



Bus Stop Improvement Plan

EXECUTIVE SUMMARY

April 2024



Customer Experience Begins at the Bus Stop

SamTrans is committed to providing an excellent customer experience for our riders, and this begins at the bus stop. The SamTrans Bus Stop Improvement Plan presents a vision for bus stops systemwide, and provides a comprehensive strategy for delivering this vision. Key components of the Plan include:



Inventory

Inventory of existing bus stops.



Priorities

Understanding of stakeholder and rider priorities on bus stop design.



Guidelines

New bus stop design guidelines.



Recommendations

Identified and prioritized stop amenity improvements.



Implementation

Strategy for implementation of bus stop improvements.

SamTrans' Vision for Bus Stops

SamTrans is committed to providing a **comfortable, convenient, and dignified** experience for riders at bus stops. SamTrans has set the following goals for every rider's experience when waiting for the bus:



Convenient

Provide a stop environment that is convenient to use, featuring appropriate curb access and a sidewalk free from obstructions.



Informative

Provide service information to riders at bus stops, including schedules and the ability to access real-time arrival data.



Comfortable

Provide shelter and a place to sit at all-day stops.



This Executive Summary walks through key outcomes from each step in the planning process. Refer to the full report for more details on the content presented here.

Inventory of Existing Bus Stops

As a first step, SamTrans inventoried all of the nearly 1,900 bus stops in operation to document existing characteristics. For more information on existing conditions, see the [SamTrans Bus Stop Inventory Dashboard](#).

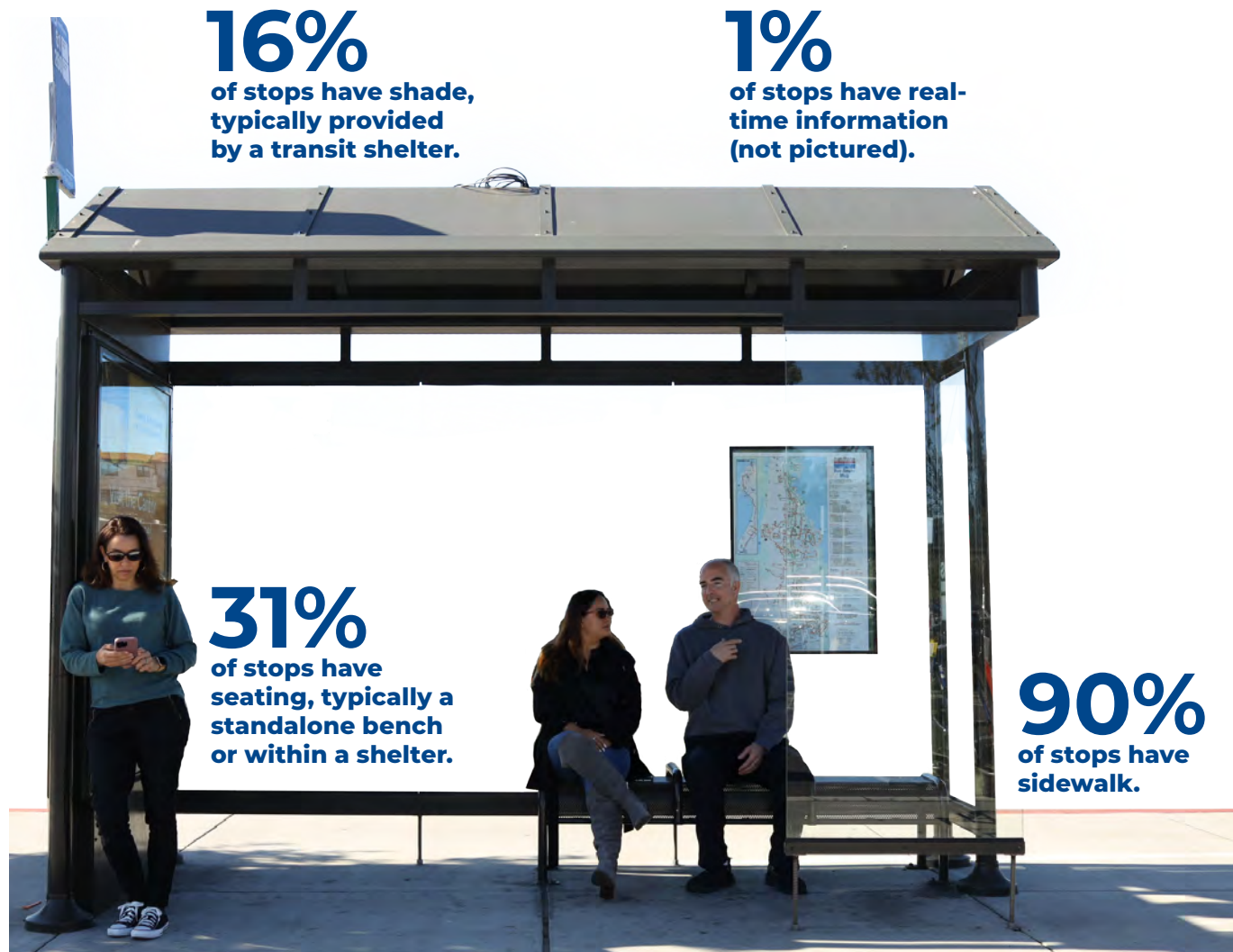
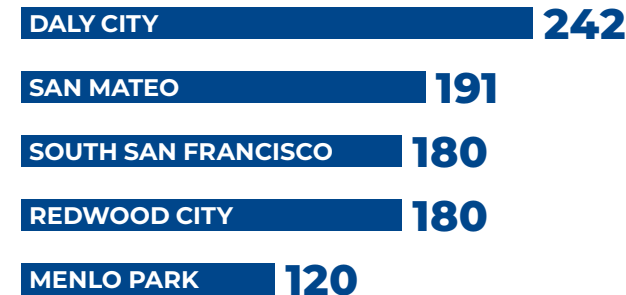
1,871

