



# 2015 Station Profile Survey Preliminary Results



February 25, 2016



# Background

- Large scale survey to gather data on trip origins and destinations, station access and egress modes, and rider profile including demographics
  - Information is used for modeling, access planning, regulatory compliance, etc.
  - 14<sup>th</sup> such survey; last conducted in 2008
- 2015 survey conducted in partnership with MTC
  - Goal: create greater uniformity in survey data for the region
  - Contract managed by MTC
  - Cost sharing: 65% MTC; 35% BART
- Motion authorizing funding agreement with MTC approved by Board in Aug. 2014



# Methodology

- Interviewer-administered tablet computer survey
  - Benefits include high response rates (74-91%), high geocoding rates (99.9%), and the ability for interviewers to clarify questions and responses
  - While more expensive than paper questionnaires, cost to BART was comparable due to cost sharing agreement with MTC
  - Survey conducted Feb. 17 – May 29, 2015; Mon – Fri, 4 a.m. – midnight\*
    - Customers intercepted on platforms using random selection
    - Total of 43,989 weekday interviews completed
- Prior Station Profile surveys: paper questionnaires distributed in stations
- Data weighting
  - Systemwide results weighted by entry/exit station pairs and time period
  - Station-level results weighted by entry station and time period

*\*Limited weekend surveying also conducted; will be analyzed and reported separately*  
**PRELIMINARY RESULTS**



