

ADMINISTRATION, PROJECTS & PLANNING
EXECUTIVE COMMITTEE
MEETING

MONDAY, JULY 11, 2022

3:30 PM

Zoom link:

<https://us02web.zoom.us/j/83035113530?pwd=Ym1lVHdnUHZycllGN2VPZVlBY0Zrdz09>

Webinar ID: 830 3511 3530

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- During the meeting (only): Your meeting-related comments may be sent to info@tam.ca.gov. During the meeting your comments will be read (3-minute limit per comment) when the specific agenda item is considered by the Committee. Your comment will also become part of the public record. (In order to ensure staff receives your comment during the meeting, it is recommended that you send your comment using info@tam.ca.gov, early in the meeting.

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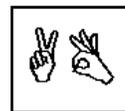
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Alice Fredericks

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Katie Rice
Stephanie Moulton-Peters
Dennis Rodoni
Judy Arnold



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AGENDA

1. Nominate and Elect Chair Pro Tempore for the July 11, 2022 Administration Projects and Planning Executive Committee Meeting (Action) – **Attachment**
2. Chair's Report (Discussion)
3. Commissioners Comments (Discussion)
4. Executive Director's Report (Discussion)
5. Open time for public expression, up to three minutes per speaker, on items not on the Board of Commissioners' agenda. (While members of the public are welcome to address the Board, under the Brown Act, Board members may not deliberate or take action on items not on the agenda, and generally may only listen.)
6. Approval of Meeting Minutes from June 13, 2022 (Action) – **Attachment**
7. Review of the Draft Implementation Plan for the Highway 101 Interchange and Approaching Roadway Study (Action) – **Attachment**
8. Local Road Safety Plan Update (Discussion) – **Attachment**
9. Accept the Canal Neighborhood Community Based Transportation Plan (Action) – **Attachment**



DATE: July 11, 2022

TO: Transportation Authority of Marin
Administration, Projects and Planning Executive Committee

FROM: Anne Richman, Executive Director *Anne Richman*
Jennifer Doucette, Executive Assistant/Clerk of the Board

SUBJECT: Nominate and Elect Chair Pro Tempore for the July 11, 2022 Administration, Projects and Planning Executive Committee Meeting (Action), Agenda Item No. 1

RECOMMENDATION

Staff recommends that the Administration, Projects and Planning Executive Committee elects a Chair Pro Tempore for the July 11, 2022 Executive Committee meeting.

BACKGROUND

Pursuant to Robert's Rules of Order, in case of the absence or inability to act of both the Chair and Vice Chair at a meeting, the Board of Commissioners or applicable Executive Committee shall elect a Chair Pro Tempore for the meeting.

DISCUSSION

This agenda item provides information regarding the election of a Chair Pro Tempore to serve as the presiding officer at the July 11, 2022 Administration, Projects and Planning Executive Committee meeting, due to the absence of Chair Stephanie Moulton-Peters. The Committee members who are present will need to nominate a member and vote on their election, at the start of the meeting. The Chair Pro Tempore elected during the meeting will serve as Chair for the July 11, 2022 Administration Projects and Planning Executive Committee meeting only.

FISCAL CONSIDERATION

Not applicable.

NEXT STEPS

Not applicable.

ATTACHMENTS

None.

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MEETING OF THE
TRANSPORTATION AUTHORITY OF MARIN
EXECUTIVE COMMITTEE
Administration, Projects & Planning
June 13, 2022
3:30 PM



Virtual Meeting

Members Present: Alice Fredericks, Tiburon Town Council
Brian Colbert, San Anselmo Town Council
Damon Connolly, Marin County Board of Supervisors
Dan Hillmer, Larkspur City Council
Stephanie Moulton-Peters, Marin County Board of Supervisors, Committee Chair

Staff Members Present: Anne Richman, Executive Director
Bill Whitney, Principal Project Delivery Manager
Dan Cherrier, Principal Project Delivery Manager
David Chan, Director of Programming & Legislation
Derek McGill, Director of Planning
Emily Tong, Senior Accountant
Jennifer Doucette, Executive Assistant/Clerk of the Board
Li Zhang, Deputy Executive Director/Chief Financial Officer
Molly Graham, Public Outreach Coordinator
Nick Nguyen, Principal Project Delivery Manager

Chair Moulton-Peters called the Administration, Projects & Planning (AP&P) Executive Committee meeting to order at 3:32 p.m. She welcomed everyone to the Committee's virtual meeting and asked Jennifer Doucette, Executive Assistant/Clerk of the Board, to conduct a roll call and ensure a quorum. Ms. Doucette confirmed the quorum and described how the public could provide comment during the meeting.

