Sacramento Regional Transit

Bus Stop Improvement Plan 2023

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Sacramento Regional Transit

Bus Stop Improvement Plan 2023

Prepared by:

Sacramento Regional Transit District

Civic Thread

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Acknowledgments

The success of the Bus Stop Improvement Plan relied greatly on robust and authentic participation to ensure the plan would be rooted in community needs and experiences. Community engagement was strengthened through the efforts and strong community ties from our valued local stakeholders. We would like to acknowledge the following community based organizations, neighborhood associations, community members, and local agencies, for all they have done to help improve the transit experience in the Sacramento region:

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Executive Summary

In 2020, the Caltrans Sustainable Communities Grant Program awarded funding to SacRT to prepare a Bus Stop Improvement Plan, in partnership with Civic Thread (formerly WALKSacramento). Informed by 763 in-person field assessments, input from customers and riders, and in consultation with SacRT's partner jurisdictions, the plan identifies $65.4 million worth of planned improvements to 630 bus stops. Divided into 61 priority corridors of approximately one to five miles located throughout SacRT's service area, each bus stop was individually graded for cost-effectiveness at improving customer comfort and safety, with an emphasis on taking an equity-based approach to investing in environmental justice and designated disadvantaged communities.

Community Engagement

The Bus Stop Improvement Plan does not include all of the over 3,100 bus stops in the SacRT system. Instead, focus areas were chosen, based on a number of factors including equity considerations. These considerations included high transit ridership, poor existing transit infrastructure and prior disinvestment, interest from the public, and location in Sacramento County's environmental justice communities[1]. A systemwide survey, early in the project, generated 280 responses and helped determine the 61 focus corridors for the project. As the project developed, another 80 comments were collected from 37 individuals over the course of four in-person community meetings, two virtual meetings, one community walk audit, and one transit station pop-up event. Considerable support was provided throughout the project for non-English speakers (both printed translations and in-person interpretation). Another 28 comments were received on the draft plan, which was made available for public review from January 9 to February 3, 2023.

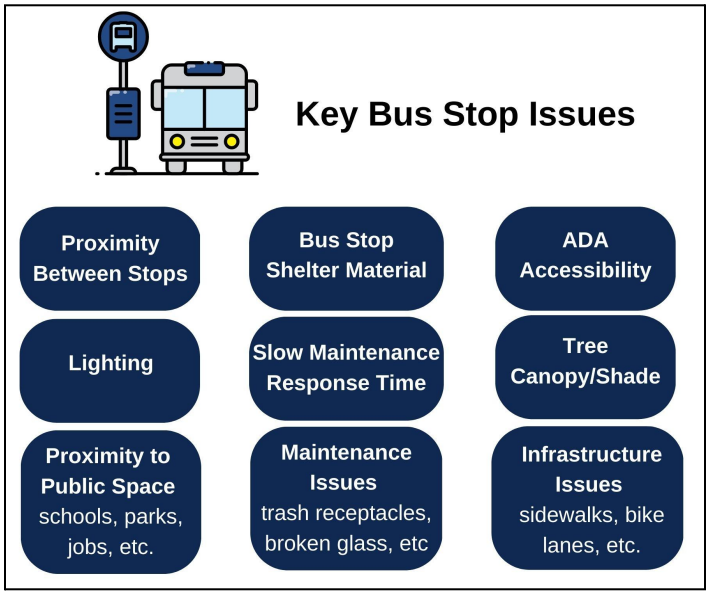


Figure 1. Key bus stop issues highlighted through community engagement process.

[1] Sacramento County's Environmental Justice communities are identified in the County's Environmental Justice Element of the General Plan. https://planning.saccounty.net/PlansandProjectsIn-Progress/Documents/General%20Plan%202030/Environmental%20Justice%20Element.pdf

Key issues reported by community members included more shelter from the elements, more durable shelter construction, more lighting, more accessible paths of travel to and from bus stops, and several other areas shown in Figure 1.

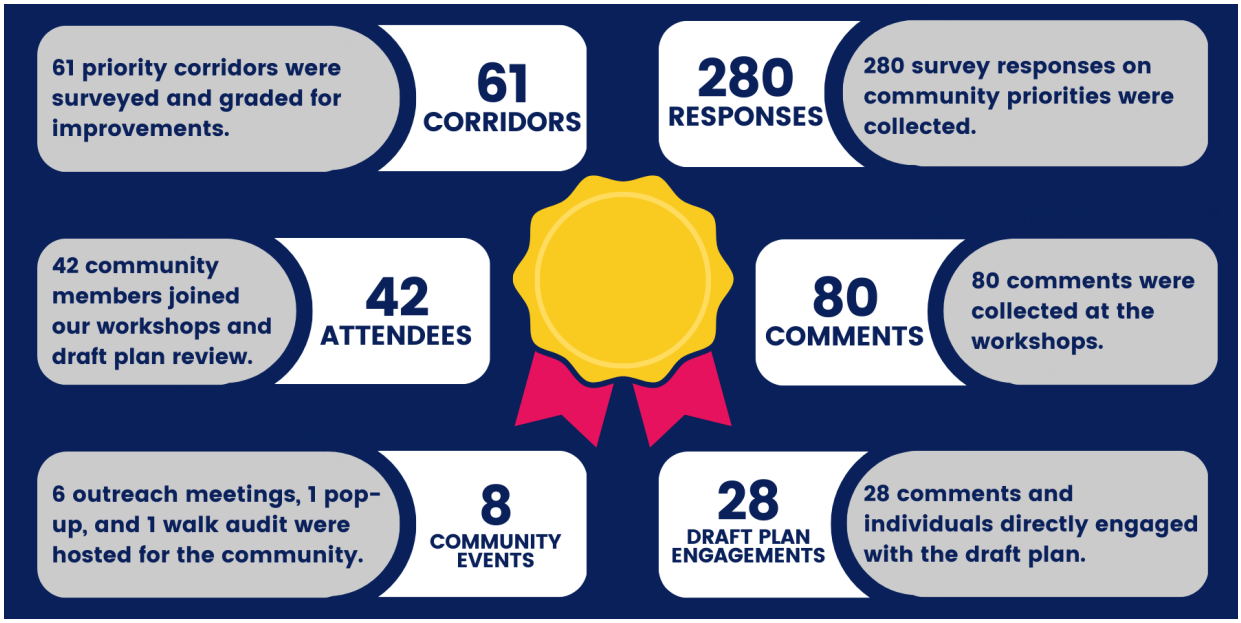


Figure 2. Key accomplishments of the community engagement process.

Design

As part of the project, SacRT updated its Design Guidelines for Bus and Light Rail to better reflect actual practices. Revisions include updates to warrants for bus stop shelters and digital signs, as well as design guidance for protected bicycle lanes, turnouts, and layover space. See Figure 3 for details on the revisions.

Improved bus stop amenities were a high priority for community members. Common concerns included bus shelter construction not vandal-resistant, broken glass, excessive heat on surfaces and from the use of glass, and lack of access to existing benches.

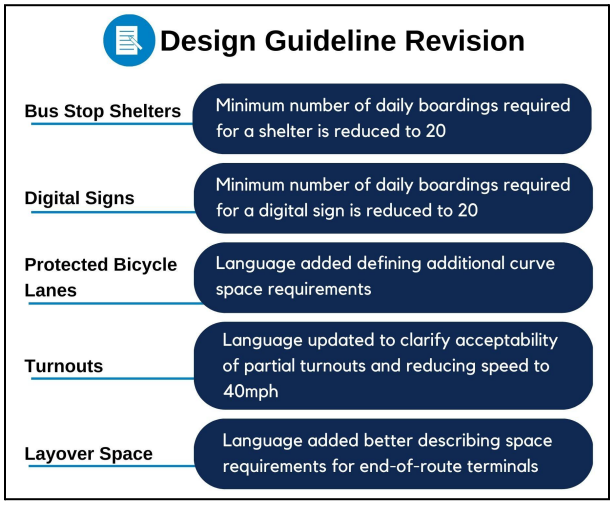


Figure 3. Design Guideline Revisions.

To address these concerns, the plan suggests potential alterations to SacRT's standard bus stop amenities, including:

- No-Wall Shelters - To reduce visual obstructions to nearby businesses, provide a greater sense of safety by removing dark hiding spaces, and confined areas that collect trash and are difficult to clean
- Sturdier Design - Using more rugged building materials such as steel posts and coated perforated metal panels, to improve durability and decrease surface temperature of benches and shelters
- Trash Receptacles - New designs that are more resistant to rain and pests and that could also be used as a canvas for local art

Figure 4. Example of bus stop shelters & amenities.

Field Assessments

Over 760 bus stops were personally inspected in the field by project interns during 2022. This approach assured that needs were identified based on direct observation from the vantage point of actual customers. It also functioned as a real-world training for project interns who would later be designing improvements, to acquaint them with the various aspects of bus stop design, including:

- ADA requirements (e.g. dimensions, slope, and vertical curb)
- Bus stop amenities (e.g. benches and shelters)
- Waiting area environment (e.g. road noise, lighting)
- Curb space requirements (e.g. for buses to move to and from a curb)
- Interactions with other vehicles (e.g. at driveways and near intersections)
- Right-of-way acquisition
- Vertical obstacles (e.g. power poles, utility cabinets, trees, etc.)
- Signage

Figure 5. Example of a stop (Silver Eagle Rd. & Mabel St. (WB)) that was assessed as sub-optimal. Stop has a precarious, uneven waiting area, difficult to access, and is placed directly adjacent to the road. Photo Credit: Sravya Dandamudi

Figure 6. Field assessment in progress.

Corridor Plans

The culmination of the Bus Stop Improvement Plan was the preparation of conceptual plans for bus stop improvements on all 61 focus corridors, which can be found in Appendix E. The corridors are typically one to five miles in length.

Cost estimates were also prepared for each corridor. Corridor projects typically range in estimated cost from $350,000 to $1 million (for design and construction costs combined). This price range allows reasonable economies of scale, but keeps individual project costs low enough to fund with smaller local and regional grant programs. To simplify permitting and plan review, none of the corridor plans span multiple municipalities.

Each planned bus stop improvement has been given a priority score according to a formula which combines a number of factors, including ridership, feasibility of making significant improvements (e.g. availability of sufficient space) and whether or not the stop is in a disadvantaged community.

The scope for each corridor plan is essentially sidewalk improvements, bus stop relocations, and additions of amenities. Potential changes to street crossings, intersections, and roadway design have been identified; but only as potential follow-ups. SacRT feels that sidewalk improvements are appropriate projects to lead, but that larger-scale street and road alterations should continue to be led by local municipalities.

Since bus stop improvements focus primarily on the sidewalk, SacRT believes this approach to project scoping will maximize benefits to transit customers per dollar. Since Sacramento area transit riders are more than three times as likely to be low-income as members of the general population, SacRT believes this is one of the most cost-effective ways to deliver concrete, tangible benefits to disadvantaged communities.[2]

The next step is for SacRT to seek funding for design and construction of the corridors in the plan. Corridors will likely be chosen partly based on a combination of factors, including priority score, cost, and timing with other related projects (e.g. repaving or other corridor projects led by local municipalities).

Priority Corridor Map

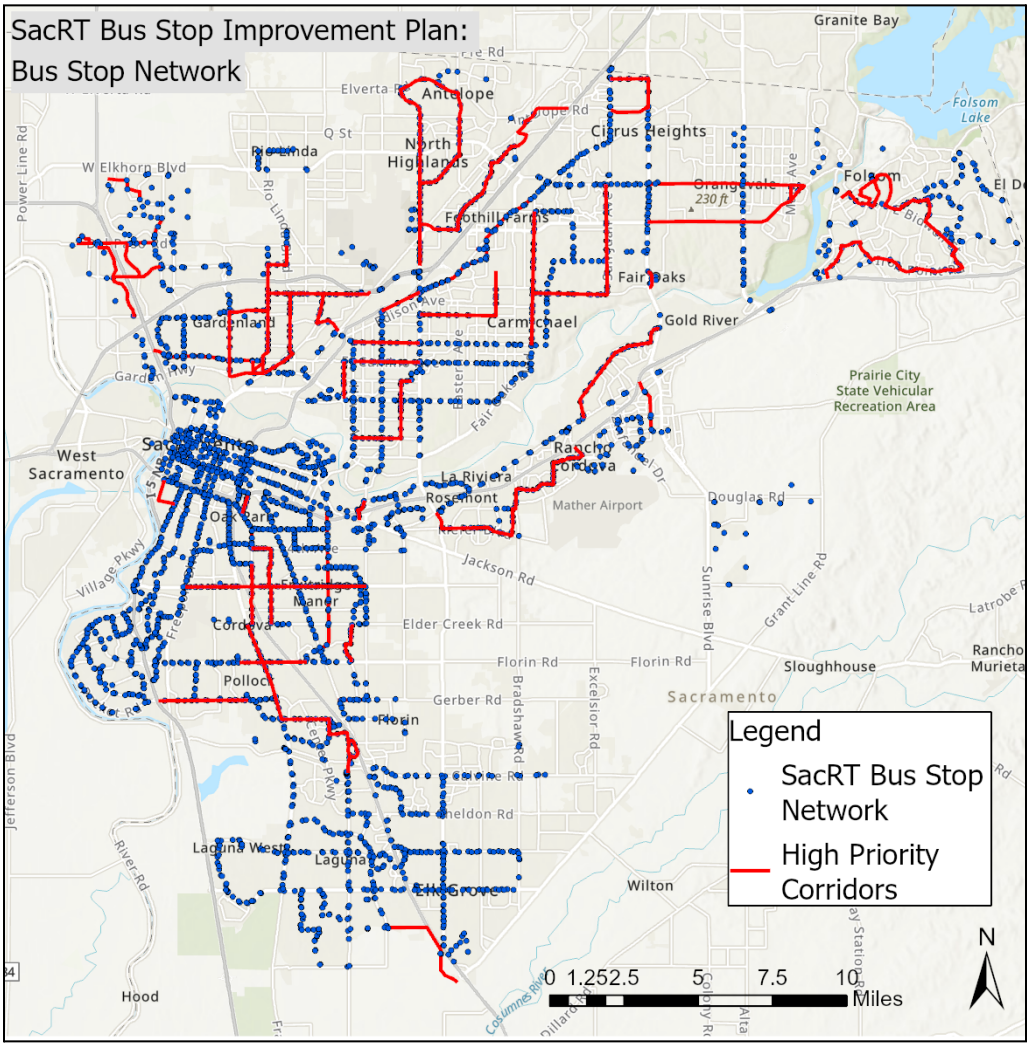


Figure 7. SacRT Bus Stop Improvement Plan's Priority Corridor Map shows the corridors of focus for this planning process in red and SacRT stops in blue.

[2] SacRT riders are 53 percent low-income. Residents within SacRT's service area are 15 percent low-income. Source: SacRT 2013 passenger survey and 2020 U.S. Census Bureau data.

1. Introduction

The Sacramento Regional Transit District (SacRT) is committed to improving the experience and accessibility for transit riders throughout its service area. In 2020, SacRT was awarded funding from the Caltrans Sustainable Communities Grant Program, to equitably prioritize and conceptually plan for capital improvements along bus corridors in its service area. This Bus Stop Improvement Plan, developed by SacRT, in partnership with Civic Thread (formerly WALKSacramento) is funded by this award.

Background

In an effort to meet current travel patterns and improve connectivity with more direct service and better frequency, SacRT launched a new enhanced bus network as part of the SacRT Forward Network Plan, developed with funding from a 2018 Caltrans Planning Grant[3]. This redesigned bus network resulted in new bus service in corridors that in some cases do not have usable pedestrian access, including several locations that have limited sidewalk access and/or are not ADA accessible.

These deficiencies are well documented in the Sacramento County ADA Self Evaluation and Transition Plan[4] which surveyed 1039 bus stops across the SacRT system and identified $2.4 million in ADA improvements. The ADA transition plan paired with the new enhanced bus network, created an urgent need to improve bus stops and the routes to them, particularly in disadvantaged communities where reliance on active transportation and transit tends to be higher.

[3] https://www.sacrt.com/forward/
[4] Sacramento County ADA Self Evaluation and Transition Plan (2019), Appendix E: Access Compliance Survey Summary of Bus Stops

Sacramento County Environmental Justice Element	Sacramento County Active Transportation Plan	City of Sacramento Transportation Priorities Plan
Policy & Implementation Measures Include transit infrastructure and connectivity needs at stops and along routes to them within Sacramento County's Environmental Justice Communities.	**Goals & Implementation Measures** Prioritize active transportation improvements and safety enhancements at major intersections, including near transit stops.	**Prioritization Criteria & Weighting** Provides points for projects that contain new transit access enchantments (sidewalk or crosswalk to a transit stop, bus lane, signal priority), and transit stop improvements.
Priority Corridors Bus Stop Improvements identified as part of this plan have been prioritized along corridors within Environmental Justice Communities to ensure equitable investment across SacRT's service area.	**Collaborative Planning** Provides an opportunity to align bus stop improvements with active transportation projects to improve usable pedestrian access along route to stops, in unincorporated Sacramento County.	**Roadmap for Investment** Allows for bus stop improvements to be conducted as part of larger transportation projects that have been prioritized for funding in the City of Sacramento.

Table 1. Matrix of notable alignment within adjacent planning efforts. This chart is illustrative, not necessarily comprehensive.

Modeled after the San Antonio VIA Bus Stop Improvement Plan[5], which included transit infrastructure improvements at bus stops in addition to improved connections along routes to stops, The Bus Stop Improvement Plan is the first undertaking of its kind to equitably and comprehensively plan to improve bus stops and the routes to them, throughout SacRT's service area. This plan builds upon many ongoing and recently completed planning efforts, by centering community voices in the process to guide direction of improvements and prioritizations that would most impact SacRT transit riders. The goals of these efforts are aligned to improve safety, accessibility, and connectivity through equitable investment within the transportation network.

[5] Transit Cooperative Research Program, Synthesis 152, Transit Agency Relationships and Initiatives to Improve Bus Stops and Pedestrian Access (pg 68)

Figure 8. Bus stop before and after improvement as a result of San Antonio's VIA Bus Stop Improvement Plan.
Source: https://transitcenter.org/taking-bus-stops-from-sorry-to-superb/

Objective

The Bus Stop Improvement plan creates a comprehensive list of necessary and desired improvements to bus stops, amenities, and supporting pedestrian infrastructure along priority corridors across SacRT's service area. These improvements include items such as the construction of new concrete pads, installation of shelters, benches, and trash receptacles, and repairs or replacement of damaged sidewalk or street surfaces.
The primary goal of the plan is to reduce environmental burden through an improved waiting experience and greater connectivity to essential community destinations. By identifying corridors with a strong combination of need and opportunity, SacRT can strategically and equitably coordinate improvements with upcoming funding opportunities and local planning efforts.

Considerations

SacRT acknowledges that inadequate bus stop amenities and lack of usable pedestrian access create first and last mile gaps, pose major obstacles to route planning and design, and disproportionately impact marginalized communities including people with disabilities, older adults, youth, and people of color. While SacRT is committed to improving equitable access and connectivity along routes to stops and at stops themselves−funding, constructing, and designing these improvements requires significant coordination and resource pooling.This division of responsibility varies across jurisdiction and is outlined through respective maintenance agreements that include respective cost-sharing percentage split between both parties. Often times, adequate funding and personnel capacity present barriers to accomplishing larger-scale improvements, resulting in the need to pursue grant funding, pool resources, and align improvements with corridor and specific planning efforts at the jurisdiction level. Additional considerations are detailed in Chapter 2, Focus Corridors section.

Plan Organization

The Bus Stop Improvement Plan is organized in five main sections, with an Executive Summary and six appendices.

Executive Summary

This section provides an overview of the Bus Stop Improvement Plan.

1. Introduction

This section details the project background and approach, while highlighting adjacent planning efforts and important considerations.

2. Approach and Methodology

This section highlights engagement activities, details the process for selecting priority corridors, and outlines upcoming projects that already address specific corridor needs along SacRT's service area.

3. Design

This section details bus stop requirements, amenities, and common deficiencies that are relevant to bus stop design. It also details obstacles to improving bus stops and outlines SacRT's design guidelines.

4. Field Assessments

This section explains the process for identifying and conducting field assessments along with high level findings. Comprehensive data gathered during the field assessments can be found in Appendix C.

5. Corridor Plans

This section highlights strategies for corridor improvements that SacRT can pursue funding for and/or partner with local jurisdictions to implement. Section 5 serves as a precursor to Appendix E, which contains detailed lanning-level corridor plans. This section also contains an overview of potential funding strategies and next steps for implementation.

Appendix A: Design Guidelines

This section references SacRT's Bus and Light Rail Design Guidelines, which have been updated as part of this planning effort.

Appendix B: Early Action

This section contains short lists of bus stops for which it is feasible and justified to install digital signs and shelters.

Appendix C: Field Assessment Data

This section references the field assessment data (available as a download) collected as part of this planning effort.

Appendix D: Community Engagement Summary
This section contains a detailed summary of all community engagement activities conducted to inform the Bus Stop Improvement Plan.

Appendix E: Corridor Plans
This section contains planning-level designs for 630 bus stops on 61 corridors that SacRT can pursue funding to implement.

Appendix F: Draft Plan Public Review
This section contains a list of public comments on the Draft Bus Stop Improvement Plan and SacRT's responses.

Appendix G: Cost Estimates
This section contains the estimated cost breakdown for implementing the proposed improvements for each of the 61 corridors contained in Appendix E.

2. Approach and Methodology

Focus Corridors

Throughout Sacramento County, SacRT serves over 3,400 bus stops,[6] of which approximately 21% are in CalEnviroScreen Disadvantaged Communities.[7] The project budget and timeline did not allow for study of every bus stop. To address this, the project team identified 'focus corridors' based on a variety of factors, with the intent to reduce duplication of effort and to prioritize urgency of need (e.g., by focusing on corridors in environmental justice communities that both required amenity updates and served a diverse cross-section of riders). In most cases, the project has sought to exclude from study any corridors with current (or upcoming) improvement plans led by local City or County transportation departments.

Figure 9, below, maps the itemized network of corridors and their resulting degree of prioritization relative to the broader network. After eliminating previously or currently evaluated corridors, the project team set out to prioritize the remaining corridors. To this end, the project team used an array of information including ridership data, recommendations from bus drivers, customer service agents, and supervisors, consideration of a corridor's location in an environmental justice community (as identified by the Sacramento County Environmental Justice Element)[8] and other relevant factors. The resulting prioritization identified high, medium, and low priority corridors for field assessments and bus stop improvement planning. Figure 9 shows the locations of the chosen corridors. **A full list of the corridor names can be found in Section 5, Corridor Plans, beginning on page 60.**

Many existing and planned SacRT bus routes traverse rural or industrial areas that lack sidewalks and other basic pedestrian infrastructure. Several such corridors have been included in the project, to document the existing need; however, such corridors typically need major upgrade projects, which likely need to be led by SacRT's partners at local municipal DOTs.