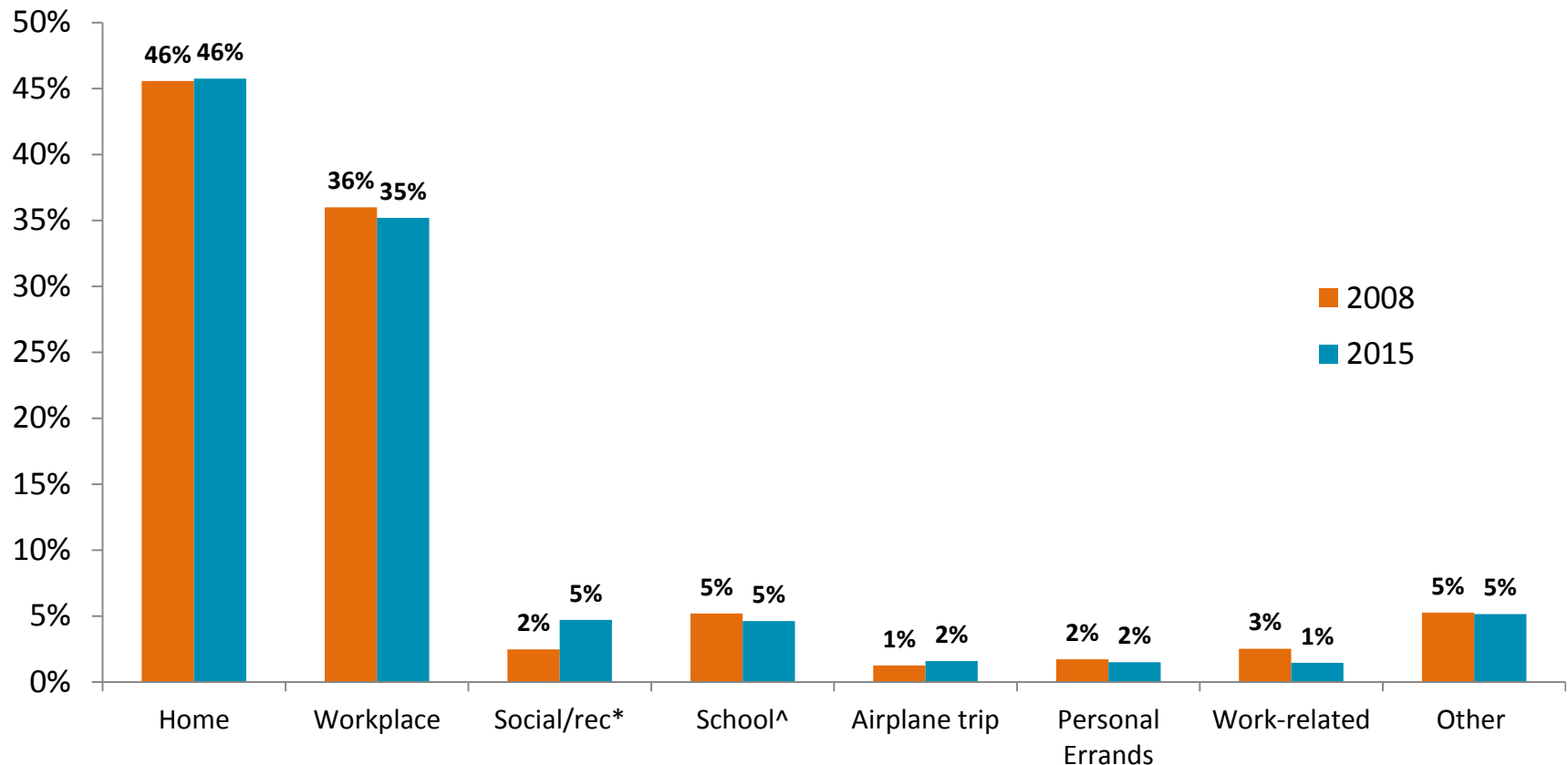
# Context

- Changes in BART system (spring 2008 – spring 2015) include:
  - Two new stations: West Dublin/Pleasanton (February 2011) and Oakland International Airport (November 2014)
  - Average weekday ridership up 19% between the two survey periods (+69,300 trips/day)
  - Introduction of demand-based parking fee increases
  - Fewer restrictions on bicycles onboard during commute hours; increased bicycle parking
  - Implementation of Clipper and rapid growth in use



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# Origin Type



Q: Where are you coming from (the starting place for this one-way trip)?

Base: weekday trips

PRELIMINARY RESULTS

\*"Social/recreational" category added for 2015 survey; comparable 2008 categories were combined.

^2015 categories included in "School:" college student, K-12 student, school-related activity



# Home-based Origin Cities

| City                | %   |  | City                      | %    |
|---------------------|-----|--|---------------------------|------|
| San Francisco       | 21% |  | Castro Valley             | 1%   |
| Oakland             | 18% |  | Antioch                   | 1%   |
| Berkeley            | 6%  |  | Lafayette                 | 1%   |
| Daly City           | 4%  |  | Pleasant Hill             | 1%   |
| San Leandro         | 4%  |  | San Bruno                 | 1%   |
| Hayward             | 4%  |  | San Ramon                 | 1%   |
| Walnut Creek        | 3%  |  | Orinda                    | 1%   |
| Concord             | 3%  |  | San Lorenzo               | 1%   |
| Fremont             | 3%  |  | Danville                  | 1%   |
| Richmond            | 3%  |  | Pacifica                  | 1%   |
| El Cerrito          | 3%  |  | Livermore                 | 1%   |
| South San Francisco | 2%  |  | Millbrae                  | 1%   |
| Pittsburg           | 1%  |  | San Mateo                 | 1%   |
| Union City          | 1%  |  | Martinez                  | 1%   |
| Dublin              | 1%  |  | San Pablo                 | 1%   |
| Pleasanton          | 1%  |  | Other (less than 1% each) | 8%   |
| Alameda             | 1%  |  | TOTAL                     | 100% |

*Base: weekday trips with home origins*

*PRELIMINARY RESULTS*



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## Top Home-based Ridership Changes: Spring 2008 - 2015

