
El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int’l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of transportation did you use? BART Is Selected
Q286 Specify BART end station

12th St. Oakland City Center (1)
16th St. Mission (2)
19th St. Oakland (3)
24th St. Mission (4)
Ashby (5)
Balboa Park (6)
Bay Fair (7)
Castro Valley (8)
Civic Center (9)
Coliseum/Oakland Airport (10)
Colma (11)
Concord (12)
Daly City (13)
Downtown Berkeley (14)
Dublin/Pleasanton (15)
El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int'l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of transportation did you use? Caltrain Is Selected

Q287 Specify Caltrain start station
   22nd Street (1)
   Atherton (2)
   Bayshore (3)
   Belmont (4)
   Blossom Hill (5)
   Broadway (6)
   Burlingame (7)
   California Ave (8)
   Capitol (9)
   College Park (10)
   Diridon (11)
   Gilroy (12)
   Hayward Park (13)
   Hillsdale (14)
   Lawrence (15)
   Menlo Park (16)
   Millbrae (17)
   Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

Answer If Which mode of transportation did you use? Caltrain Is Selected
Q288 Specify Caltrain end station
   22nd Street (1)
   Atherton (2)
   Bayshore (3)
   Belmont (4)
   Blossom Hill (5)
   Broadway (6)
   Burlingame (7)
   California Ave (8)
   Capitol (9)
   College Park (10)
   Diridon (11)
   Gilroy (12)
   Hayward Park (13)
   Hillsdale (14)
   Lawrence (15)
Menlo Park (16)
Millbrae (17)
Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

Answer If Which mode of transportation did you use? Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) Is Selected

Q289 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? Carpool/Vanpool Is Selected

Q290 I was the:
   Passenger (1)
   Driver (2)

Answer If Which mode of transportation did you use? Carpool/Vanpool Is Selected

Q291 Number of people in the carpool/vanpool on Wednesday, April 6, 2016:
   2 (2)
   3 (3)
   4 (4)
Answer If Select your first mode of transportation:  (If your next segment is via BART please use this ques... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Q292 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Select your first mode of transportation: Taxi or TNC (Uber, Lyft, etc.) Is Selected

Q293 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Q296 On your trip from SF State's main campus, what was the mode of transportation for your second segment? If your next segment is via BART, please use this question to tell us how you got from campus to the BART station.

Walk, bike, or other active transport (1)
Public transportation / shuttle (2)
Private vehicle (cars, carpool, motorcycle, etc.) (3)
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs (4)
None (5)
If None Is Selected, Then Skip To End of Block

Q297 Which mode of transportation did you use?
If On your trip from SF State's main campus, what was your second mode of transportation? (If your l... Walk, bike, or other active transport Is Selected
Walk (1)
If On your trip from SF State's main campus, what was your second mode of transportation? (If your l... Walk, bike, or other active transport Is Selected
Bicycle (2)
If On your trip from SF State's main campus, what was your second mode of transportation? (If your l... Walk, bike, or other active transport Is Selected
Other (3)
If On your trip from SF State's main campus, what was your second mode of transportation? (If your l...
Public transportation / shuttle Is Selected

Muni (4)

If On your trip from SF State's main campus, what was your second mode of transportation? (If your l...
Public transportation / shuttle Is Selected

BART (5)

If Select your first mode of transportation: (If your next segment is via BART please use this ques...
Public transportation / shuttle Is Selected

SF State Shuttle (6)

If On your trip from SF State's main campus, what was your second mode of transportation? (If your l...
Public transportation / shuttle Is Selected

Caltrain (7)

If On your trip from SF State's main campus, what was your second mode of transportation? (If your l...
Public transportation / shuttle Is Selected

Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) (8)

If On your trip from SF State's main campus, what was your second mode of transportation? (If your l...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Drove Alone (9)

If On your trip from SF State's main campus, what was your second mode of transportation? (If your l...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Dropped Off / Picked Up (10)

If On your trip from SF State's main campus, what was your second mode of transportation? (If your l...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Motorcycle/Moped (11)

If On your trip from SF State's main campus, what was your second mode of transportation? (If your l...
Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Carpool/Vanpool (12)

If On your trip from SF State's main campus, what was your second mode of transportation? (If your l...
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Taxi (19)

If On your trip from SF State's main campus, what was your second mode of transportation? (If your l...
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Uber (20)

