



# 2016 BART Customer Satisfaction Study

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# INTRODUCTION

BART's Customer Satisfaction Study is a tool to help BART prioritize efforts to achieve high levels of customer satisfaction. The study entails surveying BART customers every two years to determine how well BART is meeting customers' needs and expectations. These surveys, initiated in 1996, are conducted by an independent research firm.

The BART Board of Directors, management and staff use customer satisfaction surveys to focus on specific service areas and issues important to BART customers. Making informed choices allows BART to better serve current riders, attract new customers, and enhance the quality of life in the Bay Area.

This report is based on 5,342 questionnaires completed by BART customers. These customers were surveyed while riding on randomly selected BART cars during all hours of operation on weekdays and weekends during an approximately three-week period in September/October 2016.

The Executive Summary in the next section highlights key findings from the survey. Subsequent sections present detailed analyses of the factors that influence customer satisfaction and a full description of the survey methodology, including a copy of the questionnaire.

The initial survey questions ask customers to describe their use of the system. Customers are then asked three key opinion tracking questions focusing on:

- Overall satisfaction;
- Willingness to recommend BART; and
- Perceptions of BART's value for the money.

In addition, the survey probes for ratings of 47 specific service attributes, ranging from on-time performance to station cleanliness. BART uses the service attribute ratings to set priorities for customer satisfaction initiatives.

It should be noted that a number of changes have occurred since the previous study in September 2014. Those which might have influenced customers' perceptions include:

- High ridership, contributing to increased crowding on trains and station platforms. Average weekday ridership was 440,600 trips in September 2016, a 2% increase over the previous study. More than one-third of survey respondents reported that they had to stand due to lack of seating. Additionally, BART Operations reported that "pass ups" increased at some San Francisco and Oakland stations, where already crowded trains were unable to accommodate all of the additional riders attempting to board.
- The continued aging of the BART system, under pressure from ridership growth. Although most of BART's train cars are more than 40 years old, BART runs more of its fleet than any other major transit agency in order to keep up with demand.
- Numerous scheduled weekend track closures for critical repair work in spring/summer 2015 and 2016.
- A slight decrease in BART's on-time performance between the two survey periods.
- A decrease in escalator reliability, particularly at busy San Francisco stations where the age of the equipment is a big factor.

- Elevator renovation projects at many stations, involving door and floor replacements. While these will result in more reliable and cleaner elevators in the long-term, these projects necessitated elevators being taken out of service for one to three weeks at several stations.
- Fare and parking fee increases. BART fares increased 3.4% in January 2016, and parking fees increased between the two survey periods as well.<sup>1</sup>
- Car layout modifications to increase standing room on 60 cars (about 10% of the fleet). Three different options were tested, in which seven to eight seats were removed in order to increase car capacity.
- The completion of the train car seat covering and floor replacement projects. The last upholstered seat covering was replaced with vinyl in December 2014, and the last carpeted floor was replaced with hard surface flooring in June 2015.
- The opening of the Oakland International Airport Station in November 2014.
- Increased usage of app-based ridesharing services, such as Uber and Lyft, in the Bay Area. Among survey respondents, about one in eight reported that they would use such a service to make their trip if BART were not available.

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<sup>1</sup> BART fares increase every two years based on an inflation-based formula, while parking fee increases are tied to parking occupancy levels at stations.

# EXECUTIVE SUMMARY

Although BART is still generally well-regarded by its customers, ratings have declined significantly since 2014.

- 69% say they are very or somewhat satisfied with BART. This is down six percentage points since 2014.
- 85% would definitely or probably recommend BART to a friend or out-of-town guest. While still representing very strong support, this percentage is down four points.
- 59% agree strongly or somewhat that “BART is a good value for the money.” This has also dropped four percentage points since 2014.

The decreases in satisfaction and likelihood to recommend are primarily due to losses in the top ratings (e.g., “very satisfied,” would “definitely” recommend). The decline in perceptions of value is fairly evenly split among the “agree strongly” and “agree somewhat” categories.

| Percent of BART customers saying . . .                                   | 2012 | 2014 | 2016 |
|--|------|------|------|
| They are <b>very satisfied</b> .....                                     | 40%  | 28%  | 24%  |
| They would <b>definitely recommend</b> BART .....                        | 69%  | 59%  | 55%  |
| They <b>agree strongly</b> that BART is a good value for the money ..... | 30%  | 25%  | 23%  |

As in the last survey, the key factors contributing to the decline in customer satisfaction – increased crowding on the system, aging trains and stations, and system cleanliness concerns – have persisted. To address these challenges, BART has begun implementing the “Better BART” renovation program to rebuild the system and ultimately improve customer satisfaction. A big part of this program is new “Fleet of the Future” train cars, which are expected to bring much needed relief to customers by easing crowding, increasing reliability and improving onboard conditions. (BART has ordered 775 new cars and is currently testing the first ten pilot cars. Pending funding availability, BART hopes to purchase an additional 306 new cars, significantly expanding the fleet size from 669 currently to 1,081.)

Other Better BART projects include a new train control system, an additional maintenance shop, new powerlines and substations, new tracks, and other critical safety and reliability upgrades, many of which will take quite a few years to complete. In the interim, the following efforts are underway to improve the customer experience.

## Train capacity

In an effort to accommodate more passengers with BART’s existing fleet and reduce pass ups, BART will modify 380 of its current cars (57% of the fleet) to include a row of single seats in the middle of the car. This modification involves removing seven seats to create a wider aisle and draw passengers away from the doorways. This layout was one of three options tested in 2016 and received a more favorable response from customers than the other two. This is a short-term measure to increase capacity until the new cars go into service.

## EXECUTIVE SUMMARY (continued)

In response to customer feedback, more handstraps for standing passengers will be installed on these modified cars. Additionally, the priority seats will be differentiated by using an alternate color seat covering to further encourage riders to yield these seats to seniors and people with disabilities.

### **Escalator and elevator improvements**

In order to improve escalator reliability, BART is currently planning a comprehensive overhaul. Additionally, the BART Board recently awarded a contract to install new street entry canopies at Powell Street and Civic Center stations. The canopies are key to protecting escalators from the elements and provide the ability to lock off the entrance at the street level. The long-term goal is to install additional canopies along Market Street that incorporate lessons learned from these first projects. BART also hired additional maintenance staff in 2016, which should contribute to increased escalator reliability this year.

In order to improve elevator reliability and cleanliness, BART is currently replacing elevator doors and floors at many of its stations.

### **Noise level onboard**

Using computer modeling technology, BART engineers have created a new wheel profile designed to reduce noise resulting from contact between train wheels and tracks. BART will soon begin implementing the new profile on its existing fleet, a project expected to take about two years to complete. BART's Fleet of the Future cars will also feature the new wheel profile, in addition to micro-plug doors that better seal out noise.

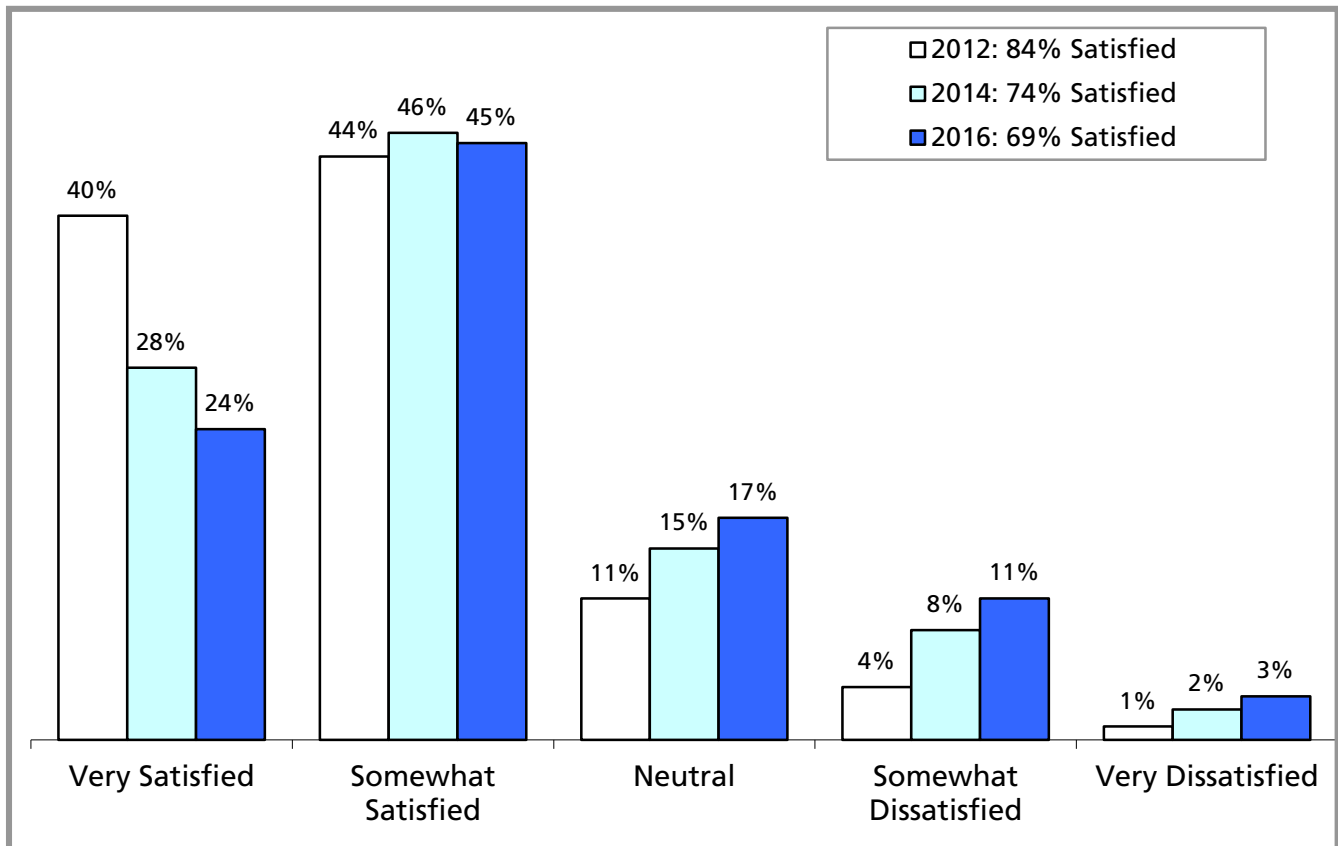


## DETAILED RESULTS

## OVERALL SATISFACTION - TRENDING

(2012 / 2014 / 2016 Comparison)

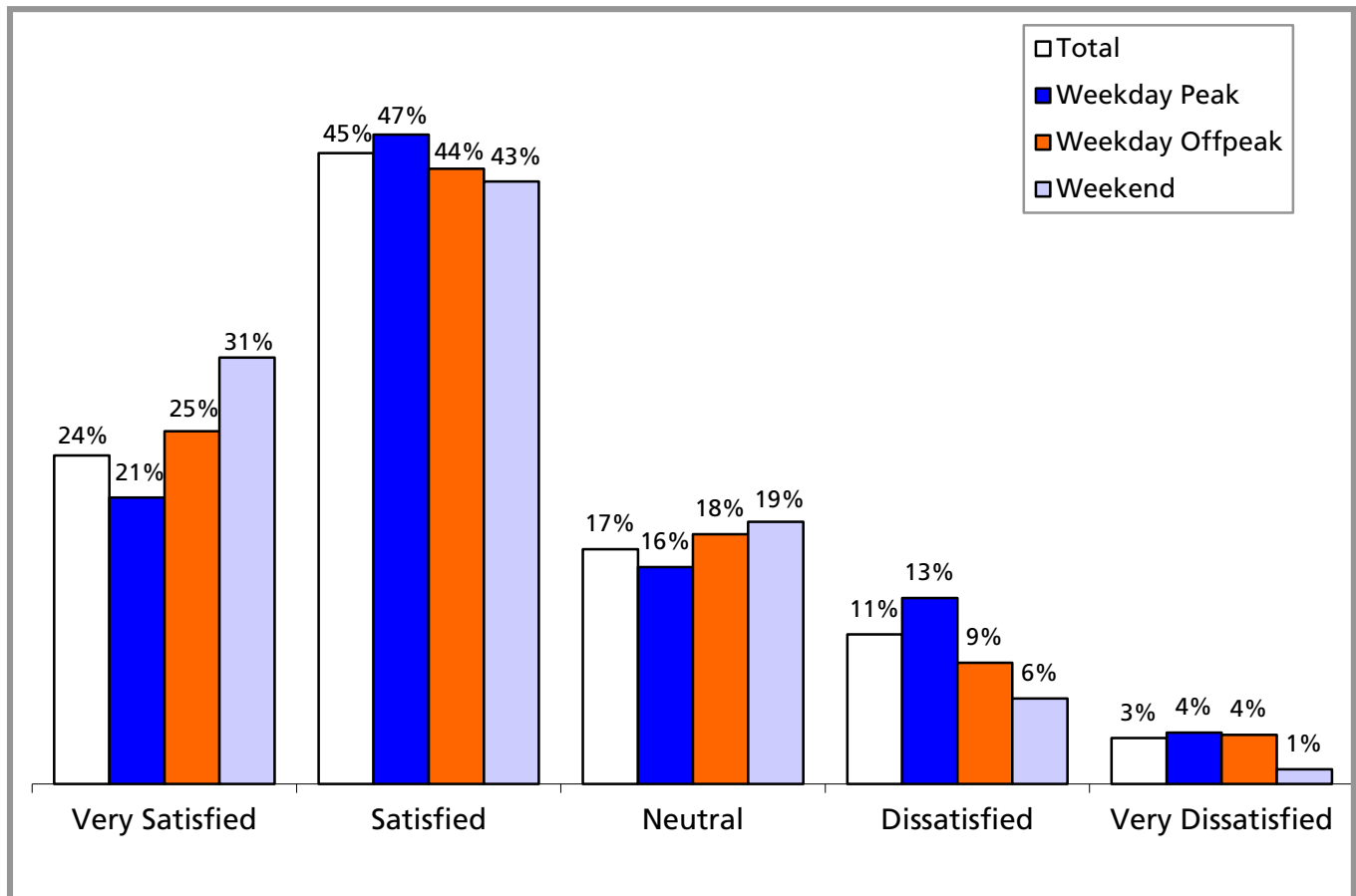
Overall satisfaction measured by those who are **very satisfied** or **somewhat satisfied** has dropped to 69% in 2016, down from 74% in 2014 and 84% in 2012. This was primarily driven by a continued decline in those who are **very satisfied**.



## 2016 OVERALL SATISFACTION

### (Peak / Off-Peak / Weekend Comparison)

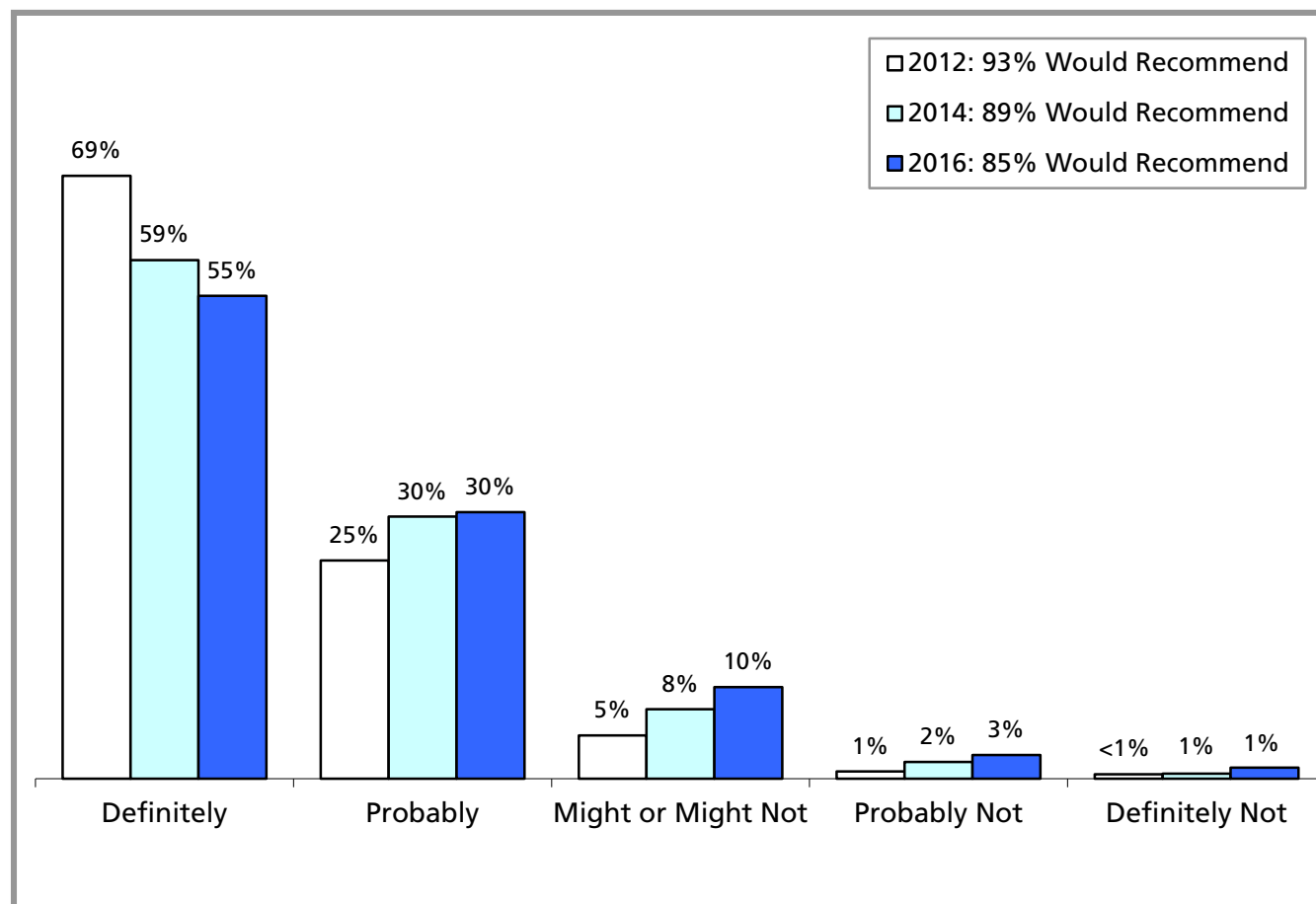
While overall satisfaction is at 69%, there are key differences among customers who ride during different time periods. Peak riders are more likely to be somewhat satisfied (as opposed to very satisfied), while a higher percentage of off-peak and weekend riders say they are very satisfied with BART.



## WILLINGNESS TO RECOMMEND BART - TRENDING

(2012 / 2014 / 2016 Comparison)

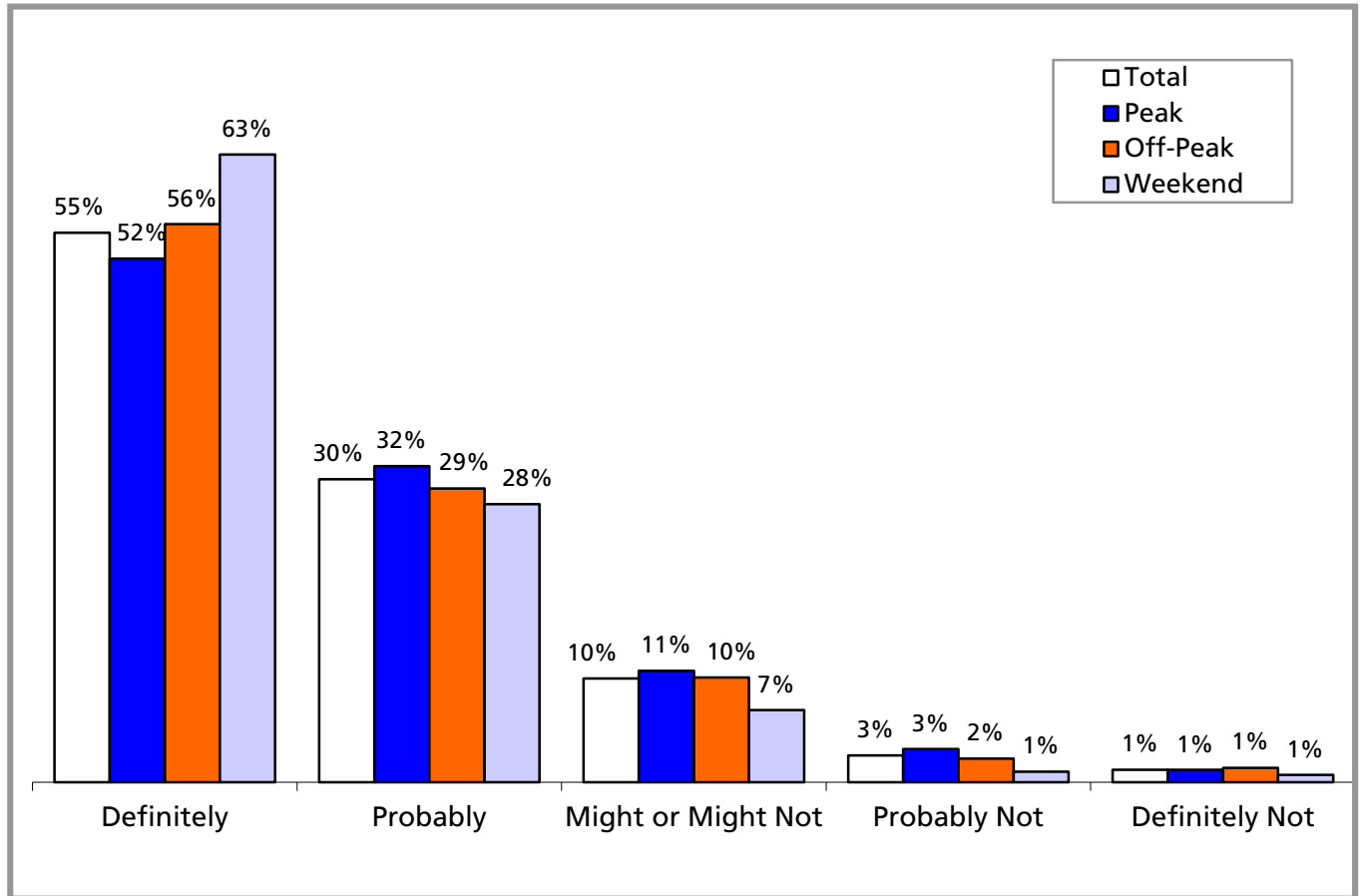
Although it remains at a very high level, overall willingness to recommend BART continued to decline in 2016. Compared to 2012, there has been an increase in the “probably” and “might or might not” recommend categories and a decrease in the “definitely” recommend category.



## 2016 WILLINGNESS TO RECOMMEND BART

(Peak / Off-Peak / Weekend Comparison)

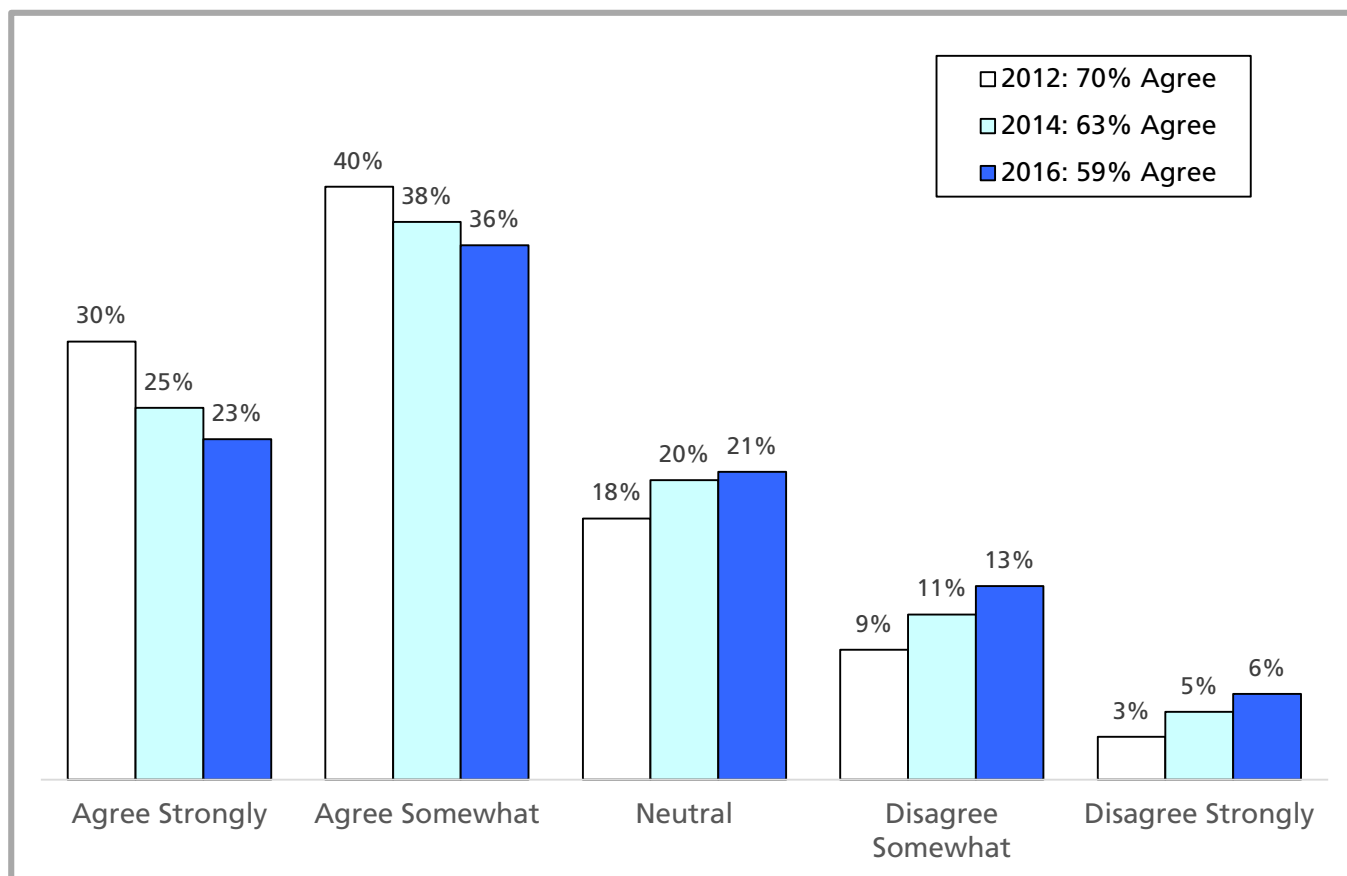
Peak period customers are less likely to definitely recommend BART than off-peak and weekend riders.