Inventoried Bus Stops

30

cities and census-designated places, plus unincorporated San Mateo County, have SamTrans bus stops.

Locations with the most bus stops:



16%
of stops have shade, typically provided by a transit shelter.

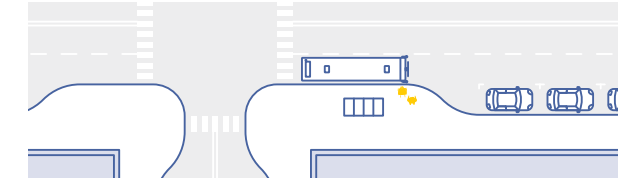
1%
of stops have real-time information (not pictured).

31%
of stops have seating, typically a standalone bench or within a shelter.

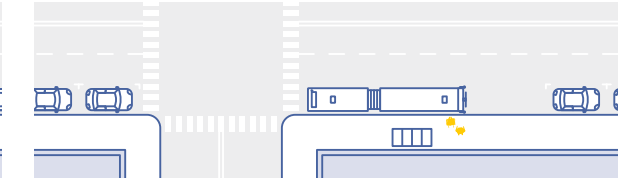
90%
of stops have sidewalk.

Of Our Bus Stops...

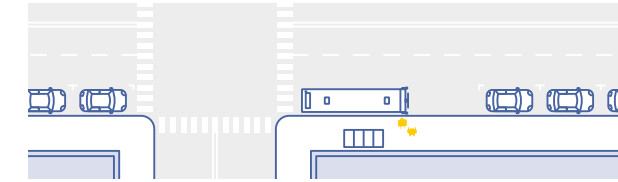
28%
are in-lane stops.



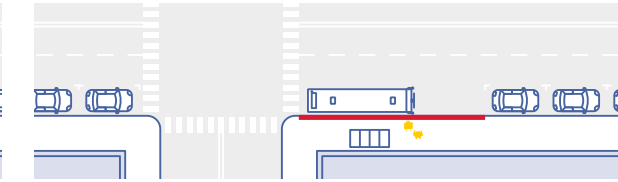
29%
are 75' or longer.



48%
are on the far side of the intersection.



67%
have parking restrictions.



10%
have daily onboardings greater than 40.

Of these:

65%

51%

Stop has seating

23%
are in medium-high to high heat vulnerability zones.

Of these:

37%

18%

Stop has shelter

44%
are in Equity Priority Areas.

Of these:

40%

21%

Equity Priority Areas are defined in Reimagine SamTrans. Heat Vulnerability Zones are defined in the SamTrans Adaptation and Resilience Plan.