1. Chair's Report (Discussion)

Chair Moulton-Peters congratulated Commissioner Lucan on his new assignment next year and Commissioner Connolly for his nomination in the June 7 Primary Election for the California State Assembly's 12th District, representing Marin and Sonoma counties.

2. Commissioners Comments (Discussion)

None.

3. Executive Director's Report (Discussion)

Executive Director (ED) Anne Richman provided the following update: the Marin Sonoma Narrows (MSN) Project B7 groundbreaking ceremony scheduled for July 21, 2022; postponement of the ribbon-cutting ceremony for the opening of the North-South Greenway multi-use path; the 10-year review process for Measure B Vehicle Registration Fee (VRF); Marin Transit's (MT's) free service on local fixed-route services for youths and students aged 18 years and under in Marin County between June 12 and August 14, 2022; free MT bus rides for all during the Marin County Fair, from June 30 to July 4, 2022; and Sonoma Marin Area Rail Transit's (SMART's) 10 additional weekday trips.

4. Open time for public expression

Chair Moulton-Peters asked if any members of the public wished to speak or had submitted a comment by e-mail and hearing none, she closed this item.

5. Approval of the Minutes from May 9, 2022 Meeting (Action)

Commissioner Fredericks moved to approve the Minutes of the May 9, 2022 meeting, which Commissioner Lucan seconded. A roll call vote was conducted, and the motion passed unanimously.

6. MTC's Proposed Transit-Oriented Communities Policy (Discussion)

ED Richman introduced the item and Kara Vuicich, Principal Planner/Analyst for the Metropolitan Transportation Commission (MTC), presented the report on MTC's Proposed Transit-Oriented Communities (TOC) Policy. Ms. Vuicich stated that the Policy is scheduled for adoption by the Joint MTC/Association of Bay Area Governments (ABAG) Committee in July. She discussed the TOC Policy and the extensive outreach program, which included meetings with Bay Area Planning Directors and stakeholder groups, and a presentation of the Draft TOC policy to the Joint MTC Planning Committee with the ABAG Administrative Committee at the May 13 meeting.

Ms. Vuicich discussed the TOC policy, which focuses on increasing housing, job density, and affordable housing near transit, and supports transit use through parking management and implementation of complete streets and multi-model access improvements. Ms. Vuicich discussed two of the goals of Plan Bay Area 2050, which are to allow a greater mix of housing and commercial densities in growth areas, such as Planned Development Areas (PDAs), and to protect affordable housing. A third goal is to improve bus transit and shared mobility to bring people to transit stations, and the final goal of the Policy focuses on MTC's continued support and facilitation of implementation of the Plan Bay Area (PBA) 2050.

Ms. Vuicich discussed the requirements for residential and commercial density development in Marin near the Larkspur Ferry terminal (which would need to be designated as a PDA by the local jurisdiction), and areas near SMART stations; the requirements for parking management, policies for affordable housing and anti-displacement; and the requirements for jurisdictions to improve access to transit stations and encourage people to use transit. The final requirement would be to identify opportunities for mobility hub planning and implementation.

Ms. Vuicich discussed policy implementation, which is expected to take four to five years. MTC will provide funding to jurisdictions from One Bay Area Grant (OBAG) Cycle 3 but compliance with the TOC policy will be required if jurisdictions wish to take advantage of the funding opportunities offered by future OBAG cycles.

In response to Commissioner Lucan, Ms. Vuicich confirmed that preferential funding opportunities for TOC policy compliance would be based on an individual SMART station and not on all the stations in a county. Ms. Vuicich stated that bus routes are subject to change and compliance was based on ferry terminals and train stations that require more permanent investment. She stated that funding set aside for Marin could potentially be provided for PDAs that are serviced by bus transit if PDAs serviced by SMART stations and the Larkspur Ferry terminal were not able to comply with the TOC policy.

