

District 1 Multimodal Transportation Study



Draft Report: October 2024

Acknowledgments

This project was funded by the Transportation Authority's Neighborhood Program at the request of Transportation Authority Board Member Connie Chan (District 1). The Neighborhood Program was established to fund community-based efforts in San Francisco neighborhoods, especially in underserved neighborhoods and areas with vulnerable populations (e.g., older adults, children, and/or people with disabilities). The Neighborhood Program is made possible with San Francisco's half-cent sales tax for transportation funds.

This report was supported by the San Francisco County Transportation Authority through a grant of Prop L transportation sales tax funds



PROJECT TEAM

San Francisco County Transportation Authority

Rachel Hiatt, Deputy Director of Planning
Aliza Paz, Principal Transportation Planner
Daniela Rible, Senior Communications
Manager

Abe Bingham, Senior Graphic Designer

San Francisco Municipal Transportation Agency

Jean Long, Multimodal Planning Manager, Streets Division

Michael Rhodes, Transit Priority Manager, Transit Division

Anna Harkman, Senior Transportation Planner, Transit Division

Kittelson & Associates, Inc.

Laurence Lewis, Senior Principal Planner
Amanda Leahy, Associate Planner
Mike Alston, Senior Planner
Ben Demonbreun, Engineering Associate
Doreen Gui, Transportation Analyst

Circlepoint

Ivy Morrison, Senior Principal Regina Merrill, Engagement Manager Monica Dwight, Senior Associate



1455 Market Street, 22nd Floor, San Francisco, CA 94103 TEL 415-522-4800 EMAIL info@sfcta.org WEB www.sfcta.org

Table of Contents

1. INTRODUCTION	6
1.1 Study Area	6
1.2 Related Planning Efforts	7
1.3 Engagement Process	8
2. DISTRICT 1 TRANSPORTATION NEEDS	9
2.1 Transportation Safety	9
2.2 Travel Patterns and Mode Share	11
2.3 Transit Performance	18
2.4 Phase 1 Community Engagement	22
3. CONCEPT DEVELOPMENT	28
3.1 Draft Concepts	28
3.2 Phase 2 Community Engagement	45
3.3 Refined Project Concepts and Strategies	53
3.4 Other Concepts Considered	70
4. IMPLEMENTATION STRATEGY	74
4.1 Costs and Funding Sources	74
4.2 Implementation Pathways and Coordination	79

Tables

Table 1. Crash Data Summary, District 1, 10/1/2017 - 9/30/2022	9
Table 2. Muni Service within District 1	19
Table 3. Recommended Intersection Treatments Along Fulton Street between	
22nd Avenue and 48th Avenue	37
Table 4. Potential Curb Management Strategies	42
Table 5. Candidate Mobility Hub Sites Screening and Selection	44
Table 6. Recommended Intersection Treatments Along Fulton Street between	
La Playa Street and Arguello Boulevard	60
Table 7. Potential Curb Management Strategies	66
Table 8. Recommended Concepts, Estimated Costs, Funding Sources, and	
Lead Agencies	74
Eiguros	
Figures	,
Figure 1. Study Area	6
Figure 2. Pedestrian/Bicycle Combined Crash Screening Results and	10
2022 High Injury Network	10
Figure 4. Made Share of District 1 Residents (Pro COVID)	11 12
Figure 5. Mode Share of District 1 Residents (Pre-COVID)	12
Figure 5. Mode Share of Tours Made by District 1 Residents by District (Pre-COVID)	13
Figure 6. Destinations of Trips Made by District 1 Residents (Pre-COVID)	14
Figure 7. Mode Share of Trips to Mini Districts by District 1 Residents (Pre-COVID)	15
Figure 8. Mode Share for Trips to District 1 Mini Districts (Pre-COVID)	15
Figure 9. Mode Share for District 1 Mini District Trips by Age Group (Pre-COVID)	16
Figure 10. Mode Share for District 1 Mini District Trips by Household	10
Income Group (Pre-COVID)	16
Figure 11. Mode Share for District 1 Mini District Trips by Time Period (Pre-COVID)	17
Figure 12. Transit Routes and Bicycle Network in District 1	20
Figure 13. 2022 Muni Systemwide Daily Ridership by Route	21
Figure 14. Transit Ridership by Stop within District 1	22
Figure 15. Age Distribution of Phase 1 Survey Respondents	23
Figure 16. Race and Ethnicity Distribution of Phase 1 Survey Respondents	24
Figure 17. Location of Draft Neighborhood Circulation and Quick-Build Concepts ar	
Districtwide Mode Shift and Greenhouse Gas Emission Reduction Strategies	28
Figure 18. Treatment Toolkit	29
Figure 19. Sample Intersection Treatments on Cabrillo Street	33
Figure 20. Sample Intersection Treatments on Balboa Street	34
Figure 21. Sample Treatments on Fulton Street	36

Figure 22. Fulton Street / 22nd Avenue Bike Connection Concept	39
Figure 23. Potential North-South Express Bus Routes	40
Figure 24. Examples of Mobility Hubs	43
Figure 25. Candidate Mobility Hub Sites	44
Figure 26. Age Distribution of Phase 2 Survey Respondents	46
Figure 27. Race and Ethnicity Distribution of Phase 2 Survey Respondents	47
Figure 28. Location of Recommended Neighborhood Circulation and Quick-	
Build Concepts and Districtwide Mode Shift and Greenhouse Gas	
Emission Reduction Strategies	54
Figure 29. Example of Existing Geary Boulevard Bus Stop with	
Recommended Amenities	55
Figure 30. Sample Intersection Treatments on Cabrillo Street	56
Figure 31. Sample Intersection Treatments on Balboa Street	57
Figure 32. Example Intersection Treatments on Fulton Street	59
Figure 33. Sample Bike Connectivity Treatments on Fulton Street	64
Figure 34. Potential North-South Express Bus Routes	65
Figure 35. Examples of Mobility Hubs	67
Figure 36. Candidate Mobility Hub Sites	69
Figure 37. Mobility Hub Concept Diagram at Cabrillo Street and La Playa Street	70
Figure 38. Separated Bike Lane on Eastbound and Westbound Turk Street	72

1. Introduction

This District 1 Multimodal Transportation Study (District 1 Study) was initiated in late 2022 at the request of Transportation Authority Board Member Connie Chan (District 1) and funded through the San Francisco Transportation Authority's Neighborhood Program. Transportation Authority staff collaborated with the San Francisco Municipal Transportation Agency (SFMTA), San Francisco Department of Public Works (SFDPW), and San Francisco Recreation and Parks Department (SFRPD) on this effort.

The project team used a combination of technical analysis and community engagement to identify transportation needs and mobility challenges and develop neighborhood circulation and quick-build concepts and districtwide mode shift and greenhouse gas emission reduction strategies to improve circulation and safety and shift vehicle trips to transit, walking, biking, or other non-driving options.

1.1 STUDY AREA

The study area shown in Figure 1, covers San Francisco's District 1 (also referred to as the Richmond), situated in the northwest portion of the city. It is bounded by the Presidio of San Francisco on the north, John F Kennedy Drive on the south, Arguello Boulevard and Masonic Avenue on the east, and the Pacific Ocean on the west. The study area includes five mini districts: Inner Richmond, Central Richmond, Outer Balboa, St Mary's / University of San Francisco, and Veteran's Affairs (VA) Hospital. These mini districts represent activity centers such as hospitals, retail corridors, and universities within District 1 and are each comprised of several traffic analysis zones (TAZs) that are used for analysis of trips to, from, and within District 1.

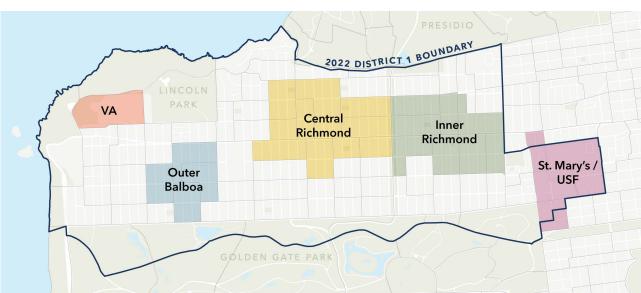


Figure 1. Study Area

1.2 RELATED PLANNING EFFORTS

The study builds on top of studies and projects that have identified and addressed District 1 transportation goals and needs. The study team reviewed the following sources to ensure alignment with past planning efforts and identify potential gaps to fill:

- Richmond District Strategy,¹ led by San Francisco Planning (SF Planning) in 2014, conducted in-depth outreach on people's needs and opinions and highlighted transit reliability and safety.
- Vision Zero SF Action Strategy,² developed by the City and County of San Francisco in 2021, identified the High Injury Network (HIN) and committed to improve every street on the HIN with safety measures by 2024. HIN segments within District 1 updated in 2022 are shown in Figure 2.
- Golden Gate Park Access and Safety Program,³ led by SFMTA and SFRPD, is an ongoing effort to support safety and accessibility following the approval of the Golden Gate Park car free promenade on John F Kennedy Drive in April 2022.
- Golden Gate Park Edges Improvement Strategy,⁴ led by SF Planning in 2018, studied the travel patterns of people accessing Golden Gate Park via Fulton Street and Lincoln Way.
- Slow Streets Program,⁵ launched by San Francisco Municipal Transportation Agency (SFMTA) in 2022, created a Slow Streets Network to create a comfortable multimodal environment along certain corridors in the city. Slow Streets are low-vehicle-traffic routes that prioritize active transportation, featuring purple Slow Streets signs and roadway markings, along with features like speed humps. Within District 1, Slow Streets include Cabrillo Street from 45th Avenue to 23rd Avenue, Lake Street from 28th Avenue to Arguello Boulevard, and 23rd Avenue from Lake Street to Cabrillo Street.

¹ SF Planning, Richmond District Strategy, Accessed April 2023. https://sfplanning.org/project/richmond-district-strategy#about

² City and County of San Francisco, Vision Zero SF. Accessed April 2023. https://www.visionzerosf.org/

³ San Francisco Recreation & Parks, JFK Promenade, Accessed April 2023. https://sfrecpark.org/1538/accessGGP#:~:text=This%20program%20proposes%20updates%20to,with%20high%20barriers%20to%20access.

⁴ SF Planning, GG Park Edges Existing Conditions Analysis Final Presentation, Accessed April 2023. https://www.sfcta.org/sites/default/files/2021-01/GG%20Park%20Edges%20Existing%20Conditions%20Analysis%20Final%20Presentation_March%202018.pdf

⁵ SFMTA, Slow Streets Program, Accessed April 2023. https://www.sfmta.com/projects/slow-streets-program

• Other Active Related Efforts, such as the SFMTA's ongoing plans, projects, and programs, such as: Biking and Rolling Plan; Muni Forward and Muni Equity Strategy; Geary Boulevard Improvement Project; Geary Rapid Project; Flag Stop Conversion Program; Fulton Street Safety and Transit Project; and Arguello Boulevard Safety Project; Central Richmond Traffic Safety Project; Anza Street Bike Lanes Project; California Street Safety Project; and, the 8th Avenue Neighborway Project.

Transit reliability and pedestrian and bicycle safety were mentioned as key challenges and concerns across multiple sources.

1.3 ENGAGEMENT PROCESS

Outreach was a critical element of the planning process and was conducted over two phases. The outreach plan was developed to target everyone who lives in District 1, with an emphasis on reaching diverse ethnicities, ages, and backgrounds. Each phase of community engagement included at least one town hall, a multi-language survey, and pop-ups/pop-ins at community events. Materials were made available in English, Chinese, Spanish, and Russian.

Phase 1 focused on understanding the community's transportation needs and challenges to guide the identification of project concepts. The project team used a variety of strategies and tools, including a virtual town hall meeting, an in-person town hall event, meetings with community groups, and pop-up events, as well as a mapbased web survey and online survey to gather inputs on their mobility challenges and transportation priorities. The top priorities identified by community members were transit reliability, safe routes to schools and transit, congestion management, and improving bike networks. This phase of outreach informed the draft concepts, which were brought to the public in Phase 2.

Phase 2 presented draft concepts and strategy recommendations to address the transportation challenges and needs identified through engagement and technical analysis. The project team collected community feedback on the draft concepts through an in-person town hall meeting with District 1 Supervisor Connie Chan, pop-up events, meetings with community groups, and an online survey. Public feedback on the draft concepts informed refinements to the concepts.

The summary and findings from Phase 1 outreach are presented in Section 2.4 and the summary and findings from Phase 2 outreach are presented in Section 3.1.

2. District 1 Transportation Needs

The project team used a combination of technical analysis and community engagement to understand transportation challenges and needs in District 1. This section presents the summary of technical analysis on transportation safety, travel patterns, and transit performance, and includes a summary and findings from Phase 1 outreach.

2.1 TRANSPORTATION SAFETY

In November 2022, the San Francisco Department of Public Health and SFMTA published the city's 2022 Vision Zero High Injury Network (HIN) update.¹ The HIN identified corridors with high concentrations of severe traffic injuries and fatalities within San Francisco and represents all modes (people in motor vehicles, people walking, and people cycling or using mobility devices).

The project team built on this analysis with a focus on crashes involving people walking and biking using crash data from the San Francisco Transbase Dashboard² for the five most recent complete years of available data, which covers the periods from October 1, 2017, through September 30, 2022. As shown in Table 1, there were 177 reported pedestrian-involved crash records and 133 reported bicyclist-involved crash records located within District 1 or within the 250 feet³ of intersections in District 1 during this time period.

Table 1. Crash Data Summary, District 1, 10/1/2017 - 9/30/2022

MODE	FATAL	SEVERE Injury	MINOR Injury	POSSIBLE Injury	REPORTED TOTAL
Pedestrian-involved	7	26	57	87	177
Bicyclist-involved	0	11	75	47	133

Source: TransBASE.sfgov.org, 10/1/2017 - 9/30/2022 data accessed in 2023

Figure 2 illustrates crash severity scores of intersections within District 1 and the one midblock segment with commensurately high crash frequency. The crash severity represents numbers of pedestrian and bicyclist crashes weighted by severity, where the weighting factors were obtained from the Highway Safety Manual.⁴ As shown in the figure, the blue and purple dots denote intersections with high crash severity scores

- $1\quad Vision\ Zero\ SF,\ Maps\ \&\ Data\ |\ Vision\ Zero\ SF,\ Accessed\ April\ 2023.\ https://www.visionzerosf.org/maps-data/$
- 2 SFCTA, TransBASE Dashboard, Accessed April 2023. TransBASE.sfgov.org
- 3 Crashes within 250 feet from the center of the intersection are considered as intersection related and were included in the analysis if the intersection is within District 1.
- 4 American Association of State Highway Transportation Officials, Highway Safety Manual, 2010. The crash severity scores are the same as Equivalent Property Damage Only (EPDO) score in the HSM.

within the district. These intersections are concentrated along Geary Boulevard, Fulton Street, John F Kennedy Drive among east-west corridors, and Arguello Boulevard, Stanyan Street, and Park Presidio Boulevard among north-south corridors. The corridors are generally consistent with the city's 2022 HIN except for John F Kennedy Drive, which is within Golden Gate Park and likely attracts more pedestrians and bicyclists. The concentration of high-crash severity score intersections along these corridors suggests opportunities for corridor-wide pedestrian and bicyclist safety improvements.

Figure 3 indicates overall total reported crashes for District 1 have declined in the past four years compared to the 2017 - 2019 reporting period.

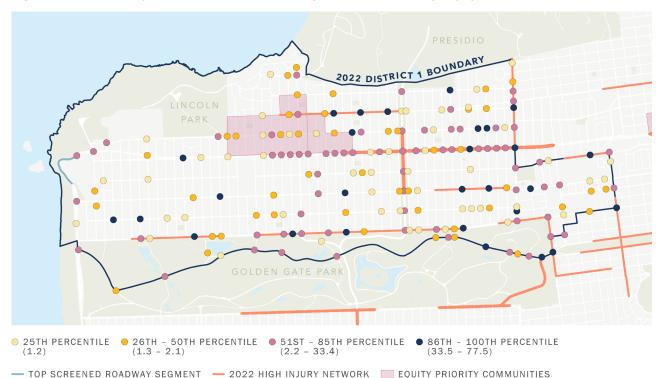


Figure 2. Pedestrian/Bicycle Combined Crash Screening Results and 2022 High Injury Network

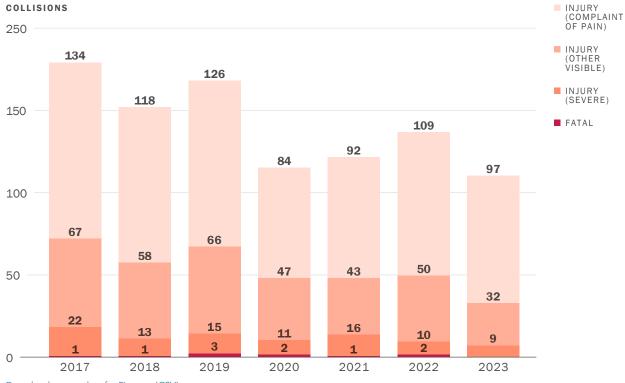


Figure 3. Highest Degree of Injury Severity in Collision

Download source data for Figure 3 (CSV)

2.2 TRAVEL PATTERNS AND MODE SHARE

The project team used the San Francisco County Transportation Authority's (SFCTA) travel demand model known as the San Francisco Chained Activity Modeling Process (SF-CHAMP) ¹ to analyze trips of all modes made by District ¹ residents. The model results summarized represent trips taken on an average weekday before COVID stay at home orders were implemented in 2019.