90%
have sidewalks.

Of these:

32%

16%

Bus Stop Inventory

The following characteristics and contextual factors were inventoried for each bus stop operating in Fall 2022.



Stop Characteristics

- Presence of a bus stop sign and pole
- Presence of real time information display
- Presence of a map or route schedule
- Presence and type of shelter
- Number of benches
- Number of Simme-Seats
- Number of trash receptacles
- Bus stop location and position
- Approximate stop length
- Presence of a bus pad
- Presence of red curb
- On-street parking regulations
- Presence and control type of a crosswalk
- Presence of a sidewalk
- Possible landing pad obstruction
- Presence of curb cuts/ramps at the nearest intersection
- Presence of a driveway less than 75 feet upstream from the bus stop sign



Contextual Factors

- SamTrans ridership
- Census places
- Roadway classification
- Injury collisions
- Existing bike facilities
- Daily average observed speeds
- Activity density
- Vulnerability index tracts
- Equity Priority Areas

Feedback on Bus Stop Design

Hearing from our Riders

SamTrans developed a tailored engagement approach to understand rider satisfaction with current amenities, what amenities are most important to them, and how contextual factors like heat, wind, or long waits change their perspective.



- The Bus Stop Improvement Plan will:**
- ANALYZE EXISTING BUS STOPS** so we have data on what each bus stop looks and feels like.
 - CREATE CLEAR DESIGN GUIDELINES** to help make bus stops more consistent and provide the amenities that are most important to our riders.
 - DEVELOP A PROCESS WITH LOCAL GOVERNMENTS** to identify and implement bus stop improvements.



i Learning from Prior Efforts

SamTrans regularly engages with riders on a variety of service-related topics and regularly receives feedback on stop conditions. It was important to us to respect riders' time and not ask the same question twice. For this reason, rider engagement started with a thorough review of comments received through prior engagement efforts.

Social media posts to engage riders in the Bus Stop Improvement Plan

684

Rider Survey Responses

The survey was live for six weeks, offered in four languages, and promoted online, on buses, at bus stops, and through the SamTrans ambassador program.

31

Rider Interviews

SamTrans conducted one-on-one listening sessions in English, Spanish, Cantonese, Mandarin, and Tagalog to hear directly from rider groups that are often missing from the conversation: off-peak riders, limited to no-English speakers, older adults and people with disabilities, and parents and caretakers.

Respondents Told Us Their...

Top Concerns	Top Requests	Location-Specific Needs	Lighting Priorities	Amenity Preferences
Respondents were most unsatisfied with the lack of shelters, real-time information, and lighting at bus stops.	The top two requested amenities were shelters and real-time arrival information.	Shelters, seating, and real-time information are especially important at locations with less frequent service, where riders may be waiting a longer time for a transit vehicle.	Lighting is most important to riders first at stops that do not have lighting from nearby buildings or businesses, and second where long wait times are expected.	Respondents considered other amenities less important, including additional trash cans, places to charge devices, bike racks, and better system maps.

Interviewees Told Us Their...

Safety Concerns	Reliability Concerns	Stop Visibility Concerns	Amenity Preferences
Safety is at the heart of most concerns expressed by riders. They expressed challenges while waiting at bus stops, including prolonged exposure to hot and cold weather, a lack of seating, and no lighting at stops.	Bus delays and the lack of reliable real-time information result in unpredictable wait times, and make it harder for riders to plan around disruptions or make alternative plans.	Bus stop visibility is a significant issue for the riders we interviewed. Inadequate signage and markings can make it hard for riders to find the bus stop and poor lighting or improperly placed seating can make it hard for operators to see waiting passengers.	The need for sun, rain, and wind protection made covered shelters at bus stops a consistent priority. Participants near-unanimously cited a need for additional seating at bus stops.

Hearing from Stakeholders Countywide

Stakeholders included local jurisdictions across the SamTrans service area, which were convened through regular Public Agency Working Group sessions and a series of presentations to standing stakeholder meetings.

22 Meetings over **15** Months

Stakeholders Told Us Their Preferences for...

Bus Stop Resources

Bus stop improvement guidance and resources should be consolidated in one standardized location.

Collaboration

SamTrans and local jurisdictions can boost collaboration through project-, data-, and cost-sharing opportunities.