In response to Commissioner Hillmer, Ms. Vuicich confirmed that public presentations have been held and materials are available on the MTC/ABAG website. She also confirmed that presentations were made to other public agencies, including Contra Costa Transportation Authority's (CCTA's) Board of Commissioners. ED Richman confirmed that the presentation has been posted on TAM's website.

Chair Moulton-Peters noted that Marin is relatively small and that she would support the inclusion of other areas of Marin that are serviced by bus routes to the ferry terminal and SMART stations. Ms. Vuicich stated that the Policy could include funding for projects outside PDAs in the designated SMART station and ferry terminal areas. Chair Moulton-Peters and Ms. Vuicich discussed the land use requirements that PDAs should be designated within a half mile of a SMART station or the ferry terminal.

ED Richman and Ms. Vuicich discussed a survey of compliance by Bay Area jurisdictions and Ms. Vuicich confirmed that while survey data collection is ongoing, she estimates that most of the jurisdictions are not in compliance with the Policy. ED Richman confirmed that staff is requesting feedback on the elements of the policy that might be of more interest to the commissioners' jurisdictions and how they might envisage TAM's role in supporting and coordinating the Policy.

Commissioner Lucan discussed his concern that the Policy's parking requirements would be too restrictive by requiring transit riders to rely solely on the train for their transportation needs. Ms. Vuicich stated that an exception might be made to the parking requirements in the final draft if Transportation Demand Management (TDM) measures are implemented.

Commissioner Hillmer stated that the parking requirements for Tier 4 did not appear to be too onerous and Ms. Vuicich discussed the need to recognize that parking is necessary where public transit, such as SMART stations, is not well served by buses.

Commissioner Fredericks noted that Tiburon has limited parking resources, most of which are privately owned. She expressed her concern that a blanket policy would not be suitable for the parking, density and access needs of a small town.

Chair Moulton-Peters asked if any members of the public wished to speak or had submitted a comment by e-mail and hearing none, she closed this item.

Chair Moulton-Peters thanked Ms. Vuicich for her presentation and ED Richman stated that staff will let the commissioners know when the final policy document is available.

The meeting was adjourned at 4:22 p.m.

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DATE: July 11, 2022

TO: Transportation Authority of Marin
Administration, Projects & Planning Executive Committee

FROM: Anne Richman, Executive Director *Anne Richman*
Bill Whitney, Principal Project Delivery Manager

SUBJECT: Review of the Draft Implementation Plan for the Highway 101 Interchange and Approaching Roadway Study (Action), Agenda Item No. 7

RECOMMENDATION

Staff is recommending that the Administration, Projects & Planning (AP&P) Executive Committee reviews the Draft Implementation Plan and recommends approval by the full Board.

BACKGROUND

The Highway 101 Interchange and Approaching Roadway Study is included in the Measure AA ½-Cent Transportation Sales Tax Expenditure Plan. The Expenditure Plan allocates 3% of the revenue from the sales tax to the Study, originally estimated at \$24.8 million over the 30-year period of the Measure.

The Expenditure Plan states the following:

“Accessing Highway 101 in Marin is a major source of congestion on local roads, which reduces the connectivity of communities across Marin. These funds would be used to attract regional, state, and federal funds for a program of improvements to interchanges and local roads. These improvements would improve the operation and safety of these interchanges for all users, allowing smoother travel to and from Highway 101. These funds provide seed money to perform the planning, the public outreach, and to develop the scope of improvements needed at these interchanges.”

The overall approach of the Study is to identify operational and safety improvements for all users of an interchange and approaching roadways including adjacent intersections. The interchange studies have been under development for two years as part of a comprehensive effort to evaluate our interchange infrastructure and to ultimately propose an implementation plan to address deficiencies most in need, and feasible, based on the factors derived from the evaluation process. It is the initial effort to prioritize interchange and local roadway improvements for future planning activities.

DISCUSSION

Existing Conditions, Constraints, and Opportunities

As part of the study development process, TAM and its consulting team collected information and documented the existing conditions and constraints, i.e., traffic volumes (including forecasted volumes), transit service and ridership, bicycle and pedestrian volumes and existing multi-modal infrastructure, non-standard features of the

roadways, crash data for safety analysis, environmental conditions, potential impacts from sea level rise, existing right-of-way constraints, and surrounding land use patterns. This exercise provided a “base map” that was used to develop improvement concepts.