## PERCEPTION OF BART AS GOOD VALUE - TRENDING

### (2012 / 2014 / 2016 Comparison)

While over half (59%) of riders see BART as a good value, this rating has decreased sharply since 2012. The percentage of riders who disagree or are neutral has increased since 2012.

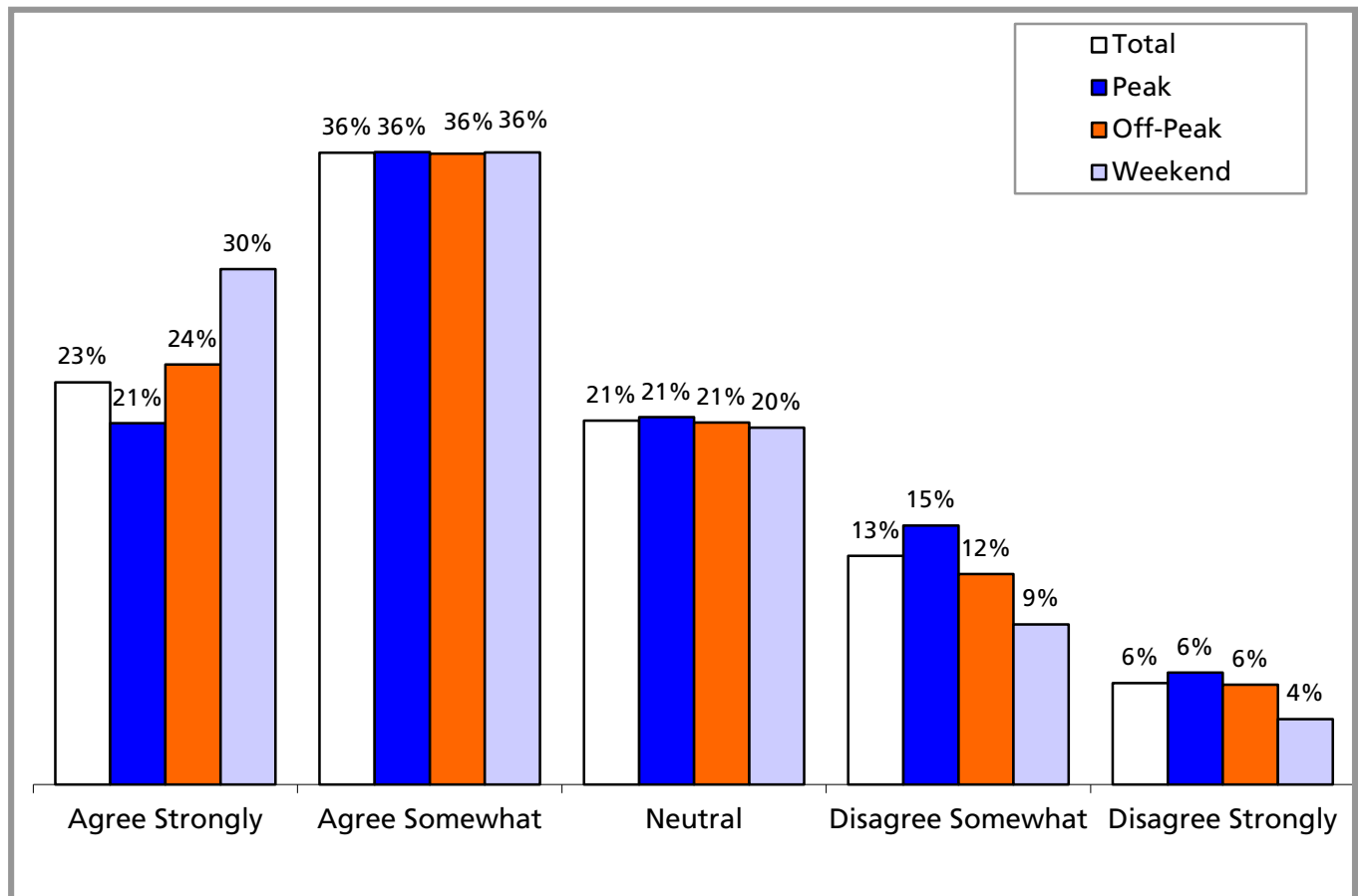


## 2016 PERCEPTION OF BART AS GOOD VALUE

(Peak / Off-Peak / Weekend Comparison)

Fewer peak period riders agree strongly that BART is a good value for the money than off-peak or weekend customers.

Peak period customers generally ride BART five or more days per week, so the aggregate fares they pay far exceed fares paid by off-peak and weekend customers. While off-peak and weekend customers generally ride BART less frequently, they are a much larger group of people overall and are an important part of public support for the BART system.



## SPECIFIC SERVICE ATTRIBUTES

In the 2016 survey, customers rated BART on 47 specific service attributes. The chart on the opposite page shows mean ratings for each of these 47 service attributes. Items appearing towards the top of the chart are rated highest, while items appearing at the bottom are rated lowest. The average rating (on a scale from 1 = Poor to 7 = Excellent) is shown next to the bar for each item. Given the large sample sizes, mean ratings are generally accurate to within  $\pm 0.05$  at a 95% confidence level.

BART received the highest ratings for:

- Clipper cards
- Availability of maps and schedules
- BART tickets
- On-time performance of trains

BART received the lowest ratings for:

- Restroom cleanliness
- Presence of BART police on trains
- Noise level on trains
- Elevator cleanliness

For a chart showing the percentage results, please see Appendix D.



## 2016 RATING OF SPECIFIC SERVICE ATTRIBUTES

Mean Rating (7-point scale)

|  |      |
|--|------|
| Clipper cards                                    | 5.85 |
| Availability of maps and schedules               | 5.65 |
| BART tickets                                     | 5.45 |
| On-time performance of trains                    | 5.27 |
| Timeliness of connections b/t BART trains        | 5.25 |
| Timely information about service disruptions     | 5.24 |
| bart.gov website                                 | 5.14 |
| Train interior kept free of graffiti             | 5.07 |
| Access for people with disabilities              | 5.03 |
| Reliability of ticket vending machines           | 5.02 |
| Hours of operation                               | 5.00 |
| Frequency of train service                       | 4.98 |
| Signs with transfer / platform / exit directions | 4.97 |
| Availability of bicycle parking                  | 4.97 |
| Reliability of faregates                         | 4.93 |
| Lighting in parking lots                         | 4.92 |
| Comfort of seats on trains                       | 4.85 |
| Length of lines at exit gates                    | 4.85 |
| Helpfulness & courtesy of Station Agents         | 4.79 |
| Timeliness of connections with buses             | 4.79 |
| Stations kept free of graffiti                   | 4.65 |
| Availability of Station Agents                   | 4.58 |
| Appearance of train exterior                     | 4.46 |
| Availability of standing room on trains          | 4.40 |
| Comfortable temperature aboard trains            | 4.38 |
| Stations - Overall condition / state of repair   | 4.37 |
| Escalator availability and reliability           | 4.33 |
| Appearance of landscaping                        | 4.32 |
| Elevator availability and reliability            | 4.28 |
| Personal security in BART system                 | 4.28 |
| Train interior cleanliness                       | 4.25 |
| Availability of car parking                      | 4.23 |
| Condition / cleanliness of seats on train        | 4.23 |
| Condition / cleanliness of windows on train      | 4.22 |
| Enforcement against fare evasion                 | 4.19 |
| Clarity of public address announcements          | 4.08 |
| Condition / cleanliness of floors on trains      | 4.05 |
| Presence of BART Police in stations              | 4.04 |
| Station cleanliness                              | 3.93 |
| Enforcement of no eating and drinking policy     | 3.93 |
| Availability of space on trains for luggage...   | 3.86 |
| Presence of BART Police in parking lots          | 3.86 |
| Availability of seats on trains                  | 3.86 |
| Elevator cleanliness                             | 3.71 |
| Noise level on trains                            | 3.67 |
| Presence of BART Police on trains                | 3.51 |
| Restroom cleanliness                             | 3.39 |

Among the 47 attributes, 34 showed statistically significant declines between 2014 and 2016. One attribute, *condition / cleanliness of seats on trains*, showed a statistically significant increase. The remaining 12 attributes were essentially flat, i.e., the changes were not statistically significant.

The chart in the next sub-section shows the percent change in the mean rating from 2014 to 2016. For details on statistical significance, refer to Appendix C.

The attributes with the largest declines were:

- Noise level on trains (-10.0%)
- Availability of seats on trains (-7.7%)
- Elevator availability and reliability (-6.6%)
- Enforcement against fare evasion (-6.3%)
- Escalator availability and reliability (-5.5%)

Regarding *noise level on trains*, it is possible that onboard noise levels in the Transbay Tube may have been louder than in 2014 due to a couple of factors. In summer 2015, new rail was installed in the Tube; new rail is typically louder until it is broken in. Additionally, in the months leading up to the survey, rail grinding was focused on the section of track between Glen Park and Daly City, as part of critical track work being done in that area. (The rail in the Transbay Tube was ground after the survey was completed.)

Going forward, BART will be making changes to the surface of the train wheels (the “wheel profile”) to reduce noise. BART expects to start this two-year process on its existing fleet in March 2017. BART’s new Fleet of the Future cars will also feature the new wheel profile, in addition to micro-plug doors that better seal out noise. (BART has ordered 775 new cars and is currently testing the first ten pilot cars. Pending funding availability, BART hopes to purchase an additional 306 new cars.)

The decline in *availability of seats on trains* is directly related to historically high ridership levels. Average weekday ridership in September 2016 was 440,600 trips, 2% higher than September 2014. Availability of seats is very important to BART’s customers. Those who stood due to lack of available seating during their BART trips reported lower satisfaction levels than those who did not.

In the long-term, BART’s capacity will increase as its new train cars go into service. When BART reaches its goal of having 1,081 cars in the fleet, BART will go from having about 39,000 total seats in the fleet to nearly 59,000 seats.

The decline in the next attribute, *elevator availability and reliability*, was likely due to elevators being offline for one to three weeks for floor and door replacement projects. At the time of the survey, there had been about 45 outages for this purpose. There’s more work to come, so further declines are likely before eventual improvements in reliability and cleanliness are seen. It should also be noted that there are many incidents on a daily basis where elevators go in and out of service, and these status reports are widely communicated.

Regarding *enforcement against fare evasion*, the BART Police Department reports that its staffing is down vs. two years ago. The decline in ratings of this attribute is likely related. BART currently has a task force exploring options, such as locking selected swing gates (which has been tested at some San Francisco stations), higher fare gates/fencing, and possibly having fare inspectors.

With regard to escalators, BART staff reports that most of the failures occur at six San Francisco stations (from Embarcadero through 24th Street Mission). The age of the equipment is a big factor, and there is a renovation plan in the works. Additionally, the BART Board recently awarded a contract to install new street entry canopies at Powell Street and Civic Center stations. The canopies are key to protecting escalators from the elements and provide the ability to lock off the entrance at the street level. The long-term goal is to install additional canopies along Market Street that incorporate lessons learned from these first projects. BART also hired additional maintenance staff in 2016, which should contribute to increased escalator reliability this year.

The attribute with a rating increase, *condition / cleanliness of seats on trains*, was up 3.9% vs. 2014. This improvement is likely due to the new vinyl seat covers, which are easier to keep clean. (The last upholstered seat was changed in December 2014.)

## SERVICE ATTRIBUTE RATINGS: PERCENTAGE CHANGES

### 2016 vs. 2014 comparisons

| <b>SCALE: 1 = Poor, 7 = Excellent</b>                 | <b>2016 Mean</b> | <b>2014 Mean</b> | <b>Difference</b> | <b>% Change (mean)^</b> | <b>Statistically Significant at 95% Conf. Lvl?</b> |
|---|------------------|------------------|-------------------|-------------------------|--|
| Noise level on trains                                 | 3.67             | 4.08             | -0.41             | -10.0%                  | Yes  |
| Availability of seats on trains                       | 3.86             | 4.18             | -0.32             | -7.7%                   | Yes  |
| Elevator availability and reliability                 | 4.28             | 4.58             | -0.30             | -6.6%                   | Yes  |
| Enforcement against fare evasion                      | 4.19             | 4.47             | -0.28             | -6.3%                   | Yes  |
| Escalator availability and reliability                | 4.33             | 4.58             | -0.25             | -5.5%                   | Yes  |
| Availability of space on trains for luggage, bikes... | 3.86             | 4.06             | -0.20             | -4.9%                   | Yes  |
| Personal security in BART system                      | 4.28             | 4.49             | -0.21             | -4.7%                   | Yes  |
| Availability of standing room on trains               | 4.40             | 4.61             | -0.21             | -4.6%                   | Yes  |
| Stations - Overall condition / state of repair        | 4.37             | 4.57             | -0.20             | -4.4%                   | Yes  |
| Station cleanliness                                   | 3.93             | 4.11             | -0.18             | -4.4%                   | Yes  |
| Elevator cleanliness                                  | 3.71             | 3.88             | -0.17             | -4.4%                   | Yes  |
| Availability of car parking                           | 4.23             | 4.41             | -0.18             | -4.1%                   | Yes  |
| Length of lines at exit gates                         | 4.85             | 5.04             | -0.19             | -3.8%                   | Yes  |
| Presence of BART Police on trains                     | 3.51             | 3.65             | -0.14             | -3.8%                   | Yes  |
| Reliability of faregates                              | 4.93             | 5.12             | -0.19             | -3.7%                   | Yes  |
| Restroom cleanliness                                  | 3.39             | 3.52             | -0.13             | -3.7%                   | Yes  |
| Presence of BART Police in stations                   | 4.04             | 4.19             | -0.15             | -3.6%                   | Yes  |
| On-time performance of trains                         | 5.27             | 5.46             | -0.19             | -3.5%                   | Yes  |
| Availability of Station Agents                        | 4.58             | 4.73             | -0.15             | -3.2%                   | Yes  |
| Clarity of public address announcements               | 4.08             | 4.21             | -0.13             | -3.1%                   | Yes  |
| bart.gov website                                      | 5.14             | 5.30             | -0.16             | -3.0%                   | Yes  |
| Enforcement of no eating and drinking policy          | 3.93             | 4.05             | -0.12             | -3.0%                   | Yes  |
| Reliability of ticket vending machines                | 5.02             | 5.17             | -0.15             | -2.9%                   | Yes  |
| Appearance of train exterior                          | 4.46             | 4.59             | -0.13             | -2.8%                   | Yes  |
| Frequency of train service                            | 4.98             | 5.11             | -0.13             | -2.5%                   | Yes  |
| Stations kept free of graffiti                        | 4.65             | 4.76             | -0.11             | -2.3%                   | Yes  |
| Appearance of landscaping                             | 4.32             | 4.42             | -0.10             | -2.3%                   | Yes  |
| Condition / cleanliness of windows on train           | 4.22             | 4.32             | -0.10             | -2.3%                   | Yes  |
| Presence of BART Police in parking lots               | 3.86             | 3.95             | -0.09             | -2.3%                   | Yes  |
| Timeliness of connections between BART trains         | 5.25             | 5.36             | -0.11             | -2.1%                   | Yes  |
| Train interior kept free of graffiti                  | 5.07             | 5.17             | -0.10             | -1.9%                   | Yes  |
| Access for people with disabilities                   | 5.03             | 5.13             | -0.10             | -1.9%                   | Yes  |
| Signs with transfer / platform / exit directions      | 4.97             | 5.06             | -0.09             | -1.8%                   | Yes  |
| Timeliness of connections with buses                  | 4.79             | 4.85             | -0.06             | -1.2%                   | No   |
| Availability of maps and schedules                    | 5.65             | 5.71             | -0.06             | -1.1%                   | Yes  |
| BART tickets  | 5.45             | 5.50             | -0.05             | -0.9%                   | No   |
| Availability of bicycle parking                       | 4.97             | 5.01             | -0.04             | -0.8%                   | No   |
| Comfortable temperature aboard trains                 | 4.38             | 4.41             | -0.03             | -0.7%                   | No   |
| Train interior cleanliness                            | 4.25             | 4.28             | -0.03             | -0.7%                   | No   |
| Timely information about service disruptions          | 5.24             | 5.26             | -0.02             | -0.4%                   | No   |
| Lighting in parking lots                              | 4.92             | 4.94             | -0.02             | -0.4%                   | No   |
| Helpfulness and courtesy of Station Agents            | 4.79             | 4.79             | 0.00              | 0.0%                    | No   |
| Condition / cleanliness of floors on trains           | 4.05             | 4.05             | 0.00              | 0.0%                    | No   |
| Comfort of seats on trains                            | 4.85             | 4.84             | 0.01              | 0.2%                    | No   |
| Hours of operation                                    | 5.00             | 4.98             | 0.02              | 0.4%                    | No   |
| Clipper cards   | 5.85             | 5.80             | 0.05              | 0.9%                    | No   |
| Condition / cleanliness of seats on train             | 4.23             | 4.07             | 0.16              | 3.9%                    | Yes  |

^The % change (mean) is calculated by dividing the difference in means by the 2014 mean. For example, on the "Clipper cards" rating, the 2016 rating is 5.85; the 2014 rating is 5.80. The difference between these two mean ratings is 0.05. So the calculation for the above table is 0.05 divided by 5.80 = 0.9%.

## QUADRANT ANALYSIS

The chart on page 21 (titled "2016 Quadrant Chart") is designed to help set priorities for future initiatives to improve customer satisfaction. This chart quantifies how important each service characteristic appears to be from a customer perspective (using the vertical axis) and shows the average customer rating for each characteristic (using the horizontal axis). For a more detailed description of how this chart is derived, see Appendix G.

The vertical axis crosses the horizontal axis at the average (mean) performance rating from the benchmark survey in 1996. This vertical axis has remained in this location in all subsequent surveys so that Quadrant Charts can easily be compared year-to-year.

The "Target Issues" quadrant identifies those service attributes which appear to be most important, but which receive relatively low ratings from BART riders. Based on the vertical axis used since 1996, target issues include the 15 attributes listed below. This quadrant looks very similar to the 2014 chart; there are just three new target issues, which are identified in bold type below.

- Station condition / state of repair
- Availability of seats on trains
- Availability of standing room on trains
- Condition / cleanliness of seats on trains
- Availability of space on trains for luggage, bicycles, and strollers
- Train interior cleanliness
- Condition / cleanliness of floors on trains
- Comfortable temperature aboard trains
- Personal security in the BART system
- Elevator availability and reliability
- **Escalator availability and reliability**
- Station cleanliness
- **Presence of BART Police in stations**
- Appearance of train exterior
- **Presence of BART Police in parking lots**

*Escalator availability and reliability* declined in ratings (-5.5%) and increased in importance. The presence of BART Police attributes declined slightly in ratings (-3.6% for stations; -2.3% for parking lots), but increased quite a bit in importance.

In looking at the types of items in the Target Issues quadrant, nearly half involve conditions onboard – both capacity issues and cleanliness issues. BART expects that its new Fleet of the Future train cars will help relieve crowding as they will expand the fleet and feature wider aisles. However, it will probably be at least a couple more years until they have a significant impact on crowding, as they will be phased in as they arrive and complete testing. In the near-term, the BART Board recently approved car layout modifications which will increase standing room on 380 of BART's current fleet of 669 cars.

Regarding cleanliness, while seat condition/cleanliness remains a target issue, this attribute did improve vs. 2014 (+3.9%), likely due to the new vinyl seat covers on all train cars.

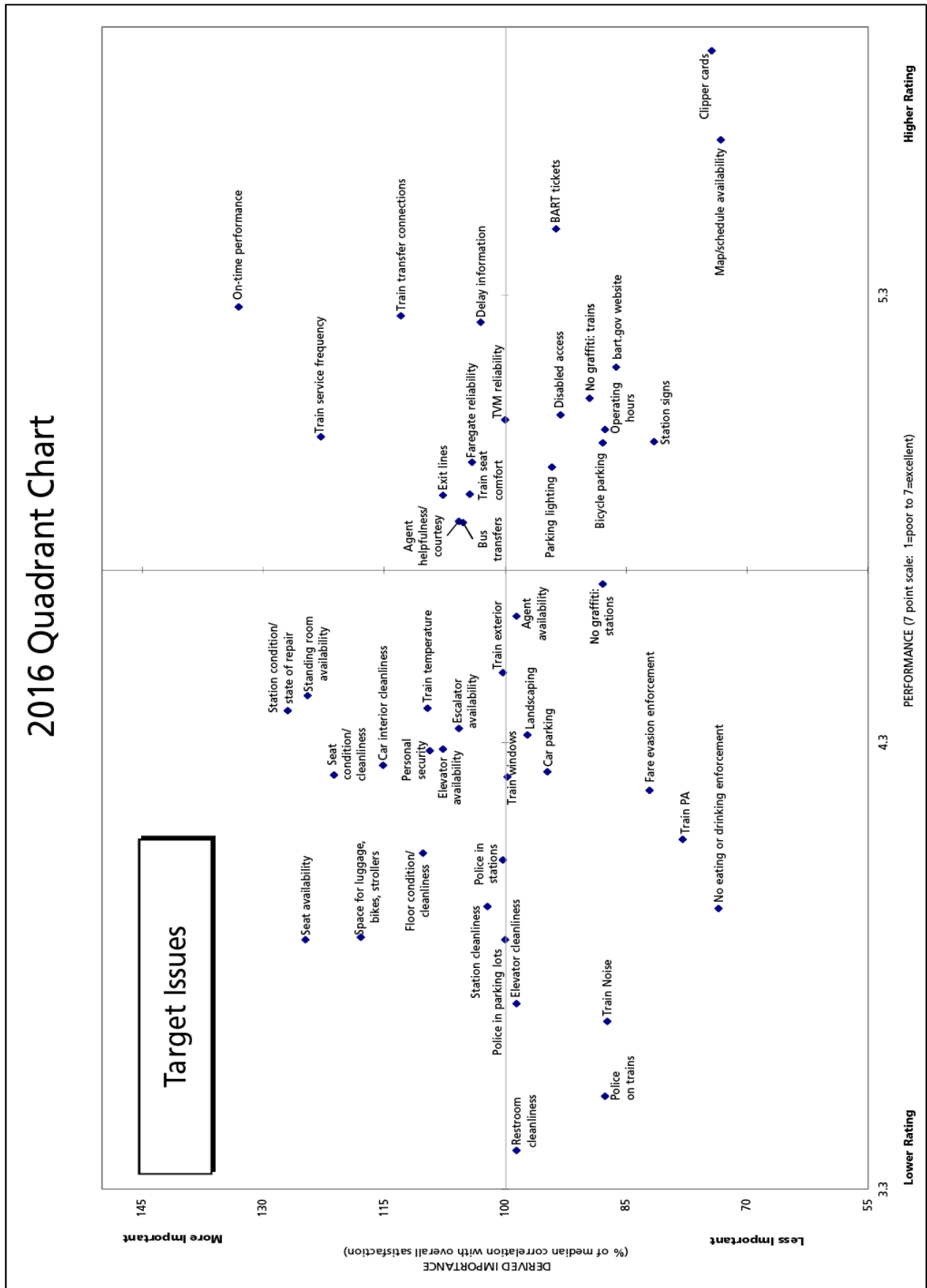
The other main category in the Target Issues quadrant involves stations – overall condition / state of repair, cleanliness, and equipment reliability. In the long-term, the passage of the Measure RR bond will enable BART to fund much of its Better BART renovation program, rebuilding aging infrastructure and revitalizing the overall condition of the system. In the near-term, BART has been replacing elevator doors and floors to improve reliability and cleanliness. An escalator renovation plan is also in the works, which is expected to greatly improve escalator reliability, particularly in downtown San Francisco.