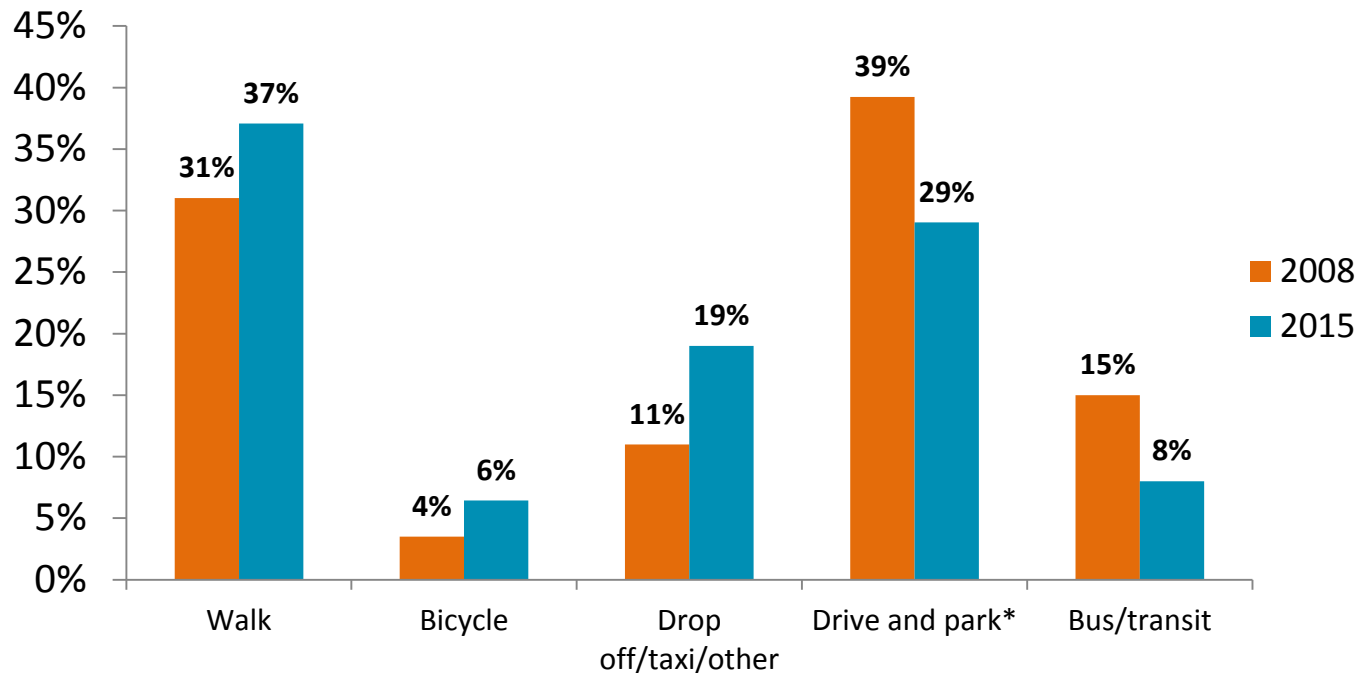
| Station                | Change in Home-Based Entries | % Chg |
|------------------------|------------------------------|-------|
| West Dublin/Pleasanton | 2,712                        | NA    |
| 19th St. Oakland       | 2,126                        | 86%   |
| Millbrae               | 1,834                        | 62%   |
| Coliseum               | 1,670                        | 65%   |
| West Oakland           | 1,631                        | 39%   |
| Fruitvale              | 1,490                        | 27%   |
| Fremont                | 1,284                        | 24%   |
| Lake Merritt           | 1,268                        | 42%   |
| MacArthur              | 1,261                        | 29%   |
| Pittsburg/Bay Point    | 1,191                        | 25%   |

*PRELIMINARY RESULTS*



# Access from Home to BART

- With BART's parking supply approximately flat since 2008, ridership growth has been accommodated by walking, cycling or getting dropped off at stations. Fewer are driving or taking transit.



*Q: How did you get from (origin trip purpose) to the (entry station) for this trip?*

*Base: weekday trips with home origins*

*PRELIMINARY RESULTS*

*\*Includes motorcycle/motorized scooter and carpool*





# Walk

## Home to BART

|    | Top 10 Stations              | % Walk |
|----|------------------------------|--------|
| 1  | 24th St. Mission             | 79%    |
| 2  | 16th St. Mission             | 76%    |
| 3  | Downtown Berkeley            | 74%    |
| 4  | 12th St. Oakland City Center | 61%    |
| 5  | Civic Center/UN Plaza        | 60%    |
| 6  | 19th St. Oakland             | 60%    |
| 7  | Ashby                        | 59%    |
| 8  | Powell St.                   | 58%    |
| 9  | Balboa Park                  | 56%    |
| 10 | Montgomery St.               | 49%    |