If On your trip from SF State's main campus, what was your second mode of transportation? (If your l...
Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected
Lyft (21)
If on your trip from SF State's main campus, what was your second mode of transportation? (If your l... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected
Other TNC (22)

Answer If Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? Walk Is Selected Or Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? Bicycle Is Selected Or Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? Other Is Selected

Q298 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? Muni Is Selected
Q209 Specify Muni Line
1-California (1)
1AX-California 'A' Express (2)
1BX-California 'B' Express (3)
2-Clement (4)
3-Jackson (5)
5-Fulton (7)
5R-Fulton Rapid (98)
6-Haight-Parnassus (8)
7-Haight-Noriega (61)
7R-Haight-Noriega Rapid (62)
7X-Noriega Express (75)
8AX Bayshore 'A' Express (90)
8BX Bayshore 'B' Express (91)
8-Bayshore (92)
9-San Bruno (10)
9R-San Bruno Rapid (93)
10-Townsend (14)
12-Folsom/Pacific (15)
14-Mission (16)
14R-Mission Rapid (17)
14X-Mission Express (18)
18-46th Avenue (94)
19-Polk (23)
21-Hayes (25)
22-Fillmore (26)
23-Monterey (27)
24-Divisadero (28)
25-Treasure Island (76)
27-Bryant (30)
28-19th Avenue (77)
28R-19th Avenue Rapid (32)
29-Sunset (78)
30-Stockton (30)
30X-Marina Express (35)
31-Balboa (36)
31AX-Balboa 'A' Express (37)
31BX-Balboa 'B' Express (38)
33-Ashbury-18th (39)
35-Eureka (40)
36-Teresita (41)
37-Corbett (42)
38-Geary (43)
38AX-Geary 'A' Express (44)
38BX-Geary 'B' Express (45)
38R-Geary Rapid (46)
39-Coit Tower (47)
41-Union (48)
43-Masonic (49)
44-O'Shaughnessy (50)
45-Union-Stockton (51)
47-Van Ness (52)
48-24th Street (53)
49-Van Ness-Mission (54)
52-Excelsior (55)
54-Felton (57)
55-16th Street (101)
56-Rutland (58)
57-Parkmerced (12)
66-Quintara (59)
67-Bernal Heights (60)
76X-Marin Headlands Express (63)
81X-Caltrain Express (65)
82X-Levi Plaza Express (66)
83X-Mid-Market Express (99)
88-BART Shuttle (67)
90-San Bruno Owl (69)
91-Owl (70)
108-Treasure Island (73)
F-Market & Wharves (79)
J-Church (80)
KT-Ingleside/Third Street (100)
L-Taraval (82)
M-Ocean View (74)
N-Judah (84)
California-Cable Car (87)
Powell-Hyde-Cable Car (88)
Powell-Mason-Cable Car (89)

Answer If Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? Muni Is Selected
Q300 Please estimate (in miles) the distance you traveled in this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? BART Is Selected
Q301 Specify BART start station
12th St. Oakland City Center (1)
16th St. Mission (2)
19th St. Oakland (3)
24th St. Mission (4)
Ashby (5)
Balboa Park (6)
Bay Fair (7)
Castro Valley (8)
Civic Center (9)
Coliseum/Oakland Airport (10)
Colma (11)
Concord (12)
Daly City (13)
Downtown Berkeley (14)
Dublin/Pleasanton (15)
El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int’l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of $\{q://QID296/ChoiceGroup/SelectedChoices\} did you use? BART Is Selected

Q302 Specify BART end station
   12th St. Oakland City Center (1)
   16th St. Mission (2)
   19th St. Oakland (3)
   24th St. Mission (4)
   Ashby (5)
   Balboa Park (6)
   Bay Fair (7)
   Castro Valley (8)
   Civic Center (9)
   Coliseum/Oakland Airport (10)
   Colma (11)
   Concord (12)
   Daly City (13)
   Downtown Berkeley (14)
   Dublin/Pleasanton (15)
   El Cerrito del Norte (16)
   El Cerrito Plaza (17)
   Embarcadero (18)
   Fremont (19)
Answer If Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? Caltrain Is Selected

Q303 Specify Caltrain start station

22nd Street (1)
Atherton (2)
Bayshore (3)
Belmont (4)
Blossom Hill (5)
Broadway (6)
Burlingame (7)
California Ave (8)
Capitol (9)
College Park (10)
Diridon (11)
Gilroy (12)
Hayward Park (13)
Hillsdale (14)
Lawrence (15)
Menlo Park (16)
Millbrae (17)
Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