Overall Mode Share

SF-CHAMP estimated that District 1 residents make an average of 91,700 weekday daily tours. Tours are a chain of shorter trips made by the same individual connecting multiple destinations and are generally round trips. Figure 4 shows the mode share of tours made by District 1 residents. Of those tours, about 61% are estimated to be driving tours, 25% are estimated to be transit tours, about 10% walk tours, and about 3% bike tours.

¹ SF-CHAMP is a model based on observed behavior from the California Household Travel Survey 2010 - 2012, census data regarding automobile ownership rates and county-to-county worker flows, and observed vehicle counts and transit boardings. The model uses a synthetic population, which is a set of individual actors that represents the Bay Area's actual population, who make simulated travel decisions for a complete day. More information is available at https://www.sfcta.org/sf-champ-modeling.

Figure 4. Mode Share of District 1 Residents (Pre-COVID)



Source: SFCTA, 2023

Download source data for Figure 4 (CSV)

Note: The percentages do not add up to 100% due to rounding.

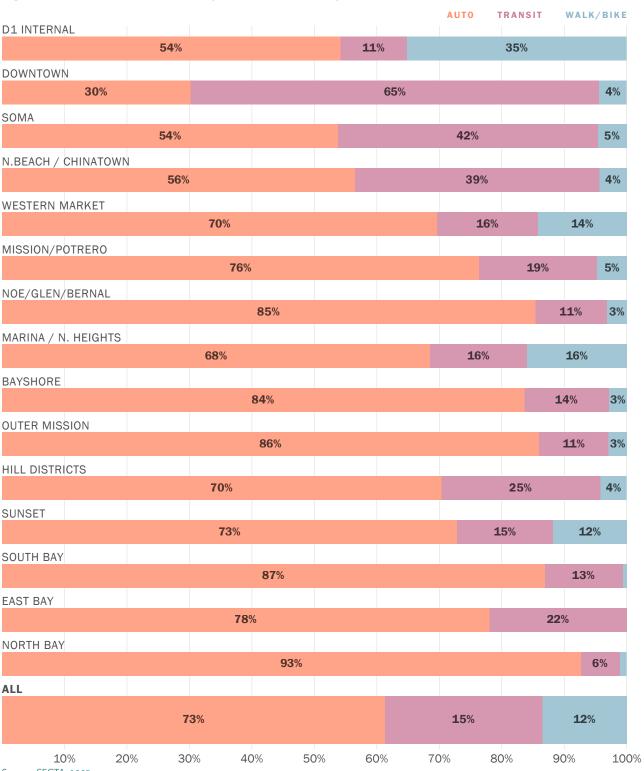
Tour Destinations and Mode Share by Destination

The following sections focus on tours made by District 1 residents from the district to citywide and regional destinations. This analysis was used to identify common destinations and indicate where there may be opportunities to influence mode choice and travel behavior. The distribution of trips made by District 1 residents is shown in Figure 5 and Figure 6 represents the mode share by trip destination.

Key Findings

- District 1 (internal trips) is the most popular destination for tours made by District 1 residents and accounts for 23% of the tours. The downtown area and Sunset district are the next most common destinations, followed by adjacent neighborhoods.
- Of regional tours, the Peninsula and South Bay are the most common destinations for residents of District 1.
- Walking and biking account for a total of 14% of tours.
 These tours are concentrated within District 1 and adjacent districts (Western Market, Marina, and Sunset).
- Tours to the eastern neighborhoods have a relatively higher share of transit tours while tours to the southeast of the city and outside of the city are dominated by automobiles.

Figure 5. Mode Share of Tours Made by District 1 Residents by District (Pre-COVID)



Source: SFCTA, 2023

Download source data for Figure 5 (CSV)

NORTH BAY LESS THAN 5% **5.1%** - 10% **10.1% - 20%** ■ GREATER THAN 20% EAST BAY **4.4%** 0 N. BEACH / CHINATOWN 4.7% MARINA / N. HEIGHTS 8.8% омитои **16.6% 4.1%** WESTERN MARKET 8.8% MISSION / POTRERO 3.8% SUNSET **11.8% 7.2%** DISTRICTS 2.9% NOE/GLEN/ BERNAL **1.1%** BAYSHORE 1.2% OUTER MISSION 2.9%

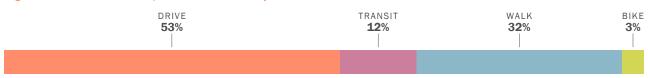
Figure 6. Destinations of Trips Made by District 1 Residents (Pre-COVID)

Download source data for Figure 6 (geopackage)

District 1 Internal Trips

The following analysis focuses on trips made by District 1 residents that originate within the district and end in one of the mini districts (Central Richmond, Inner Richmond, St. Mary's / USF, Outer Balboa, and VA Hospital). Figure 7 shows the mode share of the mini district trips made by District 1 residents. Of those trips, about 53% are estimated to be driving trips, 12% are estimated to be transit trips, about 32% walk tours, and about 3% bike tours. Compared to the mode share of tours made by District 1 residents, the shares of driving and transit are lower and the share of walking increases, which suggests walking is more desirable for shorter-distance trips.

Figure 7. Mode Share of Trips to Mini Districts by District 1 Residents (Pre-COVID)



Source: SFCTA, 2023 Download source data for Figure 7 (CSV)

Among the five mini districts, SF CHAMP estimated Central Richmond and Inner Richmond to be the most common destinations, both of which attract more than 3,000 trips each on average weekdays. Figure 8 presents the mode shares of automobile, transit, walk, and bike trips to the five mini districts. Figure 9 presents mode share by age group. Figure 10 presents mode share by time period.

Figure 8. Mode Share for Trips to District 1 Mini Districts (Pre-COVID)

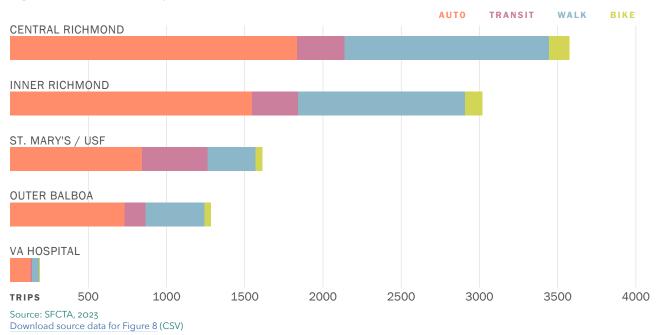


Figure 9. Mode Share for District 1 Mini District Trips by Age Group (Pre-COVID)

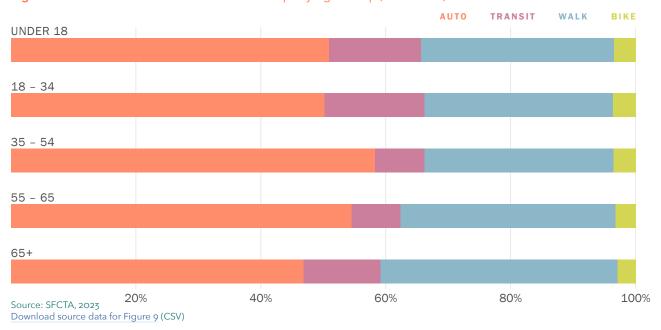
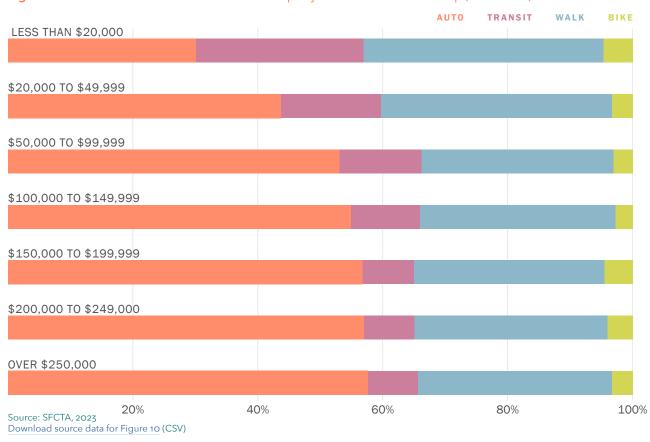


Figure 10. Mode Share for District 1 Mini District Trips by Household Income Group (Pre-COVID)



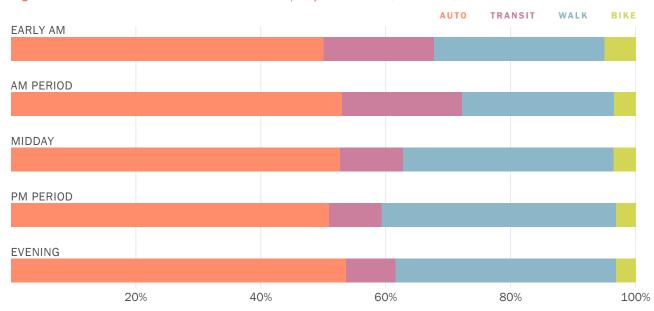


Figure 11. Mode Share for District 1 Mini District Trips by Time Period (Pre-COVID)

Source: SFCTA, 2023

Download source data for Figure 11 (CSV)

Note: The time periods defined in SF CHAMP model are: Early AM (3:00 AM to 6:00 AM), AM period (6:00 AM to 9:00 AM),

Midday (9:00 AM to 3:30 PM), PM period (3:30 PM to 6:30 PM), and Evening (6:30 PM to 3:00 AM).

Key Findings

- Mode by Mini District. The shares of automobile trips exceed 50% for all mini districts. Transit share is highest for St. Mary's / USF, where 26% or 418 trips made by District 1 residents to the mini district are transit trips.
- Mode by Age Group. As shown in Figure 9, mode shares are relatively stable across age groups. However, younger residents (under 35) are more likely to take transits, while the age group 35 to 53 are more likely to drive to mini districts.
- Mode by Income. As shown in Figure 10, in general, as household income increases, automobile share increases and transit and walk share decreases.
- Time Period. As shown in Figure 11, the mode shares for transit and walking changes over time period while auto and bike stay stable. Transit mode share tends to be higher in the early morning and AM periods and decreases through the day. In contrast, walk trips have a relatively lower share in the morning, increases during midday and PM peak, and drops in the evening.

• Trip Purpose by Mini District.¹ On average, 41% of trips to the mini districts are school or work trips, which are categorized as mandatory trips in SF CHAMP. The percentage of mandatory trips are largely affected by the land use of the mini district. Central Richmond, Inner Richmond, and Outer Balboa, which contain more retail land use, tend to attract more discretionary trips. The St. Mary's / USF and VA Hospital, which contain schools and employment centers, tend to attract more mandatory trips.

2.3 TRANSIT PERFORMANCE

The following section describes the Muni transit routes that serve District 1 and compares the ridership of the routes. The analysis helped the project team to identify priority locations and routes for recommendations related to safe access to transit, transit performance, and comfort at transit stops. The project team coordinated with SFMTA on potential safety and performance improvements and future opportunities to collaborate.

Transit Service within District 1

As shown in Figure 12, District 1 is served extensively by Muni bus service, with 1 California, 1X California Express, 5 Fulton, 5R Fulton Rapid, 18 46th Avenue, 28 19th Avenue, 29 Sunset, 31 Balboa, 33 Ashbury / 18th Street, 38 Geary, 38R Geary Rapid, and 44 O'Shaughnessy operating within the district. The headways, hours of operation, and average daily ridership in 2022 of Muni service within District 1 is presented in Table 2.

¹ The SF-CHAMP model categorizes trips to or from work or school as mandatory trips. Trips for other purposes, such as shopping, dining, and social, are categorized as discretionary trips.

Table 2. Muni Service within District 1

ROUTE1	WEEKDAY MORNING (EVENING) HEADWAYS	HOURS OF OPERATION	AVERAGE DAILY RIDERSHIP IN 2022
1 California*	8 (9)	5 AM - 12 midnight daily	13,700
1X California Express	15 (30)	Weekday peak hours only	N/A2
5 Fulton*	9 (11)	24-hour service daily	5,600
5R Fulton Rapid*	10 (11)	Weekdays 7 AM to 7 PM	6,100
18 46th Avenue	20 (20)	6 AM to 10 PM daily	1,900
28 19th Avenue*	12 (12)	5 AM – 12 midnight daily	8,600
28R 19th Avenue Rapid	12 (12)	Weekdays 7 AM to 7 PM	N/A2
29 Sunset	10 (12)	5 AM – 12 midnight daily	11,300
31 Balboa	20 (20)	5 AM to 10 PM daily	3,200
33 Ashbury / 18th Street	15 (15)	5 AM - 10 PM daily	4,200
38 Geary*	8 (10)	24-hour service daily	15,700
38R Geary Rapid*	8 (8)	6 AM - 9 PM daily	16,400
44 O'Shaughnessy	12 (12)	24-hour service daily3	8,900

Source: SFMTA, 2023

Notes:

^{1.} The asterisk mark (*) indicates Muni Forward has implemented engineering improvements to the route over the last ten years.

2. N/A indicates ridership data is not available for the route in 2022. 1X California Express is a pilot program led by the SFMTA that started in February 2023. 28R 19th Avenue Rapid resumed service in August 2023.

3. Owl service of 44 O'Shaughnessy (1 AM to 5 AM) is limited to the east portion of the route, between Hudson & Newhall to Glen Park BART.

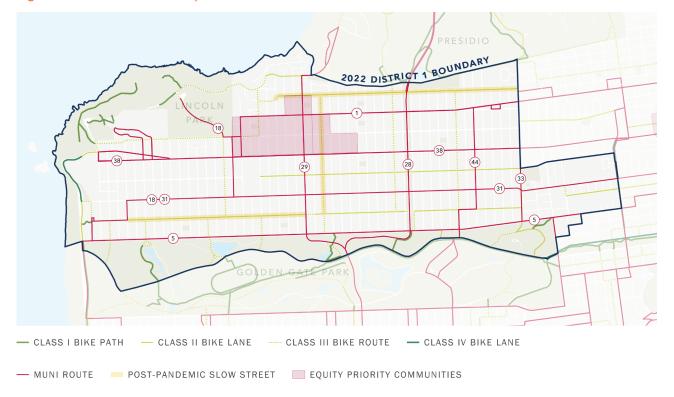


Figure 12. Transit Routes and Bicycle Network in District 1

Ridership

Figure 13 presents the average daily ridership in 2022 of routes serving District 1. 1 presents average weekday daily boardings by stop within District 1. 1

As shown in Figure 13, the Geary corridor was the busiest corridor with a total of 32,000 passengers riding 38 Geary and 38R Geary Rapid per day in 2022. 1 California, 5 Fulton and 5R Fulton Rapid combined, and 29 Sunset also served more than 11,000 passengers per day in 2022. Total ridership along routes serving District 1 has been increasing since 2022, following a similar pattern to Muni systemwide ridership increases emerging from the pandemic.

¹ Ridership data is from Jan 07, 2023 to Feb 17, 2023.