*Base: weekday trips with home origins*  
*PRELIMINARY RESULTS*



# Bicycle

## Home to BART

|    | Top 10 Stations  | % Bicycle |
|----|------------------|-----------|
| 1  | Lake Merritt     | 15%       |
| 2  | 19th St. Oakland | 14%       |
| 3  | MacArthur        | 14%       |
| 4  | West Oakland     | 12%       |
| 5  | North Berkeley   | 12%       |
| 6  | Ashby            | 11%       |
| 7  | Fruitvale        | 11%       |
| 8  | 16th St. Mission | 10%       |
| 9  | San Leandro      | 9%        |
| 10 | Castro Valley    | 9%        |

*Base: weekday trips with home origins*  
*PRELIMINARY RESULTS*



# Drop off/taxi/other

## Home to BART

|    | Top 10 Stations      | % Drop off/<br>taxi/other |
|----|----------------------|---------------------------|
| 1  | Fremont              | 33%                       |
| 2  | Pittsburg/Bay Point  | 31%                       |
| 3  | Dublin/Pleasanton    | 30%                       |
| 4  | Coliseum             | 29%                       |
| 5  | Walnut Creek         | 28%                       |
| 6  | Bay Fair             | 28%                       |
| 7  | Lafayette            | 26%                       |
| 8  | Daly City            | 26%                       |
| 9  | Glen Park            | 26%                       |
| 10 | El Cerrito del Norte | 26%                       |

*Base: weekday trips with home origins*  
*PRELIMINARY RESULTS*



# Drive and Park

## Home to BART

|    | Top 10 Stations        | % Drive and park* |
|----|------------------------|-------------------|
| 1  | North Concord/Martinez | 70%               |
| 2  | West Dublin/Pleasanton | 60%               |
| 3  | Orinda                 | 54%               |
| 4  | Dublin/Pleasanton      | 52%               |
| 5  | Walnut Creek           | 51%               |
| 6  | Concord                | 48%               |
| 7  | Millbrae               | 48%               |
| 8  | South Hayward          | 47%               |
| 9  | Lafayette              | 45%               |
| 10 | Fremont                | 44%               |