[6] Source: http://www.sacrt.com/aboutrt/documents/SacRT_FactSheet_7-2021.pdf. Accessed December 21, 2022.
[7] CalEnviroScreen 4.0 designates the top 25% of environmentally or otherwise burdened census tracts as Disadvantaged Communities. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40
[8] Source: https://planning.saccounty.net/PlansandProjectsIn-Progress/Documents/General%20Plan%202030/Environmental%20Justice%20Element.pdf. Accessed on December 21, 2022.

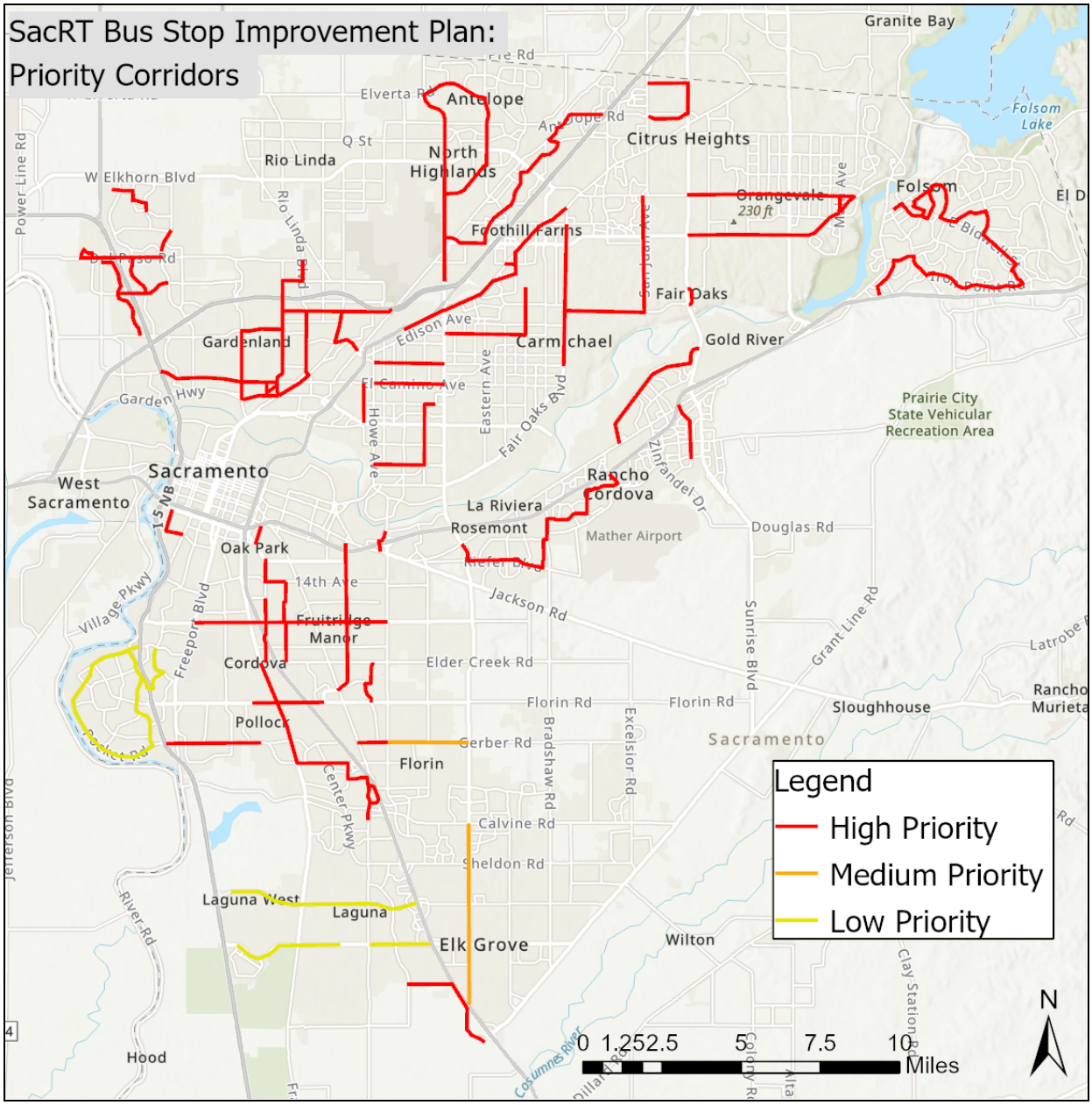


Figure 9. SacRT Focus Corridors Map.

Stakeholder and Partner Outreach

The SacRT Mobility Advisory Council (MAC) is an advisory body that consults with SacRT on mobility and accessibility concerns in the transit system. SacRT met with the MAC three times over the course of the plan to support community survey development, report the survey results, and provide general project updates.

The project team also coordinated with the City of Sacramento, Sacramento County, the City of Citrus Heights, and the City of Elk Grove on the Bus Stop Improvement Plan. The project team reviewed official project lists of local DOT's, and met with transportation and public works officials to align planning processes, enhance outreach efforts for community engagement, and provide general project updates. The City of Sacramento and City of Citrus Heights both sent staff members to at least one open house. The project team reached out to the City of Rancho Cordova and City of Folsom but were not able to schedule coordination meetings.

Community Engagement

The Bus Stop Improvement Plan intends to identify priority improvements to bus stops that are actionable and centered around community needs, particularly the needs of communities that have historically seen low investment in transit and transit and street infrastructure. SacRT contracted with Civic Thread, a local advocacy and planning nonprofit focused on advancing equity in the built environment, to lead the community engagement for the Bus Stop Improvement Plan. The intent of the Bus Stop Improvement Plan is to embed equity in its community engagement processes and approach with an emphasis on language justice, accessibility, and prioritization of residents that identify as Black, Indigenous, and or People of Color, low income, youth or are older adults. Ensuring engagement and outreach opportunities are relevant to the community, the engagement strategy considers factors such as barriers with technology, transportation, lack of other resources - such as child care or meals, and how it may inhibit participation.

Recognizing the SacRT service area represents a diverse population and geographic area, the project team developed a community engagement strategy utilizing diverse and equitable means of information gathering and sharing that supported digital, in-person, and multilingual engagement opportunities. Utilizing strategies such as Equity Centered Community Design (ECCD)[9], the goal of the engagement was to gather meaningful and accurate feedback to guide the recommendations made and ensure they are rooted in community priorities.

The major outreach efforts utilized to engage with, inform, and learn from community residents is detailed below.

[9] Equity Centered Community Design(ECCD) a unique creative problem solving process based on equity, humility-building, integrating history and healing practices, addressing power dynamics, and co-creating with the community. https://crxlab.org/shop/p/field-guide-equity-centered-community-design

Community Survey (June 2022)

To kick off community engagement for the Bus Stop Improvement Plan, Civic Thread and SacRT created and launched an online community survey available in 9 languages to capture feedback from residents about their top priorities for bus stop improvements. The feedback gathered helped identify locations, roads, and specific bus stops that need improvements as well as general prioritizations for bus stop amenities. While the survey was available for all SacRT riders, the project team intentionally designed and distributed the survey to prioritize feedback from disadvantaged and marginalized riders including riders who do not speak English as a first language, utilize mobility devices, identify as older adults, and/or are frequent transit riders who may not have access to a vehicle or other mode of transportation. To encourage survey participation, SacRT provided 10 Connect Cards to participating community members[10].

Survey Methodology & Distribution

The final survey was delivered using the Kobo Toolbox platform. Kobo Toolbox features an easy to navigate system that allows for toggling between multiple languages with one data report across multi-lingual responses. The platform also allows for "Offline" submissions, eliminating need for wi-fi or cellular reception allowing expanded reach to communities experiencing these barriers. The survey had 36 optional questions that offered respondents to answer via multiple choice, ranking, and free response (see the full survey form in Appendix D). Respondents had the option to either provide their name and e-mail or stay anonymous, as well as to opt-in to the project mailing list to receive updates on upcoming events.

To center language justice, the survey and associated outreach materials were translated and distributed in nine languages: Arabic, English, Farsi, Hmong, Laotian, Mandarin, Russian, Spanish, and Vietnamese. Examples of flyers and social media graphics are detailed in Figures 10-11. Several engagement methods were utilized to reach both an in-person and digital audience. SacRT directly promoted the survey to riders signed up to the e-newsletter list. Social media graphics were posted on Civic Thread and SacRT's social media channels, including Facebook, Instagram, Twitter, and LinkedIn. Additionally, partnerships with community based organizations, neighborhood associations, and elected officials were leveraged to promote the survey through partner outreach channels including on social media, flyer distribution, and e-newsletters. With support from SacRT's Street Team, flyers were distributed to community members and posted in public spaces across priority neighborhoods that transit riders would likely frequent (including supermarkets, thrift stores, community centers, schools, and college campuses). For example, in North Sacramento locations for flyering included Kings Supermarket, Sacramento Employment and Training Agency, and the Hagginwood Community Center. The survey was available to the public for approximately one month in May and June 2022.

[10] Connect Card is the SacRt's new electronic transit fare payment system: https://www.connecttransitcard.com/

Figure 10. Front and back of a double-sided multilingual flyer promoting the Bus Stops Improvements Survey.

Figure 11. Example of social media graphic in Dari promoting the Bus Stops Improvements Survey.

Findings

The community survey received 279 responses across SacRT's service area. Figure 12 shows the distribution of survey responses across Sacramento zip codes with a high concentration of respondents (10-17 submissions) from *Parkway and Valley Hi/North Laguna (95823), Fruitridge and Tahoe Park (95820), South Land Park and West Florin (95822), Land Park (95818), Downtown Sacramento (95814), and Pocket (95831)*.

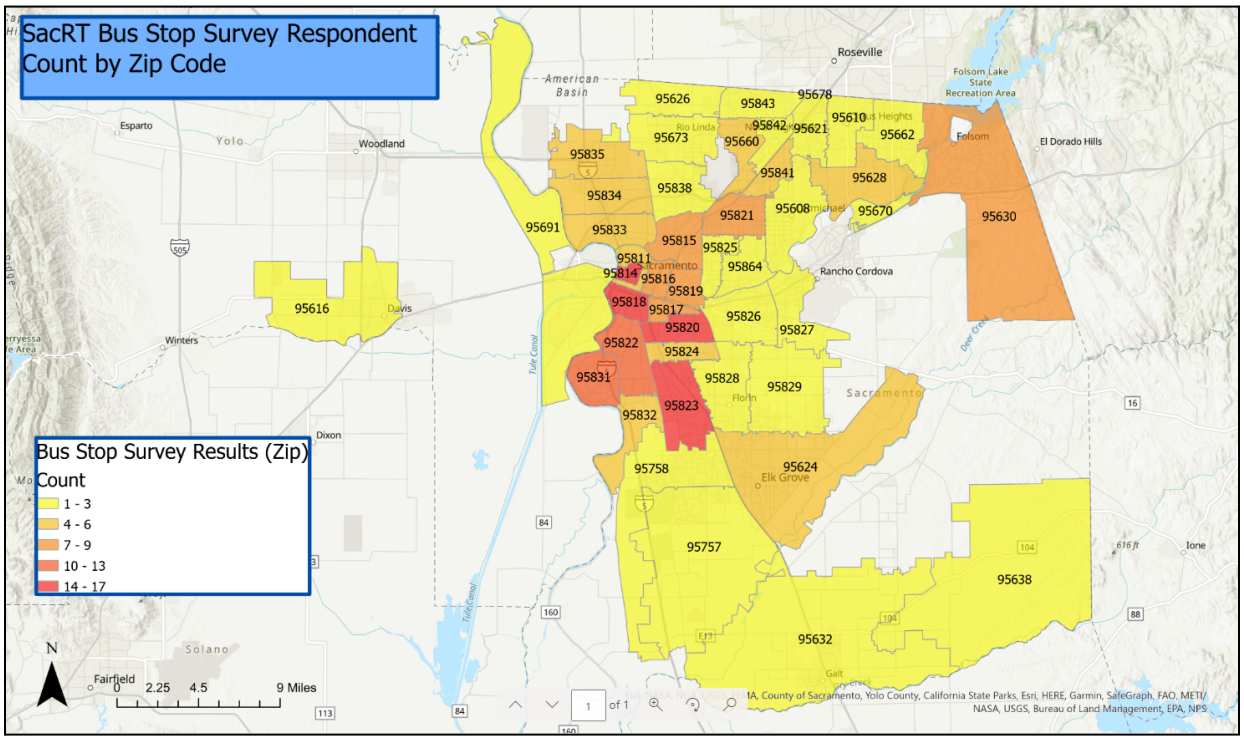


Figure 12. SacRT Bus Stop Survey respondent results grouped by zip code.

62% of respondents reported that they are experienced current or former SacRT riders, with 31% reporting they ride SacRT sometimes and 6% reporting they do not ride SacRT at all.

259 out of 279 survey respondents (93%) reported their ethnicity or race. The largest racial category was White (43%), followed by Black or African American (13%), Asian or Pacific Islander (10%), Latinx, Chicano, or Hispanic (10%), Native American (4%), and a race/ethnicity not listed (3%).

245 out of 279 survey respondents (88%) reported their income. Income level was highly variable across responses, ranging from less than $10,000 annually to more than $100,000 annually (see Figure 13). When grouping the recorded responses into three main income levels, data shows 41% representing *"Less than $10,000" to "$39,999"*, 27% representing *"$40,000" to "$74,999"*, and 32% representing *"$75,000" to "More than $100,000"*. While we see affluent neighborhoods largely represented in the zip

code data prior, it is important to note that feedback received is also reflecting a high percentage of community members living in lower socioeconomic levels.

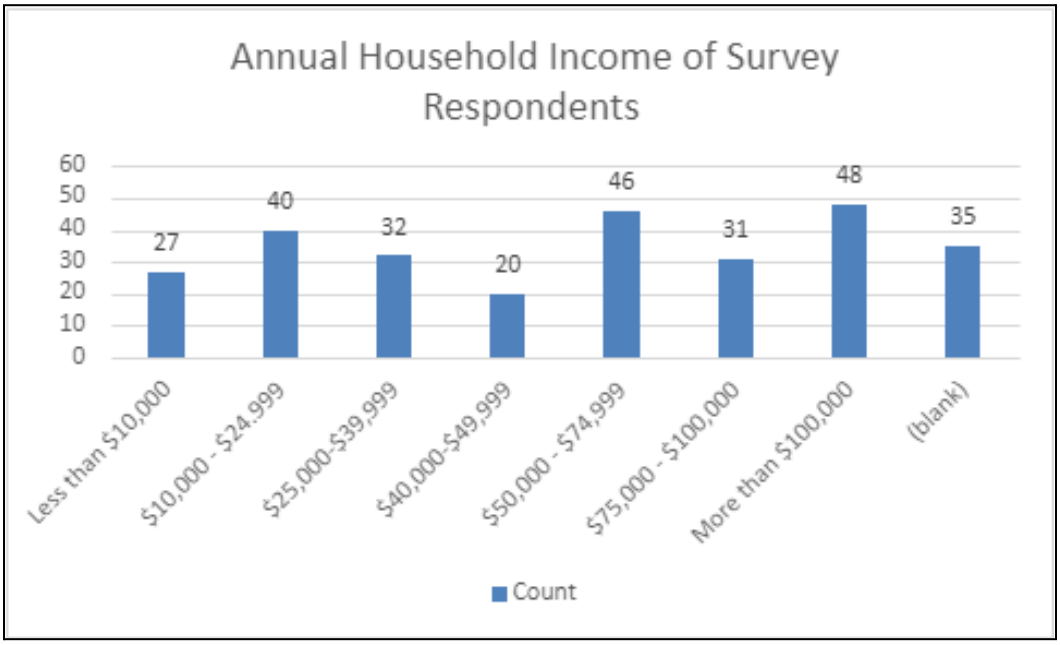


Figure 13. Annual Household Income reported by Bus Stop Survey respondents.

209 out of 279 respondents (75%) reported their accessibility needs with 13% reporting *Yes* and providing further comments ranging from describing their mobility issues or physical limitations creating barriers to walking or driving, and ways the bus and stations could better accommodate their needs, such as presence of ramps at light rail stations and lower steps to onboard the bus. 267 out of 279 respondents (96%) specified use of a wheelchair, walker, walking cane, long white cane, service animal, other mobility devices, or service animal. 13% of respondents reported that they used accessibility tools. Of all respondents, 20% reported using SacRT's disabled fare[11], and 27% reported using SacRT Go (SacRT's paratransit service).

272 out of 279 respondents (98%) provided insight if they pay senior fare upon riding SacRT, and 30% reported *Yes*.

In addition to demographic data, respondents were asked a variety of questions concerning their ideas on desired improvements to existing stops they would like to see. These questions provided respondents with opportunities to comment on such features as sidewalk conditions, environmental conditions, the prevalence of desired amenities, and open-ended questions so the thoughts of respondents could be received in their

[11] http://www.sacrt.com/fares/

own words. The following highlight key takeaways as a result of the respondent's answers.

124 survey respondents responded to desired improvements at self identified bus stops, the results of which are displayed below in Figure 14. Overwhelmingly, desired improvements centered around shelters as their most requested improvement with 85 (69%) responses. Accompanying testimony often cited protection from the elements be it sun, rain, or the cold as their reasoning. Trash receptacles and seating were closely followed with 65 and 59 responses. Comments included numerous observations of bus stops with excessive trash and a sense of being dirty in addition to their desire for a place to rest while waiting. A frequent comment from riders was the experience of long headways in between buses and the discomfort at needing to stand. Lighting was requested 53 times. Riders who commented on the need for better lighting often conveyed lacking a sense of personal safety at dark stops.

As seen, all other improvement requests fell below 35 responses. Signage, with 34 responses, represented a response rate in between the categorically higher improvements discussed above and those that received 26 or less which can largely be grouped as surrounding street and environmental configurations such as sidewalks, crossings, and stop spacing. Accompanying comments concerning signage conveyed a lack of ease in physically locating the stop to wait for a bus and the lack of information made available. Respondents cited technological features such as live wait times, more information as to the destinations served by the route, and challenges in locating stops for people who may have visual impairments.

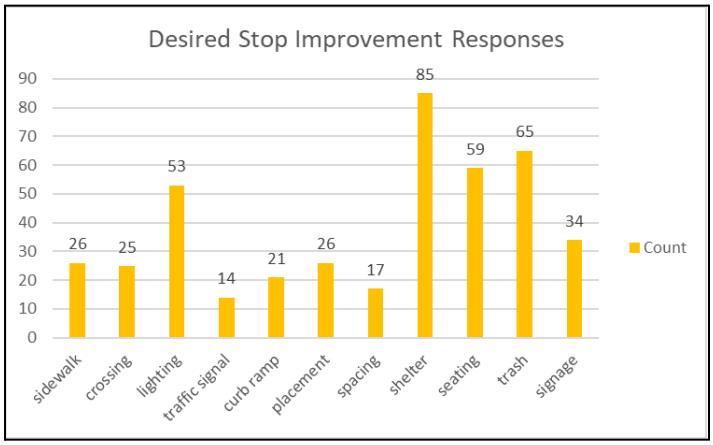


Figure 14. Frequency of Desired Stop Improvement keywords extracted from Bus Stop Survey responses.

Respondents also identified specific corridors with high bus stop improvement needs. The road/street names identified in free response answers and list questions were subsequently categorized by frequency into a word cloud, shown in Figure 15. Table 2 lists the top corridors of interest based on the community survey, many of which are corridors located in Sacramento County's Environmental Justice Communities.

Top Corridors of Interest for Needing Improvement		
Watt Avenue	Del Paso Boulevard	Fruitridge Road
Broadway Boulevard	Florin Road	Franklin Boulevard
Stockton Boulevard	Walerga Road	Meadowview Road
Mack Road	El Camino Avenue	65th Street
Folsom Boulevard		

Table 2. Community survey results indicating the top corridors of interest in need of improvement.

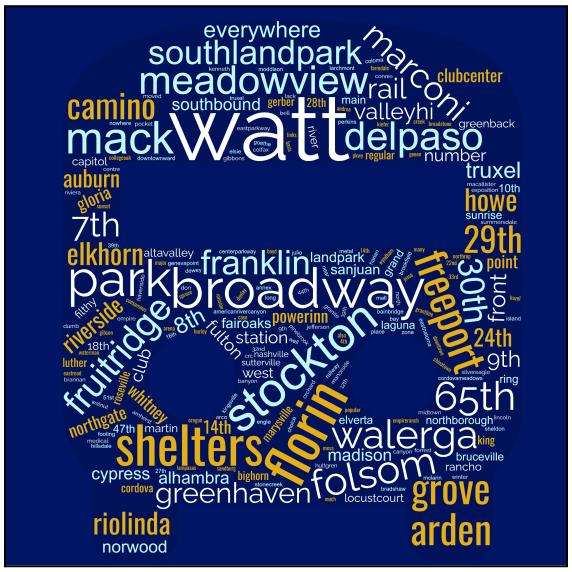


Figure 15. Word cloud of highest frequency answers from survey respondents, in response to questions about which three streets generally are most in need of bus stop improvements and a free response question about the location of specific bus stops that need improvements.

Open Houses (September 2022 - December 2022)

A total of five open house-style workshops were held throughout the SacRT service area. The first four were held in North Sacramento, Citrus Heights, South Sacramento, and Rancho Cordova, respectively between September and December 2022. The final workshop was held virtually through Zoom on December 7th, 2022. Locations were selected with the purpose of capturing the feedback from SacRT riders throughout the service area on specific bus stop improvement needs and corridors/roads of particular concern. Community members had the opportunity to speak directly with staff from SacRT, and in some locations a staff from their local government.

The open house events prioritized the following standards:

- In-person events aimed to circumvent reliance on internet connecting devices.
- Strategically located near transit lines with attention to common community destinations like community centers and libraries.
- Evening events were designed to leverage people's availability after common work hours.
- Incentives were provided in the form of free transit to open houses, meals, children's activities, and SacRT Connect Cards preloaded with free rides
- Translated materials and live interpretation was offered for all four in-person events.

With support of the SacRT Street Team, Open Houses were promoted in a similar strategy used for the survey. Targeted asks were sent via email to partners to request distribution to the communities they serve, and paper flyers were distributed to neighboring schools, local businesses, faith based organizations, and places that community members would be likely to frequent (for example, food distribution centers). Outreach efforts were unique to each of the four different neighborhoods and were selected based on proximity to the Open House venues, existing transit lines, and essential destinations such as community health clinics and grocery stores. All promotional materials were translated to the top one or two identified languages of that neighborhood.

Each workshop followed a similar format, starting with introductions, a high level overview of the project and its goals, and interactive activities and group discussions on needed bus stop improvements and their locations. The in-person open houses featured live interpretation for the language most prominent in the area.

Major themes identified in the workshops included challenges and barriers to utilizing the bus system, as well as areas for opportunity. Table 3 lists key themes that were raised in conversation with community residents.