Ownership

Local jurisdictions need clarity on ownership and maintenance responsibilities of bus stop amenities.

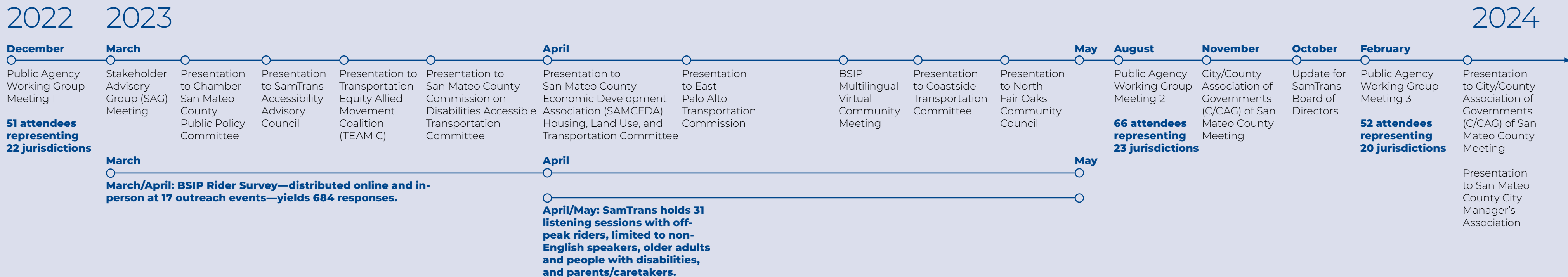
Stop Amenities

Stakeholders are excited to have clearly defined amenities by bus stop category.

Design Guidance

Stakeholders want clearer design guidance on bus boarding islands, bus bulbs, and bike lane interface with bus stops.

Stakeholder Engagement Timeline



New Bus Stop Design Guidelines

The 2023 SamTrans Bus Stop Design Guidelines provide clear, concise guidance for bus stop amenities, location, position, and access. Highlights of the Guidelines are shown below. The full document is available in Appendix D of the plan and [online](#).

The Guidelines are designed for use by SamTrans staff and our external partners.

Internal Stakeholders

SamTrans agency staff may use the Guidelines when identifying amenity upgrades at an existing stop or providing amenities at a new stop.

External Stakeholders

Local jurisdiction staff, developers, and peer agencies may use the guidelines to understand how to properly design for SamTrans bus stops alongside new private development projects or streetscape improvements.

Bus Stop Design Guidelines Highlights

Bus Stop Categories

Category	Definition	Typical SamTrans Service	Percentage of Stops
Frequent	Stops served by a bus at least four times an hour, for at least 12 hours per weekday	ECR, 120, 130, and 296 plus bus stops that serve multiple local routes	20%
Standard	Stops served by a bus 1-3 times per hour, for at least 12 hours per weekday	Most three-digit routes (100s, 200s)	45%
School-Oriented/Other	Stops only served by school-oriented routes. A bus may come as infrequently as once per day	School-oriented routes (two-digit routes), rush hour-only routes (FCX), Shuttle service	35%

Transit Amenities by Category

Category	Minimum Recommended Amenities
Frequent (Includes Transit Centers)	<ul style="list-style-type: none"> • Bus bulb or bus boarding island to widen the sidewalk if engineering design considerations are met • Standard sign and pole • Shelter with lighting • Real-time information provided via digital signage • Service map and schedule
Standard	<ul style="list-style-type: none"> • Standard sign and pole • Shelter or shade structure and bench/Simme-Seat with lighting • Service map and schedule • Real-time information provided via digital signage
School-Oriented/Other	<ul style="list-style-type: none"> • Standard sign and pole • Real-time information provided via QR codes that direct riders to a stop-specific webpage

Recommended Bus Stop Amenity Improvements

For each stop across the system, SamTrans compared existing amenities to the minimum recommended amenities outlined in the *Bus Stop Design Guidelines*. These recommendations are based on transit service and geographic characteristics and are subject to change based on engineering feasibility. The recommended stop improvements include:

650
new shade structures.

580
new benches or Simme-Seats.

1,200
new service maps and schedules.

1,200
new digital real-time information displays.

160
new bus bulbs or boarding islands.

330
new shelters. See more on the next page!