*Base: weekday trips with home origins*

*PRELIMINARY RESULTS*

*\*Includes motorcycle/motorized scooter and carpool*



# Bus/transit

## Home to BART

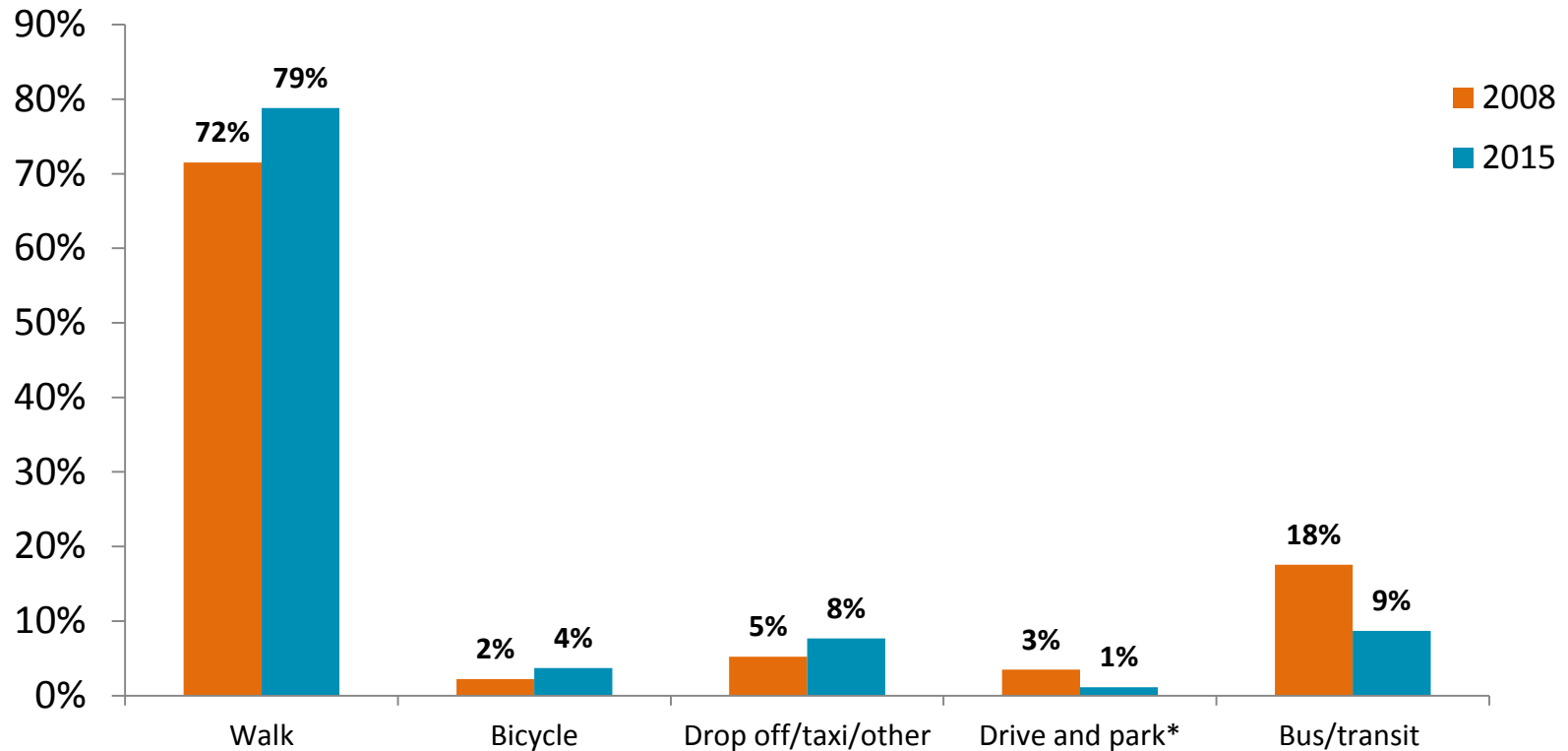
|    | Top 10 Stations              | % Bus/<br>transit |
|----|------------------------------|-------------------|
| 1  | Embarcadero                  | 28%               |
| 2  | Powell St.                   | 21%               |
| 3  | Montgomery St.               | 21%               |
| 4  | Civic Center/UN Plaza        | 20%               |
| 5  | Daly City                    | 16%               |
| 6  | Glen Park                    | 16%               |
| 7  | Millbrae                     | 16%               |
| 8  | 12th St. Oakland City Center | 15%               |
| 9  | El Cerrito del Norte         | 13%               |
| 10 | Balboa Park                  | 13%               |

*Base: weekday trips with home origins*  
*PRELIMINARY RESULTS*



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# Access from Non-home Origin to BART