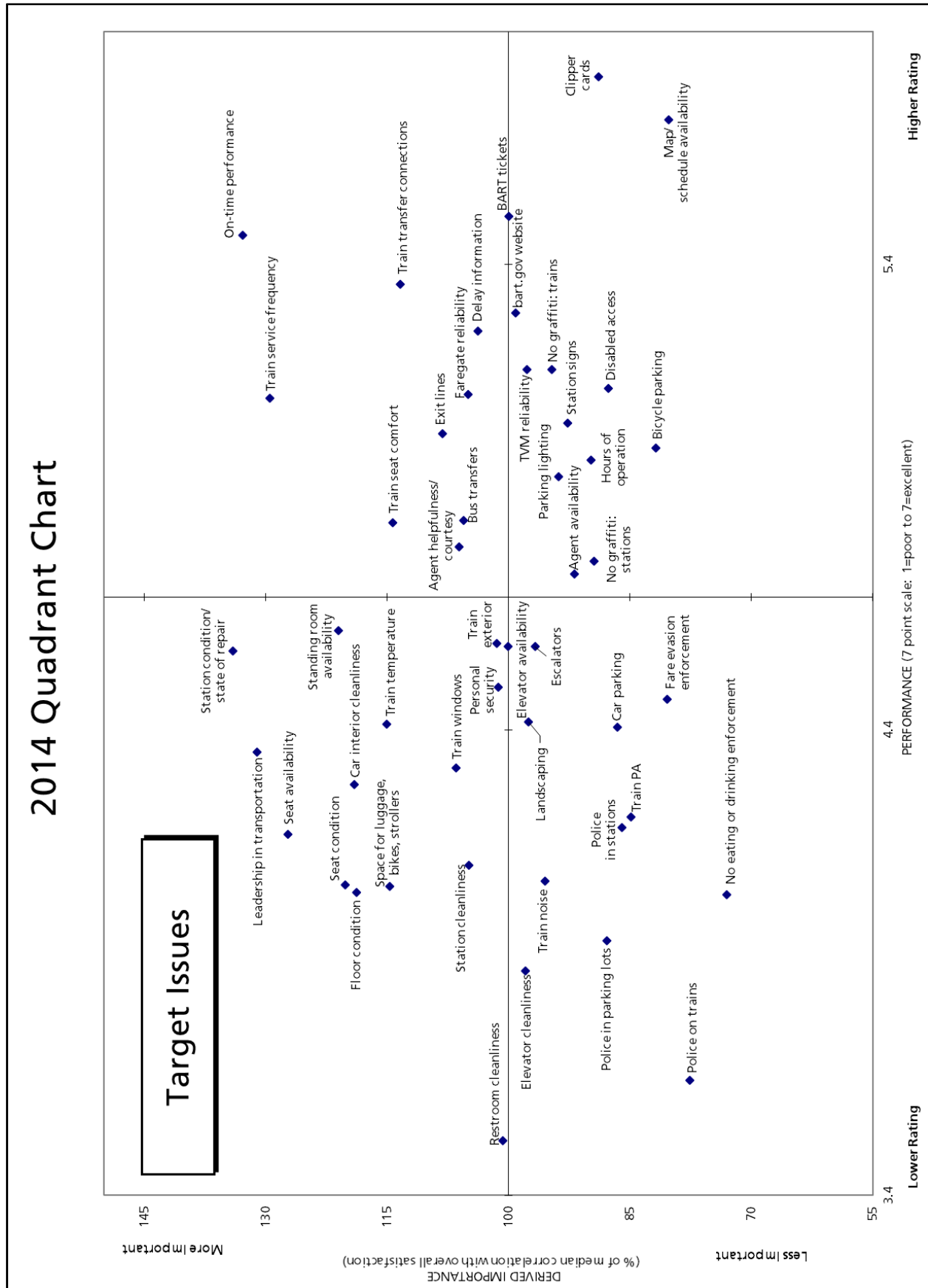
For comparison purposes, the 2014 Quadrant Chart is included after the 2016 chart.

Notes:

- The vertical axis on the charts is based on using a mean statistic of 4.685 - the average mean score of all the attributes for the 1996 benchmark study.
- The rating scale differs slightly on the 2016 chart, where the minimum is 3.3. It was set at 3.4 in 2014.

## 2016 Quadrant Chart







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## SATISFACTION TRENDS

The chart on the next page shows overall satisfaction ratings from 1996 – 2016 on the primary axis. Average weekday ridership for September of each year is shown on the secondary axis. The chart is further annotated to show some significant factors impacting customer perceptions and use of BART.

In 1996, 80% of customers were satisfied with BART. Two years later customer satisfaction had dropped to 74%. The events most likely to influence customer satisfaction, which took place in between the two surveys, were a large fare increase (the third since 1995), a work stoppage, and aging equipment. Also, the effects of a \$1.2 billion renovation program began to be felt during this period. Customer satisfaction often suffers at the beginning of a renovation program because service is impacted by cars, escalators, and elevators being taken off-line.

By 2002, customer satisfaction was back up to 80%, and in 2004, BART registered an all-time high rating of 86%. Factors that increased satisfaction probably included keeping fare increases relatively small, the opening of the extension to the San Francisco International Airport, the introduction of permit parking, and the completion of the renovation program.

The 2006 survey reflects residual effects of these improvements. In 2008, ridership surged as gas prices rose, and a fire in the Hayward train yard in May impacted riders on the Fremont line. However, BART improved train interior cleanliness and increased evening and Sunday train frequency beginning January 1, 2008.

Between the 2008 and 2010 surveys, BART ridership dropped 7% reflecting the impacts of the longest recession since World War II, running from December 2007 through June 2009. Between these two survey periods, unemployment in the three-county BART District rose from 6.3% to 10.6%. BART implemented a 6.1% fare increase in July 2009, six months earlier than anticipated, in order to help close a budget deficit.<sup>2</sup> In addition, BART reduced evening and Sunday train frequency in September 2009, effectively reversing the service increase implemented in 2008.

By the 2012 survey period, ridership had skyrocketed, topping 400,000 average weekday trips for the first time in BART's history (an increase of 14% vs. the 2010 survey period). The local economy was recovering, gas prices were on the rise, and BART customer satisfaction rebounded to 84%.

In 2014, overall satisfaction dropped ten points to 74%, as ridership surged (430,200 average weekday trips) on a system in dire need of renovation. Other factors which may have influenced customer satisfaction included two work stoppages in 2013, the elimination of many restrictions on bicycles onboard in 2013, and fare and parking fee increases.

In 2016, overall satisfaction continued to erode, dropping to 69%. Although the pace of ridership growth has slowed a bit, average weekday trips remain at historically high levels, resulting in extremely crowded conditions, continuing to strain the aging system. This has resulted not only in packed trains, but also in "pass ups," where passengers are unable to board due to crowding and must wait for the next train. BART Operations reports that pass ups have increased at some downtown San Francisco and Oakland stations.

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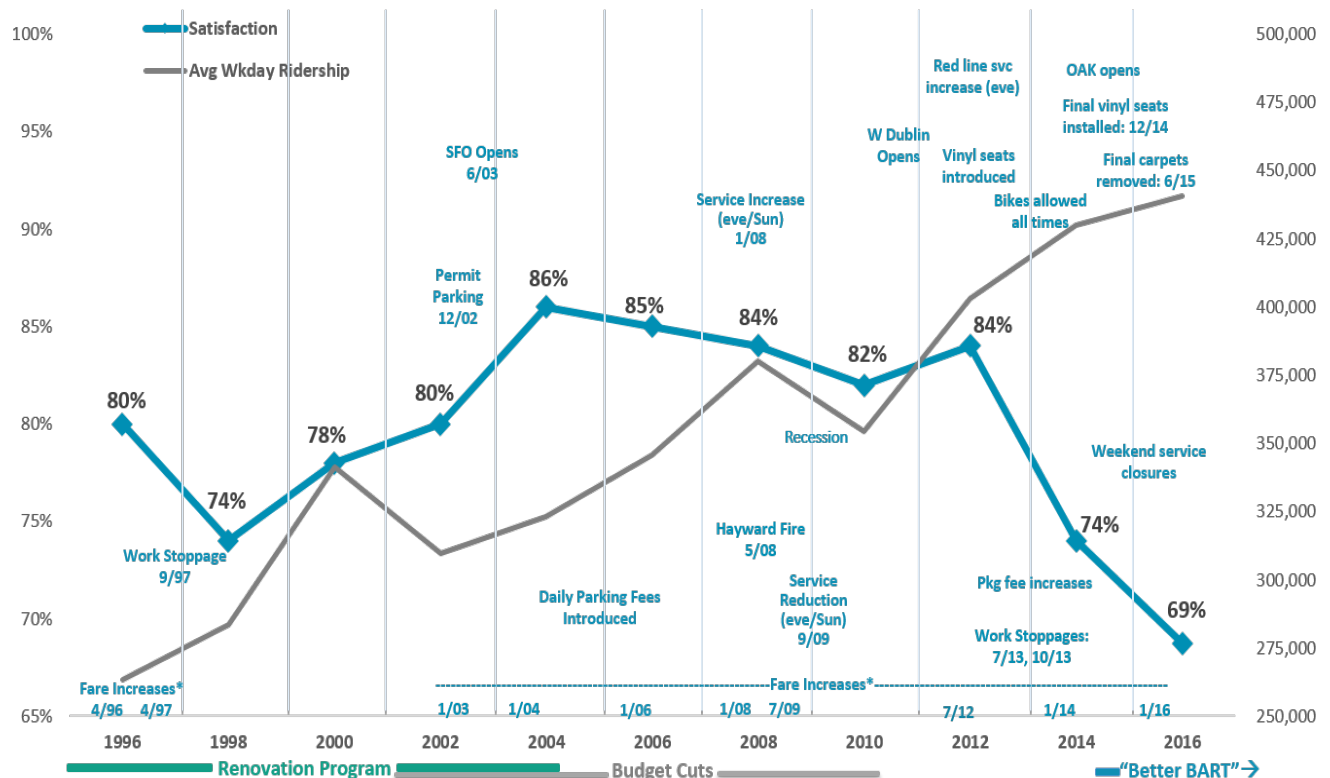
<sup>2</sup> The 7/09 fare increase of 6.1% does not include the minimum fare increase (+\$0.25) or the SFO premium fare increase (+\$2.50).

Other factors between the 2014 and 2016 surveys include:

- Numerous scheduled weekend track closures for critical repair work in spring/summer 2015 and 2016.
- A slight decrease in BART's on-time performance between the two survey periods. (BART's operational data show that 92.0% of trains were on time in the July – September 2016 period. This compares to 93.8% on time in the July – September 2014 period.)
- A fare increase of 3.4% in January 2016, as well as parking fee increases in 2015 and 2016.

Going forward, BART's current re-investment program, "Better BART," offers the opportunity to repeat the success of the last major renovation program with new train cars and upgraded infrastructure to better meet the needs of its riders.

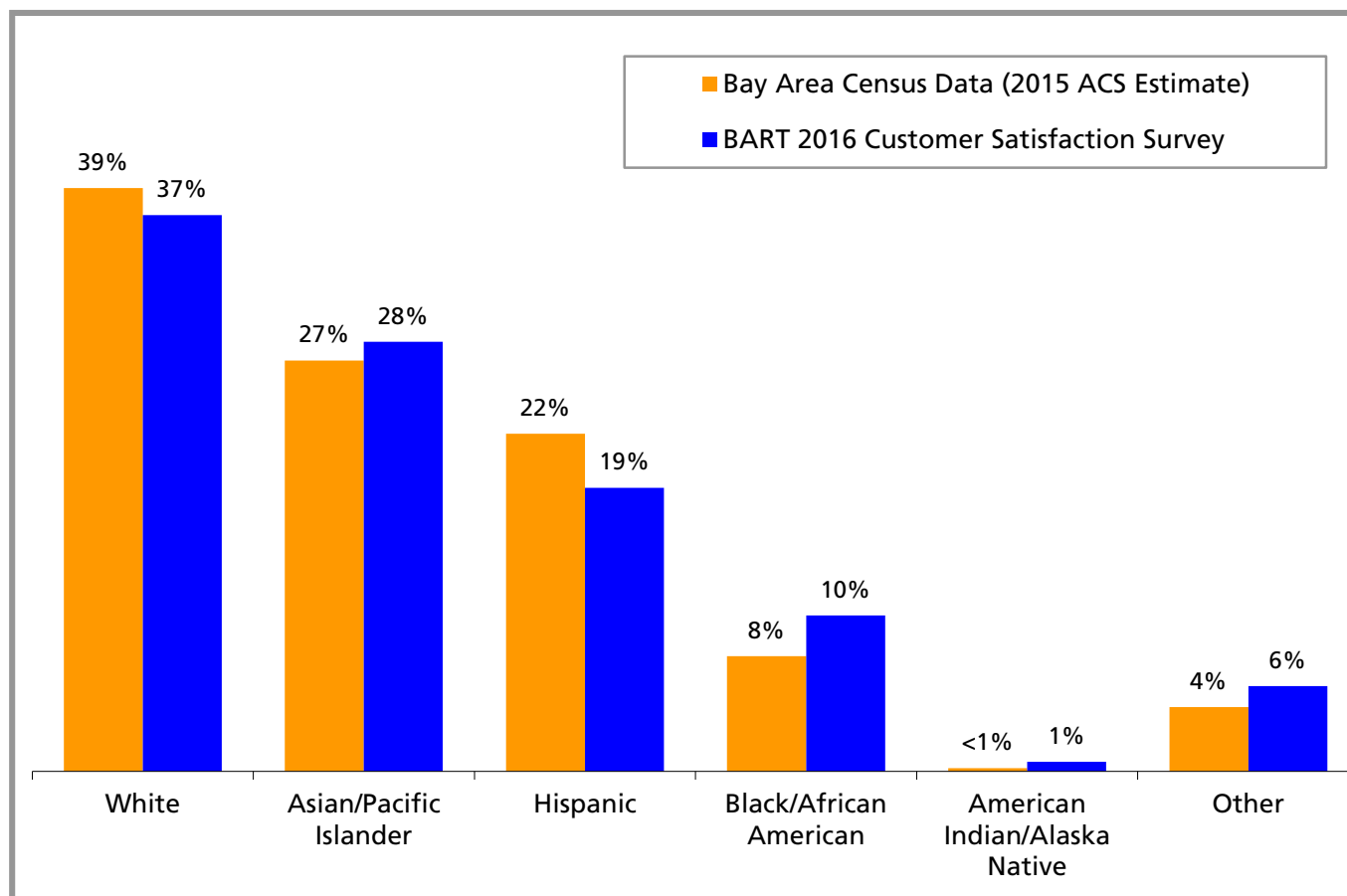
### Satisfaction Trends and Average Weekday Ridership: 1996 - 2016



\*Average fare increases were as follows: 4/96: 13.0%; 4/97: 11.4%; 1/03: 5.0%; 1/04: 10.0%; 1/06: 3.7%; 1/08: 5.4%; 7/09: 6.1%; 7/12: 1.4%; 1/14: 5.2%; 1/16: 3.4%. The 2006 fare increase of 3.7% doesn't include an additional \$0.10 capital surcharge. The 7/09 fare increase of 6.1% doesn't include the minimum fare increase (+\$0.25) or the SFO premium fare increase (+\$2.50.)

## BART CUSTOMER ETHNICITY COMPARED TO REGIONAL DATA

BART customers' ethnicities reflect the diversity of the Bay Area.



### Sources:

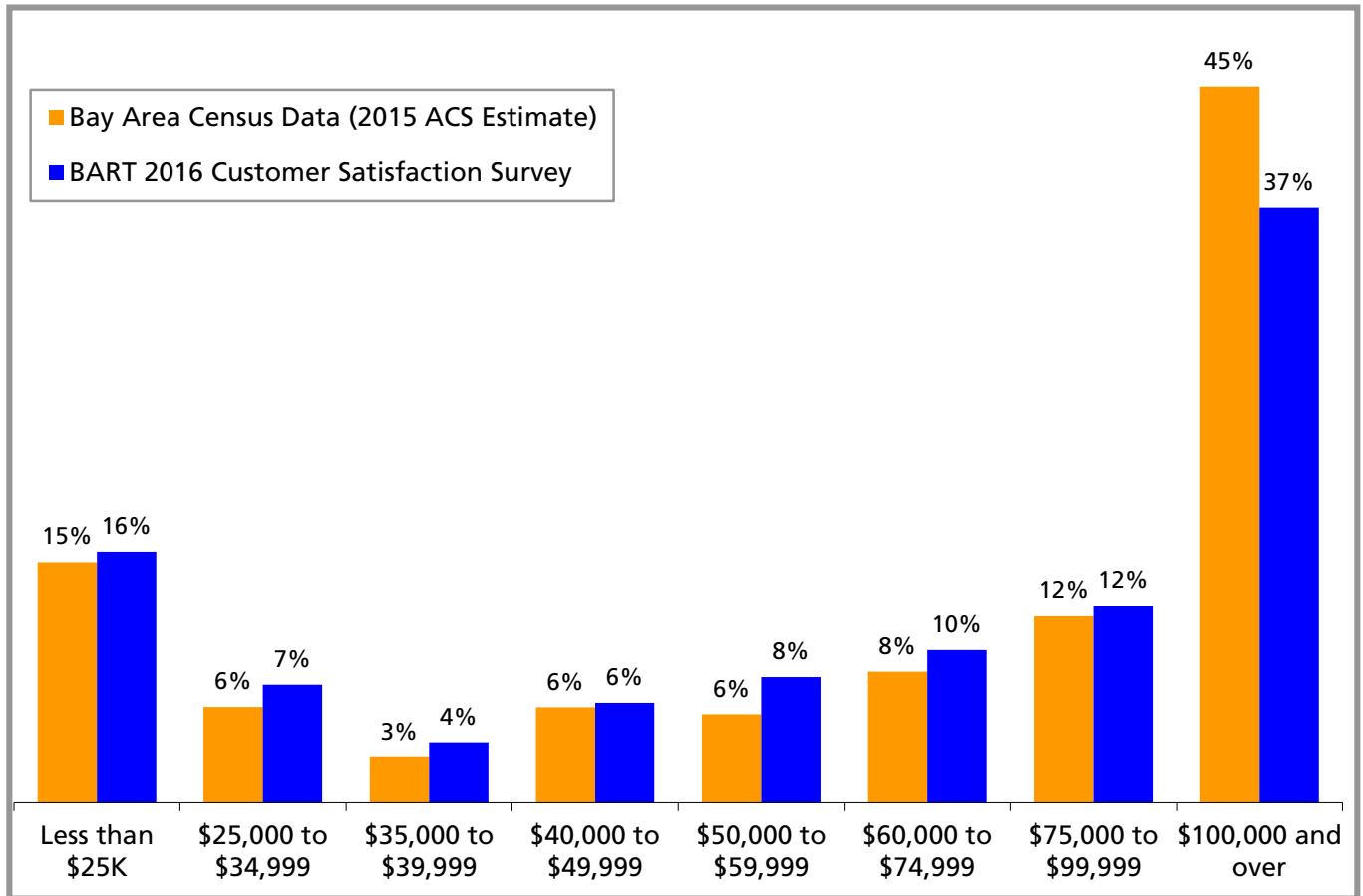
- U.S. Census Bureau, 2015 American Community Survey 1-Year Estimates: Table C03002 "Hispanic or Latino Origin by Race." Universe: Total Population. ([factfinder.census.gov](http://factfinder.census.gov))
- BART 2016 Customer Satisfaction Survey

### Notes:

- The ACS 2015 estimates shown only include data for the four counties within BART's service area: Alameda, Contra Costa, San Francisco, and San Mateo. Census tables adjust for unit non-response by weighting at the tract-level.
- The categories shown in this chart classify respondents based on single vs. two-plus race and Hispanic vs. non-Hispanic. The categories "White," "Black/African American," "Asian/Pacific Islander," and "American Indian/Alaska Native" only include respondents who reported a single race and are non-Hispanic. All two-plus race, non-Hispanic responses are included within "Other." All Hispanic responses are included within Hispanic, regardless of race. Note that ethnicity data are categorized differently in other charts within this report, so the percentages shown will differ.
- The BART data distribution is based on 5,210 responses and excludes 2% non-response.
- In order to maintain comparability with prior years' BART data, those who responded to the ethnicity question but skipped the Hispanic question are included within the non-Hispanic race categories.
- Totals may not add to 100% due to rounding.

## BART CUSTOMER INCOMES COMPARED TO REGIONAL DATA

BART customers' household incomes approximately track regional household income distribution; however, there are notable differences at the highest income level.



### Sources:

- U.S. Census Bureau, 2015 American Community Survey 1-Year Estimates: B19001 "Household Income in the Past 12 Months." Universe: Households. (factfinder.census.gov)
- BART 2016 Customer Satisfaction Survey

### Notes:

- 1) The ACS 2015 estimates shown only include data for the four counties within BART's service area: Alameda, Contra Costa, San Francisco, and San Mateo. Census tables adjust for unit non-response by weighting at the tract-level.
- 2) The BART data distribution is based on 4,891 responses and excludes 8% non-response. Note that other tables within this report include non-response, so the percentages shown will differ.
- 3) Totals may not add to 100% due to rounding.

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## Appendix A: QUESTIONNAIRE

Questionnaires in:

English

Spanish

Chinese

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# Survey & Contest

Please complete this survey and **hand it back to the survey coordinator**. If necessary, you can also mail the survey to: BART Marketing & Research, P.O. Box 12688, Oakland, CA 94604-2688.

**Grand Prize: Win an iPad!** Enter on back for a chance to win an iPad or one of four \$100 Clipper cards.

## USAGE OF BART

- 1 Which BART station did you enter before boarding this train?

(Entry Station) \_\_\_\_\_

- 2 About what time did you get on this train?

(Hour) \_\_\_\_\_ (Minute) \_\_\_\_\_ ☐ AM ☐ PM

- 3 At which BART station will you exit the system?

(Exit Station) \_\_\_\_\_

- 4 Are you transferring between BART trains on this trip?

☐ No ☐ Yes

- 5 What is the **primary** purpose of this trip? (Check only one)

- |   |   |
|---|---|
| <input type="checkbox"/> Commute to/from work | <input type="checkbox"/> Medical/Dental     |
| <input type="checkbox"/> School               | <input type="checkbox"/> Shopping           |
| <input type="checkbox"/> Airplane trip        | <input type="checkbox"/> Restaurant         |
| <input type="checkbox"/> Sports event         | <input type="checkbox"/> Theater or Concert |
| <input type="checkbox"/> Visit friends/family | <input type="checkbox"/> Other: _____       |

- 6 If BART service were not available, how would you make this trip? (Check your one best option)

- ☐ I would not make this trip
- ☐ Bus or other transit (all the way to my destination)
- ☐ Drive alone to my destination and park
- ☐ Carpool
- ☐ Uber, Lyft, Flywheel or other app-based service
- ☐ Taxi
- ☐ Bicycle to my destination
- ☐ Other: \_\_\_\_\_

- 7 Did you use a **Clipper** card to pay for this BART trip?

☐ No ☐ Yes

- 8 What **type of fare** did you pay for this BART trip? (Check one)

- |   |  |
|---|--|
| <input type="checkbox"/> Regular BART fare                        | <input type="checkbox"/> Senior discount   |
| <input type="checkbox"/> High Value Discount (\$48 or \$64 value) | <input type="checkbox"/> Disabled discount |
| <input type="checkbox"/> Muni Fast Pass                           | <input type="checkbox"/> Student discount  |
|   | <input type="checkbox"/> Other: _____      |

- 9 How did you travel between home and BART today?

- ☐ Walked all the way to BART
- ☐ Bicycled
- ☐ Bus/transit
- ☐ Drove alone
- ☐ Carpooled
- ☐ Dropped off
- ☐ Uber, Lyft, etc.
- ☐ Taxi
- ☐ Other: \_\_\_\_\_

Where did you **park**?

☐ In BART lot ☐ Off-site

What fee, if any, did you **pay**?

☐ None/free ☐ Daily Reserved

☐ Daily fee ☐ Monthly Reserved

- 10 How long have you been riding BART?

- ☐ This is my first time on BART
- ☐ 6 months or less
- ☐ More than 6 months but less than 1 year
- ☐ 1 - 2 years
- ☐ 3 - 5 years
- ☐ More than 5 years

- 11 How often do you **currently** ride BART? (Check one)

- ☐ 6 - 7 days a week
- ☐ 5 days a week
- ☐ 3 - 4 days a week
- ☐ 1 - 2 days a week
- ☐ 1 - 3 days a **month**
- ☐ Less than once a **month**

About how many times a year? \_\_\_\_\_

## OPINION OF BART

- 12 Overall, how satisfied are you with the services provided by BART?