Answer If Which mode of $\{q://QID296/ChoiceGroup/SelectedChoices\}$ did you use? Caltrain Is
Selected
Q304 Specify Caltrain end station
22nd Street (1)
Atherton (2)
Bayshore (3)
Belmont (4)
Blossom Hill (5)
Broadway (6)
Burlingame (7)
California Ave (8)
Capitol (9)
College Park (10)
Diridon (11)
Gilroy (12)
Hayward Park (13)
Hillsdale (14)
Lawrence (15)
Menlo Park (16)
Millbrae (17)
Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)
Answer If Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) Is Selected

Q305 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? Carpool/Vanpool Is Selected

Q306 I was the:
   Passenger (1)
   Driver (2)

Answer If Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? Carpool/Vanpool Is Selected

Q307 Number of people in the carpool/vanpool on Wednesday, April, 6, 2016:
   2 (2)
   3 (3)
   4 (4)
   5 (5)
   6 (6)
   7 (7)
   More than 7 (8)

Answer If On your trip from SF State's main campus, what was your second mode of transportation? (If your l... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Q308 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If On your trip from SF State's main campus, what was your second mode of transportation? (If your l... Taxi, Uber, Lyft, or other on-demand taxi or real-time ridesharing services known as TNCs Is Selected

Q309 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)
Q310 On your trip from SF State's main campus, what was the mode of transportation for your third segment? If your next segment is via BART, please use this question to tell us how you got from campus to the BART station.

   Walk, bike, or other active transport (1)
   Public transportation / shuttle (2)
   Private vehicle (cars, carpool, motorcycle, etc.) (3)
   Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs (4)
   None (5)

If None Is Selected, Then Skip To End of Block

Q311 Which mode of transportation did you use?

If On your trip from SF State's main campus, what was your third mode of transportation? (If your la... Walk, bike, or other active transport Is Selected

   Walk (1)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your la... Walk, bike, or other active transport Is Selected

   Bicycle (2)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your la... Walk, bike, or other active transport Is Selected

   Other (3)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your la... Public transportation / shuttle Is Selected

   Muni (4)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your la... Public transportation / shuttle Is Selected

   BART (5)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your la... Public transportation / shuttle Is Selected

   SF State Shuttle (6)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your la... Public transportation / shuttle Is Selected

   Caltrain (7)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your la... Public transportation / shuttle Is Selected

   Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) (8)
If On your trip from SF State's main campus, what was your third mode of transportation? (If your last... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Drove Alone (9)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your last... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Dropped Off / Picked Up (10)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your last... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Motorcycle/Moped (11)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your last... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Carpool/Vanpool (12)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your last... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Taxi (19)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your last... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Uber (20)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your last... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Lyft (21)

If On your trip from SF State's main campus, what was your third mode of transportation? (If your last... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

Other on-demand taxi or real-time ride-sharing service (22)

Answer If Which mode of transportation did you use? Walk Is Selected Or Which mode of transportation did you use? Bicycle Is Selected Or Which mode of transportation did you use? Other Is Selected