Preliminary concepts were developed to improve connectivity for all users. The approach taken was to propose improvements that could be assessed and possibly implemented in the near-term by relatively simple measures utilizing existing infrastructure. The team also proposed a suite of long-term improvements that require more complex and in-depth analyses, additional right-of-way, have potential environmental impacts, and are more costly.

A draft report for each of the twelve interchanges has been prepared and will be made available on TAM’s website. The reports include a thorough discussion of the improvement elements and will provide supporting documentation in the appendix of the report.

On February 28, 2022, the Board approved an evaluation process that was used to assess the proposed improvements for the twelve interchanges and approaching roadways that are part of the study. The process measured the effectiveness of the improvements in accordance with the adopted goals and objectives, as follows:

1. Enhance Health and Safety
2. Relieve Local Traffic Congestion
3. Improve Multimodal Access to/from and across Highway 101
4. Promote Economic Vitality
5. Implement-ability

It should be noted that factors such as reducing greenhouse gases (GHG) and providing equity for all users are embedded in the goals and objectives.

Evaluation Process and Sensitivity Testing

The intent of the evaluation process is to allow a neutral assessment of the proposed improvements, both near-term and long-term, and provide findings that can be used to establish a prioritization and implementation plan as the next step.

To further advance the process, each goal considered a measurable evaluation criteria statement, associated performance measure and a scoring matrix. After assessing the evaluation process, the AP&P Executive Committee approved a “goal weight” that represents the relative significance to be used while assessing proposed improvements.

The commissioners also recommended a sensitivity test be applied to the evaluation process to confirm goal weights are consistent with TAM’s mission. The goal weighting was tested by decreasing the emphasis on reducing congestion and increasing the value placed on multi-modal improvements and a more equity focused evaluation. In summary, adjusting the weighted value did not materially change the results from the original weighted value and scoring outcome, thus validating the original weighting choices.

Findings

The findings from the evaluation process for each of the twelve interchanges are presented in the attached Draft Implementation Plan (Attachment A) and will be summarized at the meeting. The scoring for the near-term and long-term evaluation is presented, as well as estimated project costs. The long-term improvements are scoring higher as would be expected because they address more non-standard features and provide a more comprehensive solution to multimodal mobility. The total cost of all 12 long-term concepts is estimated at \$1.3 billion.

The evaluation process identifies two long-term concepts that rise to the top for each planning area in the County, as follows:

South: Blithedale Ave./Tiburon Blvd., and Tamalpais Drive

Central: North San Pedro/Merrydale, and Freitas Parkway/Civic Center

North: Lucas Valley/Smith Ranch, and Alameda del Prado/Nave Drive

Several near-term concepts have substantially lower costs than their long-term counterparts but score almost as high since congestion is not as significant an issue at these locations compared to other factors. Total cost of all 12 near-term concepts is estimated at \$182 million.

There are also several Interchanges with compatible near-term and long-term scores, but with near-term costs at least 50% less:

Alameda del Prado/Nave Drive

Alexander Avenue/Vista Point

Donahue Street/Bridgeway

Ignacio Boulevard/Bel Marin Keys

San Marin Drive/Atherton Avenue

Second Street/Hetheron Street

Prioritization and Implementation Plan

The end goal of this phase of the interchange study is to select interchanges to advance into the next phase of project development. A more in-depth analysis will be required, following the Department of Transportation's (Caltrans') development procedure referred to as the project initiation document (PID) phase.

The findings of the evaluation process indicate three of the Highway 101 interchanges should be prioritized for further evaluation and development:

- Tiburon Blvd./East Blithedale (Long-term improvement proposal)
- Manuel T. Freitas Parkway (Long-term improvement proposal)
- Alameda Del Prado (Short-term improvement proposal)

The Draft Implementation Plan provides a summary of the activities undertaken by this study process and decision points along the way. The Measure AA Interchange program will provide funding for the initial phases to define and study a series of multi-modal improvements both within state right-of-way and on our local roadways. The Plan presents potential funding sources that could be pursued in the future to advance the project development process. The Plan also briefly discusses future steps in the development process.