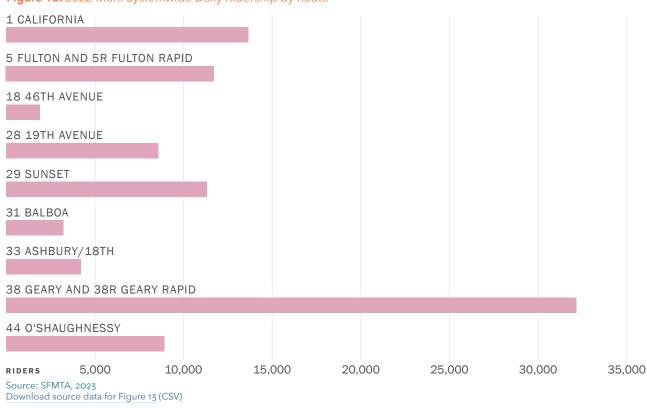


Figure 13. 2022 Muni Systemwide Daily Ridership by Route

The following trends were identified from the boarding data presented in Figure 14:

- The stop with highest ridership in District 1 is Park Presidio Boulevard / Geary Boulevard (28 19th Avenue outbound), with 1,320 average weekday boardings.
- The route with the highest ridership in District 1 is 38 Geary, with seven stops in the district exceeding 600 average weekday boardings along the corridor. The only other stop exceeding this threshold is Park Presidio Boulevard / Geary Boulevard of 28 19th Avenue.
- Bus stops serving the 44 O'Shaughnessy, 29 Sunset, and 1 California generally have high numbers of boardings within District 1, which is consistent with their high ridership compared to other routes.
- For routes traveling in the north-south direction (18 46th Avenue, 28 19th Avenue, 29 Sunset, 33 Ashbury / 18th Street, 44 O'Shaughnessy), boardings are highest at stops intersecting with major east-west routes traveling along Geary Boulevard and Fulton Street, which suggests these stops serve as transfer points for Muni riders.

For routes traveling in the east-west direction (1 California, 5 Fulton, 5R Fulton Rapid, 31 Balboa), boardings are generally highest in the eastern portion of District 1 (closer to downtown) than the western portion (closer to terminal). This corresponds with increased passenger loads on board, indicating that the number of people aboard each vehicle in service increases as the bus travels to the east and drops as the bus travels to its westbound terminus.

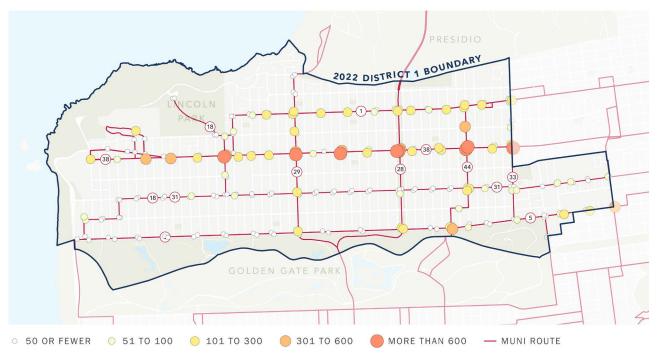


Figure 14. Transit Ridership by Stop within District 1

2.4 PHASE 1 COMMUNITY ENGAGEMENT

Phase 1 outreach focused on understanding the community's transportation needs and challenges to guide the development of project concepts. The project team used a variety of strategies and tools to connect with residents and gather input on their top transportation priorities and mode choice. The project team administered a map-based tool to allow respondents to pinpoint and comment on specific locations within District 1 and a survey was distributed online and in person at community centers and events. Advertisements were posted in the Richmond Review and on Facebook and Instagram to promote the project and online survey.

In Phase 1 of community engagement, the project team led two town hall meetings, engaged with 15 community based organizations, attended 6 community meetings, and participated in three pop ups to provide information about the study, engage attendees in conversation about their transportation challenges and priorities, and promote other opportunities to get involved, including taking the online survey

Demographic Data

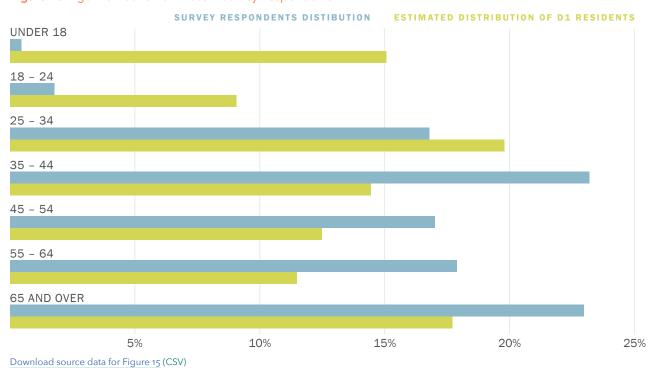
The Phase 1 survey was distributed online and with paper surveys distributed to community based organizations and at community engagement events. Respondents could take the survey in English, Chinese, Spanish, and Russian, and the project team translated responses back to English to analyze together (while noting each respondent's survey language).

The survey received 586 responses (558 in English, 17 in Chinese, 5 in Spanish, and 6 in Russian). Among all respondents, 506 (86%) provided home ZIP codes, which allowed for an approximate determination of home location in relation to District 1 boundaries. Of those 506 providing ZIP codes, 465 (92%) provided ZIP codes within District 1.

Demographics of the survey respondents were compared with estimated District 1 resident data from American Community Survey (ACS). The main differences noted were:

- Age. As shown in Figure 15, people 34 or under were underrepresented in the survey, while people 35 and above are overrepresented.
- Race and ethnicity. As shown in Figure 16, Asians were underrepresented in the survey, while Caucasians, Europeans, or Whites were overrepresented.

Figure 15. Age Distribution of Phase 1 Survey Respondents



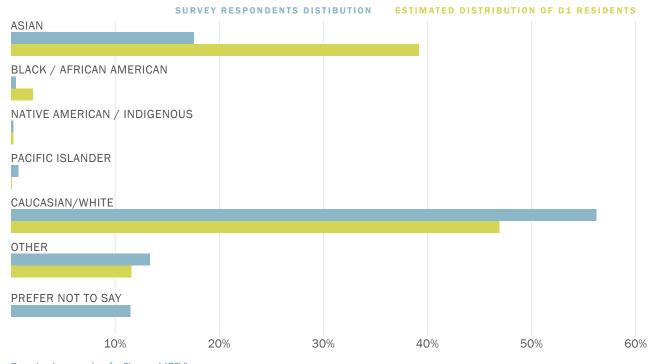


Figure 16. Race and Ethnicity Distribution of Phase 1 Survey Respondents

Download source data for Figure 16 (CSV)

Phase 1 Takeaways

The following section summarizes takeaways from the Phase 1 community outreach, including both direct response to survey questions and open-ended comments noted by community members in the survey or during engagement events. These findings and the technical analysis discussed in this chapter were used to guide the concept development and study recommendations.

Transportation Priorities

The priorities identified by survey respondents are listed below in order of frequency of being ranked highest priority:

- Transit reliability.
- Safe routes to schools and transit.
- Congestion management.
- Improving bike networks.
- Transit accessibility.
- Streetscape and public realm improvements.
- Reducing emissions.

Focus Areas

The top three focus areas ranked by the survey respondents were:

- Better transit reliability on north-south bus lines.
- Pedestrian and bike access and safety improvements on Fulton Street to Golden Gate Park.
- Traffic calming and streetscape improvements on commercial corridors (e.g. Clement, Outer Balboa).

Top Destinations

The most popular reported recent destinations for trips made by survey respondents were:

- Within District 1: Inner Richmond mini district (56% or 279 responses)
- Within San Francisco:
 - » Downtown (27% or 148 responses)
 - » Sunset (22% or 120 responses)
 - » Mission / Potrero (11% or 59 responses)
- Regional: South Bay or Peninsula (40% or 214 responses)

Travel Modes

Mode choices were generally consistent across destinations. 53% of respondents indicating that they drove or did not drive for all three reported trips.¹ The mode share by destination is generally consistent with the findings from SF-CHAMP model data, that more respondents walked for trips within District 1 and the share of driving increased for longer-distance trips (San Francisco or regional trip).

Reasons for Driving

Respondents' most frequently selected reason for driving was "Travel time or reliability" for trips to locations throughout the region, within San Francisco, and within District 1. "Convenience" was among the top three reasons for District 1 and San Francisco trips and the fourth most common reason for regional trips. "Distance", "Lack of transit options", and "Need to make multiple stops" were among the top reasons for driving trips for San Francisco trips and regional trips.

¹ For this comparison, driving trips include driving alone, carpool, taxi, and Uber or Lyft. Non-driving trips refer to walk, transit, and bike/scooter.

Reasons for Not Driving

The most frequently selected response for not driving for internal District 1 trips was "It's enjoyable". "Convenience" and "Parking is difficult" were among the top reasons for both District 1 and San Francisco trips.

Additional Feedback

Feedback shared by survey respondents and meeting participants highlighted five key themes. The themes were identified as they complement findings from data analysis and were mentioned by multiple community members via community meetings, popup events, town halls, and within the survey responses.

Transit Improvements

A top transportation priority identified by community members in Phase 1 of outreach was transit improvements, specifically regarding transit reliability, frequency, safety, accessibility, and cleanliness both onboard and at transit stops. It was noted that removal of stops on rapid bus lines, or operators skipping over stops late at night posed challenges for riders. Meeting participants also expressed a strong desire to add and restore bus service and to improve connections to other nearby neighborhoods of San Francisco. North-south lines, routes to the Sunset, Mission, and other districts, as well as express lines, were of importance. Community members also wanted to see improvements to regional transit connections to the North Bay and Peninsula. Many senior groups expressed that the current transit routes work well for them, but they had concerns about safety.

Traffic and Traffic Safety

Community members identified congestion and traffic issues throughout District 1, particularly on Fulton Street and other high-traffic areas during commute hours. Community members also expressed concerns related to drivers speeding and bypassing stop signs, and visibility and turning at intersections, particularly on Fulton Street, Geary Boulevard, and Balboa Street. There was a desire to see more traffic calming measures, such as speed bumps, implemented, and more efforts to improve pedestrian safety.

Bicycle Safety and Facilities

Community members expressed support for improved bike safety and upgraded bike facilities, such as protected bike lanes (particularly on Arguello Boulevard and Fulton Street), that connect with the city bike network, more secure bike parking, and bike share options. Some community members mentioned they do not ride their bikes because it is too unsafe. It was also noted that bicyclist behavior can cause safety issues, as community members have seen them bypass stop signs and cut off both drivers and pedestrians and ride on sidewalks.

Parking Management

Parking management was of importance, particularly amongst local businesses. Merchant groups and community members noted that transportation network companies (TNCs) like Uber and Lyft and gig services are causing congestion with double parking and using limited curbside parking on commercial corridors, negatively impacting visitor access, commercial activity, indoor dining, and street operations and safety overall. Businesses expressed the importance of having a balance between designated loading zones and parking for customers.

Slow Streets

Community members expressed mixed views regarding Slow Streets. Some viewed them as a priority and wanted to see more streets designated in this way. Others preferred that current Slow Streets, such as Cabrillo Street, resume normal traffic, and noted that Slow Streets led to increased congestion on other nearby streets. Participants raised that more signage and communication is needed to inform road users about how to use Slow Streets.

3. Concept Development

Following Phase 1 of community engagement and technical analysis, the project team reviewed the inputs and narrowed down the list of intersections and corridors to advance to concept development. This section presents the draft concepts that were presented to community members during Phase 2 of outreach; a summary and findings from Phase 2 outreach; and the refined concepts and strategies selected as the most promising candidates to achieve project goals and address top the transportation challenges – improve safety, provide safe routes to school and transit, improve bike connections, enhance access to Golden Gate Park.

3.1 DRAFT CONCEPTS

Four neighborhood circulation and quick-build concepts and three districtwide mode shift and greenhouse gas emission reduction strategies were developed and presented during Phase 2 of community engagement to gather feedback for refinement. The locations of these concepts and strategies are shown in Figure 17 and described further in this section.

MINI DISTRICTS:
OUTER MANAGEMENT ON COMMERCIAL CORRIDORS
OUTER BALBOA

Figure 17. Location of Draft Neighborhood Circulation and Quick-Build Concepts and Districtwide Mode Shift and Greenhouse Gas Emission Reduction Strategies

Draft Neighborhood Circulation and Quick-Build Concepts

The draft neighborhood circulation and quick-build concepts include a selection of treatments illustrated in the treatment toolbox shown in Figure 18 to address pedestrian

and bike safety, manage vehicle speeds, and improve transit reliability. The quick-build projects can be completed without major capital investments and can be implemented without major construction efforts that would require curb reconstruction, rerouting Muni buses, or detouring vehicle traffic. Each of the draft neighborhood circulation and quick-build concepts is described in further detail in this section.

Figure 18. Treatment Toolkit

TREATMENT EXAMPLE

High visibility crosswalks. Crosswalks with "ladder", "zebra", or other longitudinal markings increase visibility of pedestrian crossings.



Source: NACTO

Median islands. Median islands that provide a two-stage crossing for pedestrians (one direction of vehicle traffic at a time, with a refuge in between) and can help increase pedestrian visibility at intersections. Installation may require removal of up to 12 vehicle parking spaces¹.



Source: NYC Department of Transportation

Rectangular rapid flashing beacons (RRFBs). Adding RRFBs at unsignalized intersections can help raise driver awareness of pedestrians activity.



Source: FHWA

¹ Parking removal was estimated based on the proposed concept on Fulton Street. Detailed calculation is provided with discussion of the Fulton Street concept.

TREATMENT **EXAMPLE**



Curb extensions or painted safety zones. Curb extensions and painted safety zones can improve the safety of pedestrians by shortening crossing distances. Examples shown include a quick-build and concrete version of the treatment.

Source: SFMTA



Source: NACTO



Source: nyc.gov

Hardened centerlines. Raised rubber barriers along the roadway centerline, can improve safety by channelizing and slowing turning vehicles. The treatment slows speeds of left turning vehicles by impeding the ability to "cut the corner" at higher speeds, which helps



Source: nyc.gov

Source: NACTO

Bike box. A designated area at the head of a traffic lane at an intersection that provides bicyclists with a safe and visible way to get ahead of queuing traffic. These are especially useful at signalized intersections during the red signal phase.

address some respondents' concern of high-speed traffic at intersections.

TREATMENT EXAMPLE



Painted bike lane. Green bike lanes increase visibility. Dashed markings are often used in conflict areas where bicyclists and drivers are likely to cross paths.

Source: NACTO



Source: Kittelson

Bus boarding platform and amenities at high ridership locations. Bus boarding platforms can help improve transit reliability by reducing bus re-entry delay after pulling out for stops. They also provide additional space for people to wait.



Source: SFMTA

Transit stop amenities. Transit amenities, including pedestrian-scale lighting, wayfinding, shelters, benches, real-time transit information, and secure bike parking can make it feel safer and more comfortable to wait for transit.



Source: SFMTA

Intersection daylighting. Daylighting requires removing visual barriers of a crosswalk or intersection to allow all road users to easily see at intersections. This is especially important for children and other road users who are less visible at intersections. Assembly Bill 413 was signed into law in October 2023. The bill prohibits parking within 20 feet of the approach of any marked or unmarked crosswalk, even if the approach does not have any red curbs painted. FMTA is developing a systematic approach to implement intersection daylighting citywide. Concept development would be coordinated with their efforts.



Source: SFMTA

 $1 \quad SFMTA, Fulton Street Safety and Transit Project, Accessed April 2023. \\ https://www.sfmta.com/getting-around/walk/daylighting#:~:text=Starting%20on%20January%201%2C%202024,law%20in%20other%20states%20that$

Geary Boulevard - Arguello Boulevard to 48th Avenue

Geary Boulevard is one of the busiest bus corridors in the country. The 38 Geary and 38R Geary Rapid together currently serve over 40,000 daily passengers. During Phase 1 outreach, participants expressed personal security concerns while waiting at bus stops. The goal of this concept is to improve safety and security for people taking transit.

The Geary Boulevard Improvement Project is being led by SFMTA and will be upgrading transit stop amenities at all stops on Geary Boulevard, between Stanyan and 34th Avenue, including:

- Shelters and real-time information at all feasible stops (only 22nd Ave outbound is infeasible due to inadequate space for a shelter)
- Amenities at Rapid stops such as a trash can and bike racks

SFMTA is also implementing improved wayfinding including "Landor" bus stop signs systemwide. These signs will be implemented in the Geary corridor in 2024.

The concept also includes extending amenities to bus stops between 34th Avenue and 48th Avenue including at five stops along Geary Boulevard that do not currently have shelters and where either a shelter or bench may be feasible. Pedestrian scale lighting at stops along the corridor, which is not included in the Geary Boulevard Improvement Project, could also be assessed for feasibility and implementation.

Cabrillo Street – Arguello Boulevard to La Playa Street

Currently, there is a combination of a class II bikeway (bike lane) and Slow Street treatments along Cabrillo Street between Arguello Boulevard and La Playa Street. However, the bike lane has some gaps and is striped but not painted green. Additionally, many intersections along the corridor lack marked crosswalks.