Q312 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? Muni Is Selected

Q210 Specify Muni Line

1-California (1)
1AX-California 'A' Express (2)
1BX-California 'B' Express (3)
2-Clement (4)
3-Jackson (5)
5-Fulton (7)
5R-Fulton Rapid (98)
6-Haight-Parnassus (8)
7-Haight-Noriega (61)
7R-Haight-Noriega Rapid (62)
7X-Noriega Express (75)
8AX Bayshore 'A' Express (90)
8BX Bayshore 'B' Express (91)
8-Bayshore (92)
9-San Bruno (10)
9R-San Bruno Rapid (93)
10-Townsend (14)
12-Folsom/Pacific (15)
14-Mission (16)
14R-Mission Rapid (17)
14X-Mission Express (18)
18-46th Avenue (94)
19-Polk (23)
21-Hayes (25)
22-Fillmore (26)
23-Monterey (27)
24-Divisadero (28)
25-Treasure Island (76)
27-Bryant (30)
28-19th Avenue (77)
28R-19th Avenue Rapid (32)
29-Sunset (78)
30-Stockton (30)
30X-Marina Express (35)
31-Balboa (36)
31AX-Balboa 'A' Express (37)
31BX-Balboa 'B' Express (38)
33-Ashbury-18th (39)
35-Eureka (40)
36-Teresita (41)
37-Corbett (42)
38-Geary (43)
38AX-Geary 'A' Express (44)
38BX-Geary 'B' Express (45)
38R-Geary Rapid (46)
39-Coit Tower (47)
41-Union (48)
43-Masonic (49)
44-O'Shaughnessy (50)
45-Union-Stockton (51)
47-Van Ness (52)
48-24th Street (53)
49-Van Ness-Mission (54)
52-Excelsior (55)
54-Felton (57)
55-16th Street (101)
56-Rutland (58)
57-Parkmerced (12)
66-Quintara (59)
67-Bernal Heights (60)
76X-Marin Headlands Express (63)
81X-Caltrain Express (65)
82X-Levi Plaza Express (66)
83X-Mid-Market Express (99)
88-BART Shuttle (67)
90-San Bruno Owl (69)
91-Owl (70)
108-Treasure Island (73)
F-Market & Wharves (79)
J-Church (80)
KT-Ingleside/Third Street (100)
L-Taraval (82)
M-Ocean View (74)
N-Judah (84)
California-Cable Car (87)
Powell-Hyde-Cable Car (88)
Powell-Mason-Cable Car (89)

Answer If Which mode of transportation did you use? Muni Is Selected

Q314 Please estimate (in miles) the distance you traveled in this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? BART Is Selected

Q315 Specify BART start station
   12th St. Oakland City Center (1)
   16th St. Mission (2)
   19th St. Oakland (3)
   24th St. Mission (4)
   Ashby (5)
   Balboa Park (6)
   Bay Fair (7)
   Castro Valley (8)
   Civic Center (9)
   Coliseum/Oakland Airport (10)
   Colma (11)
   Concord (12)
   Daly City (13)
   Downtown Berkeley (14)
   Dublin/Pleasanton (15)
   El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int'l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of transportation did you use? BART Is Selected
Q316 Specify BART end station
   12th St. Oakland City Center (1)
   16th St. Mission (2)
19th St. Oakland (3)
24th St. Mission (4)
Ashby (5)
Balboa Park (6)
Bay Fair (7)
Castro Valley (8)
Civic Center (9)
Coliseum/Oakland Airport (10)
Colma (11)
Concord (12)
Daly City (13)
Downtown Berkeley (14)
Dublin/Pleasanton (15)
El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int’l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

**Answer** Which mode of transportation did you use? Caltrain Is Selected

**Q317** Specify Caltrain start station

- 22nd Street (1)
- Atherton (2)
- Bayshore (3)
- Belmont (4)
- Blossom Hill (5)
- Broadway (6)
- Burlingame (7)
- California Ave (8)
- Capitol (9)
- College Park (10)
- Diridon (11)
- Gilroy (12)
- Hayward Park (13)
- Hillsdale (14)
- Lawrence (15)
- Menlo Park (16)
- Millbrae (17)
- Morgan Hill (18)
- Mountain View (19)
- Palo Alto (20)
- Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

Answer If Which mode of transportation did you use? Caltrain Is Selected
Q318 Specify Caltrain end station
   22nd Street (1)
   Atherton (2)
   Bayshore (3)
   Belmont (4)
   Blossom Hill (5)
   Broadway (6)
   Burlingame (7)
   California Ave (8)
   Capitol (9)
   College Park (10)
   Diridon (11)
   Gilroy (12)
   Hayward Park (13)
   Hillsdale (14)
   Lawrence (15)
   Menlo Park (16)
   Millbrae (17)
   Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

Answer If Which mode of transportation did you use? Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) Is Selected

Q319 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of transportation did you use? Carpool/Vanpool Is Selected

Q320 I was the:
   Passenger (1)
   Driver (2)

Answer If Which mode of transportation did you use? Carpool/Vanpool Is Selected

Q321 Number of people in the carpool/vanpool on Wednesday, April 6, 2016:
   2 (2)
   3 (3)
   4 (4)
   5 (5)
   6 (6)
   7 (7)
Answer If On your trip from SF State's main campus, what was your third mode of transportation? (If your last segment was a private vehicle, select Private vehicle (cars, carpool, motorcycle, etc.)