- ☐ Very Satisfied
- ☐ Somewhat Satisfied
- ☐ Neutral
- ☐ Somewhat Dissatisfied
- ☐ Very Dissatisfied

- 13 Would you recommend using BART to a friend or out-of-town guest?

- ☐ Definitely
- ☐ Probably
- ☐ Might or might not
- ☐ Probably not
- ☐ Definitely not

- 14 To what extent do you agree with the following statement: "BART is a good value for the money."

- ☐ Agree Strongly
- ☐ Agree Somewhat
- ☐ Neutral
- ☐ Disagree Somewhat
- ☐ Disagree Strongly

## ABOUT YOURSELF

- 15 After you boarded the train for this trip, did you stand because seating was unavailable?

☐ No ☐ Yes - whole trip ☐ Yes - part of trip

→ **NOTE:** Please answer BOTH questions 16a and 16b.

- 16a Are you of Hispanic, Latino or Spanish origin?

☐ No ☐ Yes

- 16b What is your race or ethnic identification? (Check one or more)

- ☐ White
- ☐ Black/African American
- ☐ Asian or Pacific Islander
- ☐ American Indian or Alaska Native
- ☐ Other: \_\_\_\_\_

(Questions are based on the U.S. Census)

- 17a Do you speak a language other than English at home?

☐ No

☐ Yes, I speak: \_\_\_\_\_

- 17b If "Yes" to question 17a, how well do you speak English?

☐ Very well ☐ Well ☐ Not well ☐ Not at all

- 18 Gender: ☐ Male ☐ Female ☐ \_\_\_\_\_

- 19 Age: ☐ 12 or younger ☐ 35 - 44
- ☐ 13 - 17 ☐ 45 - 54
- ☐ 18 - 24 ☐ 55 - 64
- ☐ 25 - 34 ☐ 65 and older

- 20 What is your total annual household income before taxes?

- |  |  |
|--|--|
| <input type="checkbox"/> Under \$25,000      | <input type="checkbox"/> \$50,000 - \$59,999 |
| <input type="checkbox"/> \$25,000 - \$34,999 | <input type="checkbox"/> \$60,000 - \$74,999 |
| <input type="checkbox"/> \$35,000 - \$39,999 | <input type="checkbox"/> \$75,000 - \$99,999 |
| <input type="checkbox"/> \$40,000 - \$49,999 | <input type="checkbox"/> \$100,000 and over  |

- 21 Including yourself, how many people live in your household?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6+

- 22 What is your home ZIP code?

☐ Live outside U.S.

**CONTEST ENTRY:**

NAME: \_\_\_\_\_

DAYTIME TELEPHONE NUMBER ( \_\_\_\_\_ ) \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

☐ Yes ☐ No☐ Yes ☐ No

**CONTEST RULES:** No purchase necessary. Void where prohibited. You may enter more than once. This sweepstakes ends on 10/24/16 at 5 PM PDT. Sponsor is Bay Area Rapid Transit (BART). Open only to U.S. legal residents of California who are at least 18 years old at time of entry. Employees/contractors of BART and their family/household members are not eligible to enter. Other restrictions apply. Sponsor will award one iPad (approximate value \$399) and four Clipper cards (approximate value \$100 each). Aggregate prize value: \$799. Winners will be chosen by random drawing. Need not be present to win. All federal, state and local regulations apply. For Official Rules, go to [www.bart.gov/survey](http://www.bart.gov/survey).

**OVER** ➔



# Encuesta y Concurso

Por favor, complete esta encuesta y **entreguela de vuelta al coordinador de la encuesta**. También puede enviar la encuesta a: BART Marketing & Research, P.O. Box 12688, Oakland, CA 94604-2688.

**Gran Premio: ¡Gane un iPad!** Participe al dorso para ganar un iPad o una de cuatro tarjetas Clipper de \$100.

## USO DE BART

**1** ¿En qué estación de BART entró usted antes de abordar este tren?  
 \_\_\_\_\_  
 (Estación de entrada)

**2** ¿A qué hora ingresó a este tren?  
 \_\_\_\_\_ : \_\_\_\_\_  
 (Hora) (Minuto) ☐ AM ☐ PM

**3** ¿En qué estación saldrá usted del sistema BART?  
 \_\_\_\_\_  
 (Estación de salida)

**4** ¿Está haciendo transbordo entre trenes de BART en este viaje?  
☐ No ☐ Sí

**5** ¿Cuál es el objetivo **principal** de este viaje? (Marque sólo una opción)  
☐ Viaje al/del trabajo ☐ Médico/Dental  
☐ Escuela ☐ Compras  
☐ Viaje en avión ☐ Restaurante  
☐ Evento deportivo ☐ Teatro o Concierto  
☐ Visita a amistades/familiares ☐ Otro: \_\_\_\_\_

**6** Si el servicio de BART no hubiera estado disponible, ¿cómo habría realizado este viaje? (Marque la mejor opción)  
☐ No hubiera realizado este desplazamiento  
☐ En autobús u otro transporte público (hasta llegar al destino)  
☐ Manejando solo hasta mi destino y estacionando  
☐ Viaje compartido en automóvil  
☐ Uber, Lyft, Flywheel u otro servicio basado en apps  
☐ Taxi  
☐ Habría usado mi bicicleta hasta llegar a destino  
☐ Otro: \_\_\_\_\_

**7** ¿Utilizó una tarjeta **Clipper** para pagar por este viaje de BART?  
☐ No ☐ Sí

**8** ¿Qué **tipo de tarifa** pagó por este viaje en BART? (Marque uno)  
☐ Tarifa regular de BART ☐ Descuento para personas mayores  
☐ Descuento de gran volumen ☐ Descuento para discapacitados  
 (valor de \$48 o \$64) ☐ Descuento para estudiantes  
☐ Fast Pass de Muni ☐ Otro: \_\_\_\_\_

**9** ¿Cómo se desplazó desde su residencia hasta BART hoy?  
☐ Caminé a pie hasta BART  
☐ Bicicleta  
☐ Autobús/transporte público  
☐ Manejó solo  
☐ Viaje compartido  
☐ Alguien me llevó  
☐ Uber, Lyft, etc.  
☐ Taxi  
☐ Otro: \_\_\_\_\_

¿Dónde **estacionó**?  
☐ En el estacionamiento de BART  
☐ En otro lugar  
 Si **pagó** ¿cuál fue la tarifa?  
☐ Ninguna/Gratuita  
☐ Tarifa diaria  
☐ Tarifa diaria reservada  
☐ Tarifa mensual reservada

**10** ¿Cuánto tiempo lleva usted viajando en BART?  
☐ Este es mi primer viaje en BART  
☐ 6 meses o menos  
☐ Más de 6 meses pero menos de 1 año  
☐ 1 - 2 años  
☐ 3 - 5 años  
☐ Más de 5 años

**11** ¿Con qué frecuencia viaja en BART **actualmente**? (Marque uno)  
☐ 6 - 7 días a la semana  
☐ 5 días a la semana  
☐ 3 - 4 días a la semana  
☐ 1 - 2 días a la semana  
☐ 1 - 3 días al **mes**  
☐ Menos de una vez al **mes** → ¿Aproximadamente cuántas veces al año? \_\_\_\_\_

## OPINIÓN SOBRE BART

**12** En general, ¿cuán satisfecho está con los servicios de BART?  
☐ Muy satisfecho  
☐ Un poco satisfecho  
☐ Neutral  
☐ Un poco insatisfecho  
☐ Muy insatisfecho

**13** ¿Le recomendaría usted BART a un amigo o a un visitante de fuera de la ciudad?  
☐ Con seguridad  
☐ Probablemente  
☐ Quizás sí, quizás no  
☐ Probablemente no  
☐ Seguro que no

**14** ¿En qué medida está de acuerdo con la siguiente afirmación: "BART da un buen servicio a un precio razonable."?  
☐ Muy de acuerdo  
☐ Un poco de acuerdo  
☐ Neutral  
☐ No muy de acuerdo  
☐ Muy en desacuerdo

## ACERCA DE USTED

**15** Después de abordar el tren para este desplazamiento, ¿permaneció de pie por falta de asientos?  
☐ No ☐ Sí - todo el viaje ☐ Sí - parte del viaje

→ **NOTA:** Por favor responda a **AMBAS** preguntas 16a y 16b.

**16a** ¿Es usted hispano, latino o de origen español?  
☐ No ☐ Sí

**16b** ¿Cuál es su raza o identificación étnica? (Marque uno o más)  
☐ Blanco  
☐ Negro/Afroamericano  
☐ Asiático o de las Islas del Pacífico  
☐ Nativo americano o nativo de Alaska  
☐ Otro: \_\_\_\_\_  
 (Estas preguntas están basadas en el censo de los EE.UU.)

**17a** En su hogar, ¿habla algún idioma que no sea inglés?  
☐ No  
☐ Sí, hablo: \_\_\_\_\_

**17b** Si respondió "Sí" en 17a, ¿cuál es su nivel de inglés?  
☐ Muy bueno ☐ Bueno ☐ No muy bueno ☐ No hablo inglés

**18** Sexo: ☐ Varón ☐ Mujer ☐ \_\_\_\_\_

**19** Edad: ☐ 12 o más joven ☐ 35 - 44  
☐ 13 - 17 ☐ 45 - 54  
☐ 18 - 24 ☐ 55 - 64  
☐ 25 - 34 ☐ 65 y mayor

**20** ¿Cuáles son los ingresos familiares anuales antes de impuestos?  
☐ Menos de \$25,000 ☐ \$50,000 - \$59,999  
☐ \$25,000 - \$34,999 ☐ \$60,000 - \$74,999  
☐ \$35,000 - \$39,999 ☐ \$75,000 - \$99,999  
☐ \$40,000 - \$49,999 ☐ \$100,000 o más

**21** Incluyéndole a usted, ¿cuántas personas viven en su casa?  
☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6+

**22** ¿Cuál es su código ZIP?        
☐ Vivo fuera de los EE.UU.

- 23** Por favor, ayude a BART a mejorar el servicio calificando cada una de las siguientes categorías. "7" (excelente) es la calificación más alta que puede darle al servicio. "1" (pésimo) es la calificación más baja que puede darle al servicio. También puede usted usar cualquier número entre el 1 y el 7. Omita las categorías que no sean pertinentes para usted.

| CALIFICACIONES GENERALES DE BART                         | Pésimo |   |   |   |   |   |   | Excelente |
|--|--------|---|---|---|---|---|---|-----------|
| Trenes puntuales, de acuerdo al horario                  | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Horarios de funcionamiento                               | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Frecuencia del servicio de trenes                        | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Disponibilidad de mapas y horarios                       | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Información oportuna sobre interrupciones en el servicio | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Puntualidad de conexiones entre trenes de BART           | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Puntualidad de conexiones con autobuses                  | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Disponibilidad de estacionamiento para autos             | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Disponibilidad de estacionamiento para bicicletas        | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Alumbramiento de estacionamientos                        | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Acceso para personas con discapacidades                  | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Aplicación de normas contra la evasión de tarifas        | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Aplicación de normas que prohíben comer y beber          | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Seguridad personal en el sistema BART                    | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Página web bart.gov                                      | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |

| CALIFICACIONES A ESTACIONES DE BART                      | Pésimo |   |   |   |   |   |   | Excelente |
|--|--------|---|---|---|---|---|---|-----------|
| Longitud de filas en las puertas de salida               | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Fiabilidad de las máquinas de venta de boletos           | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Fiabilidad de las puertas de aplicación de tarifas       | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Tarjetas Clipper   | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Boletos de BART  | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Disponibilidad y fiabilidad de escaleras mecánicas       | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Disponibilidad y fiabilidad de elevadores                | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Presencia de Policía BART en las estaciones              | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Presencia de Policía BART en los estacionamientos        | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Disponibilidad de agentes en las estaciones              | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Ayuda y cortesía de los agentes en las estaciones        | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Aspecto de la zona ajardinada                            | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Estaciones libres de graffiti                            | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Limpieza de las estaciones                               | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Limpieza de los baños                                    | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Limpieza de los elevadores                               | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Señales de indicación de transbordos / andenes / salidas | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Condición general / estado de funcionamiento             | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |

| CALIFICACIONES A TRENES BART   | Pésimo |   |   |   |   |   |   | Excelente |
|--|--------|---|---|---|---|---|---|-----------|
| Disponibilidad de asientos en los trenes   | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Disponibilidad de espacio en los trenes para equipaje, bicicletas y carritos de bebé (carreolas) | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Disponibilidad de espacio para permanecer de pie en los trenes                                   | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Comodidad de asientos en los trenes  | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Condición / limpieza de asientos en los trenes   | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Temperatura confortable a bordo de los trenes  | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Nivel de ruido en los trenes   | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Claridad de los avisos por megafonía   | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Presencia de Policía BART en los trenes  | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Aspecto exterior del tren  | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Condición / limpieza de ventanas en los trenes   | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Interior de los trenes libre de graffiti   | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Limpieza del interior de los trenes  | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |
| Condición / limpieza del piso en los trenes  | 1      | 2 | 3 | 4 | 5 | 6 | 7 |           |

**COMENTARIOS:**(Proporcione más comentarios en [www.bart.gov/comments](http://www.bart.gov/comments).)**PARTICIPACIÓN EN EL CONCURSO:**

NOMBRE: \_\_\_\_\_

NÚMERO DE TELÉFONO DIURNO: (\_\_\_\_\_) \_\_\_\_\_

DIRECCIÓN DE CORREO ELECTRÓNICO: \_\_\_\_\_

¿Podemos comunicarnos con usted en el futuro para preguntarle su opinión sobre BART?

☐ Sí ☐ No¿Desea inscribirse a *BARTable this Week*, un boletín semanal gratuito por e-mail con concursos, descuentos, y eventos cerca de las estaciones BART?☐ Sí ☐ No

**REGLAS DEL CONCURSO:** No es necesaria la compra. No es válida donde esté prohibida. Puede participar más de una vez. Esta lotería finaliza el 10/24/16 a las 5 p. m., hora del Pacífico. El patrocinador es Bay Area Rapid Transit (BART). Disponible sólo para residentes legales de los EE. UU. en California que tengan al menos 18 años en el momento del ingreso. Los empleados contratados de BART y sus familiares o las personas que viven en su hogar no son elegibles para ingresar. Se aplican otras restricciones. El patrocinador entregará un iPad (valor aproximado de \$399) y cuatro tarjetas Clipper (valor aproximado de \$100 cada una). Valor total del premio: \$799. Los ganadores serán seleccionados al azar por sorteo. No es necesario estar presente para ganar. Se aplican todas las regulaciones federales, estatales y locales. Para ver las reglas oficiales, visite [www.bart.gov/survey](http://www.bart.gov/survey).

**CONTINUA  
AL DORSO** 



# 意見調查和幸運抽獎

請完成此意見調查，然後將填妥的調查問卷交回調查統籌人員。如有需要，您亦可將調查問卷寄往以下地址：BART Marketing & Research, P.O. Box 12688, Oakland, CA 94604-2688.

**大獎：iPad！** 請填妥並提交背頁的參加抽獎表格，您有機會贏得一個 iPad 或一張價值 \$100 的 Clipper 卡（共四張）。

## 使用 BART 地鐵

1 您在哪個 BART 地鐵站上車？

(請填寫地鐵站名稱)

2 您此程上車的時間是在什麼時候？

(時) (分) 1 上午 2 下午

3 您將在哪个 BART 地鐵站下車？

(下車地鐵站名稱)

4 您在此程中間，是否需要轉車？

1 否 2 是

5 您此程的主要目的是什麼？(請選擇一項)

- |        |            |
|--------|------------|
| 1 上/下班 | 4 看醫生/牙醫   |
| 2 學校   | 5 購物       |
| 3 去機場  | 6 餐館       |
| 4 體育活動 | 7 戲院或音樂會   |
| 5 走親訪友 | 8 其他：_____ |

6 如果沒有 BART 地鐵服務，您將如何前往目的地？

(請選擇最常用的一項)

- 1 我將放棄前往
- 2 巴士或其他公共交通 (可直達我的目的地)
- 3 自駕前往並將車停在目的地
- 4 與人共乘
- 5 Uber, Lyft, Flywheel, 或者其他軟件的打車服務
- 6 出租車
- 7 騎單車前往目的地
- 8 其他：\_\_\_\_\_

7 您是否使用 Clipper 卡支付 BART 此單程車資的嗎？

1 否 2 是

8 您使用何種車票支付 BART 此程車資？(請選擇一項)

- |                     |            |
|---------------------|------------|
| 1 一般 BART 車票        | 4 霍英特價票    |
| 2 超值票 (\$48 或 \$64) | 5 傷殘人士特價票  |
| 3 Muni Fast Pass 月票 | 6 學生特價票    |
|                     | 7 其他：_____ |

9 您今天以何種方式從家前往 BART 地鐵站？

- 1 全程走路至 BART 車站
- 2 單車
- 3 巴士/公共交通
- 4 自駕
- 5 與人共乘
- 6 別人開車
- 7 Uber, Lyft, 等
- 8 出租車
- 9 其他：\_\_\_\_\_

您在什麼地方停車？

1 BART 車站的停車場內 2 其他地方

您是否需要支付任何費用？

1 不/免費 2 按天預訂

3 每天計停車費 4 按月預訂

10 您乘搭 BART 地鐵已有多久？

- 1 這是我第一次乘搭 BART 地鐵
- 2 6 個月或以下
- 3 6 個月以上，但少於 1 年
- 4 1 - 2 年
- 5 3 - 5 年
- 6 超過 5 年

11 您目前乘搭 BART 地鐵的次數是多少？(請選擇一項)

- 1 一星期 6 - 7 天
- 2 一星期 5 天
- 3 一星期 3 - 4 天
- 4 一星期 1 - 2 天
- 5 每個月 1 - 3 天
- 6 每個月不足一次

每年約多少次？

\_\_\_\_\_

用回收紙印刷 9/2016

## 對 BART 的意見

12 整體來說，您對 BART 所提供服務的滿意程度為何？

- 1 十分滿意
- 2 頗為滿意
- 3 中立
- 4 稍有不滿
- 5 十分不滿

13 您會不會向朋友或來自外地的客人推薦乘坐 BART 地鐵？

- 1 肯定會
- 2 大有可能會
- 3 可能會或不會
- 4 大有可能不會
- 5 肯定不會

14 您對以下講法的同意程度為何：「乘搭 BART 地鐵，物有所值。」

- 1 十分同意
- 2 頗為同意
- 3 中立
- 4 頗有異議
- 5 十分反對

## 關於您自己

15 此程在上車之後，您是否因為沒有座位而需要站著？

1 否 2 是 - 全程站著 3 是 - 部份時間站著

➔ 注意：請同時回答 16a 和 16b 題。

16a 您是否是西班牙裔或拉丁裔？

1 否 2 是

16b 您屬於哪個種族或族裔？(請選擇一項或多項)

- 1 白人
- 2 黑人/非裔
- 3 亞裔或太平洋裔
- 4 美國印第安裔或阿拉斯加裔
- 5 其他：\_\_\_\_\_

(此族裔類別與美國人口普查相同)

17a 您在家是否講英語以外的語言？

1 否 2 是，我講：\_\_\_\_\_

17b 如 17a 題回答「是」，那麼您講英語的能力如何？

1 很好 2 好 3 不大好 4 完全不懂

18 性別：

1 男 2 女 3 \_\_\_\_\_

19 年齡：

- |           |           |
|-----------|-----------|
| 1 12 歲或以下 | 5 35 - 44 |
| 2 13 - 17 | 6 45 - 54 |
| 3 18 - 24 | 7 55 - 64 |
| 4 25 - 34 | 8 65 歲或以上 |

20 府上全家每年的稅前總收入是多少？

- |                       |                       |
|-----------------------|-----------------------|
| 1 \$25,000 以下         | 5 \$50,000 - \$59,999 |
| 2 \$25,000 - \$34,999 | 6 \$60,000 - \$74,999 |
| 3 \$35,000 - \$39,999 | 7 \$75,000 - \$99,999 |
| 4 \$40,000 - \$49,999 | 8 \$100,000 及以上       |

21 包括您自己在內，府上共有多少人住？

1 1 2 3 4 5 6+

22 您家的郵編號碼是多少？

□ □ □ □ □ □

□ 不在美國居住

請看背面 ➔



23 請幫助我們改善服務，就 BART 以下每個項目予以評分。「7」(卓越) 是最高分。「1」(差勁) 是最低分。當然，您可以選擇中間的任何分數。請跳過不適用於您的項目。

| 整體評分             | 差勁 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 卓越 |
|------------------|----|---|---|---|---|---|---|---|----|
| 列車準時性            | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 營運時間             | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 班次頻密性            | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 提供地圖和行車時間表       | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 及時提供服務中斷的資訊      | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 兩趟 BART 列車的接駁及時性 | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 與巴士接駁的及時性        | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 停車位供應            | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 單車位供應            | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 停車場的照明狀況         | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 針對殘障人士的便利性       | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 執行逃票懲罰政策         | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 執行車內禁止飲食政策       | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| BART 系統內之個人安全性   | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| bart.gov 網站      | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |

| BART 地鐵站評分              | 差勁 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 卓越 |
|-------------------------|----|---|---|---|---|---|---|---|----|
| 出口處的人龍長度                | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 售票機之可靠性                 | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 驗票閘之可靠性                 | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| Clipper 卡               | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| BART 車票                 | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 扶手電梯的可用性和可靠性            | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 電梯的可用性和可靠性              | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車站有 BART 警察             | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 停車場有 BART 警察            | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 隨時可找到車站職員               | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車站車站職員能夠給予的幫助和表現出來的禮貌態度 | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車站外觀                    | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車站沒有塗鴉                  | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車站清潔狀況                  | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 洗手間清潔狀況                 | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 電梯清潔狀況                  | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 轉車/月台/出口指示標誌牌           | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 整體情況/修理情況               | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |

| BART 列車評分          | 差勁 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 卓越 |
|--------------------|----|---|---|---|---|---|---|---|----|
| 車內經常有座位            | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車內有供行李、單車和嬰孩車存放的空間 | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車內有站立空間            | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車內座位舒適             | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車內座位情況/清潔狀況        | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車內溫度適宜             | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車內噪音程度             | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 公共通知的清晰度           | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車內有 BART 警察        | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 列車外觀               | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 列車車窗情況/清潔狀況        | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車內沒有塗鴉             | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車內清潔狀況             | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |
| 車內地面情況/清潔狀況        | 1  | 2 | 3 | 4 | 5 | 6 | 7 |   |    |

評論：

(您可線上提供更多反饋意見，網址為 [www.bart.gov/comments](http://www.bart.gov/comments)。)

## 填寫抽獎資料：

姓名：\_\_\_\_\_

日曆電話：(\_\_\_\_\_) \_\_\_\_\_

電子郵件地址：\_\_\_\_\_

我們未來是否可以聯絡您，以便徵詢您對 BART 服務的意見？

☐ 是 ☐ 否

您是否想登記接收 BARTable this Week 免費電郵通訊，內容包括抽獎、特價和地鐵站附近的活動資訊？

☐ 是 ☐ 否

抽獎規則：無須任何花費。於禁止處無效。您可以填寫一份以上的抽獎券。抽獎截止日期為太平洋夏令時 2016 年 10 月 24 日，下午 5 時。主辦方為 Bay Area Rapid Transit (BART)。參加者需為十八歲或以上之加州美國合法居民。BART 的僱員/合同工及其家人均不得參加資格。適用其他限制。主辦方發出的獎品將包括一個 iPad (價值約 \$399) 和四張 Clipper 卡 (每張價值 \$100)。獎品價值總計：\$799。我們將隨機抽出得獎者。得獎者無須出席抽獎活動。適用所有聯邦、州和地方法律。有關正式規則，請瀏覽網頁 [www.bart.gov/survey](http://www.bart.gov/survey)。

請看背面 ➡

## Appendix B:

# COMPLETE TABULATIONS

### Notes:

Data are weighted, including bases shown in tables, unless otherwise noted.  
"No Answer/NA" includes question non-response unless otherwise indicated.  
Columns may not add to 100% due to rounding.