This concept aims to improve street safety and bike connectivity by making pedestrian crossings and bike lanes more visible to increase awareness and reduce conflicts among people walking, biking, taking transit, and driving. Figure 19 illustrates the recommended treatments for blocks and intersections, which include:

- Green painted bike lanes.
- High visibility crosswalks.
- Curb extensions or painted safety zones.
- Hardened centerlines.

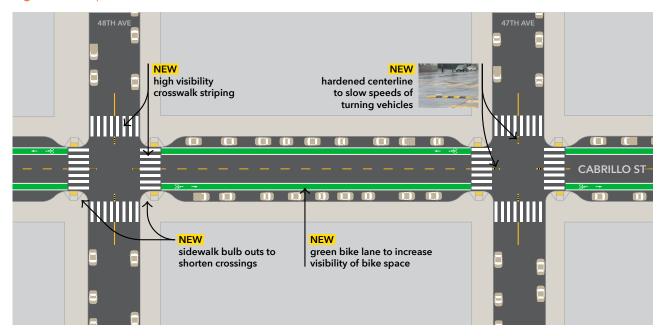


Figure 19. Sample Intersection Treatments on Cabrillo Street

Parking Removal

The curb extensions recommended for Cabrillo Street would remove parking at some intersections. Curb extensions would extend into the parking lane and would affect up to one parking space per curb extension or four parking spaces per intersection. If the treatment were implemented at all intersections, it would result in removal of about 63 spaces. Note that the parking estimate excludes daylighting within 20 feet of the approach of any crosswalk per Assembly Bill 413, as SFMTA is implementing this as a separate project.

Balboa Street - Park Presidio Boulevard to Arguello Boulevard

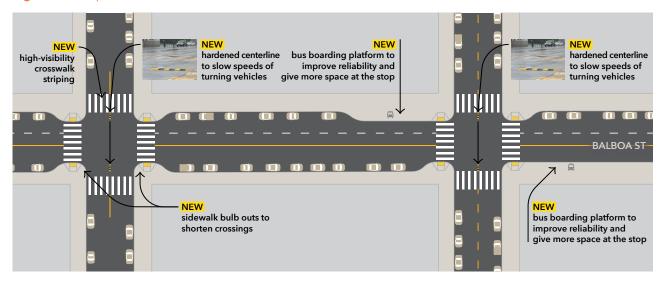
Balboa Street is a transit corridor that serves Muni bus routes 18 46th Avenue and 31 Balboa. There are also multiple schools along the corridor, including George Washington High School, Stratford School, and San Francisco Pacific Academy. During outreach, Balboa Street was one of the top locations where safety concerns were identified. During Phase 1 outreach, community members highlighted risk factors including driver speeding and lack of visibility of pedestrians and bicyclists.

This concept aims to improve transit efficiency, reliability, and access and increase pedestrian safety along the corridor. Figure 20 illustrates the recommended improvements to blocks and intersections. Treatments would include:

- Bus boarding platforms and amenities at high ridership locations.
- High visibility crosswalks.

- Curb extensions or painted safety zones.
- Hardened centerlines.

Figure 20. Sample Intersection Treatments on Balboa Street



Parking Removal

The curb extensions recommended on Balboa Street would remove parking at some intersections. Curb extensions would extend into the parking lane and would affect up to one parking space per curb extension or four parking spaces per intersection. If the treatment were implemented at all intersections, it would result in removal of about 14 spaces. Bus boarding platforms would also extend into the parking lane but are not expected to affect parking, as parking is not allowed at most existing curb-side bus stops. Note that the parking estimate excludes daylighting within 20 feet of the approach of any crosswalk per Assembly Bill 413, as SFMTA is implementing this as a separate project.

Fulton Street — 22nd Avenue to 48th Avenue

Fulton Street lies on the north edge of Golden Gate Park and serves as a primary east-west corridor for vehicles and transit. Fulton Street is identified on the High Injury Network from 44th Avenue to 34th Avenue and 30th Avenue to 7th Avenue.

During Phase 1 outreach, pedestrian and bike access and safety improvements on Fulton Street to Golden Gate Park were emphasized as one of the top focus areas by community members.

The Golden Gate Park Edges Improvement Strategy,¹ published by SF Planning in 2018, highlighted that two-thirds of intersections on Fulton Street were uncontrolled and people cross the streets at those intersections despite lack of traffic control.

As part of the ongoing Fulton Street Safety and Transit Project,² will install curb extensions on Fulton Street at Arguello Boulevard, 6th Avenue, 8th Avenue, and 10th Avenue. The anticipated construction of these bulbs are late 2024 / early 2025.

The SFMTA is also implementing or evaluating other improvements on Fulton Street between La Playa Street and Stanyan Street. These improvements include:

- Install curb extensions on Fulton Street at Arguello Boulevard, 6th Avenue, 8th Avenue, and 10th Avenue.
- Implement high visibility crosswalks on High Injury Network portions of Fulton Street.
- Install speed safety cameras. The two proposed locations are between Arguello Boulevard and 2nd Avenue and between 42nd and 43rd avenues.³
- Install new traffic signals at Fulton Street at 4th and 39th Avenues. SFMTA anticipates the installation of these signals in 2026.
- Improve traffic signal visibility and pedestrian signals at Fulton Street at 30th and 36th Avenues.

The recommended concept would coordinate with SFMTA's efforts and further improve street safety for people crossing Fulton Street and accessing Golden Gate Park while also improving transit reliability and personal security at transit stops. In addition, the concept also aims to improve connectivity to Golden Gate Park for people walking and biking, which includes slowing traffic speed on Fulton and improving safety for people crossing Fulton Street. To achieve these goals, the project team identified different combinations of treatments for application at each intersection along the corridor based on the roadway and land use context. Example intersection concepts including the recommended combination of treatments are illustrated in Figure 21. A table presenting the proposed treatments at each location is provided in Table 4.

¹ Golden Gate Edges Improvement Strategy, Accessed April 2024. https://www.https://www.sfcta.org/ggp-stakeholder#panel-reports-documents

² SFMTA, Fulton Street Safety and Transit Project, Accessed April 2023. https://www.sfmta.com/projects/fulton-street-safety-and-transit-project

³ With the passage of AB645, San Francisco can establish a pilot program to use speed safety cameras to address excessive speeding and improve safety. The cameras are estimated to begin issuing validations in 2025. https://www.sfmta.com/projects/speed-safety-cameras

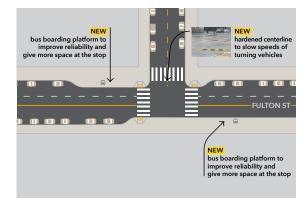
At **signalized intersections**, this concept would include the following treatments to slowing vehicle speeds, improve pedestrian crossing experience, and improve transit reliability:

- Curb extensions or painted safety zones.
- Hardened centerlines.
- Bus boarding platforms and amenities at select locations based on anticipated transfer activity and ridership.
- Intersection daylighting coordinated with SFMTA's efforts to systematically implement daylighting.

At **unsignalized intersections**, this concept would provide the following treatments to slow vehicle speeds, improve pedestrian crossing experience, and improve transit reliability:

- Hardened centerlines.
- High visibility crosswalks across Fulton and Avenues.
- Bus boarding platforms and amenities at select locations based on anticipated transfer activity and ridership.
- Rectangular rapid flashing beacons (RRFBs) at select locations based on the existing intersection traffic control, anticipated pedestrian and bicyclist crossing activity, and distance between signalized crossings.
- Median islands at one-way stop-controlled and uncontrolled intersections. Installation might require removal of up to 12 vehicle parking spaces.
- Intersection daylighting coordinated with SFMTA's efforts to systematically implement daylighting.

Figure 21. Sample Treatments on Fulton Street



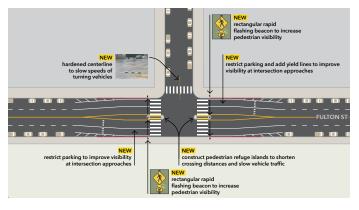


Table 3. Recommended Intersection Treatments Along Fulton Street between 22nd Avenue and 48th Avenue

CROSS STREET	RRFB	MEDIAN ISLAND	CURB EXTENSION	BUS BOARDING PLATFORM	TRANSIT SHELTER
48th	-	Υ	-	-	-
47th	-	-	Υ	-	-
46th	Y	-	Υ	-	Y
45th	Y (or 44th)	Y	-	-	-
44th	-	Υ	-	-	-
43rd / Chain of Lakes Dr	-	-	Υ	-	Y
42nd	Y (or 41st)	Υ	-	-	-
41st	-	Y	-	-	-
40th	Y	-	Y	-	Υ
39th	Y (or 38th)	Y	-	-	-
38th	-	Y	-	-	-
37th	-	-	Y	-	-
36th	-	-	Υ	Υ	Υ
35th	Y (or 34th)	Y	-	-	-
34th	-	Υ	-	-	-
33rd	-	-	Υ	-	-
32nd	Y (or 31st)	Υ	-	-	-
31st	-	Υ	-	-	-
30th	-	-	Y	Υ	Y
29th	-	Υ	-	-	-
28th	-	-	Υ	-	Υ
27th	-	Υ	-	-	-
26th	Υ	Υ	-	-	-
25th / Crossover Dr	-	-	Υ	-	-
24th	Y (or 23rd)	Υ	-	-	-
23rd	-	Υ	-	-	-
22nd	-	-	Y	Y	-

Notes:

- 1. RRFB Placement: At intersections that are uncontrolled along Fulton, RRFBs were proposed at all bus stop locations and all main entrances to the park because of inherent higher pedestrian and cyclist activity. Then RRFBS were proposed at intersections to limit the gap between signalized or RRFB crossing locations to two blocks at most (per guidance in Figure 49 of NCHRP Report 1036).
- 2. Median island placement: Median islands were proposed at all intersections that are uncontrolled along Fulton where there was room for them. This preference over curb extensions is because of their greater traffic calming effect and their improved pedestrian comfort because pedestrians only have to cross one direction and 2 lanes of travel at once.
- 3. Bus bulbs and transit shelters are recommended at all stop locations where they are missing. These recommendations require further review and coordination with SFMTA to determine feasibility and final design.

Parking Removal

Some treatments recommended in this concept would remove parking. If all treatments listed in Table 3 were implemented, it would result in removal of about 150spaces. The treatments that might affect parking spots are listed below. Note that the parking estimate excludes daylighting within 20 feet of the approach of any crosswalk per Assembly Bill 413, as SFMTA is implementing this as a separate project.

- Median islands. The median islands would include a taper that extends 60 feet from the intersection, which would require travel lanes to shift right toward the sidewalk 60 feet before the intersection. This would impact up to two parking spaces on the near side (upstream) of the intersection and up to three parking spaces on the far side (downstream) per direction. In addition, for three-leg intersections on Fulton Street, there are up to two parking spaces on the south side along Golden Gate Park, which would also be affected by the median islands. Therefore, up to 12 total parking spaces would be removed. The exact number depends on the existing red curbs and driveways.
- **Curb extensions.** Curb extensions would extend into the parking lane and would affect up to one parking space per curb extension or four parking spaces per intersection.
- Bus boarding platform. Bus boarding platforms would extend into the parking lane. However, the treatment likely would not affect parking, as parking is not allowed at most existing curb-side bus stops.

Fulton Street - Bike Connection at 22nd Avenue

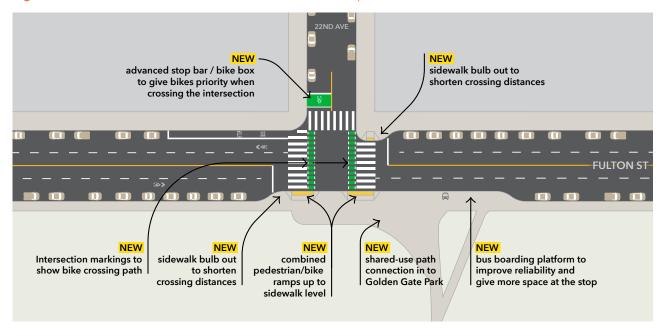
In addition to improving connections across Fulton Street, community members expressed support toward improving bike access into Golden Gate Park. Bicyclists wishing to enter Golden Gate Park from the north are currently routed from Cabrillo Street to Fulton Street via 23rd Avenue and required to travel along Fulton Street in a shared lane for one block to enter Golden Gate Park at 22nd Avenue. This concept would provide a direct bike connection to Golden Gate Park at Fulton Street via 22nd Avenue, relocating the bike route connection from 23rd Avenue to 22nd Avenue between Cabrillo Street and Golden Gate Park.

Figure 22 illustrates the recommended treatments at Fulton Street / 22nd Avenue, which would mark the travel path for bicyclists through the intersection and create a wider, shared path to enter Golden Gate Park. Treatments at Fulton Street / 22nd Avenue would include:

- High visibility crosswalks and crossbike markings.
- Bike box.

- Curb extensions or painted safety zones.
- Bus boarding platform on south side of the street.
- Shared pedestrian and bike path at park entrance.

Figure 22. Fulton Street / 22nd Avenue Bike Connection Concept



Draft Districtwide Mode Shift and Greenhouse Gas Emission Reduction Strategies

Districtwide mode shift and greenhouse gas emission reduction strategies are long-term studies and projects to encourage mode shift from driving to walking, bicycling, and taking transit and reduce vehicle miles traveled and greenhouse gas emissions in District 1. These projects are considered long-term as they require additional planning studies, engagement, technical analysis, and/or infrastructure work to implement and would take multiple years to implement.

West Side North-South Express Bus Service

As discussed in the travel patterns section of this report, based on a review of the SF-CHAMP model data, the Peninsula and South Bay is one of the most common regional tour destinations for District 1 residents and driving was the dominant travel mode to and from the South Bay. During Phase 1 outreach, community members also expressed desire to restore or add north-south bus lines and express lines. To address this need, promote transit ridership, and reduce greenhouse gas emissions, a regional express bus network linking San Francisco's west side with job centers along the San Francisco Peninsula and South Bay would be developed in coordination with SamTrans and

neighboring cities. This project would advance recommendations identified in the 2018 SamTrans Express Bus Feasibility Study, providing north-south connections. Figure 23 shows the six (6) north-south express bus routes proposed in the 2018 SamTrans study and highlights the alignment serving District 1.

ROUTE 2 (LIMITED STOP SAN BRUNO BART TO/FROM EAST PALO ALTO) ROUTE 3 (FOSTER CITY TO/FROM DOWNTOWN SAN FRANCISCO) ROUTE 12 (SAN MATEO TO DOWNTOWN SAN FRANCISCO VIA PARK-AND-RIDE) HAYWARD SAN REDWOOD

Figure 23. Potential North-South Express Bus Routes

Source: SamTrans, 2018

Curb Management on Commercial Corridors

This strategy recommends further study and development of a curb management study for the four primary commercial corridors in District 1. A curb management strategy would seek to prioritize and accommodate various curb functions, including passenger loading, parking, deliveries for businesses, food delivery services, and others. The

strategy would identify strategies that make space for the movement of people and goods and reduce conflicts between people on the streets and sidewalks, contributing to improved safety and street operations.

During Phase 1 outreach, respondents identified that it is difficult to find parking on commercial corridors in District 1.

The goal of this strategy is to reduce conflicts on commercial corridors from competing issues that lead to congestion and safety challenges. To achieve this, a Curb Management Strategy would be developed to prioritize and accommodate various curb functions. Special focus would be applied to the three commercial corridors within District 1:

- Clement Street, Arguello Boulevard to 11th Avenue.
- Clement Street, 19th Avenue to 27th Avenue.
- Balboa Street, 34th Avenue to 42nd Avenue.

Curb management on commercial corridors would be achieved through implementation of a set of strategies, including new tools, policies, legislative changes, design standards, and process improvements. An overview of relevant strategies identified from SFMTA's Curb Management Strategy is provided in Table 5. The specific strategies for implementation on commercial corridors within District 1 would be selected and refined through additional data collection, technical analysis, and input from the public.