Q322 Please estimate (in miles) the distance you traveled for this segment of your trip (for example, if you traveled 1 1/2 miles, enter 1.5)

Answer If On your trip from SF State's main campus, what was your third mode of transportation? (If your last segment was a taxi, Uber, Lyft, or other on-demand taxi or real-time ridesharing services known as TNCs, select Taxi, Uber, Lyft, or other on-demand taxi or real-time ridesharing services known as TNCs)

Q323 Please estimate (in miles) the distance you traveled for this segment of your trip (for example, if you traveled 1 1/2 miles, enter 1.5)

Q324 On your trip from SF State's main campus, what was the mode of transportation for your fourth segment? If your next segment is via BART, please use this question to tell us how you got from campus to the BART station.

- Walk, bike, or other active transport (1)
- Public transportation / shuttle (2)
- Private vehicle (cars, carpool, motorcycle, etc.) (3)
- Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs (4)
- None (5)

If None Is Selected, Then Skip To End of Block

Q325 Which mode of transportation did you use?

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your previous segment was a walk, select Walk)

- Walk (1)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your previous segment was a bike, select Bicycle)

- Bicycle (2)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your previous segment was a walk, select Other)

- Other (3)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your previous segment was a public transportation/shuttle, select Muni)

- Muni (4)
If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Public transportation / shuttle Is Selected

   BART (5)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Public transportation / shuttle Is Selected

   SF State Shuttle (6)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Public transportation / shuttle Is Selected

   Caltrain (7)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Public transportation / shuttle Is Selected

   Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) (8)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

   Drove Alone (9)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

   Dropped Off / Picked Up (10)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

   Motorcycle/Moped (11)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

   Carpool/Vanpool (12)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

   Taxi (19)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

   Uber (20)

If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs Is Selected

   Lyft (21)
If on your trip from SF State's main campus, what was your fourth mode of transportation? (If your p... Taxi, Uber, Lyft, or other on-demand taxi or real-time ride-sharing services known as TNCs is Selected

Other on-demand taxi or real-time ride-sharing service (22)

Answer If Which mode of $\{q://QID296/ChoiceGroup/SelectedChoices\}$ did you use? Walk is Selected Or Which mode of $\{q://QID296/ChoiceGroup/SelectedChoices\}$ did you use? Bicycle is Selected Or Which mode of $\{q://QID296/ChoiceGroup/SelectedChoices\}$ did you use? Other is Selected

Q326 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of $\{q://QID296/ChoiceGroup/SelectedChoices\}$ did you use? Muni is Selected

Q211 Specify Muni Line

1-California (1)
1AX-California 'A' Express (2)
1BX-California 'B' Express (3)
2-Clement (4)
3-Jackson (5)
5-Fulton (7)
5R-Fulton Rapid (98)
6-Haight-Parnassus (8)
7-Haight-Noriega (61)
7R-Haight-Noriega Rapid (62)
7X-Noriega Express (75)
8AX Bayshore 'A' Express (90)
8BX Bayshore 'B' Express (91)
8-Bayshore (92)
9-San Bruno (10)
9R-San Bruno Rapid (93)
10-Townsend (14)
12-Folsom/Pacific (15)
14-Mission (16)
14R-Mission Rapid (17)
14X-Mission Express (18)
18-46th Avenue (94)
19-Polk (23)
21-Hayes (25)
22-Fillmore (26)
23-Monterey (27)
24-Divisadero (28)
25-Treasure Island (76)
27-Bryant (30)
28-19th Avenue (77)
28R-19th Avenue Rapid (32)
29-Sunset (78)
30-Stockton (30)
30X-Marina Express (35)
31-Balboa (36)
31AX-Balboa 'A' Express (37)
31BX-Balboa 'B' Express (38)
33-Ashbury-18th (39)
35-Eureka (40)
36-Teresita (41)
37-Corbett (42)
38-Geary (43)
38AX-Geary 'A' Express (44)
38BX-Geary 'B' Express (45)
38R-Geary Rapid (46)
39-Coit Tower (47)
41-Union (48)
43-Masonic (49)
44-O'Shaughnessy (50)
45-Union-Stockton (51)
47-Van Ness (52)
48-24th Street (53)
49-Van Ness-Mission (54)
52-Excelsior (55)
54-Felton (57)
55-16th Street (101)
56-Rutland (58)
57-Parkmerced (12)
66-Quintara (59)
67-Bernal Heights (60)
76X-Marin Headlands Express (63)
81X-Caltrain Express (65)
82X-Levi Plaza Express (66)
83X-Mid-Market Express (99)
88-BART Shuttle (67)
90-San Bruno Owl (69)
91-Owl (70)
108-Treasure Island (73)
F-Market & Wharves (79)
J-Church (80)
KT-Ingleside/Third Street (100)
L-Taraval (82)
M-Ocean View (74)
N-Judah (84)
California-Cable Car (87)
Powell-Hyde-Cable Car (88)
Powell-Mason-Cable Car (89)