¹Image from Toler Manufacturing Company



Shade Structure¹

This is just one example of what a shade structure could look like. It is a monopole structure that provides relief from rain and sun. They are less costly and have a smaller footprint than a full shelter.

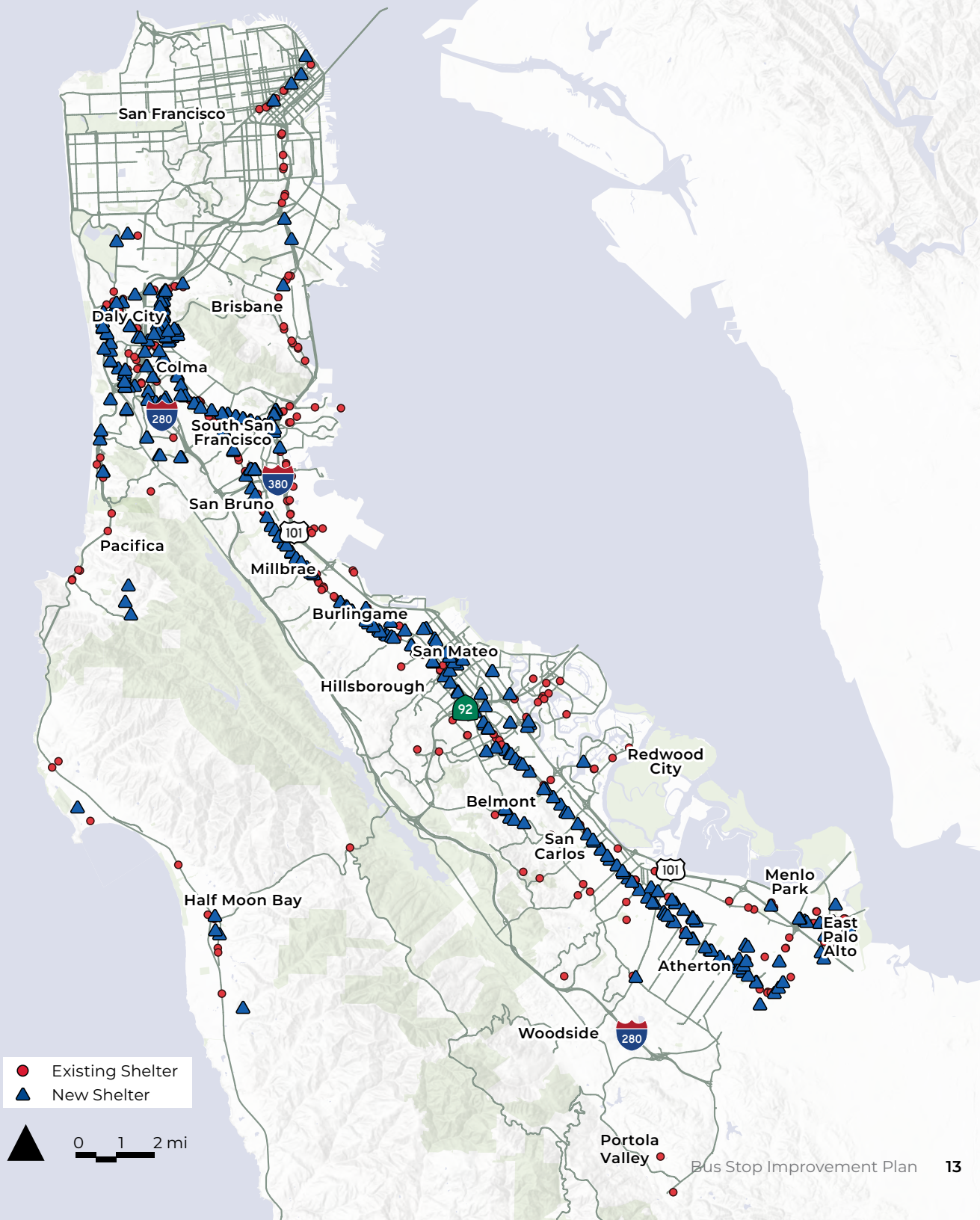


Simme-Seats

These small benches are mounted to the bus stop pole. They are less costly and more flexible to implement than full benches.

330

New Shelters With Lighting and Seating Across the System—Doubling the Amount of Shelters for Our Riders!