KEY THEMES	
Barriers & Challenges	**Opportunities**
● Poor system connectivity, bus stops not reaching low-income neighborhoods, stops too far apart ● Limited SmaRT Ride locations ● Poor sidewalk and bike lane conditions ● Route timing inconsistent with school schedules ● Slow headways ● Poor bus stop maintenance and	● Broad-based infrastructure improvements through local corridor plans ● Relocation of poorly placed stops ● Addition of new stops ● Spot-focused ADA improvements ● Assessment of stops that are good candidates for amenities (lighting, bench, trash receptacles, shelters) ● Low to moderate cost

slow response times for maintenance issues • Lack of bus stop amenities (such as trash receptacles) • Lack of ADA accessibility • Lack of shelters • Lack of tree canopy shade	improvements that can be implemented by SacRT

Table 3. Key themes identified in the workshops.

For full summaries of each individual workshop, see Appendix D.

Figure 16. Photos from the Rancho Cordova Open House (left) and South Sacramento Open House (right) during the group activities

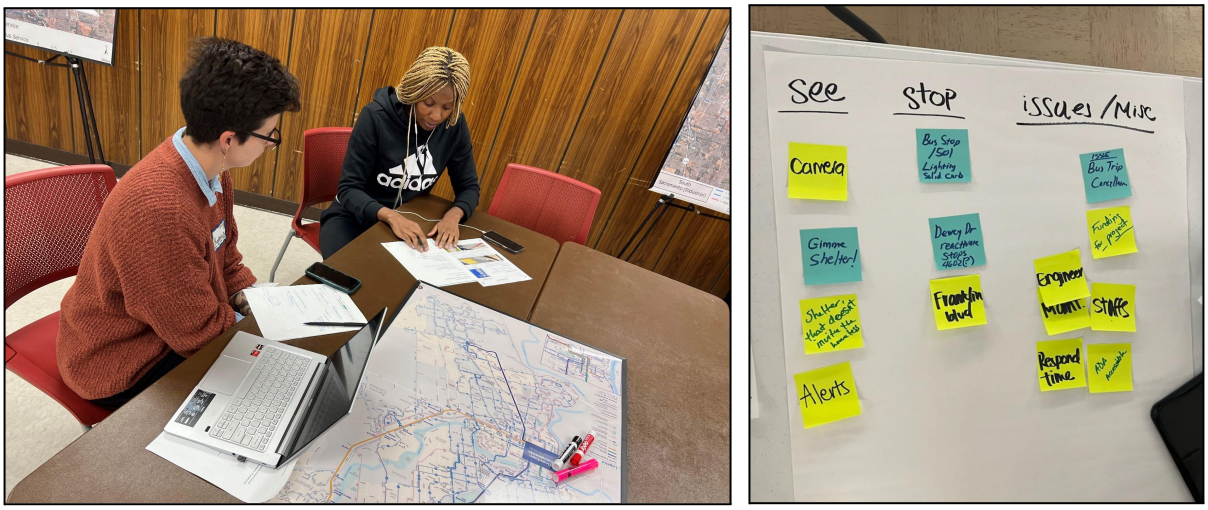


Figure 17. Photos from the South Sacramento Open House during the group activities (left) and image of visioning exercise from North Sacramento open house (right).

Figure 18. Photo from the first Open House in North Sacramento during a group discussion on needed bus stop improvements.

Community Walk Audit (October 2022)

A community walk audit was conducted in the Meadowview neighborhood in South Sacramento on Saturday, October 29, 2022 to serve multiple purposes: Inform community members about the project, gather feedback from resident experts, and identify issues with bus stops along the stretch of Meadowview Road between Capitol Collegiate Academy and 24th Street. The Halloween-themed community walk audit was promoted in partnership with AARP, and because of the surrounding neighborhoods and focus of the partnering organization, residents of the local senior housing were the primary audience, as well as one Sacramento community member that had attended previous Open Houses.

Civic Thread and AARP conducted a separate but simultaneous walk and park audit from 24th Street Bypass Park to Steve Jones Park, meeting those as part of the Bus Stop Walk Audit to debrief at Steve Jones Park. The audit results from the 24th Street Bypass Park to Steve Jones Park are not reflected in this plan or its appendices. Particular issues noted during the Meadowview Road walk audit were accessibility barriers with utility poles blocking sidewalks, a lack of comfortable, marked, and frequent crossings to get to several of the bus stops on this road, and the general discomfort of being a pedestrian or waiting at a bus stop on loud and busy arterial roads.The need for shelter and seating was noted at every bus stop assessed, and along the route many uneven sidewalks that were in disrepair were noted. AARP sponsored the luncheon that followed the debrief, to honor the community for their expertise.

Figure 19. Photos of the combined walk audit group during (left) and after (right) their debrief at Steve Jones Park.

Figure 20. Photo of the project team, interpreter, and community members conducting the Bus Stop Walk Audit; left, a bicyclist is passing in the bike lane.

Pop Up Event: University & 65th Street Light Rail Station (January 2023)

Civic Thread and SacRT held a Pop Up event on January 18th, 2023 at the 65th Street Light Rail Station in the afternoon to capture weekday commuters using Regional Transit. The date and time of the Pop Up were strategically aligned with high rates of ridership to capture as many riders as possible. This event served to gather additional comments for bus stop improvements, while additionally promoting the Bus Stop Improvement Plan Draft virtual event that would be held the following week. Approximately 80 people were reached at the Light Rail station and community feedback noted issues such as long wait times, inactive bus stops, poor lighting, unclear signage, lack of seating or shade, or amenities such as restrooms. One specific route, Route 142, was highlighted in need of a bus stop at the Amazon Fulfillment Center.

Figure 21. Civic Thread team collecting comments from transit riders at the University & 65th Street Light Rail Station Pop-up.

During the event, Civic Thread and SacRT Street Team provided transit riders with promotional flyers for the subsequent Bus Stop Improvement Draft Plan virtual session. Riders who were unable to attend the virtual session were encouraged to provide feedback at the Pop Up table and were provided SacRT Connect Cards for sharing written comments. This Pop Up style event was planned to host quick conversations

during the limited time commuters had while waiting for their train. SacRT branded giveaways were also provided to community members who stopped by.

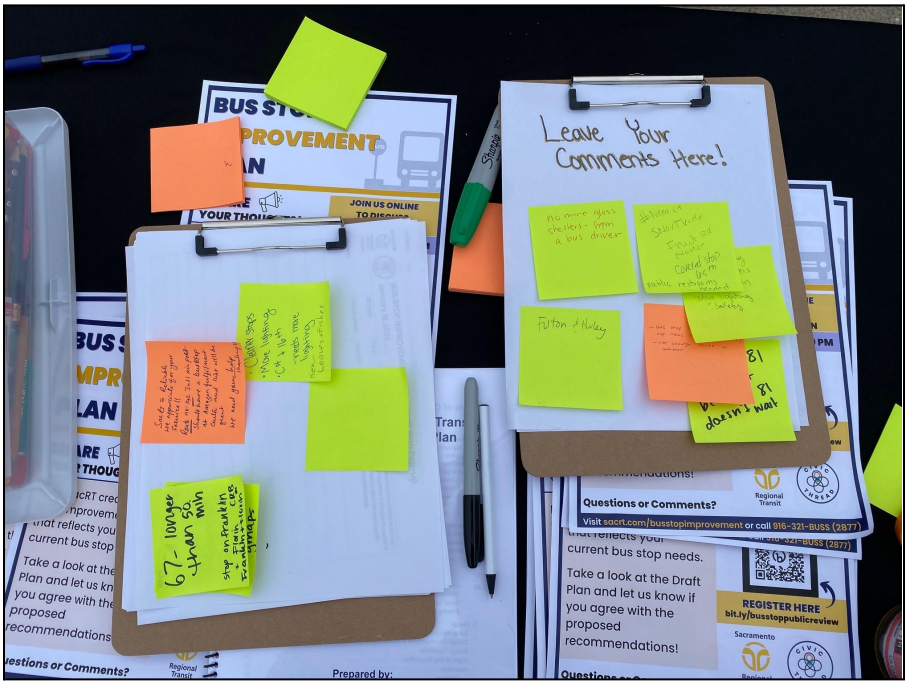


Figure 22. Comments left by transit riders at the pop up event.

Email Submissions and Phone Calls (2022)

Four community members submitted comments via e-mail during the outreach period. These messages provided insight to where major issues exist with bus stop amenities, and also offered some solutions to how they envision these areas being improved.

Two messages highlighted the importance of utilizing bus shelters as protection against extreme climate and providing seating for older adults. Additionally, restroom access was noted as another need along with overall maintenance improvements to all bus stop amenities with a heavy emphasis on sanitation.

Another message shared personal issues of navigating transit as a bicyclist. A large challenge surrounds boarding transit with the bike, as it's difficult to lift onto light rail cars, and there are issues with the racks at the front of the buses. The message also highlights how this issue can be exacerbated when navigating a heavy weight e-bike. A solution was imagined, referencing baggage cars on trains, to dedicate a car or part of a car with a low entrance or foldable ramp, to easily stow bicycles.

The last message regarded the bus stop that hosts Line #62, focused on 19th and P Street. The following problems were cited: broken glass, broken or unsafe seating,

and trash.This community member envisioned bus stop amenity improvements to be more user friendly, future proofed against vandalism, cost efficient, and welcome public art, solar generation, rainwater capture systems, and living green roofs. Referencing inspiration from Tulsa, Oklahoma bus shelters during a recent visit[12], the community member visualized improved SacRT bus shelters to have an inviting design, bike and scooter parking, concrete slab seating, trash cans, wayfinding, and a GPS real-time bus monitoring screen. They also were excited to see how solar energy could be utilized for customers, such as making it possible for phones to be charged at the shelter. Lastly, it was stressed to prioritize looking at community hot spots for heat zones while ensuring proper tree canopy is available and working with organizations like Sacramento Tree Foundation to plan trees.

Civic Thread also received feedback via a phone call from a community resident about the lack of bus service on French Rd. between Gerber Rd. and Florin Rd. and how the lack of service leaves many residents without transportation to key areas. This community resident noted that there were opportunities to connect to major terminals such as the Florin Mall, and thus provide access to many other locations in Downtown Sacramento and Galt, should service be put in.

Summary of Community Engagement

Through the Bus Stop Improvement Plan's community engagement process, feedback was collected through various methods to best capture the diversity of community members who are serviced by Regional Transit. Civic Thread's process was deliberate for an equitable reach through offering different platforms for comments including digital, in-person, and constant lines of communication via email, phone, and in-person engagement opportunities. Each platform contributed its own strengths and connections to different demographics for a comprehensive outreach.

Digital engagement found its largest audience through the Bus Stop Improvement Survey which enabled community members all around the greater Sacramento area to provide information on needed improvements and specific locations. Digital promotion allowed for a more broad distribution of promotional materials for Open Houses and Workshops, which was amplified by partners willing to share or post the materials on their respective digital platforms.

In-person engagement occurred through the five Open Houses, one Community Walk Audit and one Pop Up Event. In-person events were strategically designed to engage riders experiencing barriers to utilizing technology such as individuals with limited digital literacy, or without access to Wi-Fi or internet connecting devices. In-person events were strategically located in easy to reach areas where priority demographics frequent (bus stops, libraries, and community centers). In an attempt to mitigate barriers to in-person attendance for Open Houses, dinner, free transit rides to the venue, and

[12] Tulsa Transit is undergoing a project to improve the commuting experience on bus rapid transit. https://dimin.com/work/tulsa-transit

pre-loaded Connect Cards were provided to participants. Translated materials and live interpretation was provided for the Open Houses and Community Walk Audit to engage residents who do not speak English as a first language. The project team also distributed flyers at bus stop shelters, popular community stores, schools, and apartment complexes.

Through email and phone calls, a constant line of communication was available for community members to reach out to the Civic Thread team. This allowed a space for individuals to reach out at their best convenience, especially if they had barriers and conflicts with the scheduled events or missed opportunities to complete the survey.

Overall, the robust comments that have been recorded over seven months serve as the foundation for this Plan, supporting future improvements to be rooted in first-hand experiences and authentic community feedback.

Please see Appendix D for a complete Community Engagement Summary.

Priority Corridor Map

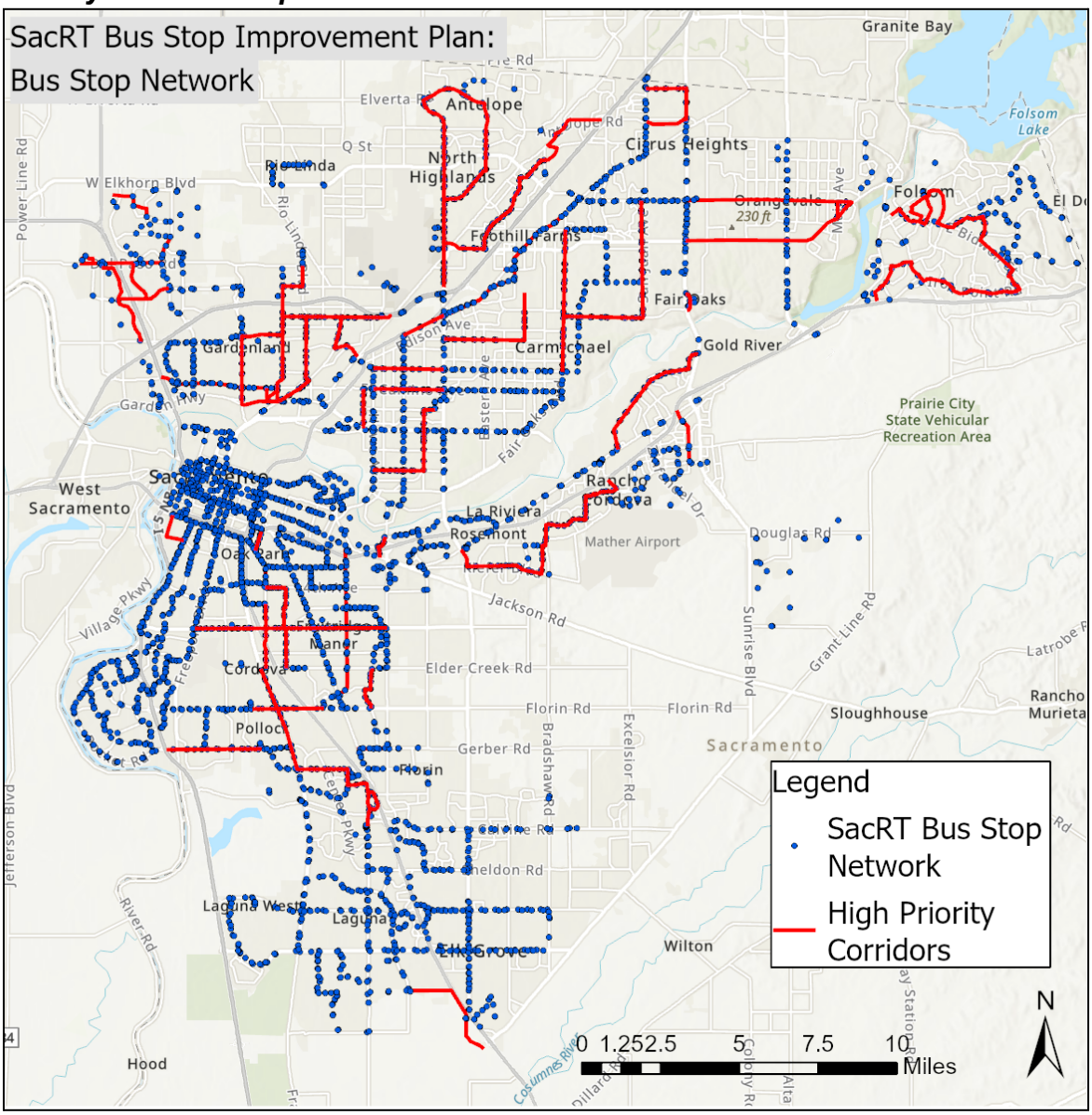


Figure 23. SacRT Bus Stop Improvement Plan's Priority Corridor Map.

3. Design

Basic Requirements for Bus Stops

In simple terms, the bare minimum requirements for a bus stop are that it has an accurate sign with the bus route and destination, and that it meets the requirements of the Americans with Disabilities Act (ADA). Old stops (built prior to the passing of the ADA in 1990) are “grandfathered” in and are not required to meet ADA requirements. However, when improvements are proposed to a grandfathered stop, it must be brought up to meet the regulations in the ADA. For example, if an existing stop without a shelter pad has a shelter pad installed, the adjacent sidewalk and a section of the adjacent road may have to be rebuilt to be brought to compliance. When locating a new bus stop, considerations to make about the new location include whether there is a safe, flat, good-in-all-weather surface from which to step onto or off the bus, a sidewalk with vertical (not rolled) curb extending in either direction, proximity to marked crosswalks and curb ramps, access for people with disabilities, and passenger protection from passing traffic and cyclists.

While a bench and a shelter are often critical to the rider experience, particularly when headways are infrequent or when there is very hot, wet, or cold weather, on a technical basis benches, shelters, and trash cans are considered amenities rather than basic requirements. The language in this plan reflects this technical categorization.

Design Considerations and Challenges

In siting a new bus stop or designing improvements to an existing stop, a transit agency must consider a number of factors and constraints, including:

Americans With Disabilities Act
Key requirements include a 5-foot by 8-foot firm, flat surface with slope no greater than 1:48 at the front door of the bus, ramps not exceeding slopes of 1:12, and an accessible path to the bus stop.

Bus Dimensions and Performance
SacRT designs for standard 40-foot transit buses with approximately 15 feet between front and rear doors. When street parking is present, clear space of approximately 60 feet behind the bus and 50 feet in front of the bus is needed for entering and exiting traffic. Power poles near the curb can pose vertical obstacles to bus mirrors and tree limbs may impact the bus.

Nearby Environment
Trees, poles, and utility boxes can pose significant challenges to finding a location that has adequate space for accessing both the front and rear door of a bus, especially for wheelchair users. Tree roots tend to create pavement upheaval, which cannot be

addressed without harming the tree. Underground utility vaults are another common obstacle that can add cost to improvement projects.

Transportation Conditions
Typical nearby traffic conditions, street design, and control devices may significantly affect bus stop siting and design (e.g., the speed of traffic, lane widths, visibility/sight distances, bicycle lanes, and especially driveways).

Adjacent Properties
Many property owners oppose the placement of bus stops or bus stop amenities in front of their properties (e.g., especially restaurants with outdoor seating, high-end hotels, and single-family homeowners). Many bus stop improvements require right of way acquisition, so acceptance of the adjacent property owner is imperative. Even when the bus stop is entirely in public right of way, property owner complaints often necessitate relocation of bus stops.

Maintenance Standards
A considerable amount of the cost of a bus stop improvement may arise from constructability requirements or local maintenance standards. For example, rebuilding a sidewalk will usually damage and necessitate the rebuilding of the adjacent curb and gutter. Rebuilding the gutter will usually require demolition of the adjacent and parallel asphalt roadway. Repaving a linear strip of the roadway adjacent to the gutter will result in a seam in the roadway. Local maintenance standards will typically not permit a project to leave a linear seam such as this in a roadway (at least not if the roadway was otherwise in good condition). This forces SacRT to repave the entire width of the roadway, or at least to a lane line, in particular so that no new pavement seam is introduced in the middle of a bicycle lane.

Street Crossings
On wider, higher-speed streets, lack of a marked street crossing can be a major obstacle to siting a new bus stop. SacRT also prefers, when possible, to keep bus stops together in pairs, across the street from one another, or at least within line-of-sight.

Examples

Given the complexity and multitude of factors required in assessing and implementing successful bus stop designs, the following examples are provided in an effort to highlight examples of well designed stops and those that provide a suboptimal experience for users. The quality of stops will range between the following examples and not all stops require or benefit from the provision of a full amenity suite.

Suboptimal Bus Stop Design and/or Location

Silver Eagle Rd. & Mabel St. (WB). *Photo Credit: Sravya Dandamudi*

Stop has a precarious, uneven waiting area, difficult to access, and is placed directly adjacent to the road.

Ethan Way & Silica Ave (SB). *Photo Credit: Sravya Dandamudi*

Stop is located on a homeowners property. ROW is very difficult for improvements.

San Juan Ave & Northlea Way (NB). *Photo Credit: Sravya Dandamudi*

Stop is located in a drainage ditch, has no waiting area, and is directly adjacent to a bike lane.

High Quality Stops

Rio Linda Blvd & Grand Ave (SB). *Photo Credit: Sravya Dandamudi*

Stop is ADA accessible and has all three basic amenities: shelter, seating, and good lighting.

Fair Oaks Blvd & Grant Ave (NB). *Photo Credit: Sravya Dandamudi*

Stop is ADA compliant and serves several nearby destinations: community center, church, and residential developments.

Fruitridge & Power Inn Rd (WB). *Photo Credit: Sravya Dandamudi*

Stop has a full amenity suite: lighting, seating, shelter, shade, and a trash receptacle. Stop is located in a high ridership area.

Design Guidelines

SacRT, like most transit agencies, maintains an official set of design guidelines that include but are not limited to architectural and engineering guidelines for bus stops. The current SacRT Bus and Light Rail Design Guidelines are available online:

SacRT Bus and Light Rail Design Guidelines
http://sacrt.com/aboutrt/RTPlanning.aspx

As part of the Bus Stop Improvement Plan, SacRT staff has made minor updates to the guidelines to better reflect existing practice. At the time of this draft plan, edits to the design guidelines are still being circulated internally among SacRT Planning, Operations, Training, Facilities, Engineering, and Safety personnel. A final version of the updated guidelines will be included with the final version of the Bus Stop Improvement Plan, or a link to the updated version will be provided, for online access.

Key areas where revisions are being considered include:

- Bus Shelters - Minimum number of daily boardings required for a shelter reduced from 25 to 20, regardless of whether the area is rural, suburban, or urban, to reflect actual practice, with certain exceptions.

- Digital Signs - Minimum number of daily boardings required for a digital sign reduced from 50 to 25, to reflect actual practice, and goal of deploying approximately 75 total digital signs.

- Protected Bicycle Lanes - Language added defining additional curb space requirements for taper and deceleration, upstream and downstream of the stopping area, for protected bicycle lanes and similar treatments that push the #1 travel lane beyond 8 feet from the curb (i.e., increasing the lateral movement of the bus to/from the curb).

- Turnouts - Language updated to clarify acceptability of partial turnouts (i.e., straddling a bike lane line) and reducing to 40 mph the speed at which turnouts are typically preferred.

- Layover Space - Language added better describing space requirements for end-of-route terminals, especially for high-frequency routes, which have considerably greater space requirements.

Right of Way Acquisition

Other than at light rail stations owned by SacRT, SacRT's bus stops typically reside in public right of way (ROW). A major obstacle to improving existing bus stops and constructing new bus stops is lack of available ROW to construct the needed improvements.

Example:
A common bus stop deficiency is lack of a firm, flat, all-weather landing at the front door of the bus with depth of at least eight feet from the curb face, as required by ADA. But often, private property begins at the line at the back of an existing sidewalk of five to six feet. Without widening the sidewalk into the existing roadway, there is no way to achieve the required eight-foot depth at a stop like this without securing ROW from the private property owner (e.g., via an easement). Moreover, ADA generally forbids SacRT from making other alterations to the bus stop without also improving it such that it achieves ADA compliance. Therefore, unless the private property owner agrees to provide ROW to SacRT, other improvements to the stop are not possible.