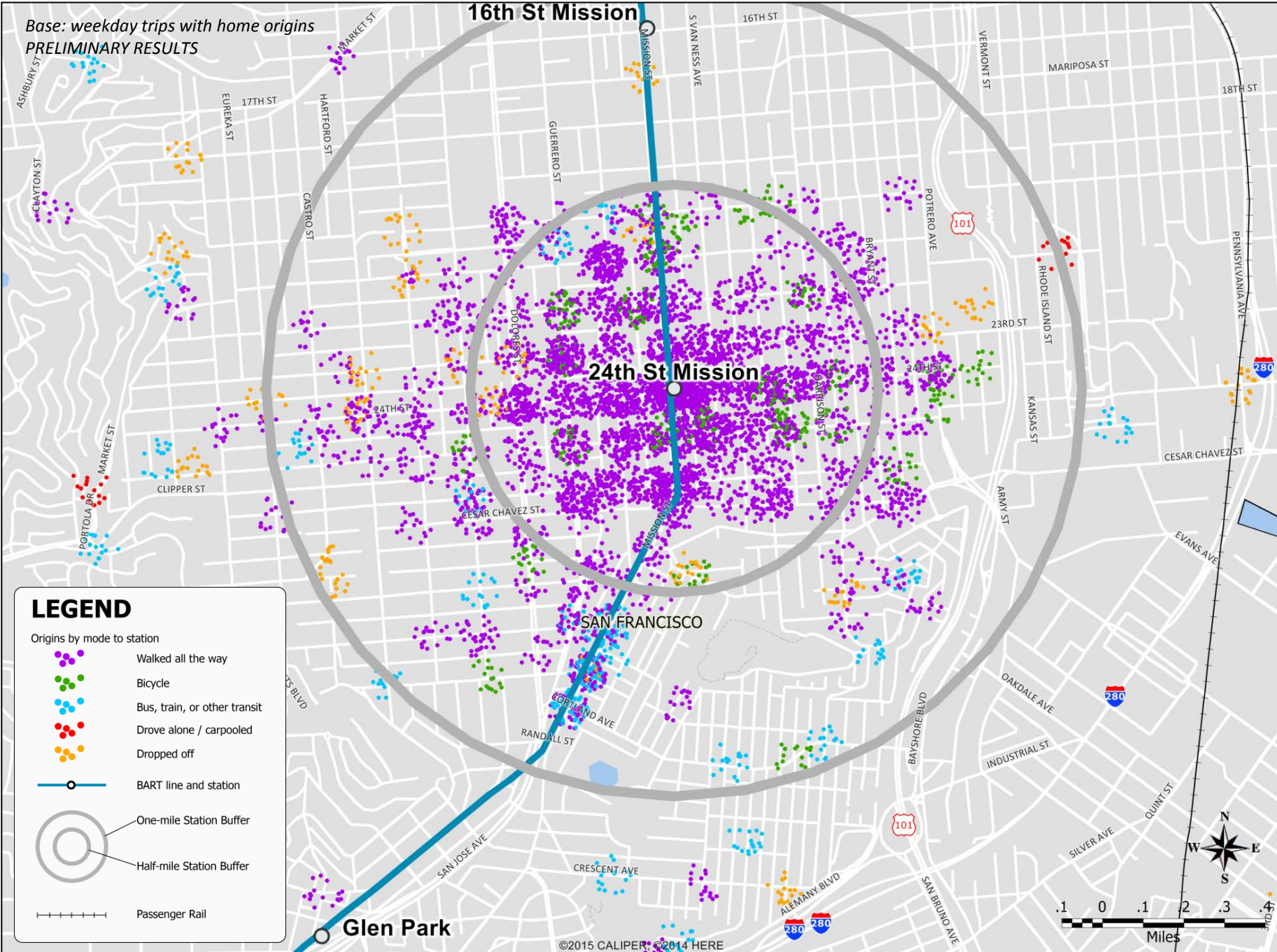
Q: How did you get from (origin trip purpose) to the (entry station) for this trip?