 Table 4. Potential Curb Management Strategies

STRATEGY	DESCRIPTION
Supplement the request-based Color Curb Program with proactive curb space allocation	Proactively allocate loading, short-term parking, and bike corrals based on demand. Encourage non-fronting businesses to apply for color curb, and develop taxi stand criteria.
Right-size loading zones according to context	Implement loading zone design standards, relocate and combine zones to maximize utility, and consider surrounding land uses when designing zones.
Increase evening and weekend parking and loading regulations	Extend hours at loading zones to nights and weekends when warranted and allocate resources to adjust enforcement staffing at these hours.
Consider extending parking meter hours to evenings and Sundays	Extending parking meter hours into the evening and on Sunday would help reduce double parking and circling.
Improve utility of yellow zones	Remove contractor meter payment exemption from yellow meters and consider permit program for parcel delivery
Improve utility of green zones	Pursue state legislation to remove disabled placard exemption from green zone time limits, standardize 15 minute time limit, extend hours where warranted, and implement clearer paint and signage.
Expand the use of loading zones that vary based on time of day	Create more dual-use zones and standardize the curb treatment and signage.
Pursue safety and accessibility through parking enforcement	Prioritize enforcement of the most harmful violations and proactively cite for misuse of loading zones.
Standardize loading signage	Develop standard designs and templates for common parking regulations and install pole signage wherever possible.
Clarify locations where passenger loading is permitted	Publicize rule allowing passenger loading in yellow zones, remove yellow curb paint from truck zones, and encourage loading across driveways when no alternative is available.
Study pricing to address curb use impacts	Examine feasibility of curb pricing and other potential revenue sources.
Reduce the use of Muni "flag stops" and develop guidelines for when they are permitted	Adopt a policy to avoid creating new "flag stops" and gradually replace with bus zones. Develop guidelines for when a bus zone is required.

Source: SFMTA Curb Management Strategy

Mobility Hubs and Electric Vehicle Charging

Mobility hubs are where multiple transportation modes, such as transit, active transportation (e.g. walking and biking), shared mobility services (e.g. scooter and bike share) are brought together to provide many travel options in one location and make transfers between them easier. Figure 24 provides example designs of mobility hubs in an underused open space and a smaller scale location.

Figure 24. Examples of Mobility Hubs





Source: MTC Mobility Hub Siting Criteria & Mobility Hub Implementation Playbook

The goal of the strategy is to improve efficiency and interconnectivity of transportation modes within District 1 by implementing a mobility hub network to improve the performance of existing transit services and transportation facilities.

While the ultimate aim is to create a network of interconnected hubs that serve local and regional multimodal travel, it is widely recognized that building a mobility hub network will take time and creativity. To address this long-term vision incrementally, the study team worked to select individual sites that represent promising locations for a mobility hub. A mobility hub site is conceptualized as a self-contained, easily navigated, transportation center with options for multimodal connections, in addition to amenities and services that facilitate meeting daily needs. A mobility hub site can be an existing transit stop, block face, vacant lot, or surface parking lot with the potential for additional modes co-located, landscaping, commercial services, and other amenities such as seating, shelter, and restrooms. These services and amenities are intended to make transferring between modes easy and enjoyable.

Drawing on criteria drawn from MTC's Mobility Hub Siting Criteria,¹ including proximity to transit routes, bicycle routes, level of transit ridership, transfer activity, nearby land uses, and ease of implementation, the initial strategy identified seven candidate sites for mobility hubs in District 1. The candidate sites are provided in Table 5 along with a qualitative assessment of each location with respect to the screening criteria topics of coordinated transit, climate action, equitable mobility, and implementation readiness. The candidate mobility hub sites are shown in Figure 25.

 $^{1\ \} MTC, Screening\ Methodology, and\ Prioritization, Accessed\ Dec\ 2023.\ https://mtc.ca.gov/sites/default/files/Web_MTC\%20\ Mobility\%20 Hubs_Siting\%20 Analysis\%20 Methodology\%20 FINAL.pdf$

 Table 5. Candidate Mobility Hub Sites Screening and Selection

LOCATION	COORDINATED Transit	CLIMATE ACTION	EQUITABLE Mobility	IMPLEMENTATION READINESS
1. Cabrillo at La Playa MTC Hub ID 39029 MTC Rank 801	Serves Muni 5, 5R, 18, 31 Near the end of the line for these routes Concentration of riders	Intersection of two bike routes Pedestrian pathway to The Great Highway and Ocean Beach	Not located within Equity Priority Community	Existing facilities and amenities, including bathroom Opportunities to repurpose Safeway surface parking lot
2. Fulton at 8th Ave MTC Hub ID 39109 MTC Rank 559	Serves Muni 5, 5R, 21, 44 Concentration of riders	Golden Gate Park access On a bike route	Not located within Equity Priority Community	Opportunity to use car- free 8th Ave within GGP
3. Turk at Parker (USF) MTC Hub 39333 MTC Rank 393	Serves Muni 31 High ridership stops concentrated along USF frontage	On a bike route(s) Adjacent USF campus and Koret Health and Education Center Adjacent ZipCar	Not located within Equity Priority Community	Opportunity to partner with USF to provide hub on campus, e.g., within Lone Mountain Circle Lot
4. 25th at California MTC Hub 39605 MTC Rank 232	Serves Muni 1, 1X, 29 Concentration of riders Access to routes on Geary	Within one- to two- blocks of bike route(s) Adjacent ZipCar	Located within Equity Priority Community	Opportunity to repurpose existing gas station
5. Clement at Veterans Dr (VA Hospital) MTC Hub & Rank n/a	No	High concentration of drive alone trips	Not located within Equity Priority Community	Opportunity to partner with VA to provide hub on campus
6. Geary at Arguello MTC Hub 39475 MTC Rank 602	Serves Muni 33, 38, 38R	On a bike route and within one block of a bike route Near bike share	Not located within Equity Priority Community	Opportunity to repurpose 3650 Geary surface parking lot or Chevron gas station
7. Geary at Park Presidio MTC Hub 39468 MTC Rank 312	Serves Muni 38, 38R, 28, 28R, 91	Within one block of a bike route(s) Near bike share	Not located within Equity Priority Community	Opportunity to use linear open space and parallel surface streets

Figure 25. Candidate Mobility Hub Sites



3.2 PHASE 2 COMMUNITY ENGAGEMENT

Phase 2 outreach sought community feedback to support project development and implementation.

In Phase 2 of community engagement, the project team led one town hall meeting, engaged with 23 community based organizations, attended 5 community meetings, and participated in 2 pop ups to provide information about the study, engage attendees in conversation about their opinions on the survey questions, and promote other opportunities to get involved, including taking the online survey. Advertisements were placed in the Richmond Review and Sing Tao newspaper and on Facebook and Instagram, to promote the project and online survey.

Demographic Data

Similar to Phase 1 of outreach, the survey was distributed online (through the SFCTA's website) and with paper surveys distributed to community based organizations and at community engagement events. Respondents could take the survey in English, Chinese, Spanish, and Russian, and the project team translated responses back to English to analyze together.

In Phase 2, the project team aimed to engage Asian and youth populations who were underrepresented via distributing a higher number of in-language paper surveys to community-based organizations, targeted advertising on newspapers and social media. Ads were posted on Sing Tao Daily to reach to Asian populations. Postcards were distributed in elementary schools to engage parents and youth.

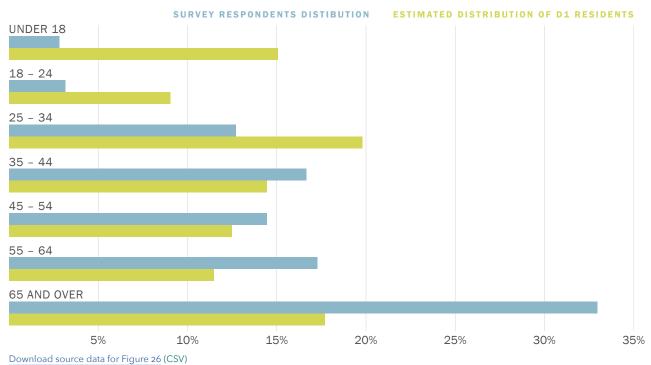
In total, 775 people responded to the survey (675 in English, 96 in Chinese, 2 in Spanish, and 2 in Russian). Out of the 775 total respondents, 658 (85%) provided valid home ZIP codes, which allowed for an approximate determination of home location in relation to District 1 boundaries. Of those 658 providing ZIP codes, 557 (85%) provided ZIP codes within District 1.

The demographic comparison focuses on underrepresented groups, youth and Asian population, noted in the survey analysis of the first phase of community engagement:

• Age. As shown in Figure 26, as in Phase 1 survey, youth population (people under 18 and between 18 and 24) were still underrepresented in the survey. However, the percentage of survey respondents in these two age groups increased from 2% in Phase 1 survey to 6% in Phase 2 survey.

• Race and ethnicity. In the first phase of engagement, Asians were largely underrepresented, with only 18% of survey respondents identified as Asian, while ACS estimates 39% of District 1 residents to be Asians. As shown in Figure 27, while the percentage of Asian respondents is still low compared to ACS estimates, it has gone up to 28% in Phase 2.

Figure 26. Age Distribution of Phase 2 Survey Respondents



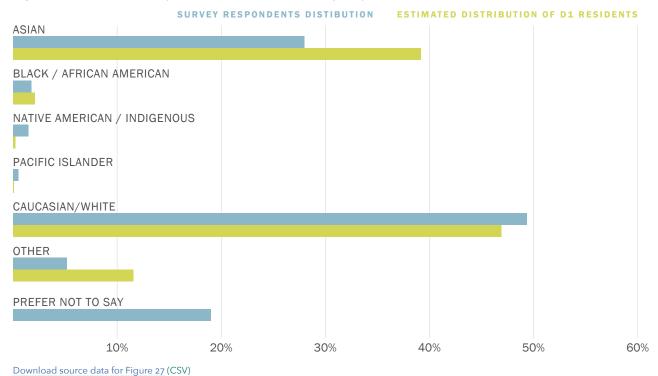


Figure 27. Race and Ethnicity Distribution of Phase 2 Survey Respondents

Phase 2 Takeaways

Findings in Phase 2 of outreach confirmed the priorities of District 1 residents that were indicated during the first phase of outreach. Community members also provided feedback on specific project concepts.

Neighborhood Circulation and Quick-Build Concepts

The survey asked for respondents' level of support towards the proposed treatments at each concept location. Detailed treatments and concept figures are presented in the Project Concepts section. The result shows in general, the level of support towards each treatment is consistent across locations. All treatments proposed on Balboa Street, Cabrillo Street, and Fulton Street received support from 50% or more of survey respondents.

Among the treatments, high visibility crosswalks received the highest level of support, with about 88% of respondents in support of this treatment on all proposed corridors. Pedestrian safety zones / curb extensions, green bike lanes, rectangular rapid flashing beacons (RRFB), shared pedestrian and bike path at Golden Gate Park entrance also were supported by 60% or more respondents. The treatments of high level of support are **bolded** in the sections below. Treatments that will remove parking spots, such

as medians, received less support. However, the majority of respondents supported installing medians at priority safety locations on Fulton Street.

Geary Boulevard – Between Arguello Boulevard and 48th Avenue

Support for this concept was expressed during the Q&A portion of the Town Hall and the survey provided more guidance on how to prioritize amenities at transit stops. Respondents identified lighting and transit shelters as amenities that improve personal security and real time transit information and transit shelters as amenities to improve comfort. Some respondents noted that real time transit information can help reduce wait times and thus improve security. In open-ended comments, survey respondents also noted the need for physical separation from traffic.

Additionally, survey respondents raised concerns about homelessness, open drug use, and shattered glass due to vandalism at transit stops. Some expressed that law enforcement is crucial to improve security and suggested more frequent police patrols, surveillance cameras, and emergency buttons.

Cabrillo Street – Between Arguello Boulevard and La Playa Street

The survey asked for respondents' level of support for the proposed treatments. As shown below, high visibility crosswalks, pedestrians safety zone / curb extensions, and green bike lanes received high level of support above 60%.

- High visibility crosswalks (649 or 88% in support)
- Pedestrian safety zones / curb extensions (477 or 63% in support)
- Green bike lanes (429 or 60% in support)
- Hardened center lines (362 or 51% in support)

In addition, during in-person events, community feedback indicated support for green bike lanes, protected bike lanes, traffic circles, and improved pavement on Cabrillo Street.

Balboa Street – Between Arguello Boulevard and Park Presidio Boulevard

Comments from in-person event participants suggest that pedestrian safety is a priority for this concept, but there is no consensus on the best approach to achieve this. Some proposed solutions include sidewalk curb extensions, automated signals for pedestrian crossing and additional enforcement for speeding and adherence to traffic rules. However, others stated that curb extensions still would not provide sufficient time to cross the street, especially for seniors. Some indicated that they were not in favor of additional space for buses because it would mean fewer parking spaces, encourage double parking, and make it more difficult for buses to maneuver.

Community members' concerns were also reflected in survey responses. Survey respondents are generally in agreement on high visibility crosswalks with 89% in support. Levels of support on other treatments revealed more split in opinions.

- High visibility crosswalks (653 or 89% in support)
- Pedestrian safety zones / curb extensions (486 or 65% in support)
- Bus boarding platforms (387 or 53% in support)
- Hardened center lines (371 or 52% in support)

Fulton Street – Between 22nd Avenue and 48th Avenue

Community input indicated support for improving pedestrian safety and connectivity between District 1 and Golden Gate Park, especially for bicyclists and pedestrians. In-person event participants expressed a strong interest in extending the recommendations to Arguello.

Some comments indicated pedestrians feel unsafe to cross with vehicles and bikes traveling at high speeds on Fulton Street. Crossing could be improved with RRFBs and widened sidewalks. While some comments indicated support for hardened centerlines, others indicated that this posed a concern for bicyclists. Several comments on median islands were received, with some preferring that they be as wide as possible, while others thought they were a "waste of space."

The survey provided more guidance on level of support of the proposed safety treatments:

- High visibility crosswalks (648 or 88% in support)
- Rectangular rapid flashing beacons (RRFB) (484 or 67% in support)
- Pedestrian safety zones / curb extensions (463 or 64% in support)
- Median islands (400 or 55% in support)
- Bus boarding platforms (396 or 54% in support)

Fulton Street – Bike Connection at 22nd Avenue

Community feedback indicated support for the bike connection, citing that the proposed concepts make the intersection easier to use. However, others indicated reservation about the proposed concept due to concerns around bicyclists' safety on Fulton Street. Instead, some suggested connecting Golden Gate Park with an existing slow street.

The survey provided more guidance on level of support of the proposed treatments:

 Shared pedestrian and bike path at park entrance (452 or 63% in support)

- Pedestrian safety zones / curb extensions (468 or 64% in support)
- Bike box (400 or 56% in support)
- Bus boarding platforms (401 or 55% in support)

Treatments with Lower Levels of Support

All proposed treatments received support from 50% or more respondents. However, the community had split opinions on some of the proposed treatments. The project team summarized common themes from the open-ended comments for these treatments:

- Bus boarding platforms. The treatment received support from about 54% of respondents across concept locations. While not many respondents directly expressed why they don't support the treatment, some expressed concerns about parking removal in open-ended comments. However, bus boarding platforms likely will not affect parking, as parking is not allowed at most existing curb-side bus stops.
- Median islands. Median islands are proposed at unsignalized intersections on Fulton Street to improve pedestrian safety. However, installing median island requires the removal of zero to ten parking spaces per block. In the survey, 55% of respondents supported the treatment.
 - » When asked for feedback regarding parking removal, 315 or 43% of respondents indicated they support the use of median islands at all unsignalized intersections and 177 or 24% of respondents indicated they support limited use of median islands at key intersections, such as at entrances to Golden Gate Park and 5 Fulton Rapid stops.
 - » Additionally, some respondents raised concerns about the effectiveness of median islands. Some pointed out that median islands might make pedestrians feel safe to stand in the middle of an intersection but won't necessarily slow down the traffic for pedestrians.
- Hardened centerlines. Hardened center lines ranked the lowest in both the Cabrillo Street and Balboa Street concepts, with about 51% of respondents in support. The respondents did not mention the reason for lower support. Based on comments on other treatments, it might be due to concern of effectiveness and impact on traffic or parking.
- **Bike boxes.** 400 or 56% of survey respondents expressed support to bike box. Other respondents did not mention the reason they do not support the treatment.

Districtwide Mode Shift and Greenhouse Gas Emission Reduction Strategies

The following summarizes respondents' feedback on the districtwide mode shift and greenhouse gas emission reduction strategies.

West Side North-South Express Bus Service.

The survey asked respondents their level of support for a north-south express bus service that will connect District 1 and the South Bay. Most respondents (480 or 66%) support the express bus service. During pop-up events and the town hall meeting in Phase 2, 22 individuals indicated support for this strategy, while two individuals indicated that they did not support it. One person indicated that in addition to this service, they would like a more direct connection to Caltrain.