Although SacRT has experience acquiring ROW for major projects (such as light rail extensions and new maintenance facilities) there is minimal policy, precedent, or experience at SacRT for acquiring ROW for bus stop improvements, which typically require acquisition of small areas of only 100 square feet or less.

One of the strategies embraced in SacRT's Bus Stop Improvement Plan is avoidance of duplication of effort with local Departments of Transportation (DOTs). Where local DOTs are planning comprehensive corridor improvements, SacRT would prefer to comment and advise the projects, with respect to bus stops and transit, rather than for SacRT to initiate its own independent–and potentially duplicative–project on the same corridor. Right of way acquisition, however, can introduce considerable uncertainty to a project's cost and timeline (i.e., because a private property owner may be reluctant or unwilling to agree). For this reason, local DOTs are often reluctant to include ROW acquisition in their scopes of work. For this reason, SacRT perceives a genuine need and opportunity to initiate and lead its own projects focused on bus stops in areas that are not planned for comprehensive improvements by the local DOT and especially where significant improvements to bus stops could be made possible (often at low construction cost) merely by the acquisition – laborious though it may be – of a small amount of ROW.

SacRT's most common vehicle for ROW acquisition for bus stop improvements is a revocable License Agreement to construct an improvement. Revocable License Agreements allow the property owner the right to terminate the agreement, in which case, SacRT would have to remove the improvements and restore the area to its prior condition at its own cost. For some projects, however, a permanent right of way may be required, in which case SacRT would need to secure an easement or purchase a property outright.

Since bus stop projects typically need only a small portion of private property, purchasing a property (i.e. in fee) is not usually a feasible option (i.e., because it would require subdividing the property). An easement is therefore the most feasible means to secure a permanent ROW. As a public agency, SacRT must first obtain a survey, including a plat map and legal description, followed by an appraisal to present an offer to the property owner. To complete the transaction SacRT would review and clear any title obligations, then record the easement. Typical costs include right of way research and legal costs, site surveying, ordering a plat map and legal description, appraisal, title reports, the cost of the easement, escrow, and recording fees, and potentially other miscellaneous administrative costs. Permanent easements require SacRT Board of approval. Depending on funding requirements, SacRT might also need approval from the granting agency.

Amenities

Bus stop amenities such as shelters, benches, trash receptacles and others play a vital role in the rider experience. Amenities must be designed not only to equitably and effectively improve the customer experience (e.g. by improving safety and comfort in communities that need it most) but to be vandal-resistant, easy to maintain, and acceptable to nearby property owners and other users of the street.

The public engagement elements of the Bus Stop Improvement Plan included input and recommendations from customers on desired changes to SacRT bus stop amenity design and policy. New amenity styles, especially for bus shelters, were one of the most common recommendations. However, another common suggestion from customers was that shelters and other amenities needed to be cleaned, maintained, and repaired more frequently. Standardization of amenities, especially bus shelters, reduces costs for spare parts and simplifies maintenance and repairs. It also provides a more uniform, recognizable appearance to customers. However, if the current style of shelters is unsatisfactory, SacRT may want to consider changing the types of shelters and other amenities it deploys.

This section compares the advantages and disadvantages of various styles of bus stop shelters, benches, and trash receptacles, and suggests possible changes to SacRT amenity design and policy.

Shelters

Bus shelters must provide protection from the weather, be easy to maintain, resist vandalism, be accessible, and be safe and inviting. In addition to overhead shelter from weather, all standard SacRT bus shelters include interior lighting (which is sometimes solar-powered), a system map, and a built-in bench seat. Shelters design and placement is further complicated because bus shelters tend to generate a significant volume of complaints from nearby property owners, e.g. because they obstruct storefronts, pose obstacles to sidewalk traffic, or attract loiterers.

SacRT primarily uses a standard, modular bus shelter design, featuring models measuring eight, 12, or 16 feet in length. Most SacRT shelters are one of two similar styles, typically of metal and glass construction, and painted black. Older shelters with a similar size and construction, but painted blue, can still be found on the system in certain areas. Since the annexation of Elk Grove and Folsom transit services into SacRT, different style shelters can also be found in those areas, which were inherited by SacRT from the former city-run transit systems.

Like many transit agencies, SacRT's shelters are primarily purchased, installed, cleaned, and repaired by an outdoor advertising contractor, who recovers costs through paid advertising placed in the shelters.

Below is a series of images of different shelter designs currently in place on the SacRT system:

Figure 24. Current styles of bus stop shelter that may be found along SacRT lines.

Standard SacRT Shelter

Source: Google images, Stop #1807, Stockton Blvd.

Colonial Style SacRT Shelter

Source: Google Maps, Stop #EDT108, 5th Street at N Street

Folsom Bus Shelter

Source: Google Maps, 2741 East Bidwell St, Folsom, CA

Elk Grove Bus Shelter

Source: Google Maps, 7406 Laguna Blvd., Elk Grove, CA

Customer complaints about existing SacRT bus shelters included the following:

- Ambient heat - The glass walls allow sunlight into the interior area, but block the wind, making the interior area hot
- Surface heat - The flat metal benches can be hot to the touch during summer
- Broken glass - Glass panels are subject to frequent vandalism
- Poor durability - Thin metal construction holds up poorly to vandalism
- Lack of access to existing benches- Many of the built-in benches lack armrests between seats, allowing people to sleep on the bench and preventing transit users from using the bench
- Inadequate lighting - Lighting is too dim or has stopped working in many shelters

To address many of the complaints above, SacRT may want to consider diversifying its fleet of shelters, to include some of the following features:

No-Wall Shelters
In many bus stop locations, a bus shelter with no walls is desirable, and can be achieved with a cantilevered canopy. No-wall shelters are often desirable and found in locations where a walled shelter would obstruct the storefront of an adjacent business, provide a hiding space, where clear distance from the shelter wall to other nearby walls would be inadequate for cleaning, or where the position of the legs on a standard walled shelter would create vertical obstacles to wheelchair and pedestrian circulation. Many shelter manufacturers provide shelters with an overhead canopy that cantilevers from the rear. Some cities also have shelters with vertical posts.

Figure 25. Another style option of bus stop shelter with a Cantilever design featuring a larger roof.

Rear-Cantilevered No-Wall Bus Shelter

Source[13]

Center-Cantilevered "Umbrella" Style No-Wall Bus Shelter

Source: Google Maps, 500 W Burnside St, Portland, OR

[13] *bjspark.com/gallery/bus-stop-walkway/#iLightbox[gallery_image_1]/29*

Perforated Metal Siding

Many transit agencies use perforated metal for a building material in bus shelters, instead of glass. Compared to glass, perforated metal allows breezes to pass through and casts a partial shadow. In cold and rainy climates, its inability to block the wind may be too great of a disadvantage, but areas with long, hot summers, especially where it rains seldomly (such as Sacramento) these qualities may provide significant advantages for customer comfort. Compared to glass, perforated metal is also shatter-proof, reducing maintenance costs. Louvered or slat-sided shelters are also available with many of the same qualities.

Figure 26. Another style option of bus stop shelter with a Louvered/slat style structure.

Perforated Metal-Sided Bus Shelter

Source: James Drake, personal collection, hosted on twitter.com, photo from Scottsdale, AZ

Louvered/Slat-Sided Bus Shelter

Source[14]

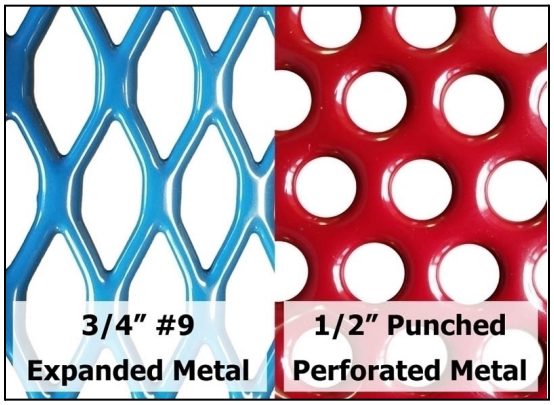
Perforated Metal Seating

Many transit agencies use seating constructed of expanded metal mesh or punched perforated metal, clad in thermoplastic (e.g. as is often used for park picnic tables, playground equipment, and other rugged outdoor applications). This provides high durability and a surface that is cooler to the touch (due to the thermal qualities of the thermoplastic, as well as the airflow through the mesh). Armrests between seats can help prevent persons from sleeping on the bench.

[14] https://www.encat.com.au/bus-shelters/squire-louvered-bus-shelter/

Figure 27. Examples of expanded metal and punched perforated metal bench textures.

Expanded Metal and Punched Perforated Metal



Source: parktables.com

Expanded Metal Bucket Seats Without Armrests

Source: parktables.com

Benches

Benches can be built into bus shelters, or installed independently. Seating, along with shelters, is one of two areas of bus stop amenities that are specifically identified by the Federal Transit Administration for examination with regard to equitable distribution of amenities.[15] Seating that is comfortable and convenient helps attract new riders and retain existing ones. There is no minimum ridership requirement for benches, but benches should be placed in locations where they will not obstruct pedestrian flow on the sidewalk or where they would be intrusive to the adjacent property owner (e.g. in front of a single-family home). Other design considerations include surface temperature, water drainage, resistance to weather and vandalism, and existence of armrests or dividers, to prevent persons from sleeping on the bench. Please note that hostile, defensive architecture structures are fundamentally exclusive of disadvantaged communities. In opposition, as a means to center *all* members of the community, it is strongly discouraged to engage with or incorporate the usage and development of hostile design. Instead, it is ideal to create opportunities for inclusion in design until institutional faults are meaningfully resolved.

SacRT currently uses two main types of bench: standard perforated metal benches, which are typically painted blue, and solid-backed ad-supported benches, with wooden bench and concrete legs, which are provided by SacRT's outdoor advertising contractor. Both designs lack armrests or dividers.

[15] See FTA Circular 4702.1B.

Figure 28. Standard SacRT Benches.

Standard SacRT Blue Bench

Source: Sravya Dandamudi, personal collection

Standard SacRT Ad-Supported Bench

Source: Google Maps, 3510 Auburn Blvd, Sacramento, CA

Customer complaints and suggestions regarding benches were mostly focused on the surface temperature of the built-in bench in standard SacRT shelters and on persons sleeping on benches, making them unavailable for transit customers.

Pictured below are several bench designs that do incorporate armrest dividers.

Figure 29. Examples of benches with dividers in between seats.

Steel Rod Bucket Seats with Armrests
(Scottsdale, AZ)

Source: James Drake, personal collection, hosted on twitter.com, photo from Scottsdale, AZ

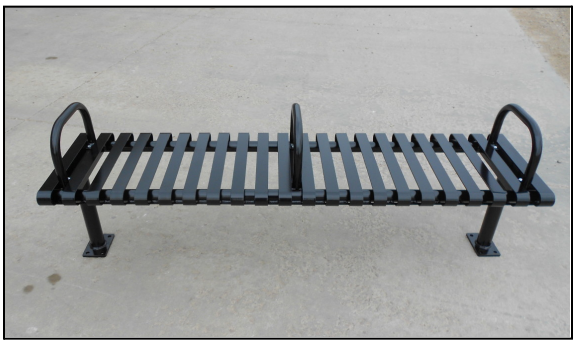
Expanded Metal Ad-Supported Bus Bench with Dividers
(Portland, OR)

Source[16]

[16] https://content.govdelivery.com/accounts/ORTRIMET/bulletins/990445

Figure 29. Examples of benches with dividers in between seats.

Backless Slatted Steel Transit Bench With Dividers



Source[17]

Punched Perforated Metal Mesh Transit Bench With Dividers

Source[18]

Bench Materials
Cost-Benefit Analysis

A cost-benefit analysis was prepared of bus bench materials across three criteria: cost, heat conductivity, and susceptibility to wear and tear.

Plastic lumber scored highly as a building material for bus benches, based on the chosen criteria. Plastic lumber comes in several varieties, including polypropylene, acrylonitrile butadiene styrene (ABS), or polyvinyl chloride (PVC). It often is made from recycled materials.
Steel, wood, and thermoplastic (polyethylene, PVC, and nylon) were evaluated, but several important drawbacks were identified.

Heat conductivity was a key concern reported by riders. Looking specifically at heat conductivity, wood and plastic lumber made of polypropylene scored highly. The least heat resistant material was steel. Thermoplastic coatings scored slightly lower than plastic lumber on this metric, with slightly higher heat conductivity than plastic lumber and wood. Please note that in practice, perforated metal coated in thermoplastic may offer similar heat resistance to plastic lumber given the potential for airflow.

Plastic lumber made of polypropylene scored the best overall due to a combination of low cost, high durability, and low heat conductivity. Steel scores highly for durability, but poorly for heat conductivity and cost. Wood is the least durable, but the best option for heat resistance. Plastic lumber is the least expensive, while steel is the most expensive[19].

To determine the most appropriate bus bench material for specific applications, further study based on context will be helpful. Factors to consider might include available budget for installation, existing shade at the location (tree canopy or other), and potential for wear and tear given ridership and pedestrian traffic.

[17] *http://tuffgo.com/portfolio-view/backless-transit-bench/*

[18] *https://www.tolarmfg.com/wp-content/uploads/2018/04/Benches-general.png*

[19] Conductivity References: Wood, Steel; Thermoplastic, Polyethylene ; Thermoplastic, nylon; Thermoplastic, PVC; Plastic Lumber, PVC; Plastic Lumber, ABS; Plastic Lumber, PP; Plastic Lumber, HDPE

Trash and Recycling Receptacles

While less complicated than shelters and perhaps not as widely regarded as benches, trash and recycling receptacles play another invaluable role in maintaining a clean and appealing bus stop. Functionally, these receptacles should include two universal features: eliminating both rain and pests from entering them. Beyond this, depending on the local municipalities waste management policies, simple, single receptacles that collect all material types such as waste, recycling, and composting materials may be used such as in Figure 30.

Figure 30. Single sorting trash receptacle.

Other options include providing individual receptacles for trash, recycling, and/or compostable waste such as Figure 31. These however rely on users to correctly sort their waste where excessive failure to do so, simply amounts to a single sorting receptacle. One strategy is to utilize shapes and sizes at the entry point such as in Figure 31.

Figure 31. Sorting receptacle system.

Waste receptacles should also be considered as potential canvases for local art, particularly in high pedestrian areas and corridors such as in Figure 32. These efforts enhance the expression and feel of the space and create a more positive user experience.

Figure 32. Artistic trash receptacle in Sacramento's Midtown.

Bicycle Facilities

While perhaps not considered a common bus stop amenity, bicycle facilities may be appropriate to add to a bus stop under specific conditions. Secure bicycle parking can encourage customers to use a bike to travel to a bus stop, thus encouraging reduction in vehicle trips and vehicle miles traveled (VMT). Installation of bicycle parking at a bus stop almost always will require collaboration with the local jurisdictions to ensure standards are met. The SacRT Bus and Light Rail Design Guidelines[20] state that bicycle racks are appropriate at stops that receive 50 to 250 or more daily boardings. Stops most likely to meet this threshold are stops at transit centers, key bus transfer points, or stops at light rail station loading areas. Bicycle racks may be placed at the rear of a bus shelter, with a minimum allowance of 4 feet on the sides. Bicycle racks should be placed in areas with high volumes of pedestrian activity that do not interfere with pedestrian circulation, to promote usage and security.

Enclosed bicycle lockers may also be considered if bus stop design and ridership warrants it - suggested daily boardings for bike lockers is 100 or more per the Design Guidelines. However, enclosed bicycle lockers pose several challenges with upkeep including maintenance challenges, people renting for significant periods, and lockers being used as temporary residences.

Installation of bike share stations near a bus stop requires coordination with both the local jurisdiction and the local operator. Bicycle sharing services can be a significant contributor to VMT reduction through offering “first-mile last-mile” options for transport.

Pictured below are different bike rack designs that provide secure and simple bike parking. Inverted-U Racks may fit best behind or beside a bus shelter. Some local jurisdictions may have specific bicycle rack design and placement guidelines, such as the City of Sacramento’s Bike Rack Design and Placement Standards.[21]

[20] https://www.sacrt.com/apps/wp-content/uploads/SacRT-Bus-Light-Rail-Design-Guidelines.pdf
[21] City of Sacramento’s Bike Rack Design and Placement Standards

Figure 33. Types of bicycle rack designs.

Inverted-U Rack

Source: https://ameribike.com/bike-racks/standard/

Post and Ring Rack

Source: https://noahsplay.com/park-equipment/bike-hitch-rack/

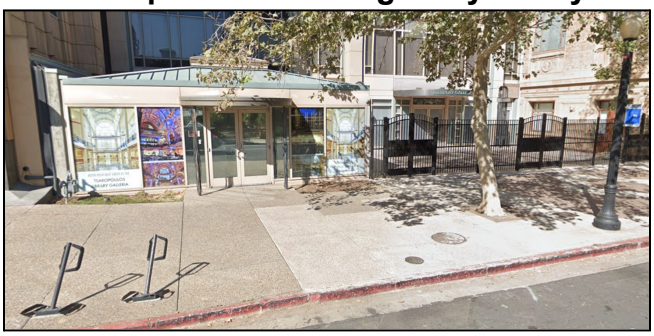
WheelWell-Secure

Source: https://en.wikipedia.org/wiki/Bicycle_parking_rack#/media/File:Davis_Bike_Rack.jpg

SacRT Bus Stop with Wave/Undulating Style Bicycle Rack

Bus Stop ID #502, Meadowview Rd. & Amherst St (WB). See bike rack in red box.
Source: Google Street View

SacRT Bus Stop with Coathanger Style Bicycle Racks



Stop ID #53204
Source: Google Street View

Design Summary

While simple in their mandated requirements, bus stops pose both a significant challenge and opportunity to a transit agency. The design, location, and features of a bus stop coalesce to play a pivotal role in the user experience of transit riders with well designed and placed amenities contributing to not only the retention of existing riders but attracting new riders to the system as well.

The implementation of any amenity must address multiple considerations at once including equity, costs, maintenance, user interface, durability, and more. Not least of all, right of way acquisition often proves the most challenging and limiting factor to improving, relocating, or adding new bus stops. The majority of bus stops excluding those located at SacRT light rail stations, reside on public right of way (ROW). With major infrastructure improvements presenting greater opportunity for ROW acquisition to take place, this 2023 Bus Stop Improvement Plan took careful consideration to not duplicate efforts and where near term corridor improvement projects are taking place, SacRT will advise bus stop design and placement during the planning process rather than address potential conditions in this report.

The design and placement of individual stops significantly affect the transit user experience. When users are waiting at a stop, the perception of the stop design, cleanliness, and comfort play a major role in shaping a positive or negative transit experience. The shelter, bench, trash receptacle, and bicycle parking amenity examples presented here are an expression of the types and considerations needing to be made when addressing the amenity improvements highlighted in the 2023 SacRT Bus Stop Improvement Plan. Amenities play a pivotal role in the user experience of transit riders with well designed and placed amenities contributing to not only the retention of existing riders but attracting new riders to the system. The implementation of any amenity must address multiple considerations at once including equity, costs, maintenance, user interface, durability, and more. As noted, not all stops will be receiving amenity improvements, but those that do will be selected based on the feedback gathered from the robust community engagement throughout this process and in accordance with existing SacRT design guidelines and framework.

4. Field Assessments

Although SacRT maintains an inventory of all bus stops, plus bench and shelter amenities, there exists no comprehensive list of necessary or desired improvements to bus stops, amenities, or supporting pedestrian infrastructure. To create and prioritize such a list, SacRT partnered with Civic Thread to employ a team of interns who would first assess all bus stops in person, to personally familiarize themselves with all the bus stops, through the eyes of riders, and then prepare a plan of recommended improvements.

While the SacRT system has over 3,100 bus stops, due to time and budget limitations, only a subset of bus stops, on certain priority corridors, were chosen for field assessments, based on a variety of criteria, as discussed in Section 2. Civic Thread then hired two field assessment interns who personally assessed 763 stops throughout SacRT's service area.

Interns were selected based on enrollment in undergraduate or graduate studies and interest and prior experience with transit. Orientation and training was provided in the office and in the field on various subject matter areas related to bus stop evaluation and siting, including:

- ADA requirements for bus stop pads and slope
- space requirements for shelters and other amenities
- space requirements for buses to move to and from a curb
- interactions with vehicles entering and exiting driveways
- interactions with vehicles at or around intersections
- common issues with separated sidewalks and rolled curbs
- obstacles to sidewalk improvements such as utility vaults, utility cabinets, and trees
- property owner concerns and right-of-way acquisition,
- line of sight and visibility
- path of travel to and from bus stops
- clearance of bus mirrors around power poles
- signage and sources of information

As discussed in Section 2, corridors were chosen for field assessments based on knowledge of known problem areas, areas with current bus service, known environmental justice neighborhoods (per the Sacramento County Environmental Justice Element[22] of the General Plan), areas that lacked prior infrastructure investment, and feedback from community residents denoting priority corridors through the community survey which received 279 responses.

[22] https://planning.saccounty.net/PlansandProjectsIn-Progress/Documents/General%20Plan%202030/Environmental%20Justice%20Element.pdf

See Appendix D for a comprehensive list of factors assessed during the field audits. Basic factors assessed included but were not limited to ADA accessibility (clear path of travel on adjoining sidewalk, vertical curb), safe location for stop, adequate lighting present, shelter and/or bench present, priority recommendations, and priority of improvement. See Figure 34 for a high-level example of a bus stop audit.

Figure 34. Field assessment worksheet provided to attendees at public workshops for informational purposes. This worksheet provides a good example of basic factors assessed in a field assessment audit.

Of 763 stops assessed, 112 (14.6%) appeared to meet ADA requirements while evaluators found deficiencies with 649 (85.4%). Many stops would require major construction work in addition to property acquisition to satisfy all ADA requirements. Among bus stops that are *not* ADA compliant at present, approximately 58.4% are classified as either likely or very likely that ROW necessary for improvements could be acquired. For 38.9% of stops, ROW acquisition was judged to be unlikely or very unlikely.

<table>
<tr><th colspan="4">Field Assessment Summary</th></tr>
<tr><td>ADA Compliant</td><td>112 (14.6%)</td><td colspan="2"></td></tr>
<tr><td rowspan="2">Not ADA Compliant</td><td rowspan="2">649 (85.4%)</td><td>Likely acquisition of ROW**</td><td>379 (60.0%)</td></tr>
<tr><td>Unlikely acquisition of ROW</td><td>252 (39.9%</td></tr>
<tr><td colspan="4">Total Stops Assessed In Person: 763*</td></tr>
</table>

Table 4. Summary of ADA compliant stops and likelihood of ROW acquisition.
**Please note that while 763 stops were assessed in person, 2 stops were not assessed for ADA compliance and thus are left out of the totals in this table.*
***Please note that gaps in data collection make number totals slightly off. Stops where likelihood of acquisition of ROW was not assessed (18 stops) have not been used to calculate percentages.*

During field audits, bus stops were classified as having low, medium, or high need for improvement. The level of need for improvement was determined in the field using a combination of feasibility of improvement, ridership demand, location, and surrounding land use. For stops classified as *not* being ADA compliant at present and having a *high* need for improvement, 43.8% of stops were classified as being likely or very likely that necessary ROW could be acquired, and for 56.1% of stops it is unlikely or very unlikely.