Base: weekday trips with non-home origins

PRELIMINARY RESULTS

\*Includes motorcycle/motorized scooter and carpooled

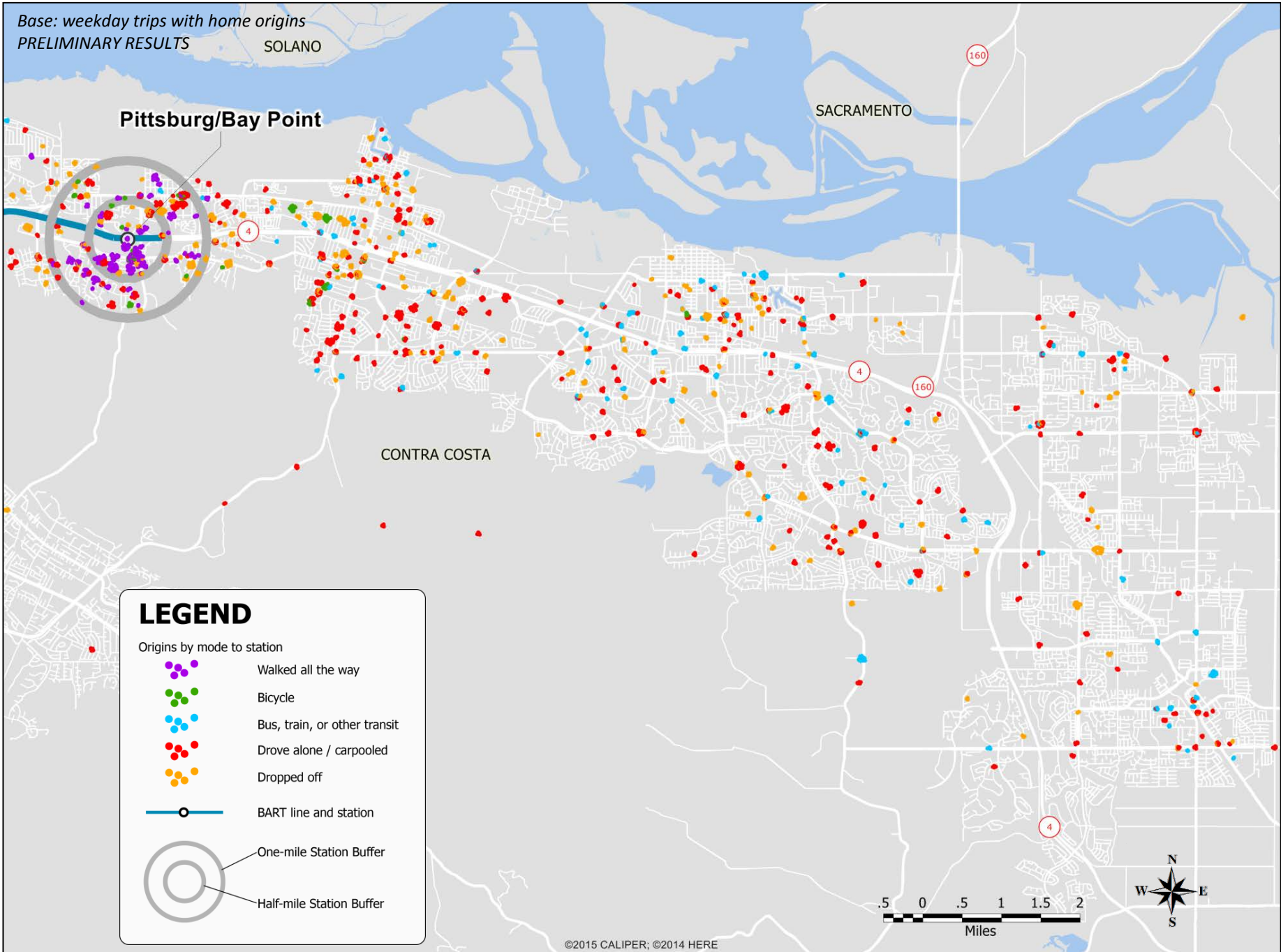
# 24<sup>th</sup> St. Mission Station: Home Locations of BART Riders by Mode





# Pittsburg / Bay Point Station: Home Locations of BART Riders by Mode

Base: weekday trips with home origins  
PRELIMINARY RESULTS







# Median Distances from Home

| Systemwide          | Median Distance from Home |
|---------------------|---------------------------|
| All Modes           | 1.2 miles                 |
| Walk                | 0.6 miles                 |
| Bicycle             | 1.0 miles                 |
| Drop off/taxi/other | 1.8 miles                 |
| Drive and park*     | 2.7 miles                 |
| Bus/transit         | 2.2 miles                 |

***Stations with longest median distances from home (all modes)***

- North Concord/Martinez (6.7 miles)
- Pittsburg/Bay Point (4.6 miles)
- Millbrae (4.6 miles)

***Stations with shortest median distances from home (all modes)***

- 24th St. Mission (0.5 miles)
- 16th St. Mission (0.5 miles)
- 12th St. Oakland City Center (0.6 miles)