The following symbols are used:

\*Less than 1%

- Zero

° Data not available from that year's survey

*This page intentionally left blank.*



## TIME BOARDED TRAIN

### 2. About what time did you get on this train?^

The following time distribution includes both weekday and weekend survey periods.

|                         | <b>2012</b> | <b>Total</b> | <b>2016</b> |
|-------------------------|-------------|--------------|-------------|
| Base: (All Respondents) | 6,700       | 5,609        | 5,342       |
|                         | (%)         | (%)          | (%)         |
| <b>AM</b>               |             |              |             |
| Before 6 am             | 2           | 2            | 2           |
| 6 am – 9 am             | 20          | 21           | 22          |
| 9:01 am – 12 noon       | 12          | 13           | 11          |
| <b>PM</b>               |             |              |             |
| 12:01 pm – 4 pm         | 17          | 16           | 16          |
| 4:01 pm – 7 pm          | 34          | 34           | 35          |
| After 7 pm              | 12          | 12           | 12          |
| Don't know/No answer    | 2           | 2            | 2           |
|                         | <u>100</u>  | <u>100</u>   | <u>100</u>  |

^ Open-ended responses were categorized into the time periods shown above.

## BART STATION ENTERED AND EXITED

1. Which BART station did you enter before boarding this train?
3. At which BART station will you exit the system?

The following table shows BART stations entered by survey participants and BART stations at which they planned to exit.

|                                   | STATION ENTERED<br>2016<br>(%) | STATION EXITED<br>2016<br>(%) |
|-----------------------------------|--------------------------------|-------------------------------|
| BASE: (All Respondents – 5,342)   |                                |                               |
| <b>EAST BAY</b>                   |                                |                               |
| Richmond                          | 1                              | 1                             |
| El Cerrito del Norte              | 2                              | 2                             |
| El Cerrito Plaza                  | 1                              | 1                             |
| North Berkeley                    | 1                              | 1                             |
| Downtown Berkeley                 | 4                              | 4                             |
| Ashby                             | 1                              | 2                             |
| MacArthur                         | 2                              | 2                             |
| 19th St/Oakland                   | 3                              | 3                             |
| 12th St/Oakland City Center       | 2                              | 2                             |
| Lake Merritt                      | 2                              | 2                             |
| Fruitvale                         | 2                              | 3                             |
| Coliseum                          | 2                              | 2                             |
| Oakland International Airport^    | *                              | *                             |
| San Leandro                       | 2                              | 2                             |
| Bay Fair                          | 2                              | 1                             |
| Hayward                           | 2                              | 2                             |
| South Hayward                     | 1                              | 1                             |
| Union City                        | 2                              | 2                             |
| Fremont                           | 3                              | 4                             |
| Concord                           | 2                              | 1                             |
| Pleasant Hill/Contra Costa Centre | 1                              | 1                             |
| Walnut Creek                      | 1                              | 1                             |
| Lafayette                         | 1                              | 1                             |
| Orinda                            | *                              | 1                             |
| Rockridge                         | 1                              | 1                             |
| West Oakland                      | 2                              | 2                             |
| North Concord/Martinez            | *                              | 1                             |
| Castro Valley                     | 1                              | 1                             |
| Dublin/Pleasanton                 | 2                              | 2                             |
| West Dublin/Pleasanton            | 1                              | 1                             |
| Pittsburg/Bay Point               | 2                              | 2                             |
| El Cerrito (Unspecified)          | *                              | *                             |
| Oakland (Unspecified)             | *                              | *                             |

\*Less than 1%

^ Respondents in the Oakland International Airport category include those who wrote "Oakland Airport" as a response and those who wrote "Coliseum," but indicated they used an airplane to get to or from BART.

**BART STATION ENTERED AND EXITED (continued)**

|                                     | <b>STATION ENTERED<br/>2016<br/>(%)</b> | <b>STATION EXITED<br/>2016<br/>(%)</b> |
|-------------------------------------|---|--|
| BASE: (All Respondents – 5,342)     |   |  |
| <b>WEST BAY</b>                     |   |  |
| Embarcadero                         | 9                                       | 10                                     |
| Montgomery St                       | 8                                       | 8                                      |
| Powell St                           | 6                                       | 7                                      |
| Civic Center/UN Plaza               | 7                                       | 5                                      |
| 16 <sup>th</sup> St Mission         | 3                                       | 2                                      |
| 24 <sup>th</sup> St Mission         | 3                                       | 2                                      |
| Glen Park                           | 2                                       | 2                                      |
| Balboa Park                         | 2                                       | 2                                      |
| Daly City                           | 2                                       | 2                                      |
| Colma                               | 1                                       | 1                                      |
| South San Francisco                 | 1                                       | 1                                      |
| San Bruno                           | 1                                       | 1                                      |
| San Francisco International Airport | 1                                       | 2                                      |
| Millbrae                            | 2                                       | 2                                      |
| San Francisco (Unspecified)         | *                                       | *                                      |
| Airport (Unspecified)               | *                                       | *                                      |
| <b>OTHER/UNDETERMINED</b>           | 1                                       | 2                                      |

\*Less than 1%

## TRANSFER

### 4. Are you transferring between BART trains on this trip?

- About two out of ten riders transfer between trains on their trip.
- Weekend riders are more likely to transfer than weekday riders.

|                         | <b>Total</b> |             |             |
|-------------------------|--------------|-------------|-------------|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |
|                         | (%)          | (%)         | (%)         |
| Yes                     | 21           | 20          | 20          |
| No                      | 78           | 78          | 79          |
| Don't know/No answer    | 2            | 1           | 2           |
|                         | 100          | 100         | 100         |

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Yes                     | 17          | 17          | 17          | 23              | 22          | 21          | 27             | 29          | 28          |
| No                      | 81          | 82          | 82          | 76              | 77          | 77          | 72             | 70          | 70          |
| Don't know/No answer    | 2           | 1           | 1           | 1               | 1           | 2           | 2              | 1           | 2           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

## TRIP PURPOSE (Multi-Year Comparison)

### 5. What is the primary purpose of this trip?

Overall, nearly two-thirds of BART riders are commuting to or from work. During the weekday peak period, most (81%) are commuting. On weekends, the most common trip purposes are commuting to/from work and visiting family/friends. (Refer to the next page for trip purpose by time period.)

|                             | <b>Total</b> |             |             |
|-----------------------------|--------------|-------------|-------------|
|                             | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents)     | 6,700        | 5,609       | 5,342       |
|                             | (%)          | (%)         | (%)         |
| Commute to/from Work        | 59           | 60          | 65          |
| Visit Family/Friends        | 8            | 9           | 7           |
| School                      | 9            | 7           | 6           |
| Airplane trip               | 3            | 3           | 3           |
| Shopping                    | 3            | 2           | 2           |
| Theater or concert          | 2            | 3           | 2           |
| Sports event                | 3            | 3           | 2           |
| Work-related Activity       | 1            | 1           | 1           |
| Restaurant                  | 2            | 1           | 1           |
| Medical/Dental              | 2            | 2           | 1           |
| Personal Business           | 1            | 1           | 1           |
| Tourism/Sightseeing         | 1            | 1           | 1           |
| Public event                | *            | 1           | 1           |
| Fitness/Recreation          | *            | 1           | *           |
| Museum/Art Gallery/ Library | *            | *           | *           |
| Other                       | 2            | 2           | 2           |
| More than one purpose       | 3            | 3           | 3           |
| Don't know/No Answer        | 1            | 1           | 1           |
|                             | 100          | 100         | 100         |

\* Less than 1%.

## TRIP PURPOSE (By Time Period)

|                             | <u>Peak</u> |       |       | <u>Off-Peak</u> |       |       | <u>Weekend</u> |      |      |
|-----------------------------|-------------|-------|-------|-----------------|-------|-------|----------------|------|------|
|                             | 2012        | 2014  | 2016  | 2012            | 2014  | 2016  | 2012           | 2014 | 2016 |
| Base: (All Respondents)     | 3,217       | 2,724 | 2,712 | 2,499           | 2,040 | 1,951 | 985            | 845  | 678  |
|                             | %           | %     | %     | %               | %     | %     | %              | %    | %    |
| Commute to/from Work        | 74          | 76    | 81    | 53              | 56    | 58    | 25             | 22   | 23   |
| Visit Family/Friends        | 4           | 4     | 3     | 9               | 9     | 8     | 22             | 24   | 23   |
| School                      | 8           | 6     | 5     | 11              | 10    | 10    | 4              | 4    | 3    |
| Airplane trip               | 3           | 2     | 2     | 3               | 4     | 3     | 5              | 4    | 5    |
| Shopping                    | 1           | 1     | 1     | 3               | 2     | 2     | 11             | 9    | 7    |
| Theater or concert          | 1           | 1     | 1     | 2               | 3     | 2     | 5              | 9    | 7    |
| Sports event                | 2           | 3     | 1     | 2               | 3     | 2     | 6              | 5    | 3    |
| Work-related Activity       | 1           | 1     | 1     | 2               | 1     | 2     | 1              | 1    | 1    |
| Restaurant                  | 1           | 1     | 1     | 2               | 1     | 1     | 3              | 4    | 5    |
| Medical/Dental              | 1           | 1     | 1     | 2               | 3     | 2     | 1              | 1    | 1    |
| Personal Business           | *           | *     | *     | 1               | 1     | 1     | 1              | 1    | 2    |
| Tourism/Sightseeing         | *           | *     | *     | 1               | 1     | 1     | 1              | 1    | 2    |
| Public event                | -           | *     | *     | *               | *     | -     | 1              | 3    | 3    |
| Fitness/Recreation          | *           | *     | *     | *               | *     | *     | 1              | 1    | 2    |
| Museum/Art Gallery/ Library | *           | -     | *     | *               | *     | *     | 1              | *    | 1    |
| Other                       | 1           | 1     | 1     | 3               | 3     | 3     | 6              | 5    | 6    |
| More than one purpose       | 2           | 2     | 2     | 4               | 3     | 4     | 5              | 6    | 4    |
| Don't know/No answer        | 1           | *     | *     | 1               | 1     | 1     | 2              | 1    | 1    |
|                             | 100         | 100   | 100   | 100             | 100   | 100   | 100            | 100  | 100  |

\* Less than 1%

- Zero

## OTHER MODE COULD HAVE UTILIZED

### 6. If BART service were not available, how would you make this trip?

- Fourteen percent would not make the trip if BART were not available.
- Forty-four percent would drive (by themselves or in a carpool) instead of taking BART.
- Nearly one-third (32%) would take a bus or some other form of public transit.
- About one in eight (13%) would use an app-based service like Uber or Lyft if BART were not available.

|  | <b>Total</b> |             |             |
|--|--------------|-------------|-------------|
|  | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents)                          | 6,700        | 5,609       | 5,342       |
|  | (%)          | (%)         | (%)         |
| I would not make this trip                       | 17           | 15          | 14          |
| Drive alone to my destination and park           | 37           | 35          | 34          |
| Bus or other transit                             | 34           | 35          | 32          |
| Uber, Lyft, Flywheel or other app-based service^ | °            | 1           | 13          |
| Carpool  | 12           | 14          | 12          |
| Bicycle to my destination^                       | 1            | 2           | 2           |
| Taxi^  | 2            | 1           | 1           |
| Other  | 1            | 1           | 1           |
| Don't know/No answer                             | 1            | 1           | 1           |

|  | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|--|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|  | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents)                          | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|  | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| I would not make this trip                       | 14          | 13          | 14          | 17              | 16          | 13          | 24             | 23          | 20          |
| Drive alone to my destination and park           | 41          | 38          | 37          | 36              | 35          | 33          | 30             | 29          | 27          |
| Bus or other transit                             | 34          | 36          | 33          | 36              | 37          | 33          | 30             | 28          | 26          |
| Uber, Lyft, Flywheel or other app-based service^ | °           | 1           | 10          | °               | 1           | 15          | °              | 1           | 21          |
| Carpool  | 13          | 16          | 13          | 11              | 11          | 10          | 13             | 16          | 10          |
| Bicycle to my destination^                       | 1           | 2           | 2           | 2               | 3           | 2           | 1              | 2           | 2           |
| Taxi^  | 2           | 1           | 1           | 2               | 1           | 1           | 2              | 2           | 2           |
| Other  | 1           | 1           | 1           | 2               | 1           | 1           | 2              | 2           | 1           |
| Don't know/No answer                             | 1           | 1           | 1           | 1               | 1           | 1           | 1              | 2           | 1           |

Note: Although not asked for, multiple mentions were accepted, so columns may not add to 100%.

^ The Uber and taxi response categories were added to the questionnaire in 2016. Data for prior years were pulled from open-ended responses provided in the "other" category. The bicycle response category was added to the questionnaire in 2014. Data for 2012 were pulled from open-ended responses provided in the "other" category.

° Data not available

## CLIPPER USE

### 7. Did you use a Clipper card to pay for this BART trip?

- Nearly three-quarters (71%) of all riders used Clipper to pay for their BART trip.<sup>^</sup>
- Peak period riders are more likely to have used a Clipper card, while weekend riders are less likely to have used one of the cards.

|                         | <b>Total</b> |             |             |
|-------------------------|--------------|-------------|-------------|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |
|                         | (%)          | (%)         | (%)         |
| Yes                     | 55           | 64          | 71          |
| No                      | 44           | 35          | 28          |
| Don't know/No answer    | 1            | 1           | 1           |
|                         | 100          | 100         | 100         |

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Yes                     | 62          | 70          | 78          | 52              | 60          | 67          | 41             | 50          | 54          |
| No                      | 38          | 29          | 22          | 47              | 39          | 32          | 58             | 48          | 45          |
| Don't know/No answer    | 1           | 1           | *           | 1               | 1           | 1           | 1              | 1           | 1           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

<sup>^</sup>Note that the percentage of surveyed riders using Clipper is slightly higher than actual Clipper usage on BART in September 2016. Among total weekday survey respondents, 73% reported having used Clipper. Clipper's actual share of average weekday trips was 67%. This discrepancy may be due to survey respondents responding in the affirmative if they have a Clipper card, even if they did not use the card for the surveyed trip.

\* Less than 1%



## FARE

### 8. What type of fare did you pay for this BART trip?

- Three-fourths of all riders pay the regular fare.
- Usage of the high-value discount fare is highest among peak riders.

|                         | <b>Total</b> |             |             |
|-------------------------|--------------|-------------|-------------|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |
|                         | (%)          | (%)         | (%)         |
| Regular ticket          | 72           | 74          | 75          |
| High Value Discount     | 15           | 13          | 14          |
| Senior                  | 4            | 4           | 4           |
| Muni Fast Pass          | 4            | 3           | 2           |
| Disabled                | 2            | 2           | 2           |
| Student                 | *            | *           | 1           |
| Other/Don't know/NA     | 4            | 3           | 2           |
|                         | 100          | 100         | 100         |

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Regular ticket          | 66          | 70          | 70          | 74              | 76          | 77          | 83             | 83          | 83          |
| High Value Discount     | 20          | 18          | 19          | 11              | 11          | 11          | 5              | 4           | 5           |
| Senior                  | 3           | 3           | 3           | 4               | 5           | 5           | 4              | 5           | 5           |
| Muni Fast Pass          | 4           | 4           | 2           | 4               | 2           | 2           | 2              | 2           | 1           |
| Disabled                | 2           | 1           | 2           | 2               | 2           | 2           | 2              | 1           | 2           |
| Student                 | *           | *           | 1           | *               | *           | *           | *              | *           | *           |
| Other/Don't know/NA     | 4           | 3           | 2           | 4               | 3           | 2           | 4              | 4           | 3           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

\* Less than 1%

## HOW TRAVELED BETWEEN HOME AND BART

### 9. How did you travel between home and BART today?

- About one-third of riders walk to BART.
- Five percent of riders bicycle to BART.
- Peak riders are more likely to have driven alone to BART than riders in other time periods.

|                            | <b>Total</b> |             |             |
|----------------------------|--------------|-------------|-------------|
|                            | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents)    | 6,700        | 5,609       | 5,342       |
|                            | (%)          | (%)         | (%)         |
| Walked all the way to BART | 31           | 33          | 33          |
| Drove Alone                | 29           | 28          | 29          |
| Bus / transit              | 17           | 14          | 14          |
| Dropped off                | 10           | 10          | 9           |
| Carpooled                  | 6            | 6           | 5           |
| Bicycled                   | 5            | 5           | 5           |
| Uber, Lyft, etc.^          | °            | *           | 3           |
| Taxi^                      | *            | *           | *           |
| Other / Combo / NA         | 3            | 3           | 3           |
|                            | 100          | 100         | 100         |

|                            | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|----------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                            | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents)    | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                            | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Walked all the way to BART | 28          | 29          | 32          | 32              | 35          | 34          | 38             | 37          | 36          |
| Drove Alone                | 34          | 33          | 33          | 25              | 24          | 26          | 18             | 18          | 19          |
| Bus / transit              | 15          | 13          | 13          | 18              | 16          | 15          | 17             | 14          | 14          |
| Dropped off                | 10          | 10          | 9           | 10              | 10          | 9           | 11             | 11          | 8           |
| Carpooled                  | 5           | 6           | 5           | 5               | 5           | 4           | 9              | 10          | 9           |
| Bicycled                   | 4           | 5           | 5           | 6               | 6           | 5           | 4              | 5           | 5           |
| Uber, Lyft, etc.^          | °           | *           | 2           | °               | *           | 3           | °              | 1           | 5           |
| Taxi^                      | *           | *           | *           | *               | *           | *           | 1              | *           | 1           |
| Other / Combo / NA         | 2           | 2           | 2           | 3               | 4           | 3           | 3              | 4           | 3           |
|                            | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

^ The Uber and taxi response categories were added to the questionnaire in 2016. Data for prior years were pulled from open-ended responses provided in the "other" category.

\* Less than 1%

° Data not available

## WHERE PARKED/FEE

9A. Where did you park?

9B. What fee, if any, did you pay?

- The percentage of riders who do not pay to park has decreased significantly since 2014.

|                         | 2012  | <b>Total</b><br>2014 | 2016  |
|-------------------------|-------|----------------------|-------|
| Base: (Drove/Carpooled) | 2,283 | 1,904                | 1,791 |
|                         | (%)   | (%)                  | (%)   |
| <b>Parked</b>           |       |                      |       |
| In BART lot             | 71    | 71                   | 70    |
| Off-site                | 15    | 19                   | 21    |
| Don't know/No answer    | 14    | 10                   | 9     |
|                         | 100   | 100                  | 100   |
| <b>Fee Paid</b>         |       |                      |       |
| None/Free               | 32    | 30                   | 19    |
| Daily Fee               | 35    | 36                   | 41    |
| Daily reserved          | 2     | 1                    | 2     |
| Monthly reserved        | 6     | 7                    | 6     |
| Don't know/No answer    | 26    | 26                   | 32    |
|                         | 100   | 100                  | 100   |

|                         | 2012  | <b>Peak</b><br>2014 | 2016  | 2012 | <b>Off-Peak</b><br>2014 | 2016 | 2012 | <b>Weekend</b><br>2014 | 2016 |
|-------------------------|-------|---------------------|-------|------|-------------------------|------|------|------------------------|------|
| Base: (Drove/Carpooled) | 1,267 | 1,070               | 1,013 | 747  | 593                     | 588  | 269  | 241                    | 190  |
|                         | %     | %                   | %     | %    | %                       | %    | %    | %                      | %    |
| <b>Parked</b>           |       |                     |       |      |                         |      |      |                        |      |
| In BART lot             | 75    | 74                  | 73    | 63   | 63                      | 65   | 73   | 76                     | 74   |
| Off-site                | 13    | 16                  | 19    | 21   | 26                      | 26   | 8    | 12                     | 14   |
| Don't know/No answer    | 11    | 9                   | 8     | 16   | 10                      | 9    | 19   | 11                     | 12   |
|                         | 100   | 100                 | 100   | 100  | 100                     | 100  | 100  | 100                    | 100  |
| <b>Fee Paid</b>         |       |                     |       |      |                         |      |      |                        |      |
| None/Free               | 27    | 24                  | 13    | 29   | 28                      | 17   | 61   | 63                     | 57   |
| Daily Fee               | 40    | 43                  | 48    | 36   | 37                      | 41   | 8    | 5                      | 6    |
| Daily reserved          | 3     | 2                   | 1     | 2    | 1                       | 3    | *    | *                      | *    |
| Monthly reserved        | 8     | 9                   | 7     | 4    | 5                       | 5    | 2    | 1                      | 1    |
| Don't know/No answer    | 22    | 22                  | 30    | 30   | 29                      | 35   | 29   | 31                     | 36   |
|                         | 100   | 100                 | 100   | 100  | 100                     | 100  | 100  | 100                    | 100  |

\* Less than 1%

## LENGTH OF TIME A BART CUSTOMER

### 10. How long have you been riding BART?

- About half of survey respondents have been riding BART for more than five years.
- Seventeen percent of riders have been riding BART for less than one year.

|   | <b>Total</b> |             |             |                                |
|---|--------------|-------------|-------------|--------------------------------|
|   | <b>2012</b>  | <b>2014</b> | <b>2016</b> |                                |
| Base: (All Respondents)                   | 6,700        | 5,609       | 5,342       |                                |
|   | (%)          | (%)         | (%)         |                                |
| Six months or less                        | 14           | 14          | 13          |                                |
| More than six months but less than a year | 5            | 5           | 4           | <b>Less than a Year = 17%</b>  |
| 1 – 2 years                               | 13           | 13          | 15          |                                |
| 3 – 5 years                               | 15           | 15          | 17          |                                |
| More than five years                      | 53           | 53          | 51          | <b>More than 5 Years = 51%</b> |
| Don't know/No answer                      | *            | 1           | *           |                                |
|   | 100          | 100         | 100         |                                |

|   | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|---|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|   | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents)                   | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|   | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Six months or less                        | 12          | 12          | 12          | 14              | 15          | 13          | 17             | 17          | 15          |
| More than six months but less than a year | 5           | 5           | 5           | 5               | 4           | 4           | 4              | 4           | 4           |
| 1 – 2 years                               | 14          | 14          | 15          | 13              | 13          | 14          | 12             | 12          | 12          |
| 3 – 5 years                               | 14          | 15          | 17          | 15              | 15          | 17          | 15             | 13          | 16          |
| More than five years                      | 54          | 54          | 50          | 52              | 52          | 52          | 52             | 53          | 52          |
| Don't know/No answer                      | *           | 1           | *           | *               | *           | *           | *              | 1           | *           |
|   | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

\*Less than 1%

## FREQUENCY OF RIDING BART

### 11. How often do you currently ride BART?

- The majority of BART trips (85%) are made by customers who ride BART at least one day per week.
- 59% of BART trips are made by frequent customers who ride five or more days per week. Within the peak period, this percentage is even higher; 69% of peak period trips are made by frequent customers.

|                         | <b>Total</b> |             |             |                                 |
|-------------------------|--------------|-------------|-------------|---------------------------------|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |                                 |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |                                 |
|                         | (%)          | (%)         | (%)         |                                 |
| 5 or more days a week   | 56           | 56          | 59          | <b>At least once/week = 85%</b> |
| 3 – 4 days a week       | 16           | 16          | 16          |                                 |
| 1 – 2 days a week       | 10           | 10          | 9           |                                 |
| 1 – 3 days a month      | 9            | 9           | 8           |                                 |
| Less than once a month  | 8            | 8           | 7           |                                 |
| Don't know/No answer    | 1            | 1           | 1           |                                 |
|                         | 100          | 100         | 100         |                                 |

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| 5 or more days a week   | 67          | 67          | 69          | 50              | 51          | 54          | 34             | 33          | 34          |
| 3 – 4 days a week       | 15          | 15          | 16          | 19              | 18          | 18          | 14             | 11          | 12          |
| 1 – 2 days a week       | 6           | 7           | 6           | 11              | 11          | 11          | 16             | 15          | 14          |
| 1 – 3 days a month      | 5           | 5           | 5           | 10              | 10          | 8           | 17             | 20          | 22          |
| Less than once a month  | 5           | 5           | 4           | 9               | 9           | 7           | 17             | 19          | 17          |
| Don't know/No answer    | 1           | 1           | *           | 1               | 1           | 1           | 2              | 2           | 1           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

\*Less than 1%

## OVERALL SATISFACTION WITH BART

### 12. Overall, how satisfied are you with the services provided by BART?

- Overall satisfaction with BART has continued to decrease.
- The decrease is greatest among weekday riders.

|                         | <b>Total</b> |             |             | <b>Very or Somewhat Satisfied = 69%</b> |
|-------------------------|--------------|-------------|-------------|---|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |   |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |   |
|                         | (%)          | (%)         | (%)         |   |
| Very Satisfied          | 40           | 28          | 24          |   |
| Somewhat Satisfied      | 44           | 46          | 45          |   |
| Neutral                 | 11           | 15          | 17          |   |
| Somewhat Dissatisfied   | 4            | 8           | 11          |   |
| Very Dissatisfied       | 1            | 2           | 3           |   |
| Don't know/No answer    | *            | 1           | *           |   |
|                         | 100          | 100         | 100         |   |
| MEAN: (5 point scale)   | 4.18         | 3.90        | 3.75        |   |