See Table 5 for the breakdown of all stops assessed (ADA compliant and not ADA compliant) and their level of improvement needed.

Level of Improvement Need	Number of Stops	Percentage of Stops
High	177	23.5%
Low	442	58.7%
Medium	134	17.8%

Table 5. Breakdown of level of improvement needed for all stops assessed in the field audits.

Note that poor condition of an existing stop does not always equate to a high priority for improvement. A stop may be in poor condition, but if ridership is extremely low and the cost of improvement is very high, then it may be a poor candidate for improvement, especially if it is not in a disadvantaged community. Even a bus stop in poor condition with higher ridership may be a poor candidate for improvement, if the needed improvements are prohibitively costly or impossible. For example, a bus stop located in a roadside ditch with no sidewalk (see image) may be scored highly for Level of Improvement Need, but the potential remedy may score poorly due to high cost and poor feasibility (e.g., due to inadequate space or poor likelihood of necessary right-of-way acquisition).

The most common priority improvements identified in the field audits include, but are not limited to:

- Widen the sidewalk or construct a concrete pad adjacent to the sidewalk to achieve a sufficiently large, flat, slip-resistant waiting and boarding/alighting area
- Add bus shelter
- Add lighting
- Add seating
- Relocate stop to better location
- Replace rolled curb with vertical curb and reinforced gutter
- Add marked crossing

Remedies for most of the deficiencies above can typically be designed and delivered by SacRT and are essentially sidewalk improvements; however, SacRT would not likely lead projects to install new crossings. New crossings and other changes that affect road design are more complicated to design, with more impacts to adjacent infrastructure, control devices, traffic movements, etc. In many locations, a new crossing may be infeasible or non-standard. Recommendations for new marked crossings need to be evaluated for feasibility and design criteria based on national and local design standards.

A stop lacking a marked crossing with no feasible route to install one is *not necessarily* grounds to move or remove a stop and has been evaluated on an individual basis throughout the field assessments. The Bus Stop Improvement Plan recommends that SacRT leave new crossing projects to local municipal departments of transportation and that SacRT's bus stop improvement program focus on the simpler improvements to the bus stop and adjacent areas. Please note that even simpler improvements such as installation of new lighting will likely require coordination with and approval by the local jurisdiction on maintenance responsibilities and costs.

Detailed field audit data may be viewed in Appendix C. Field audit data directly informs the following section, Corridor Plans.

5. Corridor Plans

Note: The full corridor plans are included in Appendix E, which is posted to sacrt.com separately due to file size constraints.

This section introduces conceptual plans for new bus stops or improvements to existing bus stops along each SacRT bus corridor that was assessed throughout the project, and serves as documentation of methodology and instructions on how to read the corridor plans. **Due to length, the conceptual plans for each corridor are contained in Appendix E.**

There are a total of 61 corridors that were assessed as part of this planning effort. The subsection for each corridor includes an area map showing the corridor location, icons for each bus stop indicating if proposed improvements are categorized as minor, major, or no change, and then sketch-level maps for each bus stop, detailing approximate locations and dimensions for the planned improvements at each stop.

How to read the corridor plans:

1. Locate the color coded area map at the start of each corridor subsection.
2. The area map page will note the main road(s) that the corridor includes, and the bounding cross streets. For example, corridor #26 is Rio Linda Blvd. Rio Linda Blvd. is the main road (corridor) and the extent of Rio Linda that is included is between Grand Ave. and Arden Way.
3. Scroll down to find the conceptual bus stop designs, which correspond to the color coded stops on the area map. Each bus stop design will include cross streets and an indicator of directionality (NB, SB, EB, WB), along with the Stop ID. Reviewers can utilize this information to find the existing stop on Google Maps Street View and compare the proposed improvements with the current conditions.
4. Find a list of proposed improvements along with the drawing of the conceptual design.

Corridor size has been chosen with the intent of each corridor plan being right-sized for next steps. Corridors are intended to be long enough to achieve an economy of scale (e.g. for engineering design, construction bidding, etc.) but small enough to not be unmanageable or excessively costly. Each corridor lies within only a single municipality, to simplify permitting and other interagency coordination matters. The level of detail for the corridor plans is intended to be sufficient for grant applications (i.e. to clearly illustrate the project scope and approximate expected costs) and to serve as an exhibit to a scope of work for an engineering consulting contract (i.e. to perform surveying, engineering design, permitting, construction documents, and refined estimation).

Recommendations for each bus stop are informed by field assessment data, environmental constraints, improvement feasibility, and cost effectiveness of improvement.

Color Coding

Stops have been color coded as follows:

Green - Green icons depict existing bus stops where no change is recommended. These are included on the area map for orientation, but there are no detail sheets for these stops. In most cases, these are existing stops in good condition. Occasionally, these may be stops with minor deficiencies, but where improvements are infeasible.

Yellow - Yellow icons depict new or existing bus stops where moderate changes are proposed. These bus stops make up the bulk of what SacRT would be improving. These bus stops have needed improvements that are achievable without a major redesign of the corridor. Planning-level cost estimates will be prepared for each yellow-tagged bus stop in the final Bus Stop Improvement Plan. Each yellow-tagged stop is also graded for priority (as discussed below).

Red - Red icons are used to depict locations where bus stops do not exist, but are desired or needed and to depict the location of existing bus stops that are known to have deficiencies, but where improvements are impossible, highly infeasible, or otherwise not recommended at this time.

> *Example:*
> Stops with fewer than five boardings per day in locations that lack any existing sidewalk are often tagged as red, especially if there is very little room to build a sidewalk. Locations such as these would likely be prohibitively costly to bring up to standard, with inadequate benefit.

Tagging stops like this red indicates that while the existing conditions are substandard, they are not recommended at this time for future SacRT projects. Over time, as adjacent land is developed, substandard corridors such as these ultimately require wholesale modernization, including sidewalks. However, wholesale corridor improvements are best left to local municipalities to lead (rather than SacRT).

Accordingly, the Bus Stop Improvement Plan seeks only to document deficiencies at red-tagged stops. For red-tagged stops, a detail sheet is included, illustrating broad recommendations and a potential solution to the perceived deficiencies of the bus stop, but placement and dimensions are considered approximate, illustrative of just one potential solution, and not thoroughly vetted for feasibility. Red-tagged stops are not included in priority scoring (see below). Nor will cost estimates for red-tagged stops be calculated or included in the total cost estimate for the corridor.

Figure 35. Example of corridor map with color coded stops.

Priority Scoring

The proposed improvements for each yellow-tagged bus stop location have been scored for priority according to the following criteria. A maximum of ten points is possible for each stop. Each corridor is then scored by computing the average score of every yellow-tagged bus stop in the corridor.

Table 6: Priority Scoring Criteria.

Element	Points	Criteria
New Pad	(+1)	New Pad Stop currently lacks a front door pad but has sufficient space for a new front door pad (i.e., for a waiting area, bench, or shelter) *Example NO condition: Inadequate space for a front door pad due to location of existing building, power pole, drainage ditch, large trees, or other major physical obstacles*

Element	Points	Criteria
Public ROW	(+2)	Public ROW Yes, has space for a New Pad AND No ROW acquisition is needed (i.e., because new pad could be constructed entirely in public right-of-way)
Feasible ROW	(+1)	Feasible ROW Yes to New Pad, No to Public ROW AND ROW acquisition is needed, but appears likely (e.g., pad would be constructed on private property, but property owner is a park, library, apartment building, etc., that is likely to be cooperative and where a bus stop is a good fit)
New Shelter	(+2)	New Shelter Yes to Public ROW or Feasible ROW AND Stop is eligible for a shelter based on ridership (>20 boardings) but does not currently have a shelter
Disadvantaged	(+2)	Disadvantaged Community[23] Stop is located in or adjacent to a Disadvantaged Community (per CalEnviroScreen 4.0 top 25% of census tracts)
Favorable Relocation	(+2)	Relocation Stop would be relocated from a poor location to a more appropriate site (e.g., less noise, better lighting, more space, more appropriate adjacent land use) OR Proposed improvement is a new stop that would fill an existing gap in stops on an existing route
Other	(+1)	Other Factors Improvements include other amenities (i.e., other than a shelter) such as a bench, lighting, or trash receptacle OR Stop is located near an important special location (e.g., community center, park, hospital, school, supermarket)
Inactive	(-2)	Future Route Stop is not currently served by a route

[23] https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

The plan necessarily includes a number of planned changes that may be low on cost-effectiveness (e.g. relatively high-cost, low-feasibility improvements to stops with low existing ridership). SacRT has in many cases included improvements such as these in the plan for the sake of completeness and documentation, i.e. so as not to imply satisfaction with an existing stop with a known deficiency. However, stops with low cost-effectiveness (i.e. low priority, high cost) should be understood to be potential candidates for removal from grant applications and future project scopes if they are perceived to jeopardize project competitiveness for funds. The difference between a cost-ineffective “yellow” stop and a “red” stop may be minor, a matter of professional judgment, and subject to future change as surveying and design work progresses.

Please refer to Appendix E for the full list of corridor designs. See below for a summary of the corridor plans and the priority scores for all corridors that contain yellow-tagged stops. Please note that planning-level cost estimates are in progress and will be provided in the final Bus Stop Improvement Plan.

Index of Corridor Plans

Corridor Number	Primary Bus Route	Corridor Name	Priority Score	Appendix Section	Appendix E Page Number
1	26	Watt Ave	3.5	E1	1
2	84	Elverta/Walerga/Don Julio	4.2	E1	40
3	93	Hillsdale/Andrea/ Roseville	3.5	E1	73
4	93	Antelope Rd	3.3	E1	119
5	21	Twin Oaks Rd	2.0	E1	127
6	n/a	Antelope Rd	1.0	E1	129
7	21	Sunrise Blvd	4.0	E1	134
8	1	Auburn Blvd, Orange Grove, College Oak	2.8	E1	138
9	25	Manzanita/Fair Oaks	2.8	E1	169
10	23	Fair Oaks/San Juan	3.3	E1	189
11	n/a	Greenback	0.8	E2	223
12	n/a	Madison	0.1	E2	245
13	F10	E. Bidwell, etc.	2.3	E2	267
14	F10	Iron Point, East Natoma, etc.	2.9	E2	281
15	21	Sunrise Blvd	NA	E2	300
16	n/a	Northborough, Macon	2.1	E2	303
17	13	Del Paso Rd	NA	E2	314
18	11	Natomas Blvd	3.0	E2	317
19	n/a	Duckhorn	0.8	E2	320
20	n/a	East Commerce	2.0	E2	343
21	n/a	Arena Blvd	0.9	E3	349
22	88	West El Camino	3.5	E3	358
24	86	Silver Eagle	5.3	E3	385
25	19	Norwood, Bell, etc.	5.1	E3	392
26	15	Rio Linda Blvd, Del Paso Blvd	5.8	E3	421
27	86	Grand Ave	4.0	E3	443
28	86	Marysville Blvd/Arcade	2.0	E3	472
29	23	Ethan	3.0	E3	481
30	25	Marconi	6.0	E3	493
31	23	El Camino	4.6	E4	509
32	82	Northrop/Morse	2.3	E4	529
33	26	College Town	5.8	E4	543
34	72	Kiefer, Branch Center, Bradshaw	2.5	E4	548
35	72	Bradshaw, Lincoln Village, Rockingham	1.5	E4	567

Corridor Number	Primary Bus Route	Corridor Name	Priority Score	Appendix Section	Appendix E Page Number
36	21	Coloma	3.8	E4	598
37	21	Kilgore	4.0	E4	613
38	n/a	5th Street, Vallejo, etc.	NA	E4	618
39	68	34th Street	NA	E4	622
40	61	Fruitridge	3.3	E4	623
41	67	MLK	3.3	E5	646
42	68	MLK	6.0	E5	660
43	61	Fruitridge	4.0	E5	669
44	68	14th Ave, 44th St	3.6	E5	677
45	61	Fruitridge	3.8	E5	711
46	81	65th St	3.4	E5	739
47	81	Florin Rd	4.2	E5	766
48	67	Franklin Blvd	5.0	E5	773
49	81	Florin Rd	6.0	E5	778
50	61	Briggs Dr	3.0	E5	786
51	61	75th Street	1.6	E6	794
52	56	Meadowview	2.2	E6	807
53	67	Franklin Blvd	5.6	E6	820
54	56	Mack Rd	2.6	E6	834
55	56	Valley Hi, Wyndham	2.0	E6	843
56	56	Bruceville, Timberlake	1.8	E6	852
57	68	Gerber Rd	4.2	E6	861
58	n/a	Florin, French, Gerber, Elk Grove Florin	1.1	E6	869
59	E113	Elk Grove Florin Rd	3.1	E6	887
60	E110	Whitelock Pkwy	3.2	E6	918
61	26	Edison	1.6	E6	925

Funding

Delivering the recommendations for bus stops in the identified corridors would require financial resources and both internal and external coordination.These requirements will vary from one corridor to another depending on the jurisdictions they traverse, on-going planning efforts, and political support.

Cost estimates have been developed for 630 planned minor or moderate bus stop improvements on the 61 corridors (tagged yellow on corridor maps), totaling $65.4 million in project costs (approximately $23.5 million for design and $41.9 million for construction). This averages to approximately $103,000 per stop, though costs for

individual stops vary greatly across the corridors. Note that this includes only stops that are essentially sidewalk improvements and excludes new crossings, intersections, and similar projects extending into the roadway (tagged red on corridor maps).

Delivery Mechanisms

For implementation of the improvements to the yellow stops identified in this plan, there are two main delivery mechanisms–SacRT projects or local DOT projects.

1. **SacRT Projects**
   The straightforward way to deliver the projects in the Bus Stop Improvement Plan is for SacRT to pursue them as SacRT-owned and SacRT-led projects. This process typically begins with the creation of a new project in SacRT's Capital Improvement Plan and pursuit of grant funds for the project. SacRT or its consultants would lead all aspects of project delivery, including grant applications, engineering design, right of way acquisition, and construction. Although some local municipalities will waive fees for permitting and plan review, SacRT has budgeted allowances for these fees. Projects would typically be broken into separate design and construction phases. And local DOTs would be consulted before applying for funds, to assure agreement on project scope, objectives, and timing, in the form of a support letter. The corridor plans in Appendix E are intended to serve as an exhibit to these scoping discussions, to grant applications, and in scopes of work for engineering and right-of-way consultants.

2. **Local DOT Projects**
   Although the Bus Stop Improvement Plan was prepared primarily from the mindset of SacRT-led projects, the majority of bus stop improvements will likely continue to be made as part of large transportation projects led by local DOTs and municipalities (or as conditions of approval for large land use projects). SacRT's role in these cases, is to review project scopes and plans, and advocate for transit-supportive features. Appendix E provides a pre-made exhibit of SacRT's desired improvements, and should therefore facilitate this process.

Funding Sources

The below funding sources include types of funds that could both be awarded or distributed to SacRT directly for capital improvements or to local jurisdictions for planning and implementation of capital improvements.

Potential funding sources for bus stop improvements could include the following, but this is not an exhaustive list:

Local Funding

- *Community Benefits Agreement (CBA)*:[24] CBAs are negotiated with community residents in a particular area in response to new development. The City of Sacramento is currently working on a city-wide Community Benefits Agreement in which developers may or may not have to pay an impact fee to fund transportation improvements in the proposed impact area.[25]
- *Enhanced Infrastructure Financing Districts (EIFD)*: EIFDs are a form of Tax Increment Financing that can support capital improvements, including transportation or transit-focused investment, for specific districts in a local jurisdiction.This category may also include NIFTIs (Neighborhood Infill Finance and Transit Improvement Districts). This type of funding would come from property taxes.
- *Tax Measure*: A County-wide tax measure, such as the 2020 Measure A Transportation Expenditure Plan[26] which got defeated, could theoretically fund transit improvements which may include capital improvements. This type of funding would come from citizen taxation - most likely sales tax.

State and Regional Funding

- *Transit and Intercity Rail Capital Program (TIRCP)*: Supported by the cap-and-trade program, TIRCP funds transformative capital improvements to reduce emissions of greenhouse gasses by reducing congestion and vehicle miles traveled throughout California.
- *Low Carbon Transit Operations Program (LCTOP)*: Also funded by the cap-and-trade program, LCTOP supports transit projects and operations that reduce GHG emissions.
- *Caltrans Sustainable Transportation Planning Grant Program*:[27] Caltrans' Sustainable Communities Grants are intended to advance projects that support state goals, implement Regional Transportation Plan (RTP) Sustainable Communities Strategies (SCS) and to reduce GHG emissions.
- *Clean California Local Grant Program*:[28] Caltrans Clean CA Local Grant Program intends to provide funding to local communities to beautify and improve local streets and roads, tribal lands, parks, pathways, and transit centers.

Federal Funding

- *Rebuilding American Infrastructure with Sustainability and Equity Discretionary Grants (RAISE)*:[29] Funded by the U.S. Department of Transportation, RAISE will fund critical freight and passenger transportation infrastructure projects.

[24] https://siwd.org/
[25] *At the time of this plan being published, details are still to be decided.*
[26] https://www.walksacramento.org/portfolio/measure-a-2020-transportation-expenditure-plan/
[27] https://dot.ca.gov/programs/transportation-planning/division-of-transportation-planning/regional-and-community-planning/sustainable-transportation-planning-grants
[28] https://cleancalifornia.dot.ca.gov/local-grants/local-grant-program#:~:text=The%20California%20Department%20of%20Transportation,%2C%20pathways%2C%20and%20transit%20centers
[29] https://www.transportation.gov/RAISEgrants

- *FTA Discretionary Grant Programs*:[30] The Federal Transit Administration, through the Bipartisan Infrastructure Law, authorizes up to $108 billion to support federal public transportation programs.
- *Community Development Block Grant Program*[31]: The Community Development Block Grant (CDBG) Program provides annual grants on a formula basis to states, cities, and counties to develop viable urban communities by providing decent housing and a suitable living environment, and by expanding economic opportunities, principally for low- and moderate-income persons. Construction of public facilities and improvements is an eligible activity.

Next Steps

The Bus Stop Improvement Plan identifies over $65.4 million worth of improvements to over 630 bus stops, divided among 61 corridors within the SacRT service area. The following can help guide next steps:

- **Continue centering equity.** The Bus Stop Improvement Plan is the first undertaking of its kind to equitably and comprehensively plan to improve bus stops and the routes to them, throughout SacRT's service area. SacRT should continue prioritizing the needs of disadvantaged communities and marginalized groups by planning for equitable investment to bus stop improvements particularly as it relates to corridor selection, funding allocation, partnerships, and community listening opportunities.

- **Apply for grant funding**. The corridor plans are intended to prepare SacRT for grant applications and to serve as a scope of work for future engineering contracts. As local and regional funding opportunities arise, SacRT should be considering which corridors would make strong applicants, in conjunction with its partner local jurisdictions, and applying for funds. Because most corridors require significant right-of-way acquisition, which can be highly uncertain, SacRT should typically apply for design and construction separately, as two phases, with right-of-way acquisition being part of the design phase.

- **Cultivate partnerships with local jurisdictions.** Preparation of the Bus Stop Improvement Plan has spurred communication between SacRT and its partner jurisdictions. SacRT should continue to engage with staff in local DOTs, engineering departments, public works, maintenance, and traffic operations, especially to stay abreast of the project pipeline, avoid project overlap where possible, and to stay apprised of jurisdictional prioritization frameworks for transportation investments.

- **Share the plan with SACOG.** Most of SacRT and Civic Thread's interaction with other local agencies on the Bus Stop Improvement Plan were with local

[30] https://www.transit.dot.gov/grants
[31] https://www.hud.gov/program_offices/comm_planning/cdbg

municipalities, which are more involved in design review, maintenance, etc.; however, with funding being the next step, and with local and regional funding programs likely being attractive funding sources, SacRT should be sure to acquaint staff with the Sacramento Area Council of Governments (SACOG) with the plan.

- **Earlier review of public works projects.** Although the Bus Stop Improvement Plan proposes projects that are led, funded, and delivered by SacRT, the majority of bus stop improvements will likely continue to be made as part of large transportation projects led by local DOTs and municipalities (or as conditions of approval for large land use projects). SacRT's involvement in reviewing these projects has often been late and reactive, particularly for public works projects. SacRT should be more proactive, earlier in projects, during the grant application and planning phases, to encourage project goals and basic parameters that will benefit transit and prioritize bus stops and supporting infrastructure. SacRT should also institute new procedures for monitoring projects (e.g., making sure to be on all local DOT project mailing lists, establishing or joining regular check-in meetings, etc.)

- **Update maintenance agreements.** SacRT has a bus stop maintenance agreement with the City of Sacramento and an expired agreement with Sacramento County. SacRT has no such agreement with Citrus Heights, Folsom, Elk Grove, or Rancho Cordova. Maintenance agreements help formalize roles, responsibilities, and cost-sharing for cleaning, maintenance, repairs, and improvements. SacRT should comprehensively update and/or establish new maintenance agreements with all its partner jurisdictions.

- **Clarify project delivery roles.** Bus stop construction projects are a relatively new area for SacRT. Historically, under SacRT's maintenance agreements, SacRT has depended on its local jurisdictional partners to lead, design, and construct bus stop improvements, with SacRT's role being primarily design review and cost-sharing. The Bus Stop Improvement Plan contemplates SacRT leading a new family of construction projects–bus stops. Accordingly, SacRT will need to establish personnel and procedures for project delivery. In particular, SacRT will need to contemplate the division of labor and timing of any handoffs from Planning to Engineering.

- **Review bus stop amenity design.** The Bus Stop Improvement Plan suggests that SacRT consider new amenity designs, such as more rugged shelters and benches. The plan did not go so far as to establish a new policy. Further discussion is needed with SacRT Facilities in pursuit of these recommendations, to balance the desire for new amenity types with the need for uniformity of spare parts, affordability, and other maintenance considerations.

- **Review amenity ownership models.** Although lighting improvements were a common suggestion from the public, the corridor plans do not often include new

lighting. One reason for this is the lack of a clear model for ownership, repairs, and payment of electrical bills. This is an area to potentially explore with SacRT's local jurisdictional partners through updating of SacRT's bus stop maintenance agreements.

- **Take early action**. Relocate inactive shelters and benches to shelter-ready bus stops, as identified in Appendix B.

- **Clean up SacRT's Stop Manager database.** SacRT maintains a database of all bus stops, including their location, direction, etc. The database is mostly complete and accurate, but is known to sometimes be outdated. Field assessments included notes of any instances where physical realities in the field did not match official records from the Stop Manager database. SacRT should have a staff member or intern reconcile the two data sources. A similar reconciliation is needed with respect to the feed that SacRT provides to Google Maps and similar platforms.