Curb Management on Commercial Corridors.

Respondents identified the followings as top challenges traveling on commercial corridors:

- It is difficult to find parking (453 or 64% responses).
- Delivery drivers often double park (370 or 52% responses).
- Parking is too expensive (214 or 30% responses).

The responses generally align with feedback from pop-up events and the town hall meeting, where "It is difficult to find parking" and "Delivery drivers often double park" were the top two responses.

In open-ended comments, respondents also referred to conflicts between road users at the curbs. For example, bicyclists are sometimes forced into traffic by delivery trucks, drivers pulling over, and double-parked vehicles.

In addition, some respondents also pointed out that the low turnover rate of parked vehicles makes it challenging to find parking and access business on the corridors. Some suggested shortening the allowed parking time or using parking meters on Sundays to prevent one vehicle occupying the spot for the full day.

Mobility Hub / Electric Vehicle Charging.

The survey sought respondents' input on priority locations at mobility hubs. Below listed the mobility hub locations ranked by respondents in the survey with top three candidate sites **bolded**:

- Geary Boulevard at Park Presidio Boulevard (344 or 47% responses).
- Geary Boulevard at Arguello Boulevard (330 or 45% responses).
- Cabrillo Street at La Playa Street (319 or 43% responses).
- Fulton Street at La Playa Street (296 or 40% responses).

- California Street at 25th Avenue (230 or 31% responses).
- Clement Street at 42nd Avenue (187 or 25% responses).
- Turk Street at Parker Avenue (USF) (183 or 25% responses).

In-person event participants revealed some of the desired elements for mobility hub sites, which included: transit connections to other parts of San Francisco; car share; bike fix-it stations; secure bike parking; and mixed-use development.

Participants also identified nine additional mobility hub sites for consideration:

- 1. Anza Street / Arguello Boulevard
- 2. Balboa Street / 25th Avenue
- 3. Balboa Street / 5th Avenue
- 4. Clement Street / 6th Avenue
- 5. Clement Street / 42nd Avenue
- 6. Fulton Street / Park Presidio Boulevard
- 7. Sutro Heights Avenue / 48th Avenue
- 8. Lincoln Park
- 9. Golden Gate Park

The survey also asked for respondents' desired amenities to install at mobility hubs. The top three amenities ranked by level of importance are:

- Real-Time Transit Information (578 or 85% selected "important").
- Passenger Pick-Up/Drop-Off Areas (382 or 57% selected "important").
- Secure Bicycle Parking (380 or 58% selected "important").

The community had mixed views on electric vehicle charging as an amenity, with 203 respondents (32%) viewed it important. In open-ended comments, some respondents expressed concern that electric vehicle charging spots might be used as parking spots and would not be an effective use of space.

The community also showed lower level of support for some micro-mobility amenities:

- Bike share (266 or 41% selected "important").
- E-bike and scooter charging (183 or 29% selected "important").
- Scooter share (136 or 22% selected "important").

Some respondents were concerned more bikes and scooters would cause safety issues if they were ridden on sidewalks.

Additional Feedback

The following summarizes other common themes shared by survey respondents and meeting participants.

Transit Improvements

Community members continued to emphasize the importance of transit improvements during Phase 2 of outreach. Specifically, there was interest in establishing transit connections between District 1 and other parts of San Francisco and the Bay Area. Some of the proposed routes included connections to the Sunset District, San Francisco International Airport, Caltrain, and an express bus to Daly City BART. Community members also recommended more frequent bus service and increasing bus stop safety and visibility. During outreach at the Community Youth Center, youth expressed concerns about safety while riding buses and called for more frequent bus service before and after school.

Traffic and Traffic Safety

During Phase 2, community members expressed similar concerns about traffic and traffic safety in District 1 and called for additional traffic safety enforcement, especially on Fulton Street and east of 22nd Avenue. Some also expressed support to extend the Fulton Street concept to Arguello Boulevard. Community members indicated support for pedestrian safety zones, curb extensions, hardened center lines, speed cameras, additional lighting, median islands, and rectangular rapid flashing beacons (RRFB's) to increase traffic safety.

Bike Safety and Facilities

Bike safety continued to be a prominent theme among District 1 residents in Phase 2 of outreach. They continued to express concern around bicyclists' safety, and many indicated that they do not ride their bikes due to traffic safety concerns, specifically speeding cars. Proposed concepts like safe bike lanes separate from traffic, bike boxes, and green bike lanes were indicated as measures that could support bike safety in the area.

3.3 REFINED PROJECT CONCEPTS AND STRATEGIES

The draft concepts presented during Phase 2 of community engagement were refined based on feedback received. This section summarizes changes to the draft concepts and presents final recommendations for advancement. The locations of the concepts are shown in Figure 28. Implementation pathways and coordination needed to advance the recommendations are presented in Section 4.2 of this document.

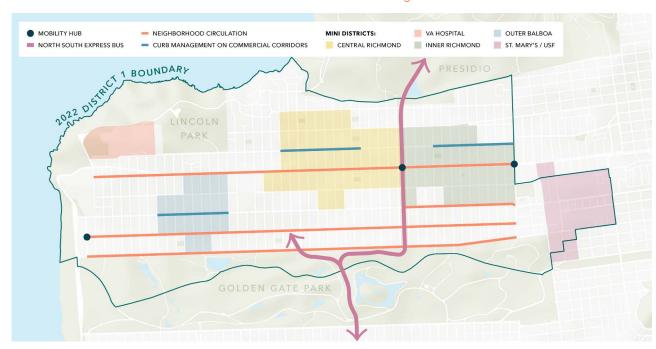


Figure 28. Location of Recommended Neighborhood Circulation and Quick-Build Concepts and Districtwide Mode Shift and Greenhouse Gas Emission Reduction Strategies

Recommended Neighborhood Circulation and Quick-Build Concepts

Geary Boulevard - Between Arguello Boulevard and 48th Avenue

Improving transit stop amenities along Geary was identified as a need by community members during Phase 1 outreach and supported this concept during Phase 2 outreach. Outreach efforts identified lighting, transit shelters, and real time transit information as priority amenities.

This concept recommends upgrading transit stops to include additional amenities¹, where feasible based on field review, further evaluation, and coordination with SFMTA:

- Pedestrian-scale lighting.
- Transit shelters at locations where they are feasible but missing.
- Benches at locations where a shelter is infeasible but a bench may be. And/or benches at particularly busy locations where additional seating beyond shelter seating would be beneficial.
- Real-time information.
- Secure bike parking.
- 1 Wayfinding improvements are planned for the Geary corridor

Figure 29 provides an example of amenities at bus stops on Geary Boulevard.





Photo by SFMTA Photography Department

This concept would coordinate with the Geary Boulevard Improvement Project led by SFMTA, which is upgrading bus stop amenities at Geary stops and expressed an opportunity to coordinate delivery of transit stop amenities between 32nd Avenue and Stanyan Street. The recommendations require further review and coordination with SFMTA to determine feasibility and final design.

Cabrillo Street - Between Arguello Boulevard and La Playa Street

This concept recommends improving street safety and bike connectivity by making pedestrian crossings and bike lanes more visible to increase awareness and reduce conflicts among people walking, biking, taking transit, and driving.

The treatments proposed in the draft concept received support from more than 50% of respondents during Phase 2 outreach. Therefore, the concept was advanced as initially proposed, with the following treatments listed below and illustrated in Figure 30.

- Green painted bike lanes.
- High visibility crosswalks.
- Curb extensions or painted safety zones.
- Hardened centerlines.

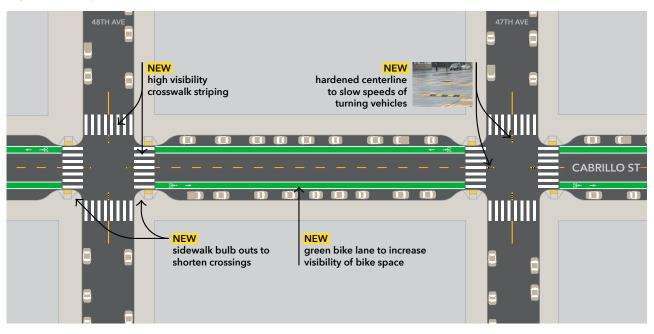


Figure 30. Sample Intersection Treatments on Cabrillo Street

Future design and implementation will be coordinated with SFMTA so that pedestrians and bicyclists would have a consistent level of protection on Slow Street portions and non-Slow Street portions and a continuous and connected riding experience along the street.

Parking Removal

The curb extensions recommended for Cabrillo Street would remove parking at some intersections. Curb extensions would extend into the parking lane and would affect up to one parking space per curb extension or four parking spaces per intersection. If the treatment were implemented at all intersections, it would result in removal of about 63 spaces. Note that the parking estimate excludes daylighting within 20 feet of the approach of any crosswalk per Assembly Bill 413, as SFMTA is implementing this as a separate project.

Balboa Street - Between Arguello Boulevard and Park Presidio Boulevard

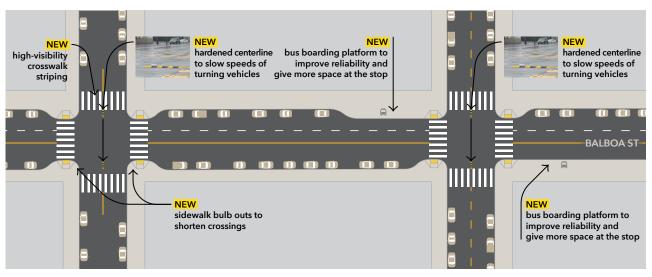
This concept aims recommends improving transit efficiency, reliability, access, and pedestrian safety along the corridor.

Comments during Phase 2 outreach indicated that pedestrian safety is a priority for this corridor and concept. Community members noted they currently don't have enough time to cross the street and were in support of treatments that would reduce crossing distances, such as curb extensions or painted safety zones. Phase 2 survey responses showed strong support for high-visibility crosswalks (89%) and curb extensions (65%), as well as majority support for bus boarding platforms and hardened center lines. The

concept was advanced as initially proposed, with the following treatments listed below and illustrated in Figure 31.

- Bus boarding platforms and amenities at high ridership locations.
- High visibility crosswalks.
- Curb extensions or painted safety zones.
- Hardened centerlines.

Figure 31. Sample Intersection Treatments on Balboa Street



Additionally, based on the findings of the technical analysis and evaluation of vehicle volumes and speeds, the project team recommends that a roadway reconfiguration, or "road diet", be considered for further study. A review of the existing traffic volumes along the corridor shows that there is excess vehicle capacity for the existing levels of travel demand, indicating that Balboa Street may be a good candidate for a road diet. Further study is needed to assess the opportunity to reallocate space to pedestrians, bicyclists, or green infrastructure. Implementation of a lane reallocation would further enhance safety, promote active transportation, and improve the overall quality of the urban environment along this commercial stretch.

¹ Traffic counts collected along Balboa Street between 5th and 6th Avenues showed a total of 4,389 vehicles (eastbound and westbound) over a 24-hour period on a typical weekday. The Federal Highway Administration Road Diet Informational Guide advises that "...roadways with [average daily traffic] of 20,000 vehicles per day (VPD) or less may be good candidates for a Road Diet and should be evaluated for feasibility." The traffic volumes along Balboa are approximately 20 percent of, or 80 percent below, that threshold. Federal Highway Administration Road Diet Informational Guide, Accessed October 2024. https://safety.fhwa.dot.gov/road_diets/guidance/info_guide/rdig.pdf

Parking Removal

The curb extensions recommended on Balboa Street would remove parking at some intersections. Curb extensions would extend into the parking lane and would affect up to one parking space per curb extension or four parking spaces per intersection. If the treatment were implemented at all intersections, it would result in removal of about 14 spaces. Bus boarding platforms would also extend into the parking lane but are not expected to affect parking, as parking is not allowed at most existing curb-side bus stops. Note that the parking estimate excludes daylighting within 20 feet of the approach of any crosswalk per Assembly Bill 413, as SFMTA is implementing this as a separate project.

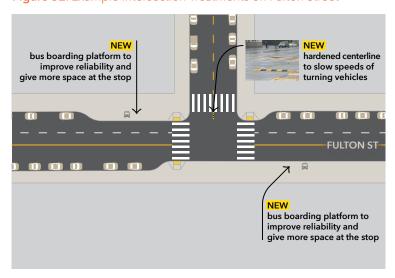
Fulton Street – Between Arguello Boulevard and La Playa Street

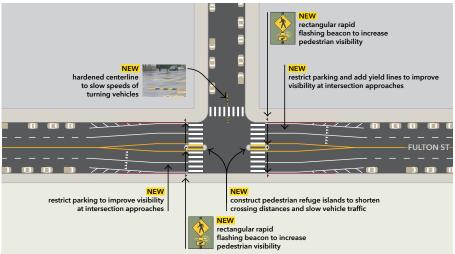
This concept recommends improving pedestrian and bike safety, slowing traffic speeds, improving transit reliability, and improving access to Golden Gate Park with intersection and transit stop improvements along the corridor.

Phase 2 comments indicated support for pedestrian and bicyclist safety treatments and enhanced connectivity to Golden Gate Park and many people expressed a desire to extend the project limits from the initial eastern limit at 22nd Avenue 1.25 miles further east to Arguello Boulevard. Community members also recommended constructing curb extensions or painted safety zones on cross-streets. As a result of community feedback, the initial concept was refined to extend the proposed treatments for signalized and unsignalized intersections between La Playa and Arguello. The concept also proposes adding bulbouts across the following cross-streets: 14th Avenue, 15th Avenue, 18th Avenue, 28th Avenue, 30th Avenue, 33rd Avenue, 40th Avenue, 43rd Avenue, and 47th Avenue.

The proposed concept for Fulton is complex as it aims to maintain access for all travelers, improve safety, and maintain Muni operating speeds and reliability. Therefore, the proposed concept is shown in Figure 32 with two variations on how a median pedestrian refuge/island can be designed – one variation has parking removal on both sides of the street and the other concentrates parking removal on the south side of the street, along Golden Gate Park. Additionally, the proposed treatments at each location along the corridor are shown in Table 7 and include options for where median pedestrian refuges/islands to provide additional high-visibility crossings along the corridor, in between signaled intersection.

Figure 32. Example Intersection Treatments on Fulton Street





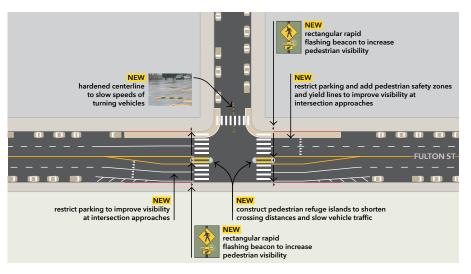


Table 6. Recommended Intersection Treatments Along Fulton Street between La Playa Street and Arguello Boulevard

CROSS STREET	RRFB	MEDIAN ISLAND	CURB Extension	BUS BULB	TRANSIT SHELTER
La Playa St	-	-	Υ	Υ	-
48th	-	Υ	-	-	-
47th	-	-	Υ	-	-
46th	Υ	-	Υ	-	Υ
45th	Y (or 44th)	Υ	-	-	-
44th	-	Υ	-	-	-
43rd / Chain of Lakes Dr	-	-	Y	-	Y
42nd	Y (or 41st)	Υ	-	-	-
41st	-	Υ	-	-	-
40th	Y	-	Υ	-	Υ
39th⁴	Y (or 38th)	Y	-	-	-
38th	-	Υ	-	-	-
37th	-	-	Υ	-	-
36th	-	-	Y	Υ	Υ
35th	Y (or 34th)	Y	-	-	-
34th	-	Υ	-	-	-
33rd	-	-	Y	-	-
32nd	Y (or 31st)	Υ	-	-	-
31st	-	Υ	-	-	-
30th	-	-	Υ	Υ	Υ
29th	-	Υ	-	-	-
28th	-	-	Υ	-	Υ
27th	-	Υ	-	-	-
26th	Y	Y	-	-	-
25th / Crossover Dr	-	-	Υ	-	-
24th	Y (or 23rd)	Y	-	-	-
23rd	-	Υ	-	-	-
22nd	-	-	Υ	Y	-
21st	-	Y	-	-	-
20th	Y	Y	-	-	-
19th	-	Υ	-	-	-
18th	-	-	Υ	Υ	Y
17th	Y	Y	-	-	-
16th	-	Υ	-	-	-
15th	Υ	Υ	-	-	-
14th	-	-	Υ	-	-
Park Presidio Blvd	-	-	-	Υ	-
Funston Ave	-	-	Υ	-	-
12th	Υ	Y	-	-	-
11th	-	Y	-	-	-

CROSS STREET	RRFB	MEDIAN ISLAND	CURB EXTENSION	BUS BULB	TRANSIT SHELTER
10th	-	-	Υ ⁵	Υ	Υ
9th	Υ	Υ	-	-	-
8th	-	-	Υ ⁵	Y	-
7th	Y	Υ	Υ	-	-
6th	-	-	Υ ⁵	Υ	-
5th	Y	Y	Y	-	-
4th ⁴	-	-	Y	Y	Y
3rd	-	Y	Y	-	-
2nd	-	Y	Y	-	-
Arguello Blvd	-	-	Υ ⁵	Υ	-

Notes:

- RRFB Placement: At intersections that are uncontrolled along Fulton, RRFBs were proposed at all bus stop locations and all main entrances to the park because of inherent higher pedestrian and cyclist activity. Then RRFBS were proposed at intersections to limit the gap between signalized or RRFB crossing locations to two blocks at most (per guidance in Figure 49 of NCHRP Report 1036).
- 2. Median island placement: Median islands were proposed at all intersections that are uncontrolled along Fulton where there was room for them. This applies to intersections without existing or proposed bus bulbs and from 7th Ave to 2nd Ave where the wider cross section allows for median islands and bus bulbs / curb extensions. This preference over curb extensions is because of their greater traffic calming effect and their improved pedestrian comfort because pedestrians only have to cross one direction and 2 lanes of travel at once.
- 3. Bus bulbs and transit shelters are recommended at all stop locations where they are missing. These recommendations require further review and coordination with SFMTA to determine feasibility and final design.
- 4. New traffic signal planned for 2026
- 5. Construction Planned Fall 2024-2025

At **signalized intersections**, this concept would include the following treatments to slowing vehicle speeds, improve pedestrian crossing experience, and improve transit reliability:

- Curb extensions or painted safety zones.
- Hardened centerlines.
- Bus boarding platforms and amenities at select locations based on anticipated transfer activity and ridership.
- Intersection daylighting coordinated with SFMTA's efforts to systematically implement daylighting.