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Very Satisfied          | 38          | 25          | 21          | 41              | 30          | 25          | 41             | 33          | 31          |
| Somewhat Satisfied      | 46          | 48          | 47          | 43              | 45          | 44          | 43             | 44          | 43          |
| Neutral                 | 10          | 15          | 16          | 11              | 15          | 18          | 12             | 14          | 19          |
| Somewhat Dissatisfied   | 4           | 9           | 13          | 4               | 8           | 9           | 3              | 6           | 6           |
| Very Dissatisfied       | 1           | 2           | 4           | 1               | 2           | 4           | 1              | 2           | 1           |
| Don't know/No answer    | *           | 1           | *           | *               | *           | 1           | 1              | 1           | *           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |
| MEAN: (5 point scale)   | 4.16        | 3.84        | 3.67        | 4.20            | 3.93        | 3.79        | 4.21           | 4.02        | 3.96        |

\* Less than 1%

## OVERALL SATISFACTION WITH BART (continued)

| GROUP                                 | Read % across |                |              |                   |         | MEAN<br>(5 point scale) |
|---------------------------------------|---------------|----------------|--------------|-------------------|---------|-------------------------|
|                                       | BASE<br>#     | Satisfied<br>% | Neutral<br>% | Dissatisfied<br>% | NA<br>% |                         |
| TOTAL 2016                            |               |                |              |                   |         |                         |
| By Frequency of Riding BART           |               |                |              |                   |         |                         |
| 3+ days a week                        | 4,033         | 66             | 17           | 16                | 1       | 3.68                    |
| Less frequently but at least monthly  | 923           | 77             | 15           | 9                 | *       | 3.95                    |
| Less often                            | 359           | 75             | 18           | 7                 | -       | 4.05                    |
| By Gender                             |               |                |              |                   |         |                         |
| Male                                  | 2,536         | 71             | 17           | 12                | *       | 3.81                    |
| Female                                | 2,558         | 67             | 17           | 16                | *       | 3.72                    |
| By Age                                |               |                |              |                   |         |                         |
| 13 – 34                               | 2,651         | 68             | 20           | 11                | *       | 3.77                    |
| 35 – 64                               | 2,318         | 68             | 14           | 17                | *       | 3.71                    |
| 65 & Older                            | 276           | 81             | 7            | 12                | 1       | 4.06                    |
| By Standing/Not Standing              |               |                |              |                   |         |                         |
| Yes                                   | 1,926         | 61             | 19           | 20                | *       | 3.54                    |
| No                                    | 3,361         | 74             | 16           | 11                | *       | 3.88                    |
| By Ethnicity                          |               |                |              |                   |         |                         |
| White                                 | 2,342         | 73             | 13           | 14                | *       | 3.81                    |
| Black/African Amer.                   | 656           | 69             | 18           | 12                | *       | 3.82                    |
| Asian/Pac. Islander                   | 1,655         | 66             | 21           | 14                | *       | 3.69                    |
| Other                                 | 595           | 65             | 19           | 15                | 1       | 3.70                    |
| By Hispanic / Latino / Spanish Origin |               |                |              |                   |         |                         |
| Yes                                   | 976           | 69             | 18           | 12                | 1       | 3.84                    |
| No                                    | 4,232         | 69             | 16           | 14                | *       | 3.74                    |
| By Disabled Fare Type                 |               |                |              |                   |         |                         |
| Disabled discount                     | 105           | 72             | 16           | 12                | -       | 3.98                    |

\* Less than 1%

- Zero

## OVERALL SATISFACTION WITH BART (continued)

| GROUP                   | Read % across |                |              |                   |         | MEAN<br>(5 point scale) |
|-------------------------|---------------|----------------|--------------|-------------------|---------|-------------------------|
|                         | BASE<br>#     | Satisfied<br>% | Neutral<br>% | Dissatisfied<br>% | NA<br>% |                         |
| TOTAL 2016              |               |                |              |                   |         |                         |
| By Trip Purpose         |               |                |              |                   |         |                         |
| Commute to Work         | 3,484         | 66             | 17           | 17                | 1       | 3.64                    |
| School                  | 345           | 71             | 20           | 9                 | -       | 3.86                    |
| Shopping                | 121           | 76             | 14           | 10                | -       | 3.96                    |
| Medical/Dental          | 63            | 71             | 12           | 17                | -       | 3.92                    |
| Airplane Trip           | 136           | 76             | 15           | 8                 | -       | 4.00                    |
| Sports Event            | 82            | 74             | 20           | 6                 | -       | 3.97                    |
| Visit Friends/Family    | 382           | 76             | 17           | 7                 | *       | 4.02                    |
| Restaurant              | 74            | 79             | 13           | 8                 | -       | 4.05                    |
| Theater/Concert         | 120           | 77             | 16           | 6                 | 1       | 3.98                    |
| By Access Mode          |               |                |              |                   |         |                         |
| Walk                    | 1,778         | 73             | 15           | 12                | *       | 3.84                    |
| Bike                    | 256           | 70             | 18           | 11                | *       | 3.81                    |
| Bus/Transit             | 747           | 73             | 16           | 10                | *       | 3.89                    |
| Drive alone             | 1,525         | 62             | 18           | 20                | *       | 3.54                    |
| Carpool                 | 266           | 68             | 18           | 14                | -       | 3.78                    |
| Dropped off             | 474           | 67             | 21           | 12                | 1       | 3.75                    |
| Uber, Lyft, etc.        | 146           | 70             | 20           | 11                | -       | 3.86                    |
| By Household Income     |               |                |              |                   |         |                         |
| Under \$25,000          | 766           | 71             | 21           | 8                 | 1       | 3.93                    |
| \$25,000- \$49,999      | 852           | 72             | 19           | 9                 | *       | 3.89                    |
| \$50,000 - \$74,999     | 853           | 69             | 17           | 14                | *       | 3.74                    |
| \$75,000 - \$99,999     | 602           | 68             | 13           | 19                | *       | 3.66                    |
| \$100,000 or More       | 1,818         | 68             | 15           | 17                | *       | 3.66                    |
| By How Long Riding BART |               |                |              |                   |         |                         |
| 6 months or less        | 685           | 73             | 18           | 9                 | -       | 3.95                    |
| 6 months – one year     | 240           | 66             | 19           | 14                | 1       | 3.69                    |
| One – two years         | 778           | 69             | 18           | 13                | -       | 3.75                    |
| Three – five years      | 896           | 70             | 17           | 13                | *       | 3.75                    |
| More than five years    | 2,724         | 68             | 16           | 16                | 1       | 3.71                    |

\* Less than 1%

- Zero



## OVERALL SATISFACTION WITH BART (continued)

| GROUP  | Read % across |                |              |                   |         | MEAN<br>(5 point scale) |
|--|---------------|----------------|--------------|-------------------|---------|-------------------------|
|  | BASE<br>#     | Satisfied<br>% | Neutral<br>% | Dissatisfied<br>% | NA<br>% |                         |
| TOTAL 2016   |               |                |              |                   |         |                         |
| By Other Mode Could Have Used for Trip^            |               |                |              |                   |         |                         |
| Would not make trip                                | 773           | 68             | 17           | 14                | 1       | 3.77                    |
| Bus/other transit                                  | 1,720         | 69             | 17           | 14                | *       | 3.76                    |
| Drive alone  | 1,833         | 69             | 16           | 15                | *       | 3.72                    |
| Carpool  | 626           | 61             | 20           | 20                | -       | 3.53                    |
| Uber, Lyft, etc.                                   | 712           | 70             | 18           | 12                | *       | 3.78                    |
| Taxi   | 67            | 75             | 16           | 7                 | 2       | 4.06                    |
| Bike   | 115           | 73             | 13           | 13                | 1       | 3.92                    |
| By BART Recommendation                             |               |                |              |                   |         |                         |
| Definitely   | 2,935         | 89             | 8            | 3                 | *       | 4.24                    |
| Probably   | 1,619         | 57             | 29           | 14                | *       | 3.47                    |
| Might/Might not                                    | 555           | 23             | 30           | 47                | *       | 2.70                    |
| Definitely/Probably not                            | 211           | 10             | 12           | 78                | -       | 1.93                    |
| By Statement, "BART is a Good Value for the Money" |               |                |              |                   |         |                         |
| Agree strongly                                     | 1,233         | 93             | 5            | 2                 | *       | 4.45                    |
| Agree somewhat                                     | 1,935         | 81             | 14           | 5                 | -       | 3.95                    |
| Neutral  | 1,115         | 54             | 32           | 14                | *       | 3.49                    |
| Disagree   | 1,012         | 34             | 20           | 45                | *       | 2.82                    |

^Multiple responses accepted

\*Less than 1%

- Zero

## WILLINGNESS TO RECOMMEND BART

### 13. Would you recommend using BART to a friend or out-of-town guest?

- Eighty-five percent would definitely or probably recommend using BART to a friend or out-of-town guest. There has been a shift from those who would definitely recommend BART to those who might or might not recommend BART.

|                         | <b>Total</b> |             |             | <b>Definitely or<br/>Probably = 85%</b> |
|-------------------------|--------------|-------------|-------------|---|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |   |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |   |
|                         | (%)          | (%)         | (%)         |   |
| Definitely              | 69           | 59          | 55          |   |
| Probably                | 25           | 30          | 30          |   |
| Might or Might Not      | 5            | 8           | 10          |   |
| Probably Not            | 1            | 2           | 3           |   |
| Definitely Not          | *            | 1           | 1           |   |
| Don't know/No answer    | *            | *           | *           |   |
|                         | 100          | 100         | 100         |   |
| MEAN: (5 point scale)   | 4.61         | 4.46        | 4.36        |   |

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Definitely              | 67          | 56          | 52          | 70              | 62          | 56          | 70             | 64          | 63          |
| Probably                | 26          | 32          | 32          | 24              | 29          | 29          | 24             | 27          | 28          |
| Might or Might Not      | 6           | 9           | 11          | 4               | 7           | 10          | 4              | 7           | 7           |
| Probably Not            | 1           | 2           | 3           | 1               | 2           | 2           | 1              | 1           | 1           |
| Definitely Not          | *           | 1           | 1           | 1               | 1           | 1           | *              | *           | 1           |
| Don't know/No answer    | *           | 1           | *           | *               | *           | 1           | 1              | 1           | *           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |
| MEAN: (5 point scale)   | 4.58        | 4.41        | 4.31        | 4.63            | 4.50        | 4.36        | 4.63           | 4.54        | 4.51        |

\*Less than 1%

## VALUE

14. To what extent do you agree with the following statement: "BART is a good value for the money?"

- The majority of BART riders (59%) agree with the statement: "BART is a good value for the money." This percentage has declined significantly since 2012.

|                         | <b>Total</b> |             |             | <b>Agree Strongly<br/>or Somewhat = 59%</b> |
|-------------------------|--------------|-------------|-------------|---|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |   |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |   |
|                         | (%)          | (%)         | (%)         |   |
| Agree Strongly          | 30           | 25          | 23          |   |
| Agree Somewhat          | 40           | 38          | 36          |   |
| Neutral                 | 18           | 20          | 21          |   |
| Disagree Somewhat       | 9            | 11          | 13          |   |
| Disagree Strongly       | 3            | 5           | 6           |   |
| Don't know/No answer    | 1            | 1           | 1           |   |
|                         | 100          | 100         | 100         |   |
| MEAN: (5 point scale)   | 3.86         | 3.68        | 3.58        |   |

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Agree Strongly          | 27          | 23          | 21          | 32              | 27          | 24          | 31             | 29          | 30          |
| Agree Somewhat          | 42          | 37          | 36          | 39              | 38          | 36          | 38             | 40          | 36          |
| Neutral                 | 18          | 22          | 21          | 18              | 19          | 21          | 18             | 18          | 20          |
| Disagree Somewhat       | 9           | 13          | 15          | 8               | 10          | 12          | 9              | 9           | 9           |
| Disagree Strongly       | 3           | 5           | 6           | 3               | 5           | 6           | 2              | 3           | 4           |
| Don't know/No answer    | 1           | 1           | 1           | *               | 1           | 1           | 1              | 1           | 1           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |
| MEAN: (5 point scale)   | 3.82        | 3.61        | 3.50        | 3.90            | 3.73        | 3.62        | 3.88           | 3.83        | 3.79        |

\*Less than 1%

## SEATING AVAILABILITY

15. After you boarded the train for this trip, did you stand because seating was unavailable?

- Thirty-six percent of riders had to stand because seating was unavailable. This is a significant increase compared to the last two surveys.
- Among those who had to stand, 60% stood for the whole trip.
- The peak periods had the highest percentage of standees.

|                         | <b>Total</b> |             |             |
|-------------------------|--------------|-------------|-------------|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |
|                         | (%)          | (%)         | (%)         |
| Yes, stood              | 26           | 30          | 36          |
| No, did not stand       | 74           | 69          | 63          |
| Don't know/No answer    | 1            | 1           | 1           |
|                         | 100          | 100         | 100         |
| Base: (Stood)           | 1,713        | 1,684       | 1,926       |
| Yes, for whole trip     | 44           | 52          | 60          |
| Yes, for part of trip   | 55           | 47          | 39          |
| Yes, unspecified        | *            | 1           | 1           |
|                         | 100          | 100         | 100         |

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Yes, stood              | 33          | 35          | 46          | 20              | 26          | 28          | 17             | 22          | 22          |
| No, did not stand       | 66          | 63          | 53          | 80              | 73          | 71          | 82             | 77          | 77          |
| Don't know/No answer    | 1           | 1           | 1           | 1               | 1           | 1           | 1              | 2           | 1           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |
| Base: (Stood)           | 1,057       | 966         | 1,240       | 490             | 537         | 539         | 167            | 182         | 147         |
| Yes, for whole trip     | 49          | 58          | 67          | 39              | 45          | 49          | 34             | 41          | 43          |
| Yes, for part of trip   | 51          | 41          | 32          | 61              | 54          | 51          | 65             | 58          | 57          |
| Yes, unspecified        | *           | 1           | 1           | *               | 1           | 1           | 1              | 1           | -           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

\* Less than 1%

- Zero

## ETHNIC IDENTIFICATION

16b. What is your race or ethnic identification? (Check one or more.)

16a. Are you of Hispanic, Latino or Spanish origin?

- BART has a diverse ridership.

|                                  | <b>Total</b> |             |             |
|----------------------------------|--------------|-------------|-------------|
|                                  | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents)          | 6,700        | 5,609       | 5,342       |
|                                  | (%)          | (%)         | (%)         |
| White                            | 45           | 45          | 44          |
| Asian or Pacific Islander        | 28           | 29          | 31          |
| Black/African American           | 13           | 12          | 12          |
| American Indian or Alaska Native | 2            | 2           | 2           |
| Other/No answer                  | 16           | 16          | 15          |
| Hispanic                         | 19           | 19          | 18          |

|                                  | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|----------------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                                  | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents)          | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                                  | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| White                            | 44          | 44          | 42          | 44              | 45          | 45          | 49             | 47          | 46          |
| Asian or Pacific Islander        | 31          | 33          | 35          | 26              | 27          | 26          | 26             | 25          | 27          |
| Black/African American           | 12          | 11          | 11          | 14              | 14          | 14          | 13             | 12          | 13          |
| American Indian or Alaska Native | 2           | 2           | 2           | 2               | 2           | 2           | 2              | 2           | 2           |
| Other/No answer                  | 15          | 15          | 14          | 18              | 16          | 17          | 15             | 16          | 17          |
| Hispanic                         | 18          | 18          | 17          | 20              | 19          | 20          | 20             | 19          | 21          |

Note: Multiple responses were accepted, so columns will not add to 100%. Reported percentages for ethnicity and Hispanic origin are not exclusive, e.g., a respondent who indicates she is White and Hispanic is included in both categories. The ethnicity data on the next page are categorized differently, so the percentages shown will differ.

## BART CUSTOMER ETHNICITY COMPARED TO REGION

### BART Customer Ethnicity Compared to Bay Area Counties in BART's Service Area

- BART customer ethnicities reflect the diversity of the region.
- The following table compares the reported ethnicity of BART riders (excluding no response) to the 2015 American Community Survey estimates.

**Race and Ethnicity**  
**BART Compared to Bay Area Counties in BART's Service Area**

| Population                                      | <b>ALAMEDA</b><br>1,638,215 | <b>CONTRA COSTA</b><br>1,126,745 | <b>SAN FRANCISCO</b><br>864,816 | <b>SAN MATEO</b><br>765,135 | <b>FOUR-COUNTY TOTAL</b><br>4,394,911 | <b>BART 2016 CUST. SAT. SURVEY</b><br>5,210 |
|---|-----------------------------|----------------------------------|---------------------------------|-----------------------------|---------------------------------------|---|
|   | %                           | %                                | %                               | %                           | %                                     | %   |
| White (non-Hispanic)                            | 32                          | 45                               | 41                              | 40                          | 39                                    | 37  |
| Black/African American (non-Hispanic)           | 11                          | 9                                | 5                               | 2                           | 8                                     | 10  |
| Asian/Pacific Islander (non-Hispanic)           | 30                          | 17                               | 35                              | 29                          | 27                                    | 28  |
| American Indian or Alaska Native (non-Hispanic) | <1                          | <1                               | <1                              | <1                          | <1                                    | 1   |
| Hispanic (any race)                             | 23                          | 25                               | 15                              | 25                          | 22                                    | 19  |
| Other, including 2+ Races (non-Hispanic)        | 4                           | 4                                | 4                               | 4                           | 4                                     | 6   |
| Total   | 100                         | 100                              | 100                             | 100                         | 100                                   | 100   |

#### Sources:

- U.S. Census Bureau, 2015 American Community Survey 1-Year Estimates: Table C03002 "Hispanic or Latino Origin by Race." Universe: Total Population. (factfinder.census.gov)
- BART 2016 Customer Satisfaction Survey

#### Notes:

- 1) The ACS 2015 estimates shown only include data for the four counties within BART's service area: Alameda, Contra Costa, San Francisco, and San Mateo. Census tables adjust for unit non-response by weighting at the tract-level.
- 2) The categories shown in this table classify respondents based on single vs. two-plus race and Hispanic vs. non-Hispanic. The categories "White," "Black / African American," "Asian/Pacific Islander," and "American Indian/Alaska Native" only include respondents who reported a single race and are non-Hispanic. All two-plus race, non-Hispanic responses are included within "Other." All Hispanic responses are included within Hispanic, regardless of race. Note that ethnicity data are categorized differently in other charts within this report, so the percentages shown will differ.
- 3) The BART data distribution is based on 5,210 responses and excludes 2% non-response.
- 4) In order to maintain comparability with prior years' BART data, those who responded to the ethnicity question but skipped the Hispanic question are included within the non-Hispanic race categories.
- 5) Totals may not add to 100% due to rounding.

## ENGLISH PROFICIENCY

17a. Do you speak a language other than English at home?

17b. If "Yes" to question 17a, how well do you speak English?

|   | <b>Total</b> |             |             |
|---|--------------|-------------|-------------|
|   | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents)                           | 6,700        | 5,609       | 5,342       |
|   | (%)          | (%)         | (%)         |
| Yes   | 40           | 37          | 39          |
| No  | 57           | 62          | 59          |
| Don't know/No answer                              | 2            | 2           | 1           |
|   | 100          | 100         | 100         |
| Base: (Speak language other than English at home) | 2,711        | 2,049       | 2,095       |
| Very well   | 65           | 71          | 72          |
| Well  | 21           | 21          | 19          |
| Not well  | 8            | 5           | 5           |
| Not at all  | 1            | *           | 1           |
| Don't know/No answer                              | 5            | 3           | 3           |
|   | 100          | 100         | 100         |

|   | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|---|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|   | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents)                           | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|   | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Yes   | 41          | 37          | 41          | 40              | 36          | 37          | 39             | 36          | 39          |
| No  | 57          | 61          | 58          | 58              | 63          | 61          | 59             | 63          | 59          |
| Don't know/No answer                              | 2           | 2           | 1           | 2               | 2           | 2           | 2              | 1           | 1           |
|   | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |
| Base: (Speak language other than English at home) | 1,323       | 1,011       | 1,104       | 1,003           | 732         | 724         | 385            | 306         | 268         |
| Very well   | 70          | 74          | 74          | 62              | 70          | 70          | 57             | 65          | 67          |
| Well  | 18          | 20          | 19          | 23              | 21          | 19          | 27             | 22          | 22          |
| Not well  | 7           | 3           | 4           | 8               | 6           | 7           | 9              | 9           | 8           |
| Not at all  | 1           | *           | 1           | 1               | 1           | 1           | 1              | *           | *           |
| Don't know/No answer                              | 4           | 3           | 3           | 6               | 3           | 3           | 6              | 4           | 3           |
|   | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

\* Less than 1%

## GENDER

### 18. Gender

|                         | <b>Total</b> |             |             |
|-------------------------|--------------|-------------|-------------|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |
|                         | (%)          | (%)         | (%)         |
| Male                    | 46           | 49          | 47          |
| Female                  | 49           | 49          | 48          |
| Another gender          | °            | °           | 1           |
| Don't know/No answer    | 5            | 2           | 4           |
|                         | 100          | 100         | 100         |

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Male                    | 43          | 47          | 46          | 50              | 50          | 49          | 48             | 49          | 48          |
| Female                  | 52          | 50          | 50          | 45              | 48          | 46          | 47             | 48          | 47          |
| Another gender          | °           | °           | *           | °               | °           | 1           | °              | °           | 1           |
| Don't know/No answer    | 5           | 2           | 4           | 4               | 2           | 4           | 5              | 3           | 4           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

° Choice not offered on that year's survey.

\* Less than 1%



## AGE

### 19. Age

- Sixty-nine percent of BART riders are under age 45.
- On weekends, nearly one in four riders is 18 – 24 years old.

|                         | <b>Total</b> |             |             |
|-------------------------|--------------|-------------|-------------|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |
|                         | (%)          | (%)         | (%)         |
| 13 – 17                 | 2            | 2           | 2           |
| 18 – 24                 | 18           | 16          | 15          |
| 25 – 34                 | 29           | 31          | 33          |
| 35 – 44                 | 18           | 19          | 19          |
| 45 – 54                 | 16           | 15          | 14          |
| 55 – 64                 | 12           | 11          | 10          |
| 65 and older            | 5            | 5           | 5           |
| Don't know/No answer    | 1            | 1           | 2           |
|                         | 100          | 100         | 100         |

**Under 45 = 69%**

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| 13 – 17                 | 2           | 2           | 1           | 2               | 2           | 2           | 5              | 3           | 3           |
| 18 – 24                 | 13          | 12          | 11          | 21              | 18          | 17          | 24             | 22          | 23          |
| 25 – 34                 | 29          | 29          | 34          | 29              | 32          | 32          | 30             | 32          | 30          |
| 35 – 44                 | 20          | 22          | 22          | 17              | 17          | 17          | 14             | 13          | 16          |
| 45 – 54                 | 18          | 19          | 15          | 15              | 13          | 14          | 10             | 12          | 12          |
| 55 – 64                 | 13          | 11          | 10          | 10              | 11          | 10          | 11             | 9           | 9           |
| 65 and older            | 4           | 4           | 4           | 5               | 6           | 7           | 5              | 7           | 6           |
| Don't know/No answer    | 1           | 1           | 2           | 1               | 1           | 2           | 1              | 2           | 2           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

## INCOME

### 20. What is your total annual household income before taxes?^

- About one-third (34%) of BART riders have household incomes of \$100,000 or more.
- Peak riders are more affluent than other riders.

|                         | <b>Total</b> |             |             |                                |
|-------------------------|--------------|-------------|-------------|--------------------------------|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |                                |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |                                |
|                         | (%)          | (%)         | (%)         |                                |
| Under \$25,000          | 19           | 17          | 14          |                                |
| \$25,000 – \$49,999     | 20           | 18          | 16          | <b>Under \$50,000 = 30%</b>    |
| \$50,000 – \$74,999     | 16           | 16          | 16          |                                |
| \$75,000 – \$99,999     | 11           | 11          | 11          |                                |
| \$100,000 and over      | 24           | 30          | 34          | <b>\$100,000 or more = 34%</b> |
| Don't know/No answer    | 9            | 9           | 8           |                                |
|                         | 100          | 100         | 100         |                                |

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| Under \$25,000          | 13          | 12          | 9           | 24              | 21          | 19          | 28             | 24          | 21          |
| \$25,000 – \$49,999     | 17          | 15          | 13          | 22              | 20          | 18          | 22             | 22          | 23          |
| \$50,000 – \$74,999     | 18          | 17          | 16          | 15              | 15          | 16          | 14             | 14          | 16          |
| \$75,000 – \$99,999     | 12          | 14          | 12          | 9               | 10          | 10          | 10             | 8           | 11          |
| \$100,000 and over      | 29          | 34          | 40          | 22              | 27          | 29          | 16             | 22          | 22          |
| Don't know/No answer    | 10          | 9           | 9           | 8               | 9           | 8           | 10             | 11          | 8           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

^Income range categories were combined to allow comparison with data from prior years.