- **Adjust as needed.** As development and travel patterns change, partnerships materialize, funding sources become available, and community needs shift, priorities may also change. SacRT will need to continuously be in communication with local municipalities, community partners, and residents to foster ongoing collaborative relationships that can inform these changing priorities and then adjust based on riders' changing mobility needs.

Appendix A: Design Guidelines

As part of the Bus Stop Improvement Plan, SacRT's Bus and Light Rail Design Guidelines are being reviewed. The current guidelines are available online at sacrt.com. The revised plans will be posted to sacrt.com on or around the time of publication of the final Bus Stop Improvement Plan.

Existing SacRT Bus and Light Rail Design Guidelines:
http://sacrt.com/aboutrt/RTPlanning.aspx

Appendix B: Early Action

Appendix B provides simple lists of bus stops that have been identified as candidates for “Quick Actions” - relatively low-cost, simple improvements that can be started immediately upon procuring funding.

Digital Sign Candidates

Below is a list of 55 existing bus stops, organized by stop ID, that are candidates for digital signs. SacRT currently has a fleet of twelve digital signs at existing bus stops, which provide real-time arrival information to customers. SacRT will also be deploying an additional nine signs and has an option to contract for up to 75 additional signs.

Criteria for digital signs includes presence of an existing shelter, existence of hard-wired power to the shelter, and ridership of 30 boardings per day or more. Additionally, digital signs are preferred in areas with multiple routes and in areas where riders are more likely to be new to the system and less familiar with how to ride (e.g., in tourist areas, along airport routes, etc.).

This list is intended to provide SacRT staff a starting point for locating additional digital signs, but is subject to change based on more thorough site analysis, suggestion of other deserving sites or criteria, or other unforeseen considerations.

Table 7. Digital Sign Candidates

Stop ID	Location	# Routes	Ridership (On)	Landmark
226	7TH ST & O ST (SB)	8	53	CAPITAL TOWERS
328	8TH ST & CAPITOL AVE (NB)	8	25	STATE PERSONNEL BOARD
330	8TH ST & I ST (NB)	8	32	POST OFFICE
413	J ST & 4TH ST (EB)	5	40	
531	L ST & 4TH ST (WB)	4	35	MACY'S PARKING
522	L ST & 17TH ST (WB)	3	36	IQ AUTO TECH
2651	29TH ST & K ST (SB)	3	73	SUTTER GENERAL HOSPITAL
3099	WATT AVE & MARGARET WAY (NB)	3	41	SAFE CREDIT UNION
3301	GREENBACK LN & ARCADIA DR (WB)	3	33	
9811	29TH ST & R ST (SB)	3	91	PARKING LOT
9812	30TH ST & R ST (NB)	3	56	DEPARTMENT OF TRANSPORTATION
1464	EL CAMINO AVE & WATT AVE (EB)	2	51	US BANK
1612	65TH ST & SKY PKWY (WB)	2	124	PACIFIC PLAZA/S.F. SUPERMARKET
1839	STOCKTON BLVD & BROADWAY (SB)	2	49	ABANDONED THEATER
1851	STOCKTON BLVD & FRUITRIDGE (SB)	2	34	RITE AID
1894	STOCKTON BLVD & LAWRENCE DR (NB)	2	35	THRIFT TOWN THRIFT STORE
1895	STOCKTON BLVD & 21ST AVE (NB)	2	26	COLONIAL HEIGHTS LIBRARY
2186	FLORIN RD & GREENHAVEN DR (EB)	2	43	US BANK/LAGUNA CREEK VILLAGE
3080	WATT AVE & EL CAMINO AVE (SB)	2	43	WALMART
3158	SAN JUAN RD & TRUXEL RD (EB)	2	3	NATOMAS VILLAGE APTS
3164	SAN JUAN RD & NORTHGATE BLVD (EB)	2	29	LAMP POST PIZZA/ TOGO'S
3192	HOWE AVE & FAIR OAKS BLVD (SB)	2	27	HUBACHER CADILLAC
3220	MACK RD & LA MANCHA WAY (WB)	2	46	L&L HAWAIIAN BARBECUE
3225	MACK RD & FRANKLIN BLVD (WB)	2	48	RALEY'S SUPERMARKET
3831	MACK RD & FRANKLIN BLVD (EB)	2	21	EL POLLO LOCO
3852	MATHERFIELD RD & ROCKINGHAM (NB)	2	29	SONNY'S MARKET
3868	KIEFER BLVD & HUNTSMAN DR (WB)	2	26	BRICK WALL
3894	HOWE AVE & FAIR OAKS BLVD (NB)	2	31	ROOD & MAX INSURANCE/REMAX
8913	TRUXEL RD & GATEWAY PARK BLVD (SB)	2	61	
227	BROADWAY % RIVERSIDE BLVD (EB)	1	47	TARGET
318	MATHER LRS & BAY 1 (NB)	1	74	MATHER/MILLS BUS LOOP
639	COLLEGE OAK DR & ORANGE GROVE AVE (NB)	1	29	AMERICAN RIVER COLLEGE
885	CONSUMNES LIGHT RAIL STATION & BUS BAY 4 (NB)	1	63	
1310	GREENBACK LN & DEWEY DR (EB)	1	22	WALGREENS
1705	ALHAMBRA BLVD & K ST (SB)	1	37	BANK OF AMERICA
1725	J ST & ALHAMBRA BLVD (EB)	1	22	US BANK
1889	STOCKTON BLVD & LEMON HILL AVE (NB)	1	40	OCEAN KING RESTAURANT

Stop ID	Location	# Routes	Ridership (On)	Landmark
1913	BROADWAY & 34TH ST (WB)	1	42	TATTOO PARLOR
1927	BROADWAY & ALHAMBRA BLVD (EB)	1	56	BONAFARE MARKET/GAS STATION
2311	FLORIN RD & 65TH ST (WB)	1	57	BURLINGTON COAT FACTORY
2312	FLORIN RD & EAST PKWY (WB)	1	21	THE HOME DEPOT
2314	FLORIN RD & FRANKLIN BLVD (WB)	1	32	SOUTHGATE PROFESSIONAL CENTER
2317	FLORIN RD & INDIAN LN (WB)	1	29	AUTOZONE
2358	FLORIN RD & SLP DR (EB)	1	35	CALIFORNIA BANK TRUST
2364	FLORIN RD & TAMOSHANTER WAY (EB)	1	27	AMF BOWLING/BINGO
2365	FLORIN RD & 24TH ST (EB)	1	31	DPT OF HUMAN ASSISTANCE
2370	FLORIN RD & LUTHER DR (EB)	1	26	LUTHER BURBANK HIGH SCHOOL
2374	FLORIN RD & EAST PKWY (EB)	1	23	CHEVRON GAS STATION
2630	ALHAMBRA BLVD & BROADWAY (NB)	1	37	US BANK
3140	65TH ST & 14TH AVE (NB)	1	36	HIRAM JOHNSON HIGH SCHOOL
3900	HOWE AVE & ARDEN WAY (NB)	1	29	BANK OF SACRAMENTO
4381	VAUX AVE & LAGUNA MAIN ST (EB)	1	#N/A	YELLOW BLDG
9817	WATT/MANLOVE LRS & BAY 3(SB)	1	104	WATT/MANLOVE BUS LOOP
11110	IRON POINT LIGHT RAIL STATION & NATOMAS STATION DR (WB)	1	18	IRON POINT LIGHT RAIL STN
85634	BIG HORN BLVD & CIVIC CENTER DR (SB)	1	#N/A	

Shelter Ready Bus Stops

The following stops, organized by stop ID, have been identified as candidates for shelters, requiring zero to minimal improvements in order to place a shelter, and having the necessary ridership (>20 boardings) to warrant shelter installation. Please note that this is not a comprehensive list: stops are drawn from the field assessment database of 783 stop locations, not the entire system.

Table 8. Shelter-Ready Bus Stops

Stop ID	OnStreet	At Street	Direction	Ridership - On	Ridership - Off
222	7TH ST	H ST	SOUTH	29	21
223	7TH ST	J ST	SOUTH	71	36
225	7TH ST	CAPITOL AVE	SOUTH	99	32
241	ARCADE	MARCONI LRT	NORTH	224	233
319	MATHER LRS	BAY 2	NORTH	165	145
326	8TH ST	O ST	NORTH	32	47
329	8TH ST	K ST	EAST	33	105
417	J ST	10TH ST	EAST	23	10
526	L ST	11TH ST	WEST	24	75
528	L ST	9TH ST	WEST	91	73
1096	ARDEN WAY	ROYAL OAKS DR	EAST	55	10
1190	GREENBACK LN	MARIPOSA AVE	WEST	43	9
1285	ELVERTA RD	WATT AVE	EAST	22	16
1312	DRY CREEK RD	ELKHORN BLVD	NORTH	33	2
1334	DEL PASO RD	EL CENTRO RD	WEST	28	36
1337	SAN JUAN AVE	GREENBACK LN	SOUTH	27	6
1374	EL CAMINO AVE	EASTERN AVE	WEST	21	2
1458	EL CAMINO AVE	FULTON AVE	EAST	22	19
1481	FAIR OAKS BLVD	PALM DR	NORTH	22	32
1555	FULTON AVE	ARDEN WAY	NORTH	22	9
1570	WALERGA	ELVERTA	SOUTH	28	6
1717	J ST	18TH ST	EAST	22	11
1885	STOCKTON BLVD	FOWLER AVE	NORTH	30	17
1892	STOCKTON BLVD	FRUITRIDGE RD	NORTH	56	31
2271	FREEPORT BLVD	7TH AVE	SOUTH	25	8
2282	FRUITRIDGE RD	FREEPORT BLVD	EAST	26	13
2372	FLORIN RD	FRANKLIN BLVD	EAST	33	28
2635	30TH ST	N ST	NORTH	32	39
2772	COLOMA RD	ANANDA LN	EAST	24	18
2888	KIEFER BLVD	MAYHEW RD	EAST	43	88
3135	65TH ST	LEMON HILL AVE	NORTH	21	8
3137	65TH ST	FRUITRIDGE RD	NORTH	34	8
3914	VALLEY HI DR	MACK RD	NORTH	43	18
3939	VALLEY HI DR	MACK RD	SOUTH	29	95
5200	MEADOWVIEW RD	MEADOWVIEW	NORTH	68	63

Stop ID	OnStreet	At Street	Direction	Ridership - On	Ridership - Off
		LRT			
5314	GLORIA DR	KEEL CT	EAST	35	11
11028	RILEY ST	NATOMA ST	SOUTH	12	11

Appendix C: Field Assessments Data

A total of 763 field assessments of existing bus stops were conducted by two interns employed by Civic Thread for the project. The spreadsheet at the download link contains the data collected over the course of seven months (June 2022 - November 2022). Assessments included documentation of existing attributes, observed deficiencies, and desired improvements. See Section 4 for a summary of field assessment results.

Appendix D: Community Engagement Summary

Open Houses

Introduction

The goal of the interactive Open Houses was to engage as many community members as possible and primarily engage underrepresented and institutionally marginalized individuals. In order to identify barriers in transit usage, the project team aimed to gather feedback from those who are transit dependent as well as those who do not usually use public transit. All feedback and concerns were welcome and reflected within the Open House notes. All notes captured qualitative data related to community transit access and experience (i.e. narratives, quotes, stories, etc.)

Approach

Civic Thread's approach to community engagement centers on providing space for communities that have been systematically excluded from planning processes and gathering meaningful and accurate feedback to guide projects and ensure they are rooted in community priorities. Civic Thread highlights equity through their work with an emphasis on language justice, accessibility, and prioritization of residents of color, monolingual or multilingual residents in languages other than English, youth, and older adults in low-income communities.

Within the Open House events, in-person evening events were prioritized to circumvent reliance on wi-fi, computer, cell phone, or tablet to join the conversation, as well as leveraging people's availability after common work hours. The event provided dinner to reduce the issue of interrupting a meal, or potentially needs for dinner, free bus transportation to and from the event, and opportunities to win free transit trips.Live interpretation was also offered.

With support of the SacRT Street Team, targeted asks were sent via e-mail to partners and paper flyers were distributed to places that community members would be likely to frequent, unique to each neighborhood. All promotional materials were translated to the top one or two identified languages of that neighborhood. Materials were also distributed to a project-specific contact list and to SacRT's rider email list.

Open House Objective

To analyze bus stops with the community that are in need of maintenance and infrastructure improvements, in order to inform the Bus Stop Improvement Plan, and to understand community resident's priorities for types of improvements and locations of improvements.

North Sacramento
September 23, 2022
Robertson Community Center (3525 Norwood Ave)
September 23, 2022
5:30-7:30pm

Outreach Partners

- Mutual Assistance Network

Attendees

- Public attendees: 8
- Civic Thread Staff: 5
- SacRT Staff: 3
- City of Sacramento Staff: 1
- Interpreters (Spanish & Hmong): 2

Input Received

Goals and Priorities

- ADA accessibility
- Weather proof overhangs
- Better Lighting
- Maintenance

Challenges

- Broken glass
- Metal seats are extremely hot
- Outdated bus stop signs
- Debris left behind
- Steps are too steep
- No sidewalks
- No trash cans
- Bus stops don't accommodate all bus stop tire size
- Light rail door open timing
- Connection/ transfer times are not visible
- Low visibility due to vegetation overgrowth
    - Hard for bus drivers to see people
- Height of signage on poles
    - Cannot feel for signs
- Poles in middle of sidewalks

Particular Bus Stop Issues

- Route 61/ Fruitridge
    - narrow sidewalks
- Route 51/ Broadway

    - Few stops on Broadway
- Light rail & Blue Line
    - Card reader problem

Opportunities

- More route maps
- Visible reporting contact sheets/promote RT info site
- More tree canopies
- Better maintenance
- Better signage visibility
    - Bus Stop numbers
- Addition of Braille signs
- Faster response time
- Weather proof overhangs
- ADA accessibility

Feedback Summary

Community members were pleased to know the amount of research that has been conducted in the area and the firsthand experiences shared by the Civic Thread interns.

During an exercise titled “Your Perfect Bus Stop”, the project team engaged participants in a discussion about what bus stops would look like in their ideal world. Conversations centered around the “perfect” bus stops and the main issues bus riders faced. The most common themes heard were the lack of attention and maintenance at bus stops. The concerns included; visibility/outdated bus routes, hazardous debris, ADA accessibility, lack of tree canopies, and lack of weather-proof overhangs. Characteristics of “perfect” bus stops included high quality shelters, cleanliness, bus stops with tactile markings so they can be identified by blind and low-vision riders, and amenities such as solar power.

Carmichael- Citrus Heights Open House Summary

October 11th, 2022
Carmichael Library (5605 Marconi Ave., Carmichael, CA 95608)
October 11th, 2022
5:30-7:30pm

Outreach Partners

City of Citrus Heights
San Juan Unified School District
Sacramento Public Library

Attendees

- Public attendees: 6
- Civic Thread Staff: 4
- SacRT Staff: 6

- City of Sacramento Staff: 1
- Interpreters (Spanish & Russian): 2

Input Received

Goals and Priorities

- ADA accessibility
- Tree canopy shade

Challenges

- Drivers can't put down ramp for ADA accessibility because of infrastructure conditions
- Calling issues in takes a long time
- Trash overflow
- Fallen signage
- Long distance between bus stops
- Tree branches block signage
- No shelter in some stops
- Shelters vandalized
- Not enough lighting
- Infrequent service on various routes
- Lack of crosswalks

Particular Bus Stop Issues

- Bus stop on San Juan Ave., Near Ranch Ave.
  - No Shade
  - Dirt patches
  - No crosswalks
- Willow Creek Dr. and San Juan Ave. (East side)
  - Traffic light is broken

Opportunities

- More route maps
- Better canopy coverage to provide natural shade
- Provide a suggestion box at bus stops for those who do not have a smartphone
- ADA accessibility

Feedback Summary

Community members were pleased to learn about the bus stop research being conducted. During this workshop, the overarching theme was better infrastructure maintenance to help improve ADA accessibility as well as better shelters with tree canopy shade.

South Sacramento Open House Summary
October 25th 2022
Belle Cooledge Community Center (5699 S Land Park Dr, Sacramento, CA 95822)
October 11th, 2022
5:30-7:30pm

Outreach Partners
Sacramento Public Library
Maria Martin, Spanish interpreter

Attendees
- Public attendees: 5
- Civic Thread Staff: 4
- SacRT Staff: 2
- Interpreters (Spanish & Hmong): 2

Input Received

Goals and Priorities
- Bus Stop proximity
- Bus Stop Maintenance
- Walkable streets

Challenges
- Maintenance
  - Broken glass/ vandalism/ trash overflow
- Poor sidewalk conditions
- SMART Ride, does not run on weekends
- Bus stops are located in places that are not pleasant to walk

Particular Bus Stop Issues
- 8th & K
  - “Stops are very far apart [...] place an extra stop.”
- Gloria Dr & Park Riviera Way
  - “ Would like bus 61 to stop here as well. The sign only lists 102.”
- Riverside Boulevard & Florin Rd
  - “[...]Can we add stop 61?”
- Gloria Dr. in between Park Riviera Way and Steamboat Way (North Bound)
  - New bus stop request
    - To reduce gap between Yuba River and Florin
- Gloria Dr and Steamboat Way (WB)
  - New bus stop request
    - To reduce gap between Yuba River stop and Florin Stop
- Florin Rd and Gloria Dr. (NB)
  - Would like to have a bus stop in between Yuba River and this stop

- Vallejo and Muir (previously 38)
    - In between two affordable/ low income housing (Marina Vista and Alder Grove). Discontinued line but signs are still there.
    - SMART Ride does not run on weekends. Difficult to get groceries on weekend/run errands
    - It currently starts at the train station and goes to the 65th light rail. Is it possible to encompass this neighborhood in this roundtrip route?
- Broadway and 5th St. (SB)
    - Tried to replace 38. Doesn't go by low income housing. Goes by schools but no bus stop between Riverside and Vallejo, and South Land Park and Vallejo. Community member's daughter takes this line from Alder Grove (Broadway 9th/10th) to Cal Middle School. There is no bus stop on the opposite side.
- Land Park and Vallejo (11- SB)
    - 11 only is offered on SB. Community member's daughter (Cal MS student) can take 11 from Alder Grove housing to school, but can't take the same line home. Has to walk to Light Rail on 4th and Wayne Hultgren LR and takes it to Broadway Station & 19th Light Rail and then takes 51 home.
- Broadway and 10th
    - No garbage can
    - Previous bench got defaced without a replacement
- 34th and Broadway(51 going towards 8th/F)
    - Saturday night- early stop around 8:45 pm however the opposite direction is still running.
    - Light Rail runs until 11pm on Saturday. Anyone coming off Light Rail has to walk South Bound.
    - Was an obstacle for community member leaving Kaiser @ Bruceville trying to get home at 8th and Broadway

Opportunities

- Opportunity to encompass route to meet needs of low income transit riders
- Additional bus stops to close gaps
- Complete streets projects are an opportunity to revision what stops look like
- Bus stop schedules could better align with school schedules to provide transportation options for students

Feedback Summary

Community members were pleased to learn about the bus stop research being conducted. During this workshop, the overarching themes were better infrastructure maintenance and the need for closer bus stops. One of the common themes was the concern of bus stops being too far apart and not reaching low income neighborhoods. Another general theme was that bus stops that are located in areas that do not feel safe to walk due to the proximity of cars, lack of lighting, etc. are difficult and unpleasant to use despite any new amenities or improvements, and complete streets and activation projects are important to make transit more appealing.

Rancho Cordova Open House Summary
December 7th, 2022
Historic Mills Building (10191 Mills Station Rd)
5:00-6:30 pm

Outreach Partners

Bicycle Advocates of Rancho Cordova (BARC)
Maria Martin, Spanish interpreter
Elena Davidson, Russian interpreter

Attendees

- Public attendees: 2
- Civic Thread Staff: 4
- SacRT Staff: 4
- Interpreters (Spanish & Russian): 2

Input Received

Goals and Priorities

- ADA accessibility
- Bus Stop Shelters (maintenance)
- Priorities: Schools, youth, and parks

Challenges

- Maintenance: broken glass, no trash cans, sidewalk issues
- Hard for parents to board with strollers
- Outdated bus stop signs
- Hard for riders to trust SacRT's Mobile App to report issues due to unresponsive app from Rancho Cordova Connect
- SMART Ride
    - Limited areas of pickup
    - Boarding locations require people to walk far distances
    - Confusion with SMART Ride boarding locations
    - Hard for people with strollers to board bus
    - No alert system to report issues

Particular Bus Stop Issues

- Land Park
    - Bus stop bench was flipped upside down
- (**Stop ID: 2743**) Rancho Cordova Public Library
    - Does not have shelter/bench was removed
    - Stop is far from the entrance of the library

- Walk Audit on Coloma Rd. And Chase intersection
    - Civic Thread has a walk audit report on Coloma in progress, attendee helped Co-led
    - (**Stop ID: 2771**) North Bound
        - Sidewalk was ruined and narrow
        - Not ADA accessible
        - Guard rail has been constantly crashed into
        - No shelter
        - No space for buses to stop
    - South Bound
        - Sidewalk is raised
        - Sidewalk is too narrow
        - Suggestion to move bus stop North so that students feel safer and to provide natural shade from existing trees
        - High Speed traffic
        - No shelter or trash bin
        - Bike lanes are too narrow
- (**Stop ID: 2722**) Coloma and Ananda Lane:
    - There is no existing sign
    - No shelter
- (**Stop ID: 2821**) Lincoln Village Dr. & Viking Dr.:
    - Bus stop is always full
    - Need trash receptacle
    - No shelter
- (**Stop ID: 3790**) Lincoln Village and Draco Dr.:
    - Good ridership and location for shelter
- (**Stop ID: 3787**) Bradshaw Rd. & Old Placerville Rd.
    - No shelter
    - Trash bin was possibly placed by local shop owner
- (**Stop ID: 5250**) Routier Rd. And Rockinham Dr.:
    - “No Parking” sign is needed
        - Parked vehicles are obstructing ADA access
        - Bus drivers have to find different location for drop off due to parked car
    - James suggested the bus stop could be expanded onto the landowner’s front yard to add a shelter
- (**Stop ID: 3793**) Scorpio Dr. And Lincoln Village Dr.:
    - “No Parking” sign needed
    - Obstructing ADA boarding
- (**Stop ID: 4215**) Routier Rd. And Vangard
    - No shelter/ seating
- (**Stop ID: 2764**)
    - Attendee got message of “Bus Stop Not Found”

Opportunities

- More visible signage
    - Perhaps more education regarding SacRT mobile App to report issues
- More bus stop shelters
- Better maintenance/ trash receptacles
- Evaluate Safe Ride pick-up location pins
- New bus stop opportunities

Feedback Summary

This Open House was the last in-person workshop event. Even though attendance was low, there were many specific bus stop issues that were raised by a concerned parent whose family depends on riding the bus for transportation. The main concerns revolve around bus shelters, trash receptacles, and Smart Ride pick up locations. This workshop brought issues of youth not being able to easily and safely get to and from school due to current poor sidewalk and bike lane conditions. The project team brainstormed with the attendees about possible solutions to the specific bus stops such as adding shelters where needed and investigating new possible pick-up locations for SmaRT Ride.