The Draft Implementation Plan recommendation includes advancing the three interchanges discussed above into the Caltrans PID process along with other potential improvements to the other nine interchange locations.

Staff is also exploring other potential alternative project delivery methods. Certain elements within the proposed improvement concepts may be good candidates for development outside the Caltrans PID process. If an improvement is not within the Caltrans right of way or the project footprint has minimal impact in the Caltrans right of way, then the project could be advanced by using local agency procedures. The team is assessing potential small-scale improvements at all locations and will make a recommendation for consideration in the future. These small-scale improvements could be developed concurrent with the PID phase of development.

FISCAL IMPACTS

There are no fiscal impacts from approving the Draft Implementation Plan. Measure AA contains a limited amount of funding to continue to advance this phase of project development; however, significant additional funding would be needed to bring the improvements to construction in the future.

NEXT STEPS

Following the AP&P Executive Committee review, the draft Plan will be presented to the Board for action.

Staff is currently in discussion with the consulting team to develop a scope and fee for the next phase of interchange developments. We are also in process of preparing a Cooperative Agreement with Caltrans to provide oversight and review of the PID documents. TAM and Caltrans staff are negotiating the cost of these services. A contract amendment with our consultant and an agreement with Caltrans will be brought back to the AP&P Executive Committee at a future date.

ATTACHMENT

Attachment A – Draft Implementation Plan

Attachment B – PowerPoint Presentation



HIGHWAY 101 INTERCHANGE & APPROACHING ROADWAY STUDY

DRAFT Implementation Plan



Prepared for:

Transportation Authority of Marin
900 Fifth Avenue, Suite 100
San Rafael, CA 94901



June 2022

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Executive Summary

The Transportation Authority of Marin (TAM) studied 12 selected interchanges on Highway 101 in Marin County to document the existing conditions, deficiencies, and constraints and to identify opportunities for improvement under a program of near- and long-term projects that aim to improve operations, intermodal connectivity, and safety for all users. The planning study is funded through Measure AA – the reauthorized ½-cent transportation sales tax that was approved by Marin voters in 2018. The overarching goal of the Transportation Sales Tax Renewal Expenditure Plan (Expenditure Plan) is to “reduce congestion and reduce greenhouse gas emissions, maintain and improve local transportation infrastructure, and provide high quality transportation options for people of all ages who live, work, and travel in Marin County.”

Multimodal concept plans were developed for each of the 12 interchange areas to address the identified deficiencies under both *long-term* and *near-term* scenarios that reflected differing levels of investment.

The concepts were evaluated against the following goals and objectives that were intended to be aligned with the guiding principles outlined in the 2021 Transportation Sales Tax Strategic Plan and other regional and statewide planning sources:

1. Enhance Health and Safety
2. Relieve Local Traffic Congestion
3. Improve Multimodal Access to/from and across Highway 101
4. Promote Economic Vitality
5. Implement-ability

For each goal and objective, a series of evaluation criteria were developed to determine how well a particular interchange improvement concept would perform against alternative concepts at that same location and against the other interchange locations. The evaluation criteria were in turn supported by various planning level performance measures that could be used to qualitatively assess proposed improvements against the established goals and objectives.

Evaluation Findings

The evaluation findings for **long-term** concepts are as follows:

- Long-term concepts generally score higher than near-term concepts, especially at interchange locations that experience or are expected to see traffic congestion issues
- Two long-term concepts rise to the top for each Marin planning area:
 - *South:* Blithedale Avenue/Tiburon Boulevard and Tamalpais Drive/Paradise Drive
 - *Central:* North San Pedro Road/Merrydale Road and Manuel T. Freitas Parkway/Civic Center Drive
 - *North:* Lucas Valley Road/Smith Ranch Road and Alameda del Prado/Nave Drive
- Total cost of improving all 12 long-term concepts is \$1.33 billion (2021 dollars)
 - Seven long-term concepts cost less than \$50 million
 - Lucas Valley Road/Smith Ranch Road = \$68 million, Tamalpais Drive/Paradise Drive = \$93 million, Alameda del Prado/Nave Drive = \$280 million

The evaluation findings for **near-term** concepts are as follows:

- Several near-term concepts have substantially lower costs than their long-term counterparts, but they score almost as high since congestion is not as significant an issue at these locations compared to other factors.
- Total cost of all 12 near-term concepts is \$182 million (2021 dollars).
- Interchanges with compatible near-term and long-term scores, but with near-term costs at least 50% less (by near-term rank) are:
 - Alameda del Prado/Nave Drive
 - Alexander Avenue/Vista Point
 - Donahue Street/North Bridge Boulevard/Bridgeway
 - Ignacio Boulevard/Bel Marin Keys Boulevard/Nave Drive
 - San Marin Drive/Atherton Avenue
 - Second Street/Hetherton Street

The evaluation process identified three interchange areas that should be pursued for comprehensive multimodal enhancements. The following three interchange areas were recommended for project planning, which is consistent with Caltrans' PID procedures:

- East Blithedale Avenue/Tiburon Boulevard (Highway 131) - #3
 - Highest scoring long-term concept in Southern Marin, including a focus on equity
 - Addresses multimodal needs
 - Serves as gateway to several municipalities (Mill Valley, Tiburon, and Belvedere)
 - Modest long-term total cost of \$32.9 million; can potentially be phased
- Manuel T. Freitas Parkway/Civic Center Drive - #8
 - Highest scoring of all interchanges for near- and long-term concepts
 - Addresses multimodal needs
 - Provides key safety enhancements
 - Modest long-term total cost of \$25.5 million; can be phased
- Alameda del Prado/Nave Drive - #10
 - Near-term concept can retrofit existing facilities with modest new construction to meet goals at a fraction of long-term plan costs
 - Addresses multimodal needs
 - Modest near-term total cost of \$31.7 million; can be phased



For the remaining nine interchanges, it is recommended that planning and development of refined near-term project components be pursued over time and as practical.

Agency Next Steps

The following steps will need to be taken by TAM and the local jurisdictions/agencies to move projects forward towards implementation:

1. TAM Board to select project(s) to move forward into project development in consultation with agency stakeholders.
2. TAM and the local jurisdiction will coordinate with the Metropolitan Transportation Commission (MTC) to have the project included in the current Regional Transportation Plan (RTP).
3. TAM will secure funding for the PID and enter into a Cooperative Agreement with California Department of Transportation (Caltrans) for project development.
4. TAM will work with the local jurisdiction and a Project Development Team to prepare the PIDs for Caltrans approval.
5. TAM and the local jurisdiction will seek funding for subsequent phases of the project.

Introduction

Throughout Marin County, Highway 101 serves as the primary north-south roadway, and it is a key link between communities. Accessing Highway 101 in Marin is a major source of congestion on local roads, which reduces the connectivity of communities across the county. Interchanges vary in age and in needs for improvements. As communities around Marin have grown over the last 30-40 years, interchanges built in the 1950s and 1960s have not been altered to meet the demands of vehicles, transit, bicyclists, and pedestrians. Many do not meet current design or operational standards.

TAM studied 12 selected interchanges on Highway 101 in Marin County to document the existing conditions, deficiencies, and constraints and to identify opportunities for improvement under a program of near- and long-term projects that aim to improve operations, intermodal connectivity, and safety for all users. The interchange locations are shown on **Figure 1**.

The resulting Existing Conditions, Constraints, and Opportunities Reports¹ provided the basis for establishing performance measures against which improvement concepts could be developed, evaluated, and prioritized. This Implementation Plan provides a summary of the evaluation and prioritization process, and it offers recommendations for a program of improvements for the local interchanges, the near- and/or long-term project delivery methods, time frames, prioritization, and phasing based on funding outlook, independent utility, cost effectiveness, ease of implementation, and benefit.

The planning study is funded through Measure AA – the reauthorized ½-cent transportation sales tax that was approved by Marin voters in 2018. The overarching goal of the Transportation Sales Tax Renewal Expenditure Plan (Expenditure Plan) is to “reduce congestion and reduce greenhouse gas emissions, maintain and improve local transportation infrastructure, and provide high quality transportation options for people of all ages who live, work, and travel in Marin County.” The Plan allocates 3% of the revenue for a 30-year program of improvements to interchanges and freeway access routes on Highway 101 to reduce congestion, improve local traffic flow, and address flooding impacts within the county. These funds will serve to leverage larger regional, State, and federal funds.