● Existing Shelter
▲ New Shelter

▲ 0 1 2 mi

Recommended Improvements by Jurisdiction

Jurisdiction	Total Stops	Standard Pole and Sign	Shelter with Seating	Shade Structure	Bench	System Map	Route Schedule	Bus Bulb/ Boarding Island	Real-Time (Digital)	Real-Time (QR)
Atherton	24	1	7	4	4	11	12	0	12	24
Belmont	74	6	10	19	15	33	35	9	35	74
Brisbane	17	0	0	4	3	8	12	0	12	17
Burlingame	56	2	18	14	4	39	46	5	46	56
Colma	11	0	6	0	0	7	11	8	11	11
Daly City	241	6	76	83	78	180	203	26	203	241
East Palo Alto	68	3	16	33	30	58	60	5	60	68
Foster City	81	3	0	13	13	14	16	0	16	81
Half Moon Bay	38	1	3	27	25	35	36	0	36	38
Menlo Park	120	6	14	24	20	38	47	6	47	120
Millbrae	16	0	12	0	0	13	16	14	16	16
Pacifica	117	8	9	66	65	77	85	0	86	117
Palo Alto	27	6	5	13	7	27	27	4	27	27
Portola Valley	17	2	0	0	0	0	0	0	0	17
Redwood City	180	13	19	73	54	102	109	16	109	180
San Bruno	105	6	15	50	45	70	68	15	73	105
San Carlos	64	3	11	22	21	36	39	10	39	64
San Francisco	58	8	10	23	23	53	54	1	54	58
San Mateo	190	9	44	68	62	132	137	19	138	190
South San Francisco	180	21	46	48	47	111	123	20	123	180
Unincorporated San Mateo County	171	13	12	70	64	106	98	2	106	171
Woodside	11	1	0	1	1	2	2	0	2	11

Source: SamTrans 2024.

SamTrans is prioritizing our highest ridership stops for near-term investments.

Investing in our highest ridership stops is an investment in our County's most vulnerable communities.

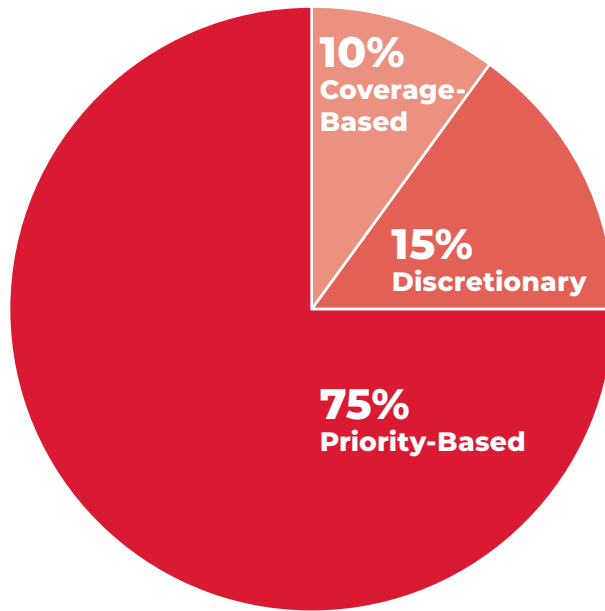
SamTrans riders are over 80% people of color while the County's population as a whole is just 43% people of color. SamTrans riders have an average household income of \$46,500—about a third of the countywide average of \$149,900. This means that investing in bus stops with high ridership is an investment in vulnerable communities. In addition to ridership, we also looked at SamTrans' Equity Priority Areas and SamTrans' Heat Vulnerability Index.



Near-Term Implementation Strategy

SamTrans has identified a set of near-term investments to prioritize in the next three to five years.

Near-Term Investment Distribution



Near-term investments will include over...

221
bus stops.

\$50M
in near-term capital improvements.

170
new shelters.

75
new bus bulbs or boarding islands.

195
new digital real-time information displays.

In some instances, these investments will include additional amenities like system maps, route schedules, shade structures and benches, and QR-based real-time information.

¹See Chapter 5 in the plan to learn more about prioritization.