At **unsignalized intersections**, this concept would provide the following treatments to slow vehicle speeds, improve pedestrian crossing experience, and improve transit reliability:

- Hardened centerlines.
- High visibility crosswalks across Fulton and Avenues.
- Bus boarding platforms and amenities at select locations based on anticipated transfer activity and ridership.

- Rectangular rapid flashing beacons (RRFBs) at select locations based on the existing intersection traffic control, anticipated pedestrian and bicyclist crossing activity, and distance between signalized crossings.
- Median islands at one-way stop-controlled and uncontrolled intersections. Installation might require removal of up to 12 vehicle parking spaces.
- Intersection daylighting, coordinated with SFMTA's efforts, to systematically implement daylighting.

Additionally, a review of the collisions along the corridor indicates there may be substantial benefit from restricting or prohibiting southbound left turns and extending pedestrian crossing times at certain locations. Further study is recommended to assess the opportunity to implement these changes and evaluate the effect on traffic circulation, diversion, and safety.

Final design and implementation of this concept would be reviewed by SFMTA and coordinated with upcoming efforts to install bulbouts at select intersections and systematic daylighting efforts.

Parking Removal

Some treatments recommended in this concept would remove parking. If all treatments listed in Table 3 were implemented, it would result in removal of about 240 spaces. The treatments that might affect parking spots are listed below. Note that the parking estimate excludes daylighting within 20 feet of the approach of any crosswalk per Assembly Bill 413, as SFMTA is implementing this as a separate project.

- Median islands. The median islands would include a taper, which would require travel lanes to shift right toward the sidewalk at up to 100 feet before the intersection. This would impact up to two parking spaces on the near side (upstream) of the intersection and up to three parking spaces on the far side (downstream) per direction. In addition, for three-leg intersections on Fulton Street, there are up to two parking spaces on the south side along Golden Gate Park, which would also be affected by the median islands. Therefore, up to 25 total parking spaces would be removed per intersection.
 - » The exact number depends on the existing red curbs and driveways.
 - » No parking loss due to median islands is expected on Fulton Street at 6th Avenue or east of the intersection as the road becomes wider and there are existing median islands.

- **Curb extensions.** Curb extensions would extend into the parking lane and would affect up to one parking space per curb extension or four parking spaces per intersection.
- Bus boarding platform. Bus boarding platforms would extend into the
 parking lane. However, the treatment likely would not affect parking,
 as parking is not allowed at most existing curb-side bus stops.

Fulton Street - Bike Connection at 22nd Avenue

This concept recommends improving walking and biking safety and connectivity to Golden Gate Park by creating a direct bike connection into the park via 22nd Avenue.

Community members indicated support for the bike connection at Fulton Street / 22nd Avenue during Phase 2 outreach and the project team received positive survey responses for the shared pedestrian and bike path entrance (63% in support) and curb extensions (64%) as well as majority support for the bike box and bus boarding platform treatments. The concept is proposed as presented. Therefore, the concept was advanced as initially proposed, with the following treatments listed below and illustrated in Figure 33.

- High visibility crosswalk and crossbike markings.
- Bike box.
- Curb extensions or pedestrian safety zones
- or painted safety zones.
- Bus boarding platform on south side of the street.
- Shared pedestrian and bike path at park entrance.

The project would be reviewed by SFMTA and coordinated with SFMTA's Fulton Street Safety and Transit Project and SFMTA's systematic daylighting efforts.

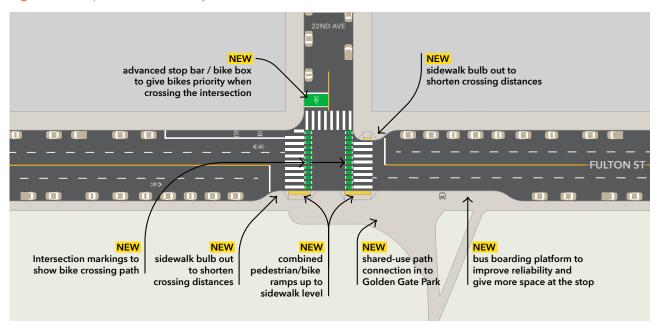


Figure 33. Sample Bike Connectivity Treatments on Fulton Street

Recommended Districtwide Mode Shift and Greenhouse Gas Emission Reduction Strategies

West Side North-South Express Bus Service

This concept recommends coordinating with SamTrans and neighboring cities to advance recommendations identified in the 2018 SamTrans Express Bus Feasibility Study, providing north-south express bus service between the westside and peninsula cities. Figure 34 shows the six (6) north-south express bus routes proposed in the 2018 SamTrans study and highlights the alignment serving District 1.

During Phase 1 outreach, community members expressed a desire to restore or add north-south bus service. Community input generally indicated support to the draft strategy presented during Phase 2 outreach. Therefore, the strategy was advanced as proposed.



Figure 34. Potential North-South Express Bus Routes

Source: SamTrans, 2018

Curb Management on Commercial Corridors

This concept recommends further study and development of a curb management study for the four primary commercial corridors in District 1. A curb management strategy would seek to prioritize and accommodate various curb functions, including passenger loading, parking, deliveries for businesses, food delivery services, and others. Advancing this concept would result in studies to identify specific strategies that make space for the movement of people and goods and reduce conflicts between people on the streets and sidewalks, contributing to improved safety and street operations.

To achieve this, a Curb Management Strategy would be developed to prioritize and accommodate various curb functions. Special focus would be applied to the three commercial corridors within District 1:

- Clement Street, Arguello Boulevard to 11th Avenue.
- Clement Street, 19th Avenue to 27th Avenue.
- Balboa Street, 34th Avenue to 42nd Avenue.

Curb management on commercial corridors would be achieved through implementation of a set of strategies, including new tools, policies, legislative changes, design standards, and process improvements. An overview of relevant strategies identified from SFMTA's Curb Management Strategy is provided in Table 9. The specific strategies for implementation on commercial corridors within District 1 would be selected and refined through additional data collection, technical analysis, and input from the public.

Table 7. Potential Curb Management Strategies

DESCRIPTION
Proactively allocate loading, short-term parking, and bike corrals based on demand. Encourage non-fronting businesses to apply for color curb, and develop taxi stand criteria.
Implement loading zone design standards, relocate and combine zones to maximize utility, and consider surrounding land uses when designing zones.
Extend hours at loading zones to nights and weekends when warranted, and allocate resources to adjust enforcement staffing at these hours.
Extending parking meter hours into the evening and on Sunday would help reduce double parking and circling.
Remove contractor meter payment exemption from yellow meters and consider permit program for parcel delivery
Pursue state legislation to remove disabled placard exemption from green zone time limits, standardize 15 minute time limit, extend hours where warranted, and implement clearer paint and signage.
Create more dual-use zones and standardize the curb treatment and signage.
Prioritize enforcement of the most harmful violations and proactively cite for misuse of loading zones.
Develop standard designs and templates for common parking regulations and install pole signage wherever possible.
Publicize rule allowing passenger loading in yellow zones, remove yellow curb paint from truck zones, and encourage loading across driveways when no alternative is available.
Examine feasibility of curb pricing and other potential revenue sources.
Adopt a policy to avoid creating new "flag stops" and gradually replace with bus zones. Develop guidelines for when a bus zone is required.

Source: SFMTA Curb Management Strategy

Mobility Hubs / Electric Vehicle Charging

This concept recommends improving the efficiency and interconnectivity of transportation modes within District 1 by implementing a mobility hub network to improve the performance of existing transit services and transportation facilities.

While the ultimate aim is to create a network of interconnected hubs that serve local and regional multimodal travel, it is widely recognized that building a mobility hub network will take time and creativity. To address this long-term vision incrementally, the study team worked to select individual sites that represent promising locations for a mobility hub. A mobility hub site is conceptualized as a self-contained, easily navigated, transportation center with options for multimodal connections, in addition to amenities and services that facilitate meeting daily needs. A mobility hub site can be an existing transit stop, block face, vacant lot, or surface parking lot with the potential for additional modes co-located, landscaping, commercial services, and other amenities such as seating, shelter, and restrooms. These services and amenities are intended to make transferring between modes easy and enjoyable.

Figure 35 provides example designs of mobility hubs at an underutilized location and a small scale site.

Figure 35. Examples of Mobility Hubs



Source: MTC Mobility Hub Siting Criteria & Mobility Hub Implementation Playbook Download source data for Figure 35 (CSV)

The project team identified candidate mobility hub sites using criteria drawn from MTC's Mobility Hub Siting Criteria,¹ including proximity to transit routes, bicycle routes, level of transit ridership, transfer activity, nearby land uses, and ease of implementation,

 $1\ \ MTC, Screening\ Methodology, and\ Prioritization, Accessed\ Dec\ 2023.\ https://mtc.ca.gov/sites/default/files/Web_MTC\%20\ Mobility\%20 Hubs_Siting\%20 Analysis\%20 Methodology\%20 FINAL.pdf$

the initial concept identified seven candidate sites for mobility hubs in District 1. The candidate mobility hub sites are shown in Figure 36.

This concept recommends advancing additional study and planning at the top three preferred mobility hub locations identified through survey efforts:

- Cabrillo Street and La Playa Street
- Geary Boulevard and Arguello Boulevard
- Geary Boulevard and Park Presidio Boulevard

The other locations identified by the project team and additional locations identified by the community are recommended as secondary locations for advancement. These include:

- Fulton Street and 8th Avenue
- Turk Street and Parker Avenue (USF)
- California Street and 25th Avenue
- Clement Street and 42nd Avenue
- Fulton Street and La Playa Street
- Anza Street and Arguello Boulevard
- Balboa Street and 25th Avenue
- Balboa Street and 5th Avenue
- Clement Street and 6th Avenue
- Fulton Street and Park Presidio Boulevard
- Sutro Heights Avenue and 48th Avenue
- Lincoln Park
- Golden Gate Park

Figure 36. Candidate Mobility Hub Sites



During Phase 2 outreach survey, community members were also asked to select the features and elements they wanted to have available at a mobility hub. The following list presents the features in ranked order.

- 1. Real-time transit information.
- 2. Passenger pick-up/drop-off areas.
- 3. Secure bicycle parking
- 4. Bicycle parking along the curb.
- 5. Vehicle parking (park and ride).
- 6. E-bike and scooter charging.
- 7. Electric vehicle charging.
- 8. Shared mobility amenities (e.g., bike share, scooter share).

A sketch concept diagram illustrating potential features for inclusion in a mobility hub at the community-supported location at Cabrillo Street and La Playa Street is provided in Figure 37.

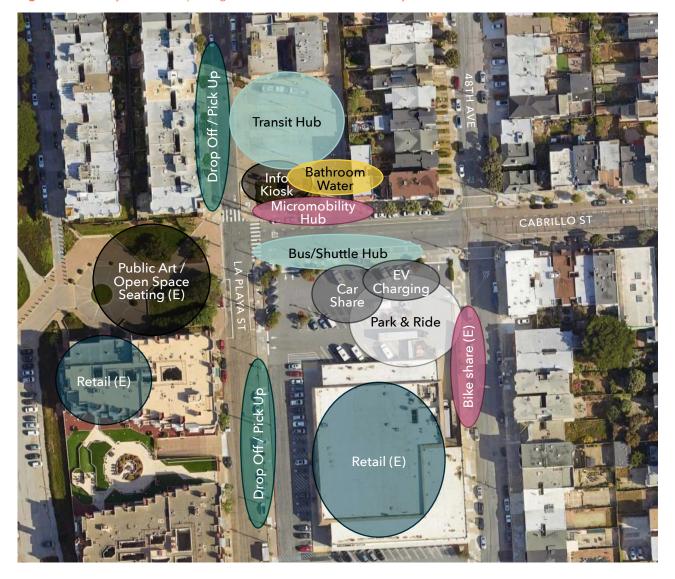


Figure 37. Mobility Hub Concept Diagram at Cabrillo Street and La Playa Street

3.4 OTHER CONCEPTS CONSIDERED

The following section presents other concepts considered but not recommended as part of the District 1 Study, as they would require more planning effort and longer implementation period compared to typical neighborhood circulation and quick-build concepts. They reflected the community's input on improving transit reliability, safety, and connectivity and represent opportunities for further development and coordination with SFMTA and other agencies.

Turk Street - Between Masonic Avenue and Arguello Boulevard

Turk Street runs on the south edge of University of San Francisco. There is a class II bike lane in both directions between Masonic Avenue and Arguello Boulevard. Muni bus 31 Balboa also runs along the corridor. While the segment between Masonic Avenue and Arguello Boulevard is not on the High Injury Network, several intersections, including Turk Street / Arguello Boulevard and Turk Street / Stanyan Street, had comparatively high pedestrian and bicyclist crash severity scores in the safety analysis. This concept would provide two priorities from community input: improved bicycle connectivity and safety (in the east-to-west directions) and safe access to transit.

Figure 38 illustrates the bike lane. Treatments considered for this concept include:

- High visibility crosswalks.
- Median islands.
- Rectangular rapid flashing beacons.
- Curb extensions or painted safety zones.
- Hardened centerlines.
- Bus boarding platforms and amenities at high ridership locations.
- Separated bike lanes on uphill segments on Turk Street.
 Separated bike lanes improve safety for bicyclists by providing physical separation from motor vehicle traffic. Installing separated bike lanes on Turk Street for the full extent between Masonic and Arguello would require the removal of up to 40 vehicle parking spaces and merits further study.

NEW NEW NEW parking protected green bike lane on the convert curb bus stop downhill segment to increase to bus boarding island to bike lane on visibility of bicyclists improve reliability and give uphill segment more space at the stop - DOWNHILL **WESTBOUND TURK UPHILL EASTBOUND TURK UPHILL -** \longrightarrow **NEW NEW** protected bike lane on the uphill segment green bike lane on the to reduce conflicts between bikes and downhill segment to increase vehicles and allow driveway access visibility of bicyclists

Figure 38. Separated Bike Lane on Eastbound and Westbound Turk Street

Stanyan Street - Between Fell Street and Fulton Street

Stanyan Street runs on the east edge of Golden Gate Park. Muni bus 33 Ashbury / 18th Street travels along the segment between Fulton Street and Haight Street. Stanyan Street stands out with one of the higher crash severity scores in the safety analysis, and the segment between Fell Street and Fulton Street is on the city's 2022 High Injury Network. In addition, Stanyan Street / Fulton Street serves as a transfer point among 5 Fulton / 5R Fulton Rapid, 21 Hayes, and 33 Ashbury / 18th Street, with high boarding and alighting activities. 33 Ashbury / 18th Street was highlighted by community members during Phase 1 outreach, as it provides access to BART and the Mission District.