## BART CUSTOMER HOUSEHOLD INCOMES COMPARED TO REGION

BART Customer Household Incomes Compared to Bay Area Counties in BART's Service Area

- BART customers' household incomes approximately track regional household income distribution; however, there are notable differences at the highest income level.

### Household Income BART Compared to Bay Area Counties in BART's Service Area

|                    | Alameda | Contra Costa | San Francisco | San Mateo | 4 County Total | BART 2016 Customer Satisfaction Survey |
|--------------------|---------|--------------|---------------|-----------|----------------|--|
| Households         | 571,828 | 391,996      | 356,916       | 263,280   | 1,584,020      | 4,891                                  |
|                    | %       | %            | %             | %         | %              | %                                      |
| Under \$25,000     | 16      | 14           | 18            | 11        | 15             | 16                                     |
| \$25,000-\$34,999  | 6       | 6            | 5             | 6         | 6              | 7                                      |
| \$35,000-\$39,999  | 3       | 3            | 2             | 3         | 3              | 4                                      |
| \$40,000-\$49,999  | 7       | 6            | 5             | 6         | 6              | 6                                      |
| \$50,000-\$59,999  | 6       | 6            | 4             | 5         | 6              | 8                                      |
| \$60,000-\$74,999  | 9       | 9            | 7             | 8         | 8              | 10                                     |
| \$75,000-\$99,999  | 12      | 13           | 10            | 12        | 12             | 12                                     |
| \$100,000 and Over | 42      | 42           | 47            | 51        | 45             | 37                                     |
| Total              | 100     | 100          | 100           | 100       | 100            | 100                                    |

Sources:

- U.S. Census Bureau, 2015 American Community Survey 1-Year Estimates: Table B19001 "Household Income in the Past 12 Months." Universe: Households. (factfinder.census.gov)
- BART 2016 Customer Satisfaction Survey

Notes:

- The ACS 2015 estimates shown include only data for the four counties within BART's service area: Alameda, Contra Costa, San Francisco, and San Mateo. Census tables adjust for unit non-response by weighting at the tract-level.
- The BART data distribution is based on 4,891 responses and excludes 8% non-response. Other tables within this report include non-response, so the percentages shown will differ.
- Totals may not add up to 100% due to rounding.

## NUMBER IN HOUSEHOLD

21. Including yourself, how many people live in your household?

- Household sizes remain steady since 2012.
- Thirty-one percent of riders live in two-person households.

|                         | <b>Total</b> |             |             |
|-------------------------|--------------|-------------|-------------|
|                         | <b>2012</b>  | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 6,700        | 5,609       | 5,342       |
|                         | (%)          | (%)         | (%)         |
| One                     | 18           | 17          | 18          |
| Two                     | 31           | 29          | 31          |
| Three                   | 20           | 19          | 20          |
| Four                    | 17           | 17          | 17          |
| Five                    | 7            | 7           | 6           |
| Six or more             | 5            | 5           | 5           |
| Don't know/No answer    | 3            | 6           | 3           |
|                         | 100          | 100         | 100         |

|                         | <b>Peak</b> |             |             | <b>Off-Peak</b> |             |             | <b>Weekend</b> |             |             |
|-------------------------|-------------|-------------|-------------|-----------------|-------------|-------------|----------------|-------------|-------------|
|                         | <b>2012</b> | <b>2014</b> | <b>2016</b> | <b>2012</b>     | <b>2014</b> | <b>2016</b> | <b>2012</b>    | <b>2014</b> | <b>2016</b> |
| Base: (All Respondents) | 3,217       | 2,724       | 2,712       | 2,499           | 2,040       | 1,951       | 985            | 845         | 678         |
|                         | %           | %           | %           | %               | %           | %           | %              | %           | %           |
| One                     | 17          | 15          | 15          | 19              | 19          | 20          | 22             | 21          | 23          |
| Two                     | 32          | 28          | 32          | 29              | 29          | 30          | 31             | 31          | 30          |
| Three                   | 20          | 20          | 21          | 21              | 19          | 21          | 17             | 17          | 16          |
| Four                    | 16          | 19          | 18          | 18              | 16          | 16          | 15             | 12          | 15          |
| Five                    | 7           | 8           | 6           | 6               | 7           | 6           | 8              | 7           | 8           |
| Six or more             | 4           | 4           | 5           | 5               | 6           | 6           | 5              | 5           | 6           |
| Don't know/No answer    | 3           | 6           | 3           | 2               | 5           | 2           | 3              | 6           | 3           |
|                         | 100         | 100         | 100         | 100             | 100         | 100         | 100            | 100         | 100         |

## RATING BART ON SPECIFIC ATTRIBUTES

23. Please help BART improve service by rating each of the following attributes. "7" (excellent) is the highest rating, and "1" (poor) is the lowest rating. You also can use any number in between. Skip attributes that do not apply to you.

| POOR |   |   |   |   | EXCELLENT |   |
|------|---|---|---|---|-----------|---|
| 1    | 2 | 3 | 4 | 5 | 6         | 7 |

**NOTE: "7" is the highest rating a respondent can give and "1" is the lowest. Blank and "don't know" responses were eliminated when calculating the arithmetic mean.**

## RATING BART ON SPECIFIC ATTRIBUTES (continued)

| OVERALL RATINGS                                  | Mean Ratings (7-point scale) |       |       |               |          |         | Mean Score<br>Change<br>2016-2014 |
|--|------------------------------|-------|-------|---------------|----------|---------|-----------------------------------|
|  | TOTAL                        |       |       | STRATA (2016) |          |         |                                   |
|  | 2012                         | 2014  | 2016  | Peak          | Off-Peak | Weekend |                                   |
| Base: (All Respondents)                          | 6,700                        | 5,609 | 5,342 | 2,712         | 1,951    | 678     |                                   |
|  | #                            | #     | #     | #             | #        | #       | #                                 |
| Availability of maps/schedules                   | 5.79                         | 5.71  | 5.65  | 5.64          | 5.66     | 5.64    | -0.06                             |
| On-time performance of trains                    | 5.72                         | 5.46  | 5.27  | 5.17          | 5.34     | 5.48    | -0.19                             |
| Timeliness of connections between<br>BART trains | 5.46                         | 5.36  | 5.25  | 5.19          | 5.27     | 5.45    | -0.11                             |
| Timely information about service<br>disruptions  | 5.37                         | 5.26  | 5.24  | 5.21          | 5.23     | 5.39    | -0.02                             |
| bart.gov website                                 | 5.44                         | 5.30  | 5.14  | 5.06          | 5.18     | 5.33    | -0.16                             |
| Access for people with disabilities              | 5.30                         | 5.13  | 5.03  | 4.96          | 5.07     | 5.19    | -0.10                             |
| Hours of operation                               | 5.08                         | 4.98  | 5.00  | 5.05          | 4.95     | 4.93    | 0.02                              |
| Frequency of train service                       | 5.24                         | 5.11  | 4.98  | 4.93          | 5.03     | 5.06    | -0.13                             |
| Availability of bicycle parking                  | 5.05                         | 5.01  | 4.97  | 4.86          | 5.03     | 5.21    | -0.04                             |
| Lighting in parking lots                         | 5.05                         | 4.94  | 4.92  | 4.82          | 4.97     | 5.14    | -0.02                             |
| Timeliness of connections with buses             | 4.93                         | 4.85  | 4.79  | 4.70          | 4.84     | 4.99    | -0.06                             |
| Personal security in the BART system             | 4.64                         | 4.49  | 4.28  | 4.19          | 4.31     | 4.57    | -0.21                             |
| Availability of car parking                      | 4.68                         | 4.41  | 4.23  | 4.07          | 4.28     | 4.77    | -0.18                             |
| Enforcement against fare evasion                 | 4.65                         | 4.47  | 4.19  | 4.06          | 4.23     | 4.62    | -0.28                             |
| Enforcement of no eating and drinking<br>policy  | 4.22                         | 4.05  | 3.93  | 3.81          | 3.99     | 4.25    | -0.12                             |

## RATING BART ON SPECIFIC ATTRIBUTES (continued)

| BART STATION RATINGS                             | Mean Ratings (7-point scale) |       |       |               |          |         | Mean Score<br>Change<br>2016-2014 |
|--|------------------------------|-------|-------|---------------|----------|---------|-----------------------------------|
|  | TOTAL                        |       |       | STRATA (2016) |          |         |                                   |
|  | 2012                         | 2014  | 2016  | Peak          | Off-Peak | Weekend |                                   |
| Base: (All Respondents)                          | 6,700                        | 5,609 | 5,342 | 2,712         | 1,951    | 678     |                                   |
|  | #                            | #     | #     | #             | #        | #       | #                                 |
| Clipper cards                                    | 5.69                         | 5.80  | 5.85  | 5.87          | 5.80     | 5.89    | 0.05                              |
| BART tickets                                     | 5.54                         | 5.50  | 5.45  | 5.40          | 5.45     | 5.61    | -0.05                             |
| Reliability of ticket vending machines           | 5.30                         | 5.17  | 5.02  | 4.91          | 5.06     | 5.32    | -0.15                             |
| Signs with transfer / platform / exit directions | 5.19                         | 5.06  | 4.97  | 4.94          | 4.96     | 5.15    | -0.09                             |
| Reliability of faregates                         | 5.22                         | 5.12  | 4.93  | 4.80          | 4.96     | 5.35    | -0.19                             |
| Length of lines at exit gates                    | 5.17                         | 5.04  | 4.85  | 4.67          | 4.95     | 5.34    | -0.19                             |
| Helpfulness and courtesy of Station Agents       | 4.94                         | 4.79  | 4.79  | 4.74          | 4.75     | 5.07    | 0.00                              |
| Stations kept free of graffiti                   | 5.01                         | 4.76  | 4.65  | 4.60          | 4.66     | 4.84    | -0.11                             |
| Availability of Station Agents                   | 4.86                         | 4.73  | 4.58  | 4.52          | 4.58     | 4.82    | -0.15                             |
| Overall condition/state of repair                | 4.81                         | 4.57  | 4.37  | 4.27          | 4.40     | 4.70    | -0.20                             |
| Escalator availability/reliability               | 4.60                         | 4.58  | 4.33  | 4.15          | 4.40     | 4.84    | -0.25                             |
| Appearance of landscaping                        | 4.60                         | 4.42  | 4.32  | 4.24          | 4.35     | 4.55    | -0.10                             |
| Elevator availability/reliability                | 4.66                         | 4.58  | 4.28  | 4.13          | 4.33     | 4.74    | -0.30                             |
| Presence of BART Police in stations              | 4.32                         | 4.19  | 4.04  | 3.96          | 4.04     | 4.33    | -0.15                             |
| Station cleanliness                              | 4.46                         | 4.11  | 3.93  | 3.85          | 3.97     | 4.15    | -0.18                             |
| Presence of BART Police in parking lots          | 4.08                         | 3.95  | 3.86  | 3.74          | 3.89     | 4.22    | -0.09                             |
| Elevator cleanliness                             | 4.21                         | 3.88  | 3.71  | 3.60          | 3.76     | 4.06    | -0.17                             |
| Restroom cleanliness                             | 3.71                         | 3.52  | 3.39  | 3.27          | 3.45     | 3.68    | -0.13                             |

## RATING BART ON SPECIFIC ATTRIBUTES (continued)

| BART TRAIN RATINGS   | Mean Ratings (7-point scale) |       |       |               |          |         | Mean Score<br>Change<br>2016-2014 |
|--|------------------------------|-------|-------|---------------|----------|---------|-----------------------------------|
|  | TOTAL                        |       |       | STRATA (2016) |          |         |                                   |
|  | 2012                         | 2014  | 2016  | Peak          | Off-Peak | Weekend |                                   |
| Base: (All Respondents)  | 6,700                        | 5,609 | 5,342 | 2,712         | 1,951    | 678     |                                   |
|  | #                            | #     | #     | #             | #        | #       | #                                 |
| Train interior kept free of graffiti                                 | 5.29                         | 5.17  | 5.07  | 4.99          | 5.12     | 5.27    | -0.10                             |
| Comfort of seats on trains   | 5.03                         | 4.84  | 4.85  | 4.76          | 4.93     | 5.04    | 0.01                              |
| Appearance of train exterior   | 4.71                         | 4.59  | 4.46  | 4.33          | 4.55     | 4.71    | -0.13                             |
| Availability of standing room on trains                              | 4.86                         | 4.61  | 4.40  | 4.21          | 4.49     | 4.97    | -0.21                             |
| Comfortable temperature aboard trains                                | 4.74                         | 4.41  | 4.38  | 4.19          | 4.48     | 4.83    | -0.03                             |
| Train interior cleanliness   | 4.49                         | 4.28  | 4.25  | 4.11          | 4.34     | 4.53    | -0.03                             |
| Condition / cleanliness of seats on trains                           | 4.18                         | 4.07  | 4.23  | 4.07          | 4.32     | 4.57    | 0.16                              |
| Condition / cleanliness of windows on trains                         | 4.52                         | 4.32  | 4.22  | 4.11          | 4.30     | 4.48    | -0.10                             |
| Clarity of public address announcements                              | 4.39                         | 4.21  | 4.08  | 4.05          | 4.07     | 4.25    | -0.13                             |
| Condition / cleanliness of floors on trains                          | 4.28                         | 4.05  | 4.05  | 3.90          | 4.14     | 4.41    | 0.00                              |
| Availability of seats on trains                                      | 4.57                         | 4.18  | 3.86  | 3.58          | 4.01     | 4.54    | -0.32                             |
| Availability of space on trains for luggage, bicycles, and strollers | 4.25                         | 4.06  | 3.86  | 3.65          | 3.96     | 4.47    | -0.20                             |
| Noise level on trains  | 4.27                         | 4.08  | 3.67  | 3.60          | 3.66     | 4.04    | -0.41                             |
| Presence of BART police on trains                                    | 3.84                         | 3.65  | 3.51  | 3.40          | 3.56     | 3.79    | -0.14                             |



## Appendix C: TESTS OF STATISTICAL SIGNIFICANCE 2016 VS. 2014

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## TEST OF STATISTICAL SIGNIFICANCE at the 95% Confidence Level

|   | 2016           |            |             |      |                    | 2014           |            |             |      |                    | Mean Difference | T-Score  | Statistically Significant at 95%? |
|---|----------------|------------|-------------|------|--------------------|----------------|------------|-------------|------|--------------------|-----------------|----------|-----------------------------------|
|   | Total Response | Don't know | Sample Size | Mean | Standard Deviation | Total Response | Don't know | Sample Size | Mean | Standard Deviation |                 |          |                                   |
| <b>OVERALL SATISFACTION (Scale 1-5)</b>       | 5,342          | 23         | 5,319       | 3.75 | 1.04               | 5,609          | 33         | 5,576       | 3.90 | 0.98               | -0.15           | -7.73994 | yes                               |
| <b>RECOMMEND TO FRIEND (Scale 1-5)</b>        | 5,342          | 23         | 5,319       | 4.36 | 0.87               | 5,609          | 24         | 5,585       | 4.46 | 0.77               | -0.10           | -6.34412 | yes                               |
| <b>"BART IS A GOOD VALUE" (Scale 1-5)</b>     | 5,342          | 47         | 5,295       | 3.58 | 1.15               | 5,609          | 53         | 5,556       | 3.68 | 1.11               | -0.10           | -4.60519 | yes                               |
| <b>Attributes: SCALE: 1=Poor, 7=Excellent</b> |                |            |             |      |                    |                |            |             |      |                    |                 |          |                                   |
| On-time performance of trains                 | 5,342          | 119        | 5,223       | 5.27 | 1.35               | 5,609          | 160        | 5,449       | 5.46 | 1.23               | -0.19           | -7.59038 | yes                               |
| Hours of operation                            | 5,342          | 179        | 5,163       | 5.00 | 1.63               | 5,609          | 174        | 5,435       | 4.98 | 1.66               | 0.02            | 0.62573  | no                                |
| Frequency of train service                    | 5,342          | 222        | 5,120       | 4.98 | 1.48               | 5,609          | 232        | 5,377       | 5.11 | 1.39               | -0.13           | -4.63359 | yes                               |
| Availability of maps and schedules            | 5,342          | 280        | 5,062       | 5.65 | 1.33               | 5,609          | 294        | 5,315       | 5.71 | 1.27               | -0.06           | -2.34815 | yes                               |
| Timely information about service disruptions  | 5,342          | 338        | 5,004       | 5.24 | 1.43               | 5,609          | 453        | 5,156       | 5.26 | 1.41               | -0.02           | -0.70966 | no                                |
| Timeliness of connections between BART trains | 5,342          | 723        | 4,619       | 5.25 | 1.31               | 5,609          | 759        | 4,850       | 5.36 | 1.27               | -0.11           | -4.14552 | yes                               |
| Timeliness of connections with buses          | 5,342          | 1,692      | 3,650       | 4.79 | 1.51               | 5,609          | 1,849      | 3,760       | 4.85 | 1.47               | -0.06           | -1.73249 | no                                |
| Availability of car parking                   | 5,342          | 1,153      | 4,189       | 4.23 | 1.87               | 5,609          | 1,206      | 4,403       | 4.41 | 1.82               | -0.18           | -4.51827 | yes                               |
| Availability of bicycle parking               | 5,342          | 1,939      | 3,403       | 4.97 | 1.53               | 5,609          | 2,101      | 3,508       | 5.01 | 1.49               | -0.04           | -1.10065 | no                                |
| Lighting in parking lots                      | 5,342          | 1,317      | 4,025       | 4.92 | 1.45               | 5,609          | 1,372      | 4,237       | 4.94 | 1.44               | -0.02           | -0.62877 | no                                |
| Access for people with disabilities           | 5,342          | 1,795      | 3,547       | 5.03 | 1.55               | 5,609          | 1,912      | 3,697       | 5.13 | 1.51               | -0.10           | -2.77984 | yes                               |
| Enforcement against fare evasion              | 5,342          | 1,339      | 4,003       | 4.19 | 1.89               | 5,609          | 1,548      | 4,061       | 4.47 | 1.83               | -0.28           | -6.75729 | yes                               |
| Enforcement of no eating and drinking policy  | 5,342          | 945        | 4,397       | 3.93 | 1.95               | 5,609          | 1,073      | 4,536       | 4.05 | 1.93               | -0.12           | -2.92250 | yes                               |
| Personal security in BART system              | 5,342          | 692        | 4,650       | 4.28 | 1.68               | 5,609          | 778        | 4,831       | 4.49 | 1.60               | -0.21           | -6.22820 | yes                               |
| bart.gov website                              | 5,342          | 1,079      | 4,263       | 5.14 | 1.44               | 5,609          | 1,237      | 4,372       | 5.30 | 1.36               | -0.16           | -5.30548 | yes                               |
| Length of lines at exit gates                 | 5,342          | 329        | 5,013       | 4.85 | 1.53               | 5,609          | 472        | 5,137       | 5.04 | 1.43               | -0.19           | -6.46005 | yes                               |
| Reliability of ticket vending machines        | 5,342          | 653        | 4,689       | 5.02 | 1.50               | 5,609          | 700        | 4,909       | 5.17 | 1.42               | -0.15           | -5.02631 | yes                               |
| Reliability of faregates                      | 5,342          | 543        | 4,799       | 4.93 | 1.50               | 5,609          | 654        | 4,955       | 5.12 | 1.40               | -0.19           | -6.46241 | yes                               |
| Clipper cards                                 | 5,342          | 712        | 4,630       | 5.85 | 1.27               | 5,609          | 974        | 4,635       | 5.80 | 1.29               | 0.05            | 1.87993  | no                                |
| BART tickets                                  | 5,342          | 1,026      | 4,316       | 5.45 | 1.34               | 5,609          | 1,120      | 4,489       | 5.50 | 1.35               | -0.05           | -1.74392 | no                                |
| Escalator availability and reliability        | 5,342          | 629        | 4,713       | 4.33 | 1.73               | 5,609          | 760        | 4,849       | 4.58 | 1.66               | -0.25           | -7.20694 | yes                               |
| Elevator availability and reliability         | 5,342          | 1,388      | 3,954       | 4.28 | 1.74               | 5,609          | 1,575      | 4,034       | 4.58 | 1.67               | -0.30           | -7.85929 | yes                               |
| Presence of BART Police in stations           | 5,342          | 828        | 4,514       | 4.04 | 1.67               | 5,609          | 899        | 4,710       | 4.19 | 1.65               | -0.15           | -4.33762 | yes                               |
| Presence of BART Police in parking lots       | 5,342          | 1,245      | 4,097       | 3.86 | 1.76               | 5,609          | 1,323      | 4,286       | 3.95 | 1.77               | -0.09           | -2.33390 | yes                               |
| Availability of Station Agents                | 5,342          | 693        | 4,649       | 4.58 | 1.61               | 5,609          | 786        | 4,823       | 4.73 | 1.60               | -0.15           | -4.54681 | yes                               |
| Helpfulness & courtesy of Station Agents      | 5,342          | 776        | 4,566       | 4.79 | 1.68               | 5,609          | 867        | 4,742       | 4.79 | 1.71               | 0.00            | 0.00000  | no                                |
| Appearance of landscaping                     | 5,342          | 949        | 4,393       | 4.32 | 1.67               | 5,609          | 1,086      | 4,523       | 4.42 | 1.66               | -0.10           | -2.83513 | yes                               |
| Stations kept free of graffiti                | 5,342          | 832        | 4,510       | 4.65 | 1.64               | 5,609          | 931        | 4,678       | 4.76 | 1.63               | -0.11           | -3.22371 | yes                               |
| Station cleanliness                           | 5,342          | 538        | 4,804       | 3.93 | 1.75               | 5,609          | 651        | 4,958       | 4.11 | 1.75               | -0.18           | -5.08066 | yes                               |
| Restroom cleanliness                          | 5,342          | 1,379      | 3,963       | 3.39 | 1.86               | 5,609          | 1,529      | 4,080       | 3.52 | 1.86               | -0.13           | -3.13374 | yes                               |

| (continued from prior page)                                   | 2016           |            |             |      |                    | 2014           |            |             |      |                    | Mean Difference | T-Score   | Statistically Significant at 95%? |
|---|----------------|------------|-------------|------|--------------------|----------------|------------|-------------|------|--------------------|-----------------|-----------|-----------------------------------|
|   | Total Response | Don't know | Sample Size | Mean | Standard Deviation | Total Response | Don't know | Sample Size | Mean | Standard Deviation |                 |           |                                   |
| Elevator cleanliness  | 5,342          | 1,435      | 3,907       | 3.71 | 1.89               | 5,609          | 1,649      | 3,960       | 3.88 | 1.87               | -0.17           | -4.00991  | yes                               |
| Signs with transfer / platform / exit directions              | 5,342          | 844        | 4,498       | 4.97 | 1.51               | 5,609          | 1,005      | 4,604       | 5.06 | 1.50               | -0.09           | -2.85230  | yes                               |
| Stations - Overall condition / state of repair                | 5,342          | 596        | 4,746       | 4.37 | 1.55               | 5,609          | 727        | 4,882       | 4.57 | 1.49               | -0.20           | -6.45172  | yes                               |
| Availability of seats on trains                               | 5,342          | 326        | 5,016       | 3.86 | 1.80               | 5,609          | 440        | 5,169       | 4.18 | 1.71               | -0.32           | -9.19315  | yes                               |
| Availability of space on trains for luggage, bikes, strollers | 5,342          | 614        | 4,728       | 3.86 | 1.78               | 5,609          | 731        | 4,878       | 4.06 | 1.76               | -0.20           | -5.53605  | yes                               |
| Availability of standing room on trains                       | 5,342          | 442        | 4,900       | 4.40 | 1.70               | 5,609          | 631        | 4,978       | 4.61 | 1.63               | -0.21           | -6.26510  | yes                               |
| Comfort of seats on trains                                    | 5,342          | 436        | 4,906       | 4.85 | 1.47               | 5,609          | 560        | 5,049       | 4.84 | 1.50               | 0.01            | 0.33594   | no                                |
| Condition / cleanliness of seats on train                     | 5,342          | 447        | 4,895       | 4.23 | 1.65               | 5,609          | 580        | 5,029       | 4.07 | 1.74               | 0.16            | 4.70139   | yes                               |
| Comfortable temperature aboard trains                         | 5,342          | 463        | 4,879       | 4.38 | 1.66               | 5,609          | 574        | 5,035       | 4.41 | 1.70               | -0.03           | -0.88900  | no                                |
| Noise level on trains   | 5,342          | 438        | 4,904       | 3.67 | 1.82               | 5,609          | 586        | 5,023       | 4.08 | 1.77               | -0.41           | -11.37503 | yes                               |
| Clarity of public address announcements                       | 5,342          | 548        | 4,794       | 4.08 | 1.74               | 5,609          | 703        | 4,906       | 4.21 | 1.75               | -0.13           | -3.66849  | yes                               |
| Presence of BART Police on trains                             | 5,342          | 820        | 4,522       | 3.51 | 1.76               | 5,609          | 930        | 4,679       | 3.65 | 1.77               | -0.14           | -3.80388  | yes                               |
| Appearance of train exterior                                  | 5,342          | 635        | 4,707       | 4.46 | 1.57               | 5,609          | 756        | 4,853       | 4.59 | 1.58               | -0.13           | -4.03487  | yes                               |
| Condition / cleanliness of windows on train                   | 5,342          | 615        | 4,727       | 4.22 | 1.67               | 5,609          | 675        | 4,934       | 4.32 | 1.67               | -0.10           | -2.94215  | yes                               |
| Train interior kept free of graffiti                          | 5,342          | 606        | 4,736       | 5.07 | 1.51               | 5,609          | 729        | 4,880       | 5.17 | 1.49               | -0.10           | -3.26794  | yes                               |
| Train interior cleanliness                                    | 5,342          | 522        | 4,820       | 4.25 | 1.65               | 5,609          | 654        | 4,955       | 4.28 | 1.68               | -0.03           | -0.89070  | no                                |
| Condition / cleanliness of floors on trains                   | 5,342          | 490        | 4,852       | 4.05 | 1.72               | 5,609          | 618        | 4,991       | 4.05 | 1.78               | 0.00            | 0.00000   | no                                |