Virtual Open House Summary

December 8th, 2022
6:00-7:30 pm

Outreach Partners

City of Elk Grove
Maria Martin, Spanish interpreter
Elena Davidson, Russian interpreter

Attendees

- Public attendees: 13
- Civic Thread: 3
- SacRT: 4

Input Received

Goals and Priorities

- ADA accessibility
- Weatherproof overhangs
- Maintenance

Challenges

- Broken glass

- No sidewalks
- No trash cans
- Lack of bus stop shelter

Particular Bus Stop Issues

- Gerber and Watermen
  - Bus Stop needed
- Meadowview
  - Bus Stop shelters needed
- P St. & 19th St. (WB)
  - Multiple panels with broken glass
  - Constant debris (broken glass, trash) on floor
  - Graffiti
  - Front post is loose
- Route 21 on Coloma Rd.
  - No bench/shelter
  - No crosswalk
  - A lot of nearby traffic
  - There is currently only a pole
- San Juan Ave. And Northlea Way
  - High traffic
  - Not ADA accessible
  - Terrain is sloped
- Route 62 isn't connected to Delta shores
- (**Stop ID: 1098**) Harvard and Blumenfeld Rd. (EB)
  - No bench
  - Bus stop is hard to see
- (**Stop ID: 1519**) Auburn Blvd. Near Capital City Fwy (WB)
  - High speed traffic

Opportunities

- Visible reporting contact sheets/promote RT info site
- Better maintenance
- Signage
  - More visible bus stop numbers
  - Audible cross signal
- More education regarding SacRT Mobile App to report issues
- Different bus stop shelter material
- ADA accessibility

Feedback Summary

The virtual workshop was easily the workshop with the most attendees and most comments. This workshop's main comments included ADA accessibility, maintenance, and education. Many concerns regarding ADA accessibility was the lack of audible crosswalks and high speed traffic. Maintenance concerns included broken debris

around bus stops and the lack of bus stop shelters with many suggestions on new shelter material. Lastly, this workshop served as an educational workshop by giving community members a brief tutorial on how to use the SacRT mobile app to report issues. The amount of informational comments received during this meeting made the virtual open house highly successful.

Community Survey

On the following pages are the Community Survey questions that were included in the survey released to the public. The survey had 36 optional questions. The survey was provided in Arabic, English, Farsi, Hmong, Laotian, Mandarin, Russian, Spanish, and Vietnamese.

Community Bus Stop Improvement Survey

Civic Thread is partnering with Sacramento Regional Transit (SacRT) to develop a Bus Stop Improvement Plan, which will create a list of necessary and desired improvements to bus stops, amenities, and sidewalks in the SacRT system. We need your opinions and feedback to identify priority bus stop needs. Please share your thoughts about your bus stop priorities to help ensure that this planning process is led by community. This survey will also help us identify areas of concern to hold community walking tours. By taking this survey, you have the chance to be entered to receive a free month of transit on the SacRT system (includes bus service, light rail, and SmaRT Ride).

All questions are optional. The survey will take approximately 4-6 minutes.

What is your ZIP code?

_____

What best describes you?

- ◯ I am an experienced SacRT transit rider or former rider
- ◯ I ride SacRT sometimes
- ◯ I have never ridden SacRT transit regularly or at all

The following questions are about the bus stops near where you live (for example, within a 5-minute walk).

Please rate the following on a scale of 1 to 5.
1 = Strongly Disagree, 5 = Strongly Agree

Sidewalks

Rate the following:	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
Many bus stops do not have sidewalks that lead to them	◯	◯	◯	◯	◯
Sidewalks exist, but are too narrow to walk or roll along	◯	◯	◯	◯	◯
Sidewalks exist, but are in poor condition	◯	◯	◯	◯	◯

Crossings

There are not frequent or convenient crossings to safely get to the bus stop	◯	◯	◯	◯	◯

1/6/23, 10:08 AM Community Bus Stop Improvement Survey

Lighting

Better lighting is needed at night	○	○	○	○	○

Stop Placement

Bus stops are too close to street traffic for comfort	○	○	○	○	○
Bus stops are located in front of unsafe, inaccessible, and/or unpleasant places	○	○	○	○	○
Bus stops are too far from the intersection to locate, walk, and/or roll	○	○	○	○	○
Bus stops are too far from key destinations to locate, walk, and/or roll	○	○	○	○	○

Please rate the following on a scale of 1 to 5.

1 = Strongly Disagree, 5 = Strongly Agree

Stop Spacing

Bus stops are too far apart, I have to travel too far	○	○	○	○	○
Bus stops are too close together, the bus makes too many stops to get to my destination efficiently	○	○	○	○	○

Shelter

Bus stops need more shade	○	○	○	○	○
Bus stops need shelter from the rain, wind, heat, or cold	○	○	○	○	○

Seating

More accessible benches or seating are needed at bus stops	○	○	○	○	○

Trash

Accessible trash cans are needed at bus stops	○	○	○	○	○
Trash cans are often full and need to be emptied more	○	○	○	○	○

Signage

Visual bus stop signs are hung too high or are obscured by tree branches or other objects	○	○	○	○	○
More tactile signs are needed	○	○	○	○	○

https://kobo.humanitarianresponse.info/#/forms/aUKbfFEnXiz8ZjHt62YamV/landing 2/6

1/6/23, 10:08 AM Community Bus Stop Improvement Survey

Overall

Overall, the bus stops in my neighborhood are good bus stops ○ ○ ○ ○ ○

What are the top three streets that need better bus stops, sidewalks, crossings, lighting, etc.?

Street 1

Street 2

Street 3

What are the biggest problems with bus stops in the Sacramento area?

Are there any specific bus stops that need improvements? Please fill out the following boxes.

Stop ID (optional)

What street is it on?

What is the nearest cross street?

https://kobo.humanitarianresponse.info/#/forms/aUKbfFEnXiz8ZjHt62YamV/landing 3/6

1/6/23, 10:08 AM Community Bus Stop Improvement Survey

What type of improvement does the stop need?

- [ ] Sidewalk
- [ ] Crossing
- [ ] Lighting
- [ ] Traffic Signal
- [ ] Curb Ramp
- [ ] Placement
- [ ] Spacing
- [ ] Shelter
- [ ] Seating
- [ ] Trash
- [ ] Signage

Is there anything else you want to tell us?

_____

The following questions are about YOU:

_____

Would you be willing to meet in person, with a small group of other neighborhood residents, and with SacRT and Civic Thread, to do a walking tour of the bus stops in your neighborhood?

A walking tour is a chance to show us the bus stops in your neighborhood and your challenges with them so that we can better understand how to improve them.

- ◯ Yes
- ◯ No

Would you like to join the project mailing list?

- ◯ Yes
- ◯ No

Would you like to be entered in a drawing for a free SacRT monthly pass?

- ◯ Yes
- ◯ No

If you answered yes to any of the above questions, please let us know the best way to reach you:

_____

Name

_____

https://kobo.humanitarianresponse.info/#/forms/aUKbfFEnXiz8ZjHt62YamV/landing 4/6

Phone

_____

Email

_____

What days and times are best for you to attend a walking tour? Select all that apply.

-

- [ ] Weekdays
- [ ] Saturday
- [ ] Sunday
- [ ] Morning
- [ ] Afternoon
- [ ] Evening

Civic Thread is collecting the following information to better understand who is riding SacRT. This information will be used only to develop the SacRT Bus Stop Improvement Plan and help us conduct a planning process that prioritizes the needs of our most impacted community members. All questions are optional.

_____

What is your yearly household income?

- ◯ Less than $10,000
- ◯ $10,000 - $24.999
- ◯ $25,000-$39,999
- ◯ $40,000-$49,999
- ◯ $50,000 - $74,999
- ◯ $75,000 - $100,000
- ◯ More than $100,000

What is your ethnicity?

- ◯ Native American
- ◯ Black of African American
- ◯ Latinx, Chicano, or Hispanic
- ◯ Asian or Pacific Islander
- ◯ White
- ◯ Middle Eastern or North African
- ◯ I prefer not to say
- ◯ A race/ethnicity not listed here

Do you have accessibility needs?

- ◯ Yes
- ◯ No

If you wish, please explain.

_____

Do you ride SacRT Go (i.e., paratransit)?

- ◯ Yes
- ◯ No

Do you use a wheelchair, walker, walking cane, long white cane, other mobility device, or service animal?

- ◯ Yes
- ◯ No

Do you pay the disabled fare to ride SacRT?

- ◯ Yes
- ◯ No

Do you pay the senior fare to ride SacRT?

- ◯ Yes
- ◯ No

Do you have access to a car?

- ◯ Yes
- ◯ No

Draft Plan Feedback

The public comment period for the Draft SacRT Bus Stop Improvement Plan was open from January 9, 2023 to February 3, 2023. Comments could be submitted via an online submission form hosted by Survey Monkey and linked at this webpage, and via direct comments on the web page: https://www.sacrt.com/apps/sacramento-regional-transit-district-bus-stop-improvement-plan/

See Appendix F for a matrix of public comments and comment responses.

Pop-Up Event
January 18th, 2023
65th St. Light Rail Station (6724 Q St.)
5:30-7:30 pm

Pop-Up Objective

To spread the word regarding the virtual event happening to discuss the SacRT Bus Stop Improvement Plan Draft while also taking any additional comments regarding bus stop improvements. Free Connect Cards with 30 rides each were provided as an incentive to members of the public who provided feedback on the spot.

Attendees

- Civic Thread Staff: 3
- SacRT Staff: 3
- Approx. number of people reached: 80

Input Received

Challenges

- Wait times are long
- Inactive bus stops
- Not enough lighting
- Unclear signage
- No benches
- Not enough shade
- Glass shelters
- No bathrooms

Particular Bus Stop Issues

- Route 142
  - Should add a bus stop at the Amazon Fulfillment Center

Event Summary

Together, the Civic Thread and SacRT staff approached transit riders and handed out promotional flyers. If the transit riders anticipated a conflict with the scheduled meeting, they were encouraged to approach the Civic Thread table and write any comments or

concerns regarding their most utilized bus stops. While some transit riders had only a few moments to communicate, the crew welcomed them to the Civic Thread table as well as the SacRT table for some free SacRT merchandise.

Virtual Draft Plan Review
January 25th, 2023
Online, Zoom
6:00-7:30 pm

Meeting Objective
To provide an overview of the SacRT Bus Stop Improvement Plan Draft to the public and share information about how to comment on the plan while also taking comments regarding bus stop improvements. Free Connect Cards with 30 rides each were provided as an incentive to meeting participants.

Attendees
- Civic Thread Staff: 4
- SacRT Staff: 4
- Public Attendees: 8

Input Received
Challenges
- Unsynchronized bus and train schedules
- Low frequency buses
- Lack of upcoming stop announcements
- Ineffective or lack of notifications for schedule delays

Particular Bus Stop Issues
- Route 72 Mather
    - Transferring towards Folsom from the train to the bus is inconveniently timed. The bus does not wait and so riders miss the transfer, often by just a few minutes. Because the bus is not high frequency riders must wait a long time for the next bus.

Event Summary
Civic Thread and SacRT staff held and facilitated a Draft Plan Review session virtually, via Zoom. A project overview and purpose was provided in addition to a thorough tutorial on how transit riders and community members can navigate the Bus Stop Improvement Plan and appendices with more context. Different portions of the draft plan were also reviewed and explained in-depth. There was a short discussion and comment period. Community members were encouraged to provide any additional comments or concerns through the SacRT website or via email to key contacts.

Appendix E: Corridor Plans

Appendix E includes the conceptual corridor plans. Below is a summary list of all corridors included in the project, with the corridor number, primary bus route, corridor name, and priority score for each corridor that contains yellow-tagged stops. Please visit https://www.sacrt.com/apps/sacramento-regional-transit-district-bus-stop-improvement-plan/ to view the six corridor design documents, which have been posted separately due to file size constraints. All maps and satellite images are oriented with north at the top unless noted otherwise.

Planning-level cost estimates have been developed for all 630 “yellow” stops on the 61 corridors (i.e., all stops with potential minor or moderate level improvements). The sum total to complete these improvements (design and construction) is $65,420,500 (approximately $23.5 million for design and $41.9 million for construction). Individual corridor cost estimates break out the cost of yellow stops in each corridor because costs for individual stops vary widely. However, the average cost for design and construction is approximately $103,000 per stop. Please note that “red” stops, which refer to stops needing major improvements requiring coordination with the respective local jurisdictions (such as crossings, intersections, and projects extending into the roadway) are not included in these cost estimates.

A glossary of common abbreviations has been included below for ease of understanding the corridor designs.

Corridor Number	Primary Bus Route	Corridor Name	Priority Score	Appendix Section	Appendix E Page Number
1	26	Watt Ave	4.2	E1	1
2	84	Elverta/Walerga/Don Julio	4.2	E1	40
3	93	Hillsdale/Andrea/ Roseville	3.5	E1	73
4	93	Antelope Rd	3.3	E1	119
5	21	Twin Oaks Rd	2.0	E1	127
6	n/a	Antelope Rd	1.0	E1	129
7	21	Sunrise Blvd	4.0	E1	134
8	1	Auburn Blvd, Orange Grove, College Oak	2.8	E1	138
9	25	Manzanita/Fair Oaks	2.8	E1	169
10	23	Fair Oaks/San Juan	3.3	E1	189
11	n/a	Greenback	0.8	E2	223
12	n/a	Madison	0.1	E2	245
13	F10	E. Bidwell, etc.	2.3	E2	267
14	F10	Iron Point, East Natoma, etc.	2.9	E2	281
15	21	Sunrise Blvd	NA	E2	300
16	n/a	Northborough, Macon	2.1	E2	303
17	13	Del Paso Rd	NA	E2	314
18	11	Natomas Blvd	3.0	E2	317
19	n/a	Duckhorn	0.8	E2	320
20	n/a	East Commerce	2.0	E2	343
21	n/a	Arena Blvd	0.9	E3	349
22	88	West El Camino	3.5	E3	358
24	86	Silver Eagle	5.3	E3	385
25	19	Norwood, Bell, etc.	5.1	E3	392
26	15	Rio Linda Blvd, Del Paso Blvd	5.8	E3	421
27	86	Grand Ave	4.0	E3	443
28	86	Marysville Blvd/Arcade	2.0	E3	472
29	23	Ethan	3.0	E3	481
30	25	Marconi	6.0	E3	493
31	23	El Camino	4.6	E4	509
32	82	Northrop/Morse	2.3	E4	529
33	26	College Town	5.8	E4	543
34	72	Kiefer, Branch Center, Bradshaw	2.5	E4	548
35	72	Bradshaw, Lincoln Village, Rockingham	1.5	E4	567
36	21	Coloma	3.8	E4	598

Corridor Number	Primary Bus Route	Corridor Name	Priority Score	Appendix Section	Appendix E Page Number
37	21	Kilgore	4.0	E4	613
38	n/a	5th Street, Vallejo, etc.	NA	E4	618
39	68	34th Street	NA	E4	622
40	61	Fruitridge	3.3	E4	623
41	67	MLK	3.3	E5	646
42	68	MLK	6.0	E5	660
43	61	Fruitridge	4.0	E5	669
44	68	14th Ave, 44th St	3.6	E5	677
45	61	Fruitridge	3.8	E5	711
46	81	65th St	3.4	E5	739
47	81	Florin Rd	4.2	E5	766
48	67	Franklin Blvd	5.0	E5	773
49	81	Florin Rd	6.0	E5	778
50	61	Briggs Dr	3.0	E5	786
51	61	75th Street	1.6	E6	794
52	56	Meadowview	2.2	E6	807
53	67	Franklin Blvd	5.6	E6	820
54	56	Mack Rd	2.6	E6	834
55	56	Valley Hi, Wyndham	2.0	E6	843
56	56	Bruceville, Timberlake	1.8	E6	852
57	68	Gerber Rd	4.2	E6	861
58	n/a	Florin, French, Gerber, Elk Grove Florin	1.1	E6	869
59	E113	Elk Grove Florin Rd	3.1	E6	887
60	E110	Whitelock Pkwy	3.2	E6	918
61	26	Edison	1.6	E6	925

Glossary

Bus stops are typically identified by a 4-digit stop number, an intersection, the direction of travel, and the orientation of the stop to the intersection (e.g., near-side, far-side, or mid-block).

Example:

#1184	**SB**	**Arcadia Dr**	**& Greenback Ln**	**NS**
Stop Number	*Direction*	*Primary Street*	*Cross Street*	*Orientation*

Directions:	**Orientations:**
NB = Northbound	*NS= Near-Side*
EB = Eastbound	*FS= Far-Side*
SB = Southbound	*MB= Mid-Block*
WB = Westbound	

Abbreviation	Term	Definition
APN	Assessor's Parcel Number	A number assigned to parcels of real property by the tax assessor of a particular jurisdiction for purposes of identification and record-keeping.
EB	East Bound	In context, this term refers to a bus traveling outbound in the eastward direction.
FS	Far-Side	In context, this term refers to the location of a bus stop on the far side of the intersection for which it is named - i.e. the bus will cross the named intersection and *then* stop. Far-side stops are generally preferable because they allow a driver more time to move back into traffic after stopping.
MB	Mid-Block	In context, this term refers to the location of a bus stop in the general middle of the block between the intersection for which it is named and another intersection.
N/A	Not Applicable	Does not apply
NB	North Bound	In context, this term refers to a bus traveling outbound in the northward direction.
NS	Near-Side	In context, this term refers to the location of a bus stop on the near side of the intersection for which it is named - i.e. the bus will stop *before* crossing the named intersection.
ROW	Right-of-Way	To acquire ROW means to purchase or otherwise acquire the use or control of a piece of land.
SB	South Bound	In context, this term refers to a bus traveling inbound in the southward direction.
TBD	To Be Determined	To be determined
WB	West Bound	In context, this term refers to a bus traveling inbound in the westward direction.

Appendix F: Draft Plan Public Feedback

The public comment period for the Draft SacRT Bus Stop Improvement Plan was open from January 9, 2023 to February 3, 2023. See below for a matrix of comments and comment responses. Please note that Comment ID will be the same if separate points of feedback came from the same commenter.

Comment ID	Comment	SacRT Response
1	There are a number of recommendations for new marked crosswalks. Federal, State and City standards must be met to install marked crosswalks. Please add clarifying language in the narrative, something similar to: All new recommended marked crosswalks need to be evaluated for feasibility and design criteria based on national and local design standards.	Thanks for noting this, we have included clarifying language on page 55 of the Plan.
1	There is a reference made to the City's complete streets project on MLK. The City does not have a complete streets project on MLK. Please correct this statement.	An official-looking website organized by a neighborhood group was mistaken for a City web project by our team. Thanks for noting this, we have corrected the statement.
1	There are a few locations where the recommendation is to move a bus stop away from an intersection. Moving bus stops away from intersections results in people crossing outside marked crosswalks and intersections, posing a safety risk. Please reconsider those recommendations.	Thanks for your comment. We have recommended mid-block stops only when volumes and speeds were low and/or when the location closer to the corner appeared worse, for safety or other reasons. All new bus stops will also get a second review for issues such as these during engineering design and permitting.

Comment ID	Comment	SacRT Response
1	Bell Ave Complete Streets: I hope RT engaged in this effort, it's about to go into construction.	Thanks for your comment. We did not see any conflict with the Bell Ave Complete Streets Plan and our Plans.
1	West El Camino at Normington Dr: We have an active project here. Reach out to [City Staff] if you've not engaged in this effort yet.	Thanks for your comment. The SacRT team is coordinating with the City on any potential conflicts.
1	Pedestrian scaled lighting is typically funded through a self taxation by the property owners. The City has little no mechanisms to install this type of lighting outside of a significant complete streets project. Please include funding recommendations as part of this plan.	Thanks for your comment. Installation of new lighting will require coordination with and approval by the local jurisdiction on maintenance responsibilities and costs. Language has been added to the final plan reflecting the need for additional follow-up on ownership and maintenance models for ped-scale lighting improvements.
2	Looks like there will be more improvements to the 13 which is great. I would love to see something that connects Fairoaks Blvd and Downtown through Watt Ave.	Thank you for your comment. It has been shared with SacRT's Service Planning unit as feedback.

Comment ID	Comment	SacRT Response
3	Great plan overall but I'm confused on the breakdown of the 763 stops assessed. The draft plan indicates that 112 of these appeared to meet ADA standards while 649 did not. These add to 761 rather than 763. Of the 649 non-ADA stops, the draft indicates that 379 would likely require right of way acquisition while 252 would not. These add to 631 rather than 649. Similarly, the 763 stops are prioritized as high (177), medium (134), and low (442). These add to 753 rather than 763. Also suggest swapping the low and medium rows on the table on page 39 so that they flow from high to low prioritization.	Thanks for your comment! We apologize for the confusion. The discrepancies you are seeing are due to gaps in the data where it was not collected in the field. There are only a few instances of this.
4	A huge improvement to bus stop 72 at both the Watt/Manlove and Mather/Mills train stations would be schedules that coordinate with the arrival of the trains. Complaints about the scheduling for this bus have been made to RT over the years but changes are not noticeable. It is left to the driver's discretion whether to decide to wait for the train or not (subs don't seem to wait). Often, on paper, this bus is scheduled to leave just TWO minutes before the train's arrival. After deboarding, just as the train clears the tracks you get to watch helplessly as you see the backside of the bus exiting the terminal, leaving you stranded for another 24-60 mins depending on if it is a weekend. Sometimes you can RUN from the train and the driver will wait for the runners, but let it be a normal walking pace and you will get left behind! Buses don't match train frequency so it is a huge inconvenience to have to miss your transfer and wait forthe next bus, especially if you are traveling with young kids, are disabled or a senior, or are expected somewhere where you will be penalized for lateness (school/work/appointment/etc). Additionally, poor scheduling costs you money when your 90-minute transfer expires as a result of the missed connection.	Thank you for the comment. We acknowledge that scheduled arrival and departure times at stop 72 are resulting in missed connections. While we are unable to address scheduling issues as part of The Bus Stop Improvement Plan, we have elevated your request to Service Planning and Scheduling Departments. To follow up on this concern, please contact James Drake at jdrake@sacrt.com.