Answer If Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? Muni Is Selected
Q328 Please estimate (in miles) the distance you traveled in this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? BART Is Selected
Q329 Specify BART start station
12th St. Oakland City Center (1)
16th St. Mission (2)
19th St. Oakland (3)
24th St. Mission (4)
Ashby (5)
Balboa Park (6)
Bay Fair (7)
Castro Valley (8)
Civic Center (9)
Coliseum/Oakland Airport (10)
Colma (11)
Concord (12)
Daly City (13)
Downtown Berkeley (14)
Dublin/Pleasanton (15)
El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord/Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int'l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of $\{q://QID296/ChoiceGroup/SelectedChoices\} did you use? BART Is Selected

Q330 Specify BART end station

12th St. Oakland City Center (1)
16th St. Mission (2)
19th St. Oakland (3)
24th St. Mission (4)
Ashby (5)
Balboa Park (6)
Bay Fair (7)
Castro Valley (8)
Civic Center (9)
Coliseum/Oakland Airport (10)
Colma (11)
Concord (12)
Daly City (13)
Downtown Berkeley (14)
Dublin/Pleasanton (15)
El Cerrito del Norte (16)
El Cerrito Plaza (17)
Embarcadero (18)
Fremont (19)
Fruitvale (20)
Glen Park (21)
Hayward (22)
Lafayette (23)
Lake Merritt (24)
MacArthur (25)
Millbrae (26)
Montgomery St. (27)
North Berkeley (28)
North Concord-Martinez (29)
Orinda (30)
Pittsburg/Bay Point (31)
Pleasant Hill/Contra Costa Centre (32)
Powell St. (33)
Richmond (34)
Rockridge (35)
San Bruno (36)
San Francisco Int'l Airport (37)
San Leandro (38)
South Hayward (39)
South San Francisco (40)
Union City (41)
Walnut Creek (42)
West Dublin/Pleasanton (44)
West Oakland (43)

Answer If Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? Caltrain Is Selected

Q331 Specify Caltrain start station
   22nd Street (1)
   Atherton (2)
   Bayshore (3)
   Belmont (4)
Blossom Hill (5)
Broadway (6)
Burlingame (7)
California Ave (8)
Capitol (9)
College Park (10)
Diridon (11)
Gilroy (12)
Hayward Park (13)
Hillsdale (14)
Lawrence (15)
Menlo Park (16)
Millbrae (17)
Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)

Answer If Which mode of ${q://QID296/ChoiceGroup/SelectedChoices} did you use? Caltrain Is Selected

Q332 Specify Caltrain end station
22nd Street (1)
Atherton (2)
Bayshore (3)
Belmont (4)
Blossom Hill (5)
Broadway (6)
Burlingame (7)
California Ave (8)
Capitol (9)
College Park (10)
Diridon (11)
Gilroy (12)
Hayward Park (13)
Hillsdale (14)
Lawrence (15)
Menlo Park (16)
Millbrae (17)
Morgan Hill (18)
Mountain View (19)
Palo Alto (20)
Redwood City (21)
San Antonio (22)
San Bruno (23)
San Carlos (24)
San Francisco (25)
San Jose (26)
San Martin (27)
San Mateo (28)
Santa Clara (29)
South San Francisco (30)
Stanford (31)
Sunnyvale (32)
Tamien (33)
Answer If Which mode of $\{q://QID296/ChoiceGroup/SelectedChoices} did you use? Other bus provider than Muni (e.g. AC Transit/Golden Gate Transit/SamTrans) Is Selected

Q333 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If Which mode of $\{q://QID296/ChoiceGroup/SelectedChoices} did you use? Carpool/Vanpool Is Selected

Q334 I was the:
   Passenger (1)
   Driver (2)

Answer If Which mode of $\{q://QID296/ChoiceGroup/SelectedChoices} did you use? Carpool/Vanpool Is Selected