*Base: weekday trips with home origins*

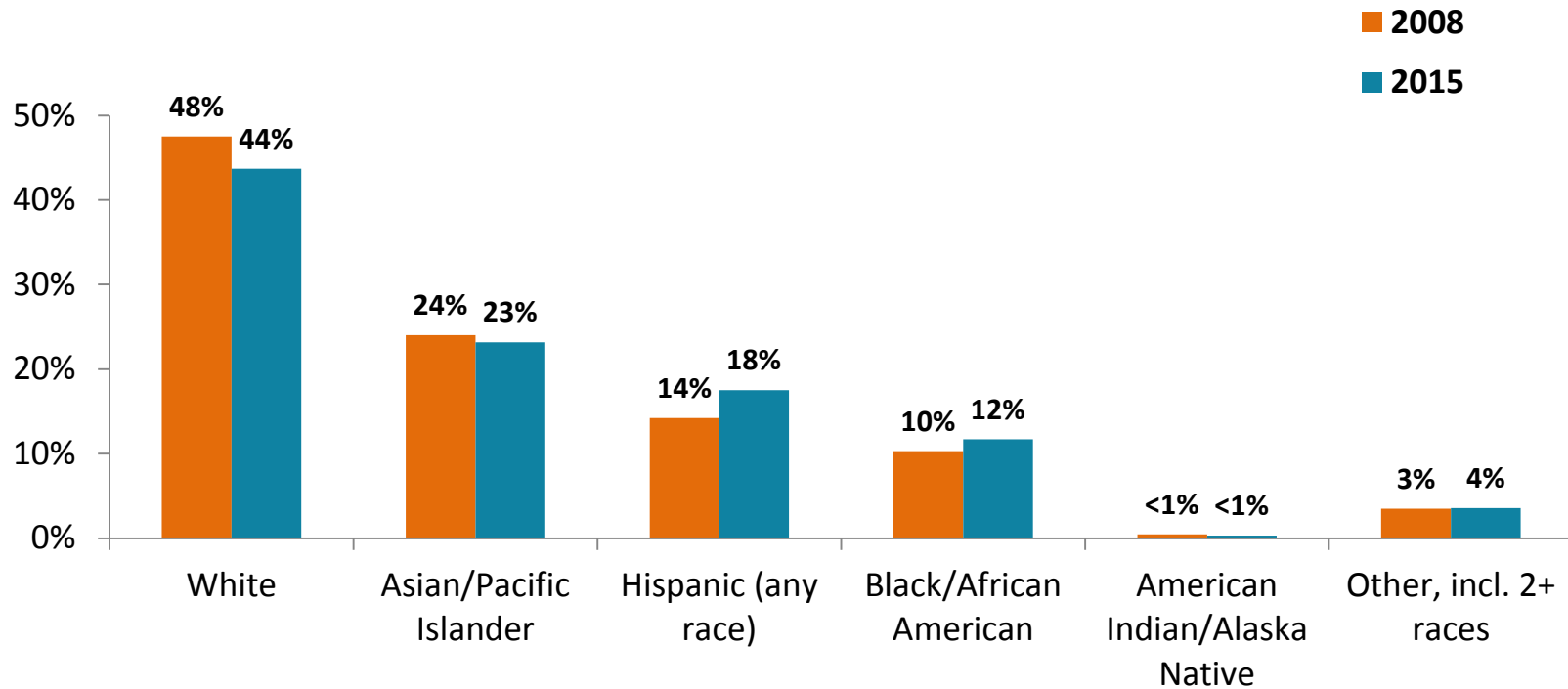
*PRELIMINARY RESULTS*

*\*Includes motorcycle/motorized scooter and carpool*



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# BART Customer Demographics



Base: weekday trips  
PRELIMINARY RESULTS



# Next Steps

- Sortable Excel files and station level maps will be available on [bart.gov](http://bart.gov) next month
- Per MTC's schedule, project to be completed by end of June, including final report with:
  - Data by time period
  - Data by entry station
  - Two-pagers for each station with rider characteristics and maps of home origins
  - Regional maps
- BART/MTC assessment of methodology and lessons learned in FY17
- Future Station Profile surveys – joint effort as described in amendment to MTC Resolution 3866:
  - *“Transit agencies will participate in the (the joint) Survey Program when collecting information on transit passenger demographics AND travel patterns together.”*