## Appendix D: SERVICE ATTRIBUTE RATINGS - PERCENTAGES

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## Service Attribute Ratings – Percentages

SCALE: 1=Poor, 7=Excellent

|   | Mean | Top Two | Neutral | Bottom Two | Don't know |
|---|------|---------|---------|------------|------------|
|   | #    | %       | %       | %          | %          |
| Clipper cards   | 5.85 | 60      | 24      | 2          | 13         |
| Availability of maps and schedules                            | 5.65 | 60      | 32      | 3          | 5          |
| BART tickets  | 5.45 | 45      | 33      | 3          | 19         |
| On-time performance of trains                                 | 5.27 | 49      | 45      | 4          | 2          |
| Timeliness of connections between BART trains                 | 5.25 | 41      | 42      | 3          | 14         |
| Timely information about service disruptions                  | 5.24 | 46      | 43      | 5          | 6          |
| bart.gov website  | 5.14 | 36      | 40      | 4          | 20         |
| Train interior kept free of graffiti                          | 5.07 | 41      | 42      | 6          | 11         |
| Access for people with disabilities                           | 5.03 | 29      | 33      | 5          | 34         |
| Reliability of ticket vending machines                        | 5.02 | 38      | 44      | 6          | 12         |
| Hours of operation  | 5.00 | 45      | 43      | 9          | 3          |
| Frequency of train service                                    | 4.98 | 40      | 49      | 7          | 4          |
| Signs with transfer / platform / exit directions              | 4.97 | 35      | 43      | 6          | 16         |
| Availability of bicycle parking                               | 4.97 | 26      | 33      | 5          | 36         |
| Reliability of faregates                                      | 4.93 | 36      | 47      | 7          | 10         |
| Lighting in parking lots                                      | 4.92 | 28      | 42      | 5          | 25         |
| Comfort of seats on trains                                    | 4.85 | 34      | 51      | 7          | 8          |
| Length of lines at exit gates                                 | 4.85 | 35      | 51      | 8          | 6          |
| Helpfulness & courtesy of Station Agents                      | 4.79 | 34      | 41      | 10         | 15         |
| Timeliness of connections with buses                          | 4.79 | 24      | 39      | 5          | 32         |
| Stations kept free of graffiti                                | 4.65 | 30      | 45      | 10         | 16         |
| Availability of Station Agents                                | 4.58 | 28      | 49      | 10         | 13         |
| Appearance of train exterior                                  | 4.46 | 25      | 53      | 11         | 12         |
| Availability of standing room on trains                       | 4.40 | 27      | 50      | 14         | 8          |
| Comfortable temperature aboard trains                         | 4.38 | 26      | 52      | 14         | 9          |
| Stations - Overall condition / state of repair                | 4.37 | 21      | 57      | 11         | 11         |
| Escalator availability and reliability                        | 4.33 | 25      | 48      | 15         | 12         |
| Appearance of landscaping                                     | 4.32 | 22      | 48      | 13         | 18         |
| Elevator availability and reliability                         | 4.28 | 20      | 41      | 13         | 26         |
| Personal security in BART system                              | 4.28 | 22      | 50      | 15         | 13         |
| Train interior cleanliness                                    | 4.25 | 22      | 54      | 15         | 10         |
| Availability of car parking                                   | 4.23 | 23      | 39      | 16         | 22         |
| Condition / cleanliness of seats on train                     | 4.23 | 22      | 55      | 15         | 8          |
| Condition / cleanliness of windows on train                   | 4.22 | 21      | 52      | 15         | 12         |
| Enforcement against fare evasion                              | 4.19 | 22      | 37      | 17         | 25         |
| Clarity of public address announcements                       | 4.08 | 21      | 50      | 19         | 10         |
| Condition / cleanliness of floors on trains                   | 4.05 | 19      | 53      | 19         | 9          |
| Presence of BART Police in stations                           | 4.04 | 17      | 51      | 16         | 16         |
| Station cleanliness   | 3.93 | 18      | 51      | 21         | 10         |
| Enforcement of no eating and drinking policy                  | 3.93 | 21      | 38      | 23         | 18         |
| Availability of space on trains for luggage, bikes, strollers | 3.86 | 18      | 49      | 22         | 11         |
| Presence of BART Police in parking lots                       | 3.86 | 15      | 43      | 19         | 23         |
| Availability of seats on trains                               | 3.86 | 18      | 52      | 24         | 6          |
| Elevator cleanliness  | 3.71 | 15      | 36      | 22         | 27         |
| Noise level on trains   | 3.67 | 17      | 48      | 27         | 8          |
| Presence of BART Police on trains                             | 3.51 | 13      | 45      | 27         | 15         |
| Restroom cleanliness  | 3.39 | 11      | 36      | 27         | 26         |

Note: Ratings are based on a scale of 1 - 7. Top Two includes 6 or 7 ratings, Neutral includes 3, 4, or 5 ratings, and Bottom Two includes 1 or 2 ratings.

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## Appendix E: DESCRIPTION OF METHODOLOGY AND RESPONSE RATE SUMMARY

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# DESCRIPTION OF METHODOLOGY

## FIELD PROCEDURES

In total, ten interviewers worked on the 2016 study. The interviewer training session was conducted at Corey, Canapary & Galanis' (CC&G) office in San Francisco on Thursday, September 8, 2016, and the bulk of the field interviewing was conducted between September 9 and September 29, 2016. (A couple of remaining runs were surveyed on Sunday, October 9<sup>th</sup>.)

Interviewers, for the most part, worked in crews of two. In addition to the interviewers, roving supervisors also worked on the project.

Interviewers boarded randomly pre-selected BART trains and distributed questionnaires to all riders on one pre-determined BART car (also randomly selected). These interviewers rode nearly the whole route of their designated line (origination/destination stations were generally Balboa Park, Castro Valley, Concord, El Cerrito Plaza, South Hayward, San Francisco International Airport, and Millbrae), continually collecting completed surveys and distributing surveys to new riders entering their car.

The questionnaires were available in English, Spanish, and Chinese. Interviewers carried signs on the back of their clipboards that said in the respective languages: "I have surveys in English, Spanish, and Chinese." In 2016, 106 non-English language surveys were completed, representing 2.0% of total surveys (unweighted).

Tallies were kept for questionnaires taken home with riders to be mailed back and for all non-responses (refusals, language barrier, children under 13, sleeping, and left train). The definitions for non-responses are:

- *Language Barrier* - Non-response because a questionnaire is not available in a language understood by the rider.
- *Left Train* - The surveyor was unable to offer a questionnaire to a rider because of the short distance of that rider's trip.
- *Children under 13* - Children under 13 are not eligible for the survey.
- *Sleeping* - Sleeping riders are not offered a questionnaire.
- *Refusals* - Riders unwilling to accept/fill out the survey.

All surveys collected during a run were collated together into batches. During this process, coding of answers was completed and surveys were individually examined to verify completeness and age of the respondent. Incomplete surveys and surveys from respondents under 13 years of age were removed. Data from the surveys were then input into a database.

Following inputting, randomly selected batches were pulled and reviewed for quality assurance. All of the surveys in the selected batches were compared to the data input for all questions to verify the accuracy of editors, coders, and data entry staff. A total of 535 surveys were reviewed in this manner (10% of all surveys). A further 1,089 surveys (slightly more than 20% of total) were checked for data input on the key questions only (questions 12, 13, and 14).

## DESCRIPTION OF METHODOLOGY (continued)

### SAMPLING

Sampling was achieved by selecting BART train trips that most closely resembled trains selected for the 2014 study. The resulting sample of BART trains fell within three strata: peak, off-peak and weekend. Peak is defined as weekday trains dispatched between 5:30 am - 8:30 am and 3:30 pm - 6:30 pm. Off-peak includes trains dispatched all other weekday times. Weekend includes all trains dispatched on Saturday or Sunday.

Once all train selections were made, each trip (train run) was matched with an appropriate return trip on the same line. (For the few cases where a return trip was not available, it was treated as a one-way trip, and no return trip was assigned.) For each trip, one train car was randomly selected for interviewers to board. Interviewers attempted to survey all car riders through the destination station. This random car selection process resulted in a slight bias towards shorter trains. Riders on shorter trains had a higher likelihood of being selected than those on longer trains. In previous years, analysis has been performed on this issue and has demonstrated that this bias has no material effect on the results. The number of outgoing and returning trips totaled: Peak – 38 trips, Off-Peak – 58 trips, weekend 43 trips.

### WEIGHTING

The data were weighted by ridership segment to proportionately represent BART riders. The weighted ridership segments are defined identically to the sampling ridership segments except that weekend is broken into Saturday and Sunday. The resulting ridership segments are as follows: weekday peak, weekday off-peak, Saturday, and Sunday. The chart below shows the actual number of questionnaires by ridership segment and the number of questionnaires weighted to represent the proportional amount of riders in each. It also shows the number of riders the weighting is based on, as well as the percentage of riders these numbers represent (weighted %).

|                                   | <b>Weekday<br/>Peak</b> | <b>Weekday<br/>Off-peak</b> | <b>Saturday</b> | <b>Sunday</b> | <b>Weekly<br/>Total</b> |
|-----------------------------------|-------------------------|-----------------------------|-----------------|---------------|-------------------------|
| Questionnaires completed          | 2,013                   | 1,855                       | 640             | 834           | 5,342                   |
| Questionnaires weighted by strata | 2,712                   | 1,951                       | 399             | 279           | 5,342                   |
| Estimated # of BART trips*        | 1,290,392               | 928,231                     | 189,796         | 132,945       | 2,541,364               |
| Weighted %                        | 50.8%                   | 36.5%                       | 7.5%            | 5.2%          | 100%                    |

\* Estimated number of BART trips taken from ridership averages for the week of September 10 –September 16, 2016. Weekday numbers include five weekdays.

## 2016 BART Customer Satisfaction Study

Response Rate / % of Riders Who Completed Survey / Distribution Rate

|  | <i>Total</i>         | <i>Peak</i>         | <i>Off-Peak</i>     | <i>Weekend</i>      |
|--|----------------------|---------------------|---------------------|---------------------|
| Children under 13                      | 127                  | 20                  | 36                  | 71                  |
| Language barrier                       | 70                   | 22                  | 20                  | 28                  |
| Sleeping                               | 276                  | 108                 | 113                 | 55                  |
| Left train                             | 145                  | 77                  | 47                  | 21                  |
| Refused                                | 4,246                | 1,442               | 1,414               | 1,390               |
| Already Participated                   | 176                  | 82                  | 58                  | 36                  |
| Partials (not processed)               | 342                  | 102                 | 137                 | 103                 |
| Qst. distributed and not returned      | 588                  | 249                 | 178                 | 161                 |
| <b>TOTAL NON-RESPONSE</b>              | <b><u>5,970</u></b>  | <b><u>2,102</u></b> | <b><u>2,003</u></b> | <b><u>1,865</u></b> |
| Completes collected                    | 5,034                | 1,870               | 1,758               | 1,406               |
| Completes mailed back                  | 308                  | 143                 | 97                  | 68                  |
| <b>TOTAL COMPLETES</b>                 | <b><u>5,342</u></b>  | <b><u>2,013</u></b> | <b><u>1,855</u></b> | <b><u>1,474</u></b> |
| <b>PASSENGERS ON SAMPLED CARS</b>      |                      |                     |                     |                     |
| (Total completes + Total Non-response) | <b><u>11,312</u></b> | <b><u>4,115</u></b> | <b><u>3,858</u></b> | <b><u>3,339</u></b> |

### Response Rate & % of Riders Who Completed Survey

|  |                      |                     |                     |                     |
|--|----------------------|---------------------|---------------------|---------------------|
| <b>PASSENGERS ON SAMPLED CARS</b>                    | <b>11,312</b>        | <b>4,115</b>        | <b>3,858</b>        | <b>3,339</b>        |
| Less:  |                      |                     |                     |                     |
| Children Under 13                                    | (127)                | (20)                | (36)                | (71)                |
| Language Barrier                                     | (70)                 | (22)                | (20)                | (28)                |
| Sleeping   | (276)                | (108)               | (113)               | (55)                |
| <b>POTENTIAL RESPONDENTS</b>                         | <b><u>10,839</u></b> | <b><u>3,965</u></b> | <b><u>3,689</u></b> | <b><u>3,185</u></b> |
| <b>TOTAL COMPLETES</b>                               | <b>5,342</b>         | <b>2,013</b>        | <b>1,855</b>        | <b>1,474</b>        |
| <b>Response Rate <sup>1</sup></b>                    | <b>49.3%</b>         | <b>50.8%</b>        | <b>50.3%</b>        | <b>46.3%</b>        |
| <b>% of Riders Who Completed Survey <sup>2</sup></b> | <b>47.2%</b>         | <b>48.9%</b>        | <b>48.1%</b>        | <b>44.1%</b>        |

### Distribution Rate

|  |                      |                     |                     |                     |
|--|----------------------|---------------------|---------------------|---------------------|
| <b>PASSENGERS ON SAMPLED CARS</b>          | <b>11,312</b>        | <b>4,115</b>        | <b>3,858</b>        | <b>3,339</b>        |
| Less:                                      |                      |                     |                     |                     |
| Children Under 13                          | (127)                | (20)                | (36)                | (71)                |
| Language Barrier                           | (70)                 | (22)                | (20)                | (28)                |
| Sleeping                                   | (276)                | (108)               | (113)               | (55)                |
| <b>POTENTIAL RESPONDENTS</b>               | <b><u>10,839</u></b> | <b><u>3,965</u></b> | <b><u>3,689</u></b> | <b><u>3,185</u></b> |
| Total Completes                            | 5,342                | 2,013               | 1,855               | 1,474               |
| Qst. taken home and not returned by Oct 24 | 588                  | 249                 | 178                 | 161                 |
| Partials (not processed)                   | 342                  | 102                 | 137                 | 103                 |
| <b>TOTAL QST. DISTRIBUTED</b>              | <b><u>6,272</u></b>  | <b><u>2,364</u></b> | <b><u>2,170</u></b> | <b><u>1,738</u></b> |
| <b>Distribution Rate <sup>3</sup></b>      | <b>57.9%</b>         | <b>59.6%</b>        | <b>58.8%</b>        | <b>54.6%</b>        |

<sup>1</sup> Total Completes divided by Potential Respondents

<sup>2</sup> Total Completes divided by Passengers on Sampled Cars

<sup>3</sup> Total Questionnaires Distributed divided by Potential Respondents

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## Appendix F: CODING OF RESPONDENT COMMENTS

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# CODING OF RESPONDENT COMMENTS

## EDITING AND CODING

This section outlines editing and coding procedures utilized on the 2016 BART Customer Satisfaction Study. For the most part, information as provided by the respondent on the self-administered questionnaire was entered as recorded.

Editing procedures, where disparities occurred, were as follows:

### **Scaling Questions**

- If multiples occurred where only one response was acceptable (e.g., both 5 and 6 circled on the Poor - Excellent scale or Agree Strongly and Agree Somewhat both checked), the answer input alternated between the higher and lower responses. On the first occurrence we took the higher response, and on the next occurrence we took the lower response, etc.
- In cases where bipolar discrepancies were observed (e.g., both 1 and 7 circled) the midpoint was used. Sometimes respondents would include notes like poor in this respect and excellent in another respect for a specific attribute.

The back side of the questionnaire included a section for comments. Overall, 1,418 respondents, or 27% of all respondents, provided comments. All of these written comments were typed into a database. The comments were then split and coded using a list of "department specific" codes provided by BART. The code list and incidence for each code are listed on the following page. A total of 2,001 comments were tabulated and coded.

The verbatim comments for each code are made available to the BART departments responsible for each area. This provides them with an additional tool to understand the reasons for customer rating levels.

## **2016 Customer Satisfaction Study**

### **Code Sheet – Comment Code Frequencies**

**[FREQUENCIES FOR EACH CATEGORY ARE INDICATED IN BRACKETS]**

Code 1 | Agent Availability [10]  
Code 2 | Bus/Muni/Caltrain Connections [8]  
Code 3 | Bicycles [43]  
Code 4 | General Compliments [137]  
Code 5 | Disability/Senior Issues [38]  
Code 6 | Escalators and Elevators (except cleanliness) [37]  
Code 7 | Extensions [33]  
Code 8 | Fares and Fare Policies [146]  
Code 9 | Graffiti [4]  
Code 10 | Overall Train/Track Maintenance/Conditions [19]  
Code 11 | Lighting [4]  
Code 12 | Other Comments [59]  
Code 13 | Announcements and PA (Public Address) Issues [23]  
Code 14 | Personnel (Except Police) [40]  
Code 15 | Parking [67]  
Code 16 | Police/Enforcement (except bikes)/Security [138]  
Code 17 | Overall Station Conditions/State of Repair [19]  
Code 18 | Station Cleanliness (Except Graffiti) [133]  
Code 19 | Service – Type, Amount, etc. [237]  
Code 20 | Signage, Maps, and Schedules [51]  
Code 21 | Seats on Trains/Crowding [192]  
Code 22 | Comments About Surveys/Research [24]  
Code 23 | Train Cleanliness [95]  
Code 24 | Temperature [46]  
Code 25 | Fare Collection – General [6]  
Code 26 | Fare Collection Equipment [1]  
Code 27 | Refunds [0]  
Code 28 | Tickets [0]  
Code 29 | Train Windows [5]  
Code 30 | Clipper [8]  
Code 31 | Need for More Restrooms/Open Restrooms [33]  
Code 32 | Overall Car Condition [26]  
Code 33 | Car Layout / Test Car Layout [50]  
Code 34 | Homeless/Panhandling [103]  
Code 35 | BART Transfers/Entry and Exit Lines [17]  
Code 36 | Reliability/Delays/Delay Information [46]  
Code 37 | Train Noise [103]

## Appendix G: QUADRANT CHARTS BY RIDERSHIP SEGMENT

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## QUADRANT CHARTS BY RIDERSHIP SEGMENT

The chart titled "2016 Quadrant Chart" (see page 21) is designed to help set priorities for future initiatives to improve customer satisfaction. It identifies those specific service attributes that are most important to BART customers on average and also shows which service attributes rate lowest. The "Target Issues" quadrant (top left) displays the most important service attributes in need of attention.

Values along the horizontal axis are average ratings. Customers marked their ratings on a scale of 1 = poor and 7 = excellent, so higher ratings on the right side of the Quadrant Chart are better scores and those on the left side are worse. The vertical axis ("Derived Importance") scale was derived by correlating each of the service attributes with customers' overall satisfaction levels. Those service attributes having strong correlations with overall satisfaction are seen as "More Important," while those with weaker correlations are seen as "Less Important."

For example, customer ratings of on-time performance are very strongly correlated with overall satisfaction (i.e., customers that are happy with BART's on-time performance tend to be more satisfied overall, and conversely customers that are disappointed with on-time performance tend to be less satisfied overall). On the other hand, customer ratings of map/schedule availability have only a weak correlation with overall satisfaction (i.e., it is not uncommon for customers to rate map/schedule availability highly, even though they are dissatisfied overall with BART services). Therefore, on-time performance is located in the upper part of the chart, while map/schedule availability is located in the lower part.

Specific values along the vertical axis are derived by calculating ratios between correlation coefficients for each service attribute and the median correlation level. Those service attributes above 100 are more correlated with overall satisfaction, while those below 100 are less so.

Note that some service attributes are seen as fairly unimportant on average because not all customers are affected by them, even though they are quite important to specific customer segments (e.g., car parking availability, elevator cleanliness, restrooms, and bicycle parking availability).

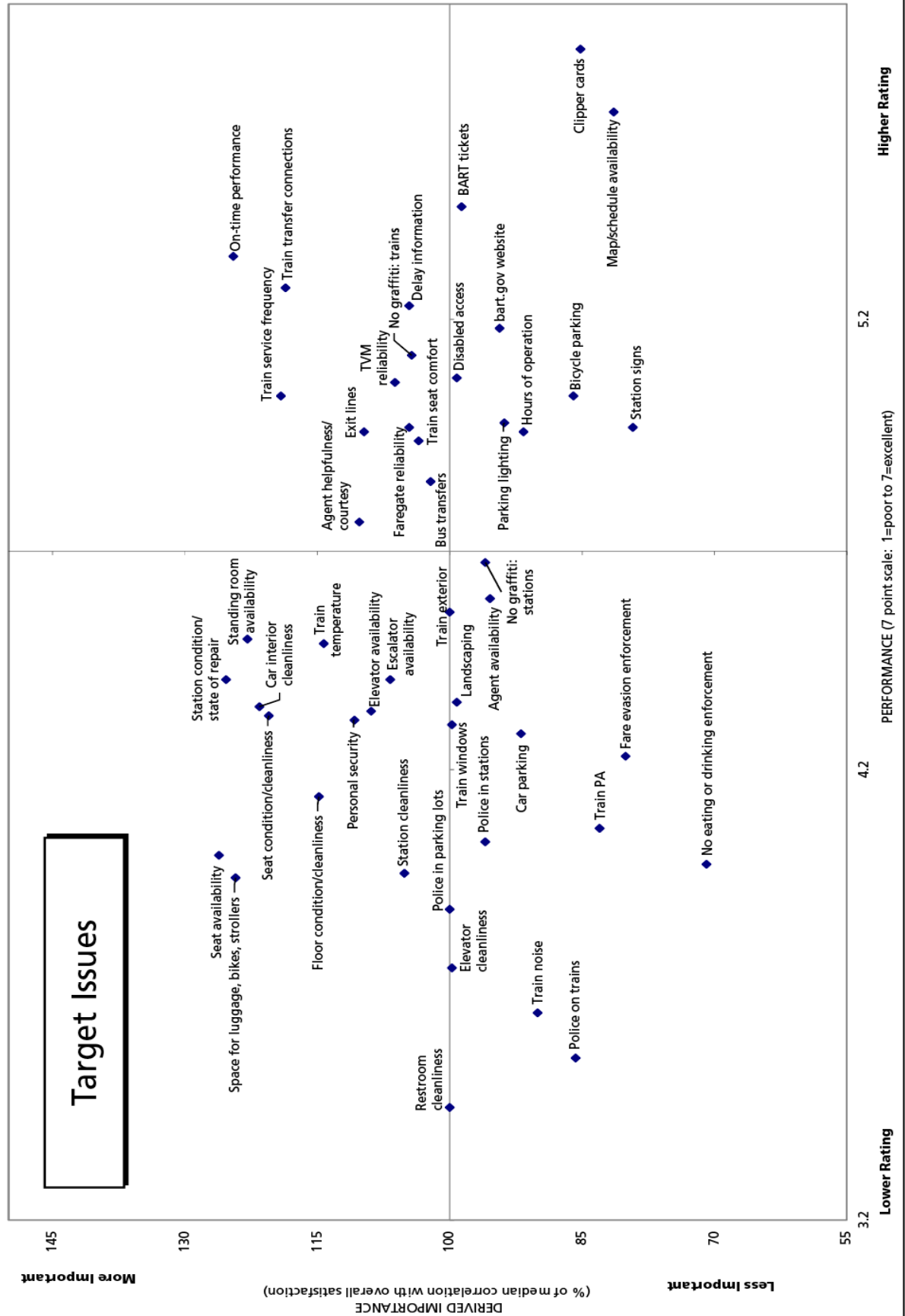
Also, note that more sophisticated statistical tests, utilizing factor and regression analyses, were done for the 1996 and 1998 Customer Satisfaction reports. This testing was not done in subsequent years as the results of the additional analyses were generally consistent with the correlation coefficient-based analysis used in the Quadrant Chart. Please refer to the 1998 Customer Satisfaction report for information on additional statistical testing done in past years.

The following pages show the Quadrant Charts for each of the three sample ridership segments: peak, off-peak, and weekend riders.

# Target Issues



## 2016 Quadrant Chart (Off-peak)



## 2016 Quadrant Chart (Weekend)