Q335 Number of people in the carpool/vanpool on Wednesday, April 6, 2016:
   2 (2)
   3 (3)
   4 (4)
   5 (5)
   6 (6)
   7 (7)
   More than 7 (8)

Answer If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your previous segment was via BART please use this question as an opportunity to tell us h... Private vehicle (cars, carpool, motorcycle, etc.) Is Selected

Q336 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)

Answer If On your trip from SF State's main campus, what was your fourth mode of transportation? (If your previous segment was via BART please use this question as an opportunity to tell us h... Taxi, Uber, Lyft, or other on-demand taxi or real-time ridesharing services known as TNCs Is Selected

Q337 Please estimate (in miles) the distance you traveled for this segment of your trip (for instance if you traveled 1 1/2 miles, enter 1.5)
Q199 How many round trips, other than those already reported in this survey, did you take
to/from campus (or home for on-campus residents) on Wednesday, April 6, 2016? Please do not
include trips taken within campus.

0 (No other trips made other than my commute to/from campus). (13)
1 (1)
2 (4)
3 (5)
4 (6)
5 (7)
6 (8)
7 (9)
8 (10)
9 (11)
10 or more (12)

If 0 (No other trips made other...) is selected, then skip to have you participated in or used / do...

Q200 What was your primary mode of travel for these trips? If this includes an auto trip for any
segment, please select that option.

Walk, bike, or other active transport (4)
Public transportation / shuttle (5)
Private vehicle (cars, carpool, motorcycle, etc.) (6)
Taxi, Uber, Lyft, or other on-demand taxi services known as TNCs (7)

Q201 How many of these trips occurred (arrived or departed campus) between the hours of 7-9 AM?

0 (12)
1 (1)
2 (2)
3 (3)
4 (4)
5 (5)
6 (6)
7 (7)
8 (8)
9 (9)
10 or more (11)

Q202 How many of these trips occurred (arrived or departed campus) between the hours of 4-6 PM?
0 (11)
1 (1)
2 (2)
3 (3)
4 (4)
5 (5)
6 (6)
7 (7)
8 (8)
9 (9)
10 or more (10)

q26 Have you participated in or used / do you currently participate in or use any of the following programs and services?

I wasn’t aware of this service (1) I’ve heard of this service but never used it (2) I occasionally (1-2 times a week) use this service (3) I frequently (3-5 days a week) use this service (4)

Free round trip transfer on Muni 28/28R from Daly City BART when using Clipper Card (1)

Bike Barn (2)
Bike Racks (7)
511 RideMatch Service (3)
Zipcar (9)
Electric Vehicle Charging Stations (10)

Answer If What is your primary affiliation with SF State? Staff or Administrator Is Selected Or What is your primary affiliation with SF State? Faculty Is Selected

Q146 For Employees: Have you participated in or used / do you currently participate in or use any of the following programs and services?
I wasn't aware of this service (1) I've heard of this service but never used it (2) I occasionally (1-2 times a week) use this service (3) I frequently (3-5 days a week) use this service (4)

Commuter Check Pre-Tax Transit Benefit (pre-tax purchase of transit passes) (1)
Vanpool (2)
Emergency Ride Home Program (3)
Pre-Tax Parking Benefit (pre-tax purchase of parking) (4)

Q27 Do you know where to go if you have questions about your commute or need other transportation information?
- Yes, and I have used the resources available to me before (1)
- Yes, but I have not used the resources available to me (2)
- No, I do not know what resources are available to me (3)

Q147 Which resources have you used to get transportation and commute information? (please check all that apply)
- SF State Website home page (1)
- Parking & Transportation Website (2)
- Word of mouth (Fellow student or Coworker) (3)
- My manager (5)
- Human Resources (6)
- Hiring Materials (7)
- A distribution list that I signed up for (8)
- Digital Screens found around campus (9)
- Other (please specify) (10) ____________________

Q116 In an effort to reduce parking demand and to expand affordable transportation options, SF State is exploring the possibility of pursuing discounts for our students, faculty, and staff for on-demand taxi services known as TNCs such as Uber and Lyft. Would you be interested in such a benefit?
- Yes (1)
- No (2)
Q212 Please provide any additional comments about transportation issues that relate to SF State.

q31 If you would like to be entered for a chance to receive a $100 gift card to the SF State Bookstore, please enter your email address.