Comment ID	Comment	SacRT Response
5	I like the suggestion of redesigning the bus shelters to improve maintenance and safety. I wish they focused on making life better for pedestrians in our communities, the fast car speeds, infrequent crossings, noncontiguous sidewalks and bike lanes, and lack of lighting make it really hard to get around without a car. I really hope we see some improvements and change from this process, and not just another check the box and nothing happens. SacRT has a new regional system and has annexed in a ton of service.	Thanks for your comment and engaging in this process. We certainly agree that there are a lot of improvements that would drastically improve transportation options for the communities in Sacramento, and acknowledge how difficult it is to live car free here because of the current infrastructure. It will be an ongoing collaboration between local and regional agencies to make positive changes happen and this plan is just one component - many local and regional governments have goals to improve not just transit in the region but also enact basic transportation improvements to improve walking, biking, and rolling and more generally access to mobility options.
5	I wish the city/county/caltrans would be better partners and work with SacRT to improve roadway and sidewalk access. Our regional leaders should help us make a cohesive feeling system by funding regional infrastructure updates like bus stops.	Thanks for your comment and for engaging in this process. We acknowledge that collaboration has not always been seamless between local jurisdictions and SacRT in the past. This Plan references some ideas for how to improve coordination between local and regional agencies in the Next Steps section - we encourage you to check it out!

Comment ID	Comment	SacRT Response
6	I do think, where possible, bus stops should be covered to provide shade in the heat and coverage during winter weather, too.	Thank you for the comment. This is also SacRT's goal, and several new shelter designs are being evaluated for their suitability in different types of inclement weather that the Sacramento area will be seeing in the coming years. Please note that in general, shelters may be provided to stops with 20 or more boardings per day.
6	I would definitely want bus stops in the Pocket Area and Downtown Sacramento included for the improvements.	Thanks for your comment. Unfortunately, we did not have enough resources for this plan to audit all bus stops on the SacRT system. To most equitably use resources, the stops we chose to audit were in areas with known gaps in infrastructure, known CalEnviroScreen designated disadvantaged communities and/or low-income status, and within Sacramento county's Environmental Justice communities.

Comment ID	Comment	SacRT Response
6	Digital, real time signage that also alerts riders to any delays would be great since half the time that we check the online RT trackers it does not alert us to any bus delays or cancellations.	Thank you for the comment. This is an important need and the Bus Stop Improvement Plan, Appendix B (Early Action), includes a list of stops that are candidates for digital signs. SacRT currently has twelve digital signs at existing bus stops and plans to deploy nine more, with the option to contract for up to 75 additional digital signs. Criteria for digital signs includes presence of an existing shelter, existence of hard-wired power to the shelter, and ridership of 30 boardings per day or more. Additionally, digital signs are preferred in areas with multiple routes and in areas where riders are more likely to be new to the system and less familiar with how to ride (e.g., in tourist areas, along airport routes, etc.).
6	I don't think the bus stops should have any glass walls. There are always people who will break the glass.	Thank you for the comment. We get this feedback frequently, and SacRT is considering shifting to a different shelter design! Some different considerations on components of good bus shelter designs are outlined in the Plan.
6	I like the idea of the perforated metal seating and including divider arm rests that give you some space between other passengers.	Thank you for the comment.

Comment ID	Comment	SacRT Response
6	Larger trash cans (bolted to the ground) would be good and lighting for safety. More cleaning of the bus stops need to be done, including frequent power washing and trash collection. There should also be signage that provides emergency contact numbers to report problems with the stops and any other emergent situations that may occur at the bus stops. Also, RT Police need to come by more frequently to ensure homeless people are not camped out inside the bus stop shelter. The 8th & Capitol bus stop, for example, often has a homeless person sleeping across available seating so paying RT riders do not have a clean and sanitary places to sit at that stop. Making all stops not only functional, but cleaner and safer should be high priorities.	Thank you for your comments related to general improvements and maintenance issues. Please feel free to include specific bus stop locations (on street/at street) so staff can identify what the potential improvements and/or maintenance needs are. More generally, you can use the Alert SacRT app (available for Apple & Android devices) to report maintenance needs directly to SacRT.

6	It would be good, too, if the stops could be set back from the street more, especially in the Downtown Sacramento area, since cars often come very close to the stops and it does present a possible threat to passengers. I usually stand way back from the street for this reason. This would involve retraining drivers, though, to be aware of stops that are set back from the usual line of view for them.	Thank you for your comment. Some stop locations require the construction of a bus turnout, which places the stop completely out of the travel lane, forcing the bus to pull out of traffic to the curb, on high-speed streets for safety and traffic purposes. Most stop locations on slower-speed streets do not require the need for a turnout, but there can still be somewhat of a buffer between the actual travel lane and cars and the stop. ADA compliance requires that all bus stops are constructed to have curb, sidewalk, and landing pad. In some locations, the stops are built with a pad behind the sidewalk, which can create more space between moving vehicles and standees at the stop. Other locations that have the landing pad in front of sidewalk places the stop closer to the travel lane and cars; however, all landing space at front door boarding is required to have an 8-foot depth, which does help to provide additional space between vehicles and patrons. The addition of a bike lane can also contribute to more of a buffer between moving traffic and patrons waiting at a bus stop. SacRT staff considers safety as a top priority when identifying new and improved stop locations.

Comment ID	Comment	SacRT Response
6	I also think signage should be included for the improvements to include "No Smoking" area signs and reminders to riders about possible fines. That is a big problem with both RT and at Light Rail stops that people are engaging not only in a lot of cigarette smoking, but also pot smoking.	SacRT is able to place "No Smoking" signs inside of bus shelters; however, there is no location for this same signage at bus stops that do not have shelters. Additionally, SacRT light rail stations have "No Smoking" signs along the station platforms. SacRT Transit Ambassadors are able to enforce the no-smoking policy when they are present at the station, but we understand this is difficult to enforce without staff presence.
6	As far as ADA, it might be good to have some seats set higher for elderly and disabled persons who may not be able to lower themselves down to the lower seats. There should also be signage included that reminds people that the front seats of the bus are reserved for elderly and disabled since it doesn't seem like parents bother to teach young people to give up their seats to people who may need them. Reminders are good. Maybe these could be digital reminders since kids would probably read digital signs more than they would take the time to read posters at the bus stop.	While vehicle design is not part of the scope of this plan, SacRT's Planning team will share this comment with the Accessible Services department for consideration when preparing specifications for future bus procurements.

Comment ID	Comment	SacRT Response
7	Please put back the bus route on 14th Avenue! I am 1.9 miles from my work (3331 Power Inn Road) and would LOVE to be able to take the bus to even the Power Inn lightrail. There used to be a bus on 14th Avenue years ago. Please bring it back! Thank you.	Thank you for your comment. This request is outside the scope of the Bus Stop Improvement Plan, but we have forwarded it to SacRT's Customer Advocacy Department and SacRT's Service Planning unit. We note your concerns and appreciate your comment! To follow up on this concern, please contact James Drake at jdrake@sacrt.com.
8	I am so glad to see the 72 as a high priority corridor	Thank you for your comment.
9	I am pleased to see several stops in the Rancho Cordova area on the improvement plan high priority list. I would like to ask more about the 21 line that runs from Mather Field Mills LTR (in Rancho Cordova) to Sunrise Mall transit center (in Citrus Heights) - I did not see any improvements to stops on that route in the Fair Oaks section - Old Fair Oaks before Winding Way. Several of these stops are near shopping and a park, but are difficult to get onto and off the bus at - one at a stop sign doesn't even pull up to a curb (in the direction towards Rancho). I would almost fall off the bus there. I am disabled and will eventually be returning to my office in Citrus Heights on a daily basis. I am not looking forward to returning to the commute.	Thank you for the comment. Although the segment you mention may not have been included in the corridor plans, SacRT staff is interested in learning what locations you are concerned about. Please feel free to forward specific bus stop locations (on street/at street) so staff can identify what improvements are necessary to meet ADA requirements, such as: concrete landing pad, improved sidewalk(s), etc.. Please contact Sarah Poe at spoe@sacrt.com.

Comment ID	Comment	SacRT Response
10	I gave up on regional transit. My daughter rode to school daily. It was unreliable and full of drug addicts with little to no security. Fortunately, we found a way to work around this but not everybody is so lucky. I really hope RT does something, some people have no other option than public transportation and I believe you are obligated to try harder for them.	Thank you for your comment.
11	Need improvements for the neighborhood stops for route E11 at Fire Poppy (NB) where we have to walk thru mud & grass area to get on the bus. There is no pad or place to safely stand and no lighting for driver to see person at the stop in the early morning hours.	Thank you for your comment and for raising these issues. While these were not stops that were audited as part of the Bus Stop Improvement Plan, SacRT will communicate these improvement needs to the City of Elk Grove.
12	Second request: Move stop from Franklin High School. Please add back stops in the neighborhood along Franklin High Road so we don't have to worry about kids breaking into our cars parked on the street. Franklin High won't let us park in the parking lot or the Library lot.	Thank you for your comments. There are several bus stops along Franklin High Road, by Franklin High School, as well as by the surrounding neighborhoods. In order to help us look into your request, it would be helpful to understand which specific bus stops near Franklin High School you are referencing. To follow up on this request, please feel free to reach out to James Drake at jdrake@sacrt.com with the specific location and the cross streets.

Comment ID	Comment	SacRT Response
12	We need improvements for the location of the stops for both commuter routes E11 & E12. Neighborhood stops are located where we have to walk thru mud & dog poop to get on the bus. There is no pad or place to safely stand. Also often with no lighting for Driver to see person at the stop in the early morning hours.	Thank you for the comment. So staff can identify what improvements are necessary to meet ADA requirements, such as: concrete landing pad, improved sidewalk(s), etc.. Please feel free to follow up on this request by reaching out to James Drake at jdrake@sacrt.com with the specific location and the cross streets.
13	I believe adding bike lockers to some of the main stops would facilitate reduction of cars. Folks will be more willing to take their bike to the stop if there's a secure bike locker.	Thank you for your comment. The official Bus Stop and Light Rail Design Guidelines note that bike lockers/secure bike parking facilities may be included at stops with an average of 100-250 or greater daily boardings. Further, they may be located at stops where the bicycle parking does not block pedestrians' right of way and is near pedestrian activity to promote usage and security. We have included language in the plan noting that bicycle parking should be considered where suitable. Any installation of bicycle infrastructure would require coordination with the City or County whose jurisdiction the bus stop is on.
14	I'm commenting on the design of the bus stops. As the report mentions, the glass in the standard design is frequently broken. Please redesign the standard bus stop to not include glass. Consider San Francisco's bus stop design that includes 3 form (polycarbonate resin panels) that can stand up to high abuse.	Thank you for your comment. This is an issue that has been raised a lot by the community. RT is aware of these issues and is considering new shelter design options.

Comment ID	Comment	SacRT Response
14	Also, although it may be necessary to use benches that prevent people experiencing homelessness from sleeping on them, mitigate this with armrests instead of using anti-human design. Also consider all body sizes when placing arm rests.	Thank you for your comment.

15	Please return service to the Upper Land Park, Alder Grove, Marina Vista (5th St, Vallejo Way, Muir Way) area. Prior to SacRT forward implementation in 2019, this area was serviced by fixed route regular service 7 days a week by old Bus Route #38. Smart Bus is inconvenient as no guarantee of service or time of service I might need. Fixed route regular schedule better as I know in advance, even days ahead, of the bus schedule. Smart Bus is appropriate for disabled, paratransit type service. People don't want to walk far to a stop. Current routes #11 and #51 is far for some us in the area plus you took away old #2. Add more stops to our area, bring back #38. The #38 route was pretty much preserved in the SacRT forward implementation except you cut service to Upper Land Park, Marina Vista, Alder Grove. Why wasn't it preserved for our area and kept in others? We have low income who need service. There are also students and moderately income who used the old #38. New housing added in this area (Mill at Broadway) and a high school -they were using the old #38. You lose riders because you take away service. Can't you add back stops in our area? Be creative - have the current #38 come through our area, return the old #2 and have it come through our area, reinstitute old #34 and add our area. There is a push for people to use mass transit, save environment - please return convenient service, fixed time and route to us. If you don't want to use a big bus, how about a small bus but on regular fixed route and time schedule like old #38. I miss the old #2 which ran throughout the day. Now it is only #102 at commute time. It seems you cut off established areas from convenient service. Yet, you have service near transit oriented housing. Old established areas deserve regular fixed route service too. We shouldn't have to move to get service. Too much emphasis on light rail. Sometimes we need only take a bus. Plus SacRT forward increased travel time and transfers for trips that previously took less time and transfers. Please seriously consider adding back stops and regular fixed route and fixed time service to Upper Land Park, Marina Vista, Alder Grove.	Thank you for your comment. While this request is outside the scope of the Bus Stop Improvement Plan, we have forwarded it to SacRT's Customer Advocacy Department and SacRT's Service Planning unit. To follow up on this request, please feel free to reach out to James Drake at jdrake@sacrt.com.

Comment ID	Comment	SacRT Response
16	Please consider placing a bench for seating at the bus stop for outbound route 81 at the University/65th Street Light Rail station. The bench at the former bus stop for the 81 route is no longer being used and can be relocated to the new bus stop for passenger's convenience. Thank you for all of your consideration and cooperation.	Thank you for your suggestion. SacRT Facilities staff will be directed to relocate the bench from its previous location to the Route 81 stop at University/65th Street light rail station.
17	I am a disabled rider who stopped taking the bus (teleworking instead) - however, I eventually will have to return to the office. I live in Rancho Cordova and work in Citrus Heights. I was pleased to see some key stops on my route are in the high priority list and would like to see the Data Drive & International Drive stop also improved (this is a one-way route - currently the stop has a bench, narrow sidewalk, no cover or trees).	Thank you for your comment. While the Data Drive & International Drive stop was not audited or included as part of the Bus Stop Improvement Plan, SacRT will communicate these improvement needs to the City of Rancho Cordova to see if it can be brought to ADA compliance. There may be barriers to acquiring the needed Right of Way to improve this stop.
17	Additionally, there is a stop in old Fair Oaks (in the direction heading towards Rancho Cordova) on the 21. There are small shops on the right and a park on the left. The bus stops at a stop sign, does not even pull up to a curb, and I have stumbled trying to disembark there several times. It needs help. I also miss the community bus route in Citrus Heights that went down Stock Ranch Road - but it needed a stop at the corner by the SBA building. I recall having to switch over to dial-a-ride prior to lockdown - and will have to look at my commute options again soon when I have to go back to the office.	Thank you for your comments. This bus stop location requires further assessment in order to determine the appropriate recommendations. The SacRT Team will follow up with Facilities to address the issues that you raised.

Comment ID	Comment	SacRT Response
18	Howdy! I am a person who relies a lot of buses to take me to places on time. I recently got stranded by bus 93 when I needed to make my appointment on time and it never showed up. I waited enough time for it to arrive...TWICE. It may be due to the current floodings happening here, so I would like it if it was possible to notify people which buses are being affected by it/ are being delayed or rerouted on the website.	Thank you for your comment. SacRT's Bus Tracker application provides real-time bus information, including arrival times at bus stops. Delays due to detours, traffic incidents, construction, weather or equipment problems may affect the accuracy of estimated stop times. If your bus is delayed, SacRT Bus Tracker will adjust estimated stop times accordingly. To receive access to service alerts and stop time notifications, please create a BusTracker account at bustime.sacrt.com/account.
18	I also like to bring back bus 80, it's route was THE BEST way to get around shopping centers and now I cannot visit my favorite stores anymore.	Thank you for your comment. While this request is outside the scope of the Bus Stop Improvement Plan, we have forwarded it to SacRT's Customer Advocacy Department and SacRT's Service Planning unit. To follow up on this request, please feel free to reach out to James Drake at jdrake@sacrt.com.

Comment ID	Comment	SacRT Response
19	Can you direct the public to the place in this plan where the needs of middle school and high school students are emphasized? There is great need for additional public-transportation infrastructure for middle and high school students - particularly in areas of Sac County that do not have dedicated 200-series bus routes such as in the San Juan Unified School District area. But when I took a quick look at your plan, I didn't see references to outreach and public discussion at school facilities or with district staff. Given that the bus options for students in these areas is currently very poor, any outreach to existing customers would completely miss getting input from these families. This has been an ongoing issue with RT - that in areas or with audiences where there is little to no ridership currently because of infrastructure issues, there is no input. This is especially applicable to the significantly underserved populations like students. There was movement in the right direction in late 2019 in this regard, but then the pandemic and school closures (remote learning) changed the dynamic drastically. If the discussions and outreach continued after the hiatus, it is not made clear in this planning document. These efforts should be a combination effort of planning and outreach/communications, as both are needed when such a large demographic is not currently a ridership base despite high need.	Thank you for your comment. While the outreach team for the Bus Stop Improvement Plan did specifically reach out to schools and school districts to garner participation at our meetings, in particular in the San Juan Unified area, this is an important community to get feedback from and there is always more we can and should do. We appreciate you noting the need for ongoing engagement with district and school staff and we fully agree.
20	Improving transit is important.	We agree!

Comment ID	Comment	SacRT Response
21	I would love to see bus service that can take you all the way down Fair Oaks from the college to Sunrise Mall. It would be a great connector.	Thank you for your comment. While this request is outside the scope of the Bus Stop Improvement Plan, we have forwarded it to SacRT's Customer Advocacy Department and SacRT's Service Planning unit. To follow up on this request, please feel free to reach out to James Drake at jdrake@sacrt.com.
22	To Whomever It May Concern: I am writing on the behave of the Laguna Ridge Community for help to meet the needs of a rapidly growing community on a new bus stop. Our community has been patiently waiting for a bus stop at Cape Verde Dr. on Whitelock Blvd. in Elk Grove for over 6 years. It is too difficult and unsafe for Seniors and young children to walk from this community to the existing bus stop locations at Big Horn & Whitelock Blvd.; and Promenade Pkwy at Kaiser especially on rainy/hot days and in the dark of day and night. A new bus stop addition would improve ridership that benefits our community and the transit community including both RT and E-Trans. Thank you for your consideration on implementation to spur interest for our community and others toward an effective and efficient public transportation system.	Thank you for your comment. We are aware that there is a long distance between existing Route 110 bus stops on Whitelock Parkway between Big Horn Boulevard and Promenade Parkway. This suggested bus stop location may be subject to infill development plans; therefore, SacRT Planning staff will coordinate with the City of Elk Grove on the feasibility of constructing ADA-compliant bus stops at the intersection of Whitelock and Cape Verde.

Comment ID	Comment	SacRT Response
23	Hi! I'm a Rancho Cordova parent and have cycled 3 kids through Einstein Middle School. I have consulted my children and want to share their feedback on a few stops along route 72 (EB). Per the draft plan, Stop #2886 (EB) Kiefer &Huntsman, will not receive a shelter. This stop is nearest to the middle school, which should be a priority for a shelter. According to my kids, the reason for higher amounts of boardings further west is that the students migrate away from this stop due to being SKIPPED OVER by an OVERCROWDED BUS. The kids migrate west to Stop #2885 + Stop #2884 to catch the east-bound bus hoping not to get skipped over. Mainly this migration occurs by foot, but they say some kids take Stop #3868 to ride west, then hop over to the EB side again, hoping to guarantee a spot. The bus not having enough frequency at this high-volume time of day is causing migratory patterns. I think a back-to-back bus during Middle School dismissal times would change these patterns and a shelter could then be prioritized at the EB stop nearest the school (because the boardings would then be concentrated at that stop). I have provided feedback that all stops nearest schools should be prioritized for shelters, and it is because my own kids are impacted by the lack thereof. It's brutal in the heat or in the rain, especially when you are left to wait unsheltered for a long period of time because an overcrowded bus cannot allow you to board.	Thank you for your comment and we note your concerns. Unfortunately, the request for route frequency adjustments is outside the scope of the Bus Stop Improvement Plan, but we have forwarded it to SacRT's Customer Advocacy Department and SacRT's Service Planning unit. To follow up on this request, please feel free to reach out to James Drake at jdrake@sacrt.com. Additionally, we will be revising the plan to provide a shelter at Stop #2886 due to demonstrated need.

Comment ID	Comment	SacRT Response
24	I see no improvements for the 19 line. There is and never has been a bus stop sign at the corner of Elkhorn and Watt Avenue on the inbound side. Nobody knows where to catch the bus and no place to load a wheelchair. And why is there such long stretches of road without any bus stops at all? Elkhorn, from Watt to Dry Creek. Rio Linda Blvd from Elkhorn to Marysville Blvd.	Thank you for your comments. The bus stop on Elkhorn and Watt (1396) is currently an active stop. SacRT Facilities has been directed to ensure that a pole with sign is placed at this location, and Route 19 buses have been serving the stop. In response to the large stop spacing issues on Elkhorn and Rio Linda- this is primarily due to the existing roadway conditions along these corridors, and a lack of safe bus stop locations. SacRT is required to have all new bus stops meet ADA compliance; therefore, sidewalks are needed, which are built by the local jurisdiction. SacRT is not able to serve a new stop that does not have the required infrastructure.
25	I live in Northlake off of West Elkhorn Blvd. I don't see any plans to have a transportation system from there to Downtown or even South Natomas. Is there any plans for that area to receive regional transportation?	Thank you for your comment. While this request is outside the scope of the Bus Stop Improvement Plan, we have forwarded it to SacRT's Customer Advocacy Department and SacRT's Service Planning unit. To follow up on this request, please feel free to reach out to James Drake at jdrake@sacrt.com. We note your concerns and appreciate your comment!
26	The many new developments in Natomas need bus stops. Huge amount of apartments and houses are all over Natomas and the nearest bus stop is over 3 miles away!!!	Thank you for your comment. In order to help us look into your request, it would be helpful to understand what developments need stops and their locations. South Natomas has more coverage than North Natomas, particularly west of I-5. To follow up on this

Comment ID	Comment	SacRT Response
		request, please reach out to James Drake at jdrake@sacrt.com.
27	Please add a numerically list sorted by ascending Stop ID that contains each stop addressed in the Appendices. This way riders can easily look up stops they're interested in within 1 places. searching all the appendices. The format of the list can be Stop ID || Name || AppendixSection Examples: 290 || University/65th Lrt & Bay 4 (WB) || E5 1464 || El Camino Ave & WattAve (EB) || E4 3072 || Watt Ave & Orange Grove Ave (SB) || E1	Thanks, we are working on this!
28	Please place a bench and repair the shelter at the Route 38 bus stop located at 65th Street light rail station. Many older adults ride this bus. There is no protection from the sun or rain. The Route 38 stop is located a half a block away from the main station, so it is inconvenient to have to cross two streets to get to it. Thank you for your consideration.	Thank you for your comment. SacRT Planning staff will coordinate with Facilities to determine installation of a shelter at this location.

Appendix G: Cost Estimates

This section contains the estimated cost breakdown for implementing the proposed improvements for each of the 61 corridors contained in Appendix E. Please visit https://www.sacrt.com/apps/sacramento-regional-transit-district-bus-stop-improvement-plan/ to view Appendix G, which has been posted separately due to file size constraints.

Planning-level cost estimates have been developed for all 630 “yellow” stops on the 61 corridors (i.e., all stops with potential minor or moderate level improvements). The sum total to complete these improvements (design and construction) is $65,420,500 (approximately $23.5 million for design and $41.9 million for construction). Individual corridor cost estimates break out the cost of yellow stops in each corridor because costs for individual stops vary widely. However, the average cost for design and construction is approximately $103,000 per stop. Please note that “red” stops, which refer to stops needing major improvements requiring coordination with the respective local jurisdictions (such as crossings, intersections, and projects extending into the roadway) are not included in these cost estimates.