¹ The Existing Conditions, Constraints, and Opportunities Reports for each interchange can be accessed through the TAM Projects and Planning website for the Highway 101 Interchange and Approaching Roadway Study at the following link: <https://www.tam.ca.gov/101study/>

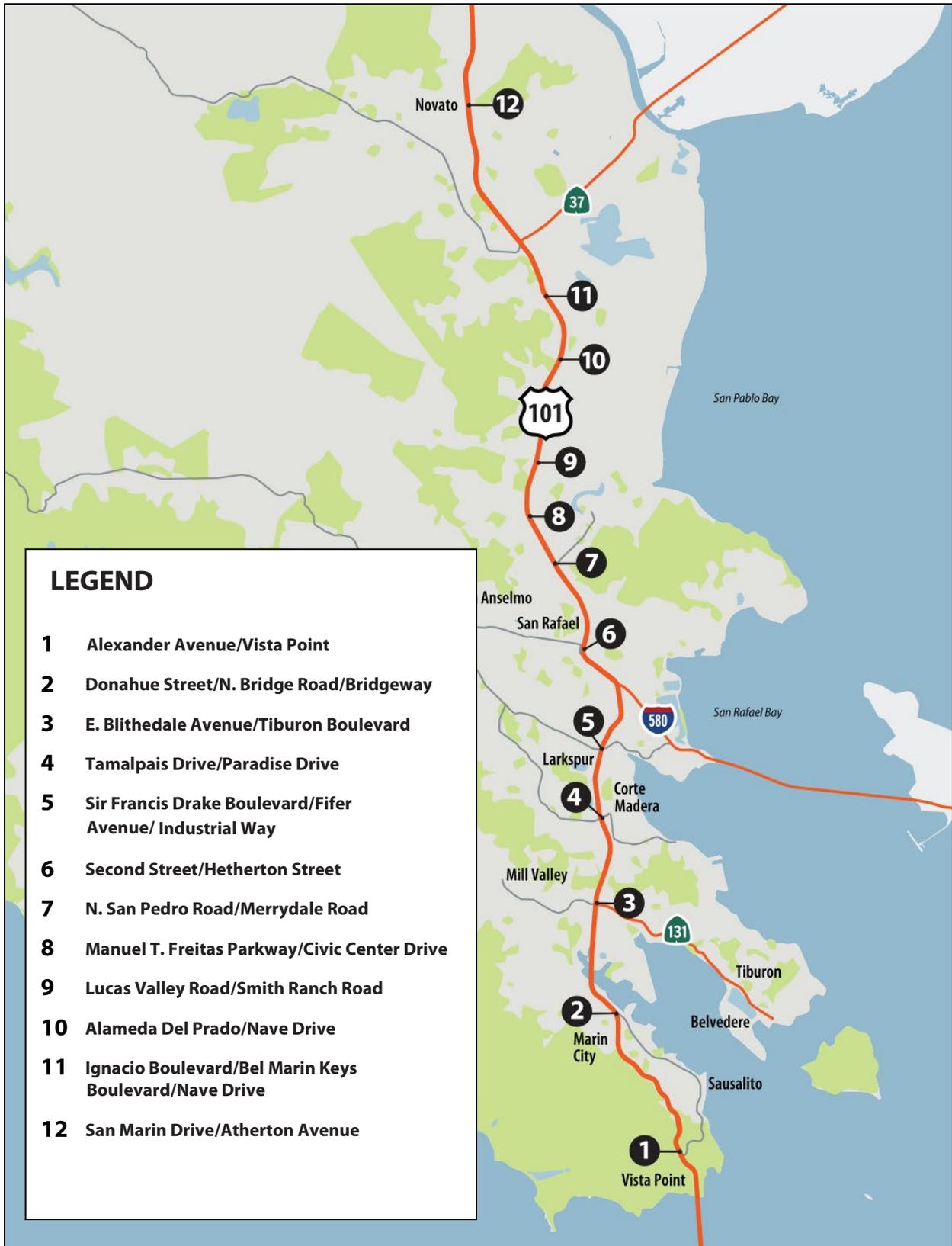


Figure 1: Study Interchange Locations

STUDY PROCESS

The planning study was conducted in three phases, beginning with the development of goals and objectives for the program and an overall analysis of the 30 interchanges along Highway 101 interchanges in Marin County to confirm which interchange locations (up to 12) are the most in need of improvement. Phase 2 involved a more detailed analysis to identify the existing conditions and deficiencies, constraints, and opportunities for improvement at each interchange location. Under Phase 3, an evaluation process prioritized the identified projects into a series of near- and long-term improvements. The study concluded with the development of a strategic roadmap of how the projects can be most effectively delivered, based on implementation timeframe, method of delivery, and potential funding availability.



STUDY INTERCHANGE SELECTION

There are 30 interchanges located along Highway 101 in Marin County. Eleven interchange locations were identified in the Expenditure Plan based on input from stakeholders, including jurisdictional partners and the public, during the development of the Expenditure Plan. Each represents significant access for adjacent communities along Highway 101. Some of the interchanges have been cooperatively planned among partners for years, and other locations have had long-standing visions for improvements that have not yet been planned in detail. A 12th interchange location was added at the onset of the project through an evaluation process conducted by the team and accepted by the TAM Board. A preliminary screening eliminated 10 interchange locations based on low travel demand, recent upgrades, or because they will be studied as part of other ongoing or planned interchange planning efforts. Six remaining locations were evaluated against the goals and objectives that were being developed to support the study, which covered the intent of the Expenditure Plan. The evaluation recommended the Alameda del Prado/Nave Drive location be selected as the most appropriate candidate for study. The memorandum documenting the selection is included as [Appendix A](#).

Evaluation and Prioritization

CONCEPT DEVELOPMENT

Multimodal concept plans were developed for each of the 12 interchange areas to address the identified deficiencies. Two sets of concepts were developed for each interchange area:

- a. **Long-term concepts** that focus on addressing all identified multimodal needs, meeting design standards, and in many cases involving significant infrastructure investment.