The intersection of Stanyan and Fulton is constrained and has many competing uses. A number of treatments were considered to improve transit efficiency and reliability through this segment. The project team coordinated with SFMTA to discuss and evaluate potential designs and the following treatments showed some promise and are recommended for further study.

- Transit signal priority for 33 Ashbury / 18th Street. The priority signal
 would help the bus to turn right from Fulton Street to Stanyan Street.
 Further study should confirm the signal change would not impact the
 current transit signal priority for 5 Fulton and 5R Fulton Rapid buses.
- **Signal timing adjustments.** If needed, the signals on Stanyan Street between Fulton Street and Fell Street / Oak Street could be re-timed to help improve circulation on Stanyan Street and bus performance.
- Bus stop relocation. The project team also considered relocating the eastbound bust stop from Stanyan to Fulton to help improve bus reliability by allowing the bus to make a wider turn without stopping on Stanyan just past the intersection footprint. Currently, the buses need to cross both lanes on Stanyan Street to pull into the stop and might block southbound travel lanes. Furthermore, the sidewalk on Stanyan Street, near the existing stop, is narrow and relocating the stop to Fulton Street where the sidewalk is slightly wider would result in additional space for people to wait. However, relocating the stop to Fulton also has challenges that need additional study as the possible stop location on Fulton is within a dedicated right turn lane and would block eastbound right-turning drivers. Right-turning drivers may then change lanes to turn right using the through lane, which may cause additional delay for the 5 Fulton and 5R Fulton Rapid buses and create conflicts with people getting off 33 Ashbury / 18th Street and crossing Fulton Street.

4. Implementation Strategy

The recommendations in this study will take different paths to implementation, because they vary in their size and complexity. The type as well as the availability of funds needed to implement each recommendation also vary. This section discusses the cost of each recommendation, implementation recommendations, potential funding sources, and implementation pathways – next steps and agency actions to make plan recommendations a reality.

4.1 COSTS AND FUNDING SOURCES

Table 11 identifies potential funding sources for study concept recommendations. The neighborhood circulation and quick build concepts are similar in scope and therefore also similar in terms of potential funding sources and agency coordination needs. The districtwide concepts vary considerably.

 Table 8. Recommended Concepts, Estimated Costs, Funding Sources, and Lead Agencies

CONCEPT	ESTIMATED COST RANGE	POTENTIAL FUNDING SOURCES	LEAD AGENCY AND POTENTIAL PARTNERS		
NEIGHBORHOOD CIRCULATION AND QUICK BUILD CONCEPTS					
Geary Boulevard — Between Arguello Boulevard and 48th Avenue	\$760,000	• Prop L	SFMTA (lead) SFCTA		
		• TNC Tax			
		• Prop L			
Cabrillo Street — Between Arguello Boulevard and La	\$6,000,000 (quick build)	Prop AA	SFMTA (lead)		
Playa Street	\$6,000,000 (quick build)	GO Bond	SFCTA		
		General Fund			
		• ATP			
		• TNC Tax			
Balboa Street – Between	\$1,800,000 (quick build)	• Prop L			
Arguello Boulevard and Park		Caltrans HSIP	SFMTA (lead) SFCTA		
Presidio Boulevard		• USDOT SS4A			
		General Fund			
	\$3,700,000 (quick build)	• TNC Tax			
Fulton Street — Between		• Prop L	SFMTA (lead)		
Arguello and La Playa		Caltrans HSIP	SFCTA		
		• USDOT SS4A			

CONCEPT DISTRICTWIDE MODE SHI	ESTIMATED COST RANGE FT AND GREENHOUSE GAS	POTENTIAL FUNDING SOURCES S EMISSION REDUCTION STRATEGIES	LEAD AGENCY AND POTENTIAL PARTNERS	
		Caltrans Sustainable Planning Grant		
West side north-south express	\$5.7M (operation and	• SB1	SamTrans (lead)	
bus service	maintenance)**	• San Mateo County Transportation Authority Regional Transit Connections	SFCTA	
Curb Management Strategy on	\$900,000 (includes	• Prop L	SFMTA (lead)	
Commercial Corridors	implementation)	SMART Grant	SFCTA	
		BAAQMD Grants		
Mobility hubs/electric vehicle charging	\$500,000 per mobility hub site	• TFCA	SFMTA (Lead)/ SFCTA (lead)	
		• Prop L*	(

- * These funds would require would require Mobility Hub to be in Community Based Transportation Plan
- ** Cost estimate is based on the 2018 US-101 Express Bus Feasibility Study. Capital costs are not assumed in this cost estimate.

Local Sources

Prop AA

In November 2010, San Francisco voters approved Proposition (Prop) AA, authorizing the San Francisco County Transportation Authority to collect an additional \$10 annual vehicle registration fee on motor vehicles registered in San Francisco to fund transportation improvements in the following three categories, with revenues split as indicated by the percentages: Street Repair and Reconstruction – 50%, Pedestrian Safety – 25%, and Transit Reliability and Mobility Improvements – 25%. Given its small size – less than \$5 million in annual revenues – one of Prop AA's guiding principles is to focus on small, high-impact projects that will provide tangible benefits to the public in the short-term. Thus, Prop AA only funds design and construction phases of projects and places a strong emphasis on timely use of funds. Public agencies are eligible applicants for Prop AA funds.

go Bond

General obligation bonds (or "GO Bonds") are approved by the voters of San Francisco and are issued to fund major capital construction projects. The Transportation 2030 bond, approved in 2014, included \$500 million for transportation projects.

Proposition L Half-Cent Sales Tax

In 2022, San Francisco voters approved a 30-year half-cent transportation sales tax to be administered by SFCTA (a successor to Proposition K, passed in 2003). Proposition L funds projects in five major categories:

- Transit maintenance and enhancements (41%).
- Major transit projects (23%).
- Streets and freeways (19%).

- Paratransit (11%).
- System planning and community equity (6%).

These categories are further developed into expenditure plan (EP) programs, the following of which may be relevant to funding the plan recommendations: Muni Reliability and Efficiency Improvements, Transit Enhancements, Safer and Complete Streets, Curb Ramps, Transportation Demand Management, Neighborhood Transportation Program. The above-listed expenditure plan programs may be able to fund implementation of the neighborhood circulation and quick-builds concepts.

General Fund

Some discretionary funding may be available within the General Fund budgeting process for the types of recommendations included in this plan.

Transportation Fund for Clean Air (TFCA)

The TFCA is funded by a \$4-per-vehicle registration surcharge in the nine-county Bay Area; 40 percent is available to each County. The Transportation Authority is San Francisco County's designated TFCA manager and dedicates approximately \$800,000 annually to projects that support bicycle, pedestrian, and other transportation projects that help clean the air by reducing motor vehicle emissions.

Traffic Congestion Mitigation Tax (TNC Tax)

The TNC Tax imposes a 3.25 percent surcharge on all individual ridehail rides and a 1.5 percent surcharge on shared rides that originate in San Francisco through 2045. These funds are for Vision Zero supportive capital safety projects.

Regional Transit Connections Program

The SMCTA is currently developing the Regional Transit Connections Plan, which will provide guidance for a new grant program funded through San Mateo County's 30-year half-cent sales tax passed in 2018, also known as Measure W. Ten percent, or approximately \$9 million annually, of Measure W revenues are dedicated to funding operations and capital projects such as station access improvements, new ferry terminals, and express bus services that connect San Mateo County with San Francisco, Alameda, and Santa Clara Counties. The Regional Transit Connections Plan is expected to be complete in September 2024 and will establish a grant program framework for implementation.

Regional/State/Federal Sources

SMART Grant

The U.S. Department of Transportation SMART Grant program funds demonstration projects that advance smart city or community technologies and systems to

improve transportation efficiency and safety. This program is not currently accepting applications and future cycles are to be determined.

Senate Bill 1 (SB1)

California Senate Bill 1 was signed into law on April 28, 2017. The bill provides \$5.4 billion annually toward transportation in California. The money is allocated approximately half to Caltrans facilities and half to local roads. Local funding is allocated through the Local Streets and Roads Program, the State-Local Partnership Program (LPP), and the State Transportation Improvement Program (STIP, distributed through MPOs and Regional Transportation Planning Agencies). While these SB1 programs generally fund road maintenance and capital improvements, as well as transit fixed guideway capital improvements, the LPP and STIP programs can fund transit vehicles and rolling stock.

Bay Area Air Quality Management District (BAAQMD) Grant Opportunities

BAAQMD is tasked with regulating stationary sources of air pollution in the nine-county Bay Area, and its Board oversees policies and adopts regulations for air pollution control within the district. BAAQMD administers grant programs that could fund some of the recommendations in this plan. Although not still active, some recent grant programs provide an indication of the types of funding opportunities available. For example, the FY 2023 Charge! Program provided \$5 million in funding to offset the cost of purchase and installation of accessible chargers at publicly accessible places like transit parking locations, destinations, workplaces, or at multifamily housing facilities.

Active Transportation Program (ATP)

The state Department of Transportation (Caltrans) provides grants to encourage increased use of active modes of transportation. This highly competitive program provides funding for the types of projects included in the neighborhood circulation and quick-build concepts but emphasizes projects within disadvantaged neighborhoods, none of which are identified in these concepts. Therefore, ATP is an unlikely funding source for the project recommendations.

Other Potential Sources

West Side North-South Express Bus Service Funding Sources

The 2018 US-101 SamTrans Express Bus Feasibility Study¹ included a list of potential funding sources for this express bus service, including the following:

• State Sources: Transportation Development Act (TDA) funds, Senate Bill 1 (SB1), Cap-and-Trade Program, and CARB funding sources.

1 Available online at https://www.samtrans.com/projects/us-101-express-bus-feasibility-study

- Regional Sources: Regional Measure 3.1
- Local sources: Better Utilizing Investments to Leverage
 Development (BUILD; formerly TIGER), Urbanized Area Formula
 Funds, Bus and Bus Related Equipment and Facilities and Low No Programs, State of Good Repair Grants, revenue bonds, value
 capture, a special assessment district, tax increment financing,
 developer contributions, and public and private contributions.

The Study describes each option in more detail.

Safe Streets for All (SS4A) Grant Program

Through the Infrastructure Investments and Jobs Act, USDOT provides funding for several types of projects, including significant funding for active transportation projects and programs. This program increases opportunities for funding Safe Routes to School (SR2S) funds through the transportation alternatives program. The latest federal funding program will provide funds from 2022 – 2026. One program, the Safe Streets for All (SS4A) Grant Program, has appropriated \$5 billion over the next five years, with up to \$1.2 billion available in fiscal year 2024. About 46 percent of that funding is available for projects and strategies identified in a safety action plan like the 2021 Vision Zero SF Action Strategy. The Vision Zero Action Strategy identifies the city's HIN including some neighborhood circulation and quick build concept locations: Geary Boulevard, Balboa Street, and Fulton Street. A city application for SS4A implementation funding could fund improvements at those locations.

Highway Safety Improvement Program (HSIP) Grant

The Highway Safety Improvement Program (HSIP) is one of the core federal-aid programs in the federal surface transportation act, Fixing America's Surface Transportation Act (FAST). The purpose of the HSIP program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal land. Example safety projects include but are not limited to crosswalk markings, rapid flashing beacons, curb extensions, speed feedback signs, guard rails, median islands, slurry seal, and other pavement markings. In California, HSIP is rewarded based on a ranking of demonstrated project benefit-to-cost ratio. For locations identified in the neighborhood circulation and quick-build concepts, any projects along roadways with relatively high crash history (i.e., those on the HIN) may be able to achieve a competitive benefit-to-cost ratio and be funded through HSIP.

¹ Regional Measure 3 was approved in 2018; as of this writing, California Senate Bill 925 which would propose a Regional Measure 4 is being considered in the State Legislature. It could be placed on the ballot in 2026.

² Available online at https://www.visionzerosf.org/about/action-strategy/

4.2 IMPLEMENTATION PATHWAYS AND COORDINATION

The recommended next steps for study concepts and strategies are presented in this section.

Neighborhood Circulation and Quick-Build Concepts

For these concept designs featuring neighborhood circulation and quick-build improvements to advance, the SFMTA would need to conduct detailed design and engineering to confirm the appropriateness and feasibility of the design. Then, any of the above-listed funding sources would need to be identified to fund these improvements.

Fulton Street is a complex corridor with many competing needs and safety challenges; the corridor also has multiple significant projects for implementation between 2024 and 2026, including new transit bulbs, automated speed enforcement cameras, and new traffic signals.

The proposed design to add median pedestrian refuges/islands will need to be piloted to understand the impacts to street safety, Muni operations, and vehicle speeds. The Transportation Authority and SFMTA will identify up to three locations to test the components of the concept – expanded daylighting at intersections, median pedestrian refuges/islands, and rectangular rapid flashing beacons. The results of the pilot will guide design adjustments to the concepts to ensure they are implementable and effective in advancing the study and citywide transportation goals. Following the pilot and design refinements, the Transportation Authority and SFMTA will continue to coordinate implementation next steps, including finalizing implementation locations and obtaining funding.

Geary Boulevard Bus Stop Improvements

At the time of this writing, SFMTA is leading the Geary Boulevard Improvement Project which is delivering transit and safety improvements on Geary Boulevard between Stanyan Street and 34th Avenue. The Quick Build phase of this project, including transit lanes and bus stop changes, was completed in fall 2023. Bus shelters at stops that were re-located as a part of the Quick Build phase are scheduled to be installed in November 2024. Additional transit and safety improvements are scheduled to be implemented beginning in late 2026 and completed by the end of 2027. After this work is complete, all bus shelters will also have real-time information. The project is fully funded with a cost estimate of \$48 million and funding sources of Prop A Go Bond, Prop B, Academy of Art Fair Share Fee, TSF, Calsta cap and trade TIRCP grant, and Prop K funds

In coordination with SFMTA, additional transit stop improvements can be identified for stops west of the Geary Boulevard Improvement Project area, between 34th Avenue to 48th Avenue. Pedestrian scale lighting along the corridor can also be assessed for feasibility. Relative to other bus stop amenities, pedestrian-scale lighting is more expensive (over \$30,000 capital cost per location), has a longer lead time to design and implement

(including time to procure a contractor), and creates more construction disruption including excavation for the pole foundation and connection to electricity. Stop amenities have different paths for implementation and once identified, the Transportation Authority and SFMTA will coordinate on next steps to design and implement improvements

West Side North-South Express Bus Service

The District 5 Octavia Improvement Study recommended the westside north-south express bus service and this service is also included in the SFTP 2050 Vision Plan. SamTrans has studied implementation of a service, and the 2018 Study recommended phased implementation of six new express routes. To advance this recommendation, more detailed service planning and funding pathways and coordination between agencies would be needed, including a consideration of changes to reflect post-covid ridership and funding constraints.

Curb Management on Commercial Corridors

The SFMTA Curb Management team can consider the commercial corridors identified in the recommendations above as part of a Curb Management Project. A project would reallocate curb space along Clement Street and Balboa Street to align the curb functions for those land use contexts. In the short term, local business owners may apply (individually or together) for a recently-established general loading zone to provide short-term goods pick-up/drop-off access to the curb. The next step in a Curb Management Project is to conduct a detailed study of parking demand and curb use to identify curb changes.

Mobility Hubs and Electric Vehicle Charging

San Francisco does not have mobility hubs. The TA could advance the top three locations identified in this study and provide location siting, design recommendations, and rider amenities for each of the priority locations identified on page 68 An outcome of that study would be mobility hubs designs to implement as funding becomes available. The recommendation includes electric vehicle (EV) charging, with a consideration for curbside access, which can build on SFMTA's Curbside EV Charging Feasibility Study and Pilot, which will determine feasibility of public charging infrastructure and is expected to be complete in Fall 2024.1

¹ SFMTA, Curbside EV Charging Feasibility Study & Pilot, Accessed May 2024, https://www.sfmta.com/projects/curbside-ev-charging-feasibility-study-pilot

- **y** @sfcta
- **f** @sfcta
- in linkedin.com/company/transportation-authority
- O @sfcta
- sfcta.org/stay-connected

1455 Market Street, 22nd Floor, San Francisco, CA 94103

TEL 415-522-4800

EMAIL info@sfcta.org

WEB www.sfcta.org