Near-Term Investments and Stops by Jurisdiction (Thousands of Dollars)

Jurisdiction	Near-Term Stops	Total Near-Term Costs	FY 2025	FY 2026	FY 2027
Atherton	2	\$10	\$0	\$0	\$10
Belmont	8	\$1,120	\$0	\$1,120	\$0
Brisbane	1	\$10	\$0	\$0	\$10
Burlingame	4	\$230	\$230	\$0	\$0
Colma	2	\$690	\$690	\$0	\$0
Daly City	38	\$7,750	\$0	\$7,750	\$0
East Palo Alto	8	\$1,770	\$1,770	\$0	\$0
Foster City	5	\$120	\$0	\$0	\$120
Half Moon Bay	5	\$390	\$390	\$0	\$0
Menlo Park	2	\$350	\$0	\$0	\$350
Millbrae	8	\$2,530	\$0	\$0	\$2,530
Pacifica	25	\$1,660	\$0	\$0	\$1,660
Palo Alto	1	\$110	\$110	\$0	\$0
Redwood City	14	\$3,110	\$3,110	\$0	\$0
San Bruno	14	\$3,370	\$0	\$3,370	\$0
San Carlos	5	\$110	\$0	\$0	\$110
San Francisco	8	\$1,100	\$0	\$0	\$1,100
San Mateo	40	\$6,300	\$6,300	\$0	\$0
South San Francisco	27	\$5,500	\$0	\$0	\$5,500
Unincorporated SM County	8	\$1,230	\$0	\$0	\$1,230
Total	225	\$37,460	\$12,600	\$12,240	\$12,620

Source: SamTrans 2024.

Notes:
Portola Valley and Woodside have no stops identified for near-term improvements and are not included in the table. Spending by fiscal year is subject to change and may extend beyond 2027.

Implementation Approach for SamTrans-funded Improvements

SamTrans is committed to making quick progress on implementing the Bus Stop Improvement Plan, starting with the near-term investments. SamTrans plans to take the lead on each step of implementation with the goal of delivering the near-term improvements within three to five years.

Funding

SamTrans leads with some requests to partner on grant applications.

Design

SamTrans leads with opportunities for feedback/collaboration along the way.

Permitting

Local jurisdictions provide support on permitting processes.

Construction

SamTrans leads with City inspectors/staff participation.

Staffing Needs

Implementing a large-scale program such as the Bus Stop Improvement Plan requires staffing beyond day-to-day state-of-good-repair projects and minor capital upgrade projects. SamTrans would need to augment existing staff with either:

- Four full-time employees (FTEs) and an engineering on-call
- Seven to ten FTEs if engineering were to be done in-house

Key roles required with either option include a dedicated grant and funding coordinator, one to two bus stop planners, and anywhere from two to eight engineering staff members. Increases in maintenance FTEs may be necessary as well, including up to two Intelligent Transportation Systems (ITS) technicians for real-time signage support.



Longer-Term Investments

Following completion of the near-term investments, SamTrans will revisit the remaining stops and identify and prioritize the next set of investments. Roughly \$100 million of additional investment (in 2023 dollars) will be needed to complete all identified longer-term investments. Local jurisdictions may choose to self-fund and implement improvements at these bus stops sooner through the following mechanisms:

Locally Funded Bus Stop Improvement Programs

Jurisdictions self-fund and implement bus stop amenities through sidewalk and street furniture program.

City-Led Streetscape Projects

Bus stop improvements are incorporated into larger streetscape projects.

Developer-Funded Improvements

Bus stop improvements are implemented through Transportation Demand Management (TDM) requirements, grant requirements, or conditions of approval.

Estimated Timeline for SamTrans Funding

Jurisdiction	Long-Term Stops (5+ Years)
Atherton	22
Belmont	66
Brisbane	16
Burlingame	52
Colma	9
Daly City	203
East Palo Alto	60
Foster City	76
Half Moon Bay	33
Menlo Park	118
Millbrae	8
Pacifica	92
Palo Alto	26
Portola Valley	17
Redwood City	166
San Bruno	91
San Carlos	59
San Francisco	50
San Mateo	150
South San Francisco	153
Unincorporated San Mateo County	163
Woodside	11
Total	1,641

Source: SamTrans 2024.

samTrans

The logo graphic consists of two horizontal white bars stacked vertically, positioned directly below the text 'samTrans'. The top bar is thin, and the bottom bar is thicker.