- b. **Near-term concepts** that focus on addressing pedestrian, bicycle, and some public transit vehicle needs, but without significant infrastructure investments as compared to the long-term concepts.

Near-term concepts were generally “designed” to transition into long-term plans, (i.e., be phaseable). Some near-term concepts may require minor design exceptions and not remedy all existing nonstandard conditions, whereas long-term concepts would strive to meet all design standards. In some cases, the most optimal active transportation enhancements would require long-term investments, (e.g., a new crossing structure over Highway 101).

All concept plans were developed to be representative of potential solutions. Actual measures to be implemented may be revised or modified during future project development. Concept plans for each interchange are included in [Appendix B](#).

GOALS AND OBJECTIVES

The interchange and approaching roadway concepts were evaluated against goals and objectives that were adopted by the TAM Executive Committee and Board in July 2020 (see [Appendix A](#) for the staff memorandum). The goals and objectives originated from the 2017 Strategic Vision Plan, 2018 Measure AA Expenditure Plan, recent Highway 101 corridor planning documents, and numerous local, regional, and statewide sources. They are intended to be aligned with the larger planning context to guide development of the Highway 101 interchanges program as a whole and of the proposed interchange improvement concepts themselves. They are also intended to be aligned with the guiding principles outlined in the 2021 Transportation Sales Tax Strategic Plan.

The goals and objectives are as follows:

1. Enhance Health and Safety
2. Relieve Local Traffic Congestion
3. Improve Multimodal Access to/from and across Highway 101
4. Promote Economic Vitality
5. Implementability

EVALUATION METHODOLOGY

For each goal and objective, a series of evaluation criteria were developed to determine how well a particular interchange improvement concept would perform against alternative concepts at that same location and against the other interchange locations. The comparative performance of near- and long-term concepts were also evaluated in this manner. The evaluation criteria were supported by various planning level performance measures that could be used to qualitatively assess proposed improvements against the established goals and objectives. The evaluation methodology was accepted by the TAM Executive Committee in July 2021 (see [Appendix C](#) for the staff memorandum). The evaluation criteria and performance measures were reviewed and accepted by the Marin Public Works Association in January 2022 and the TAM Administration, Projects and Planning (AP&P) Executive Committee and Board in February 2022 (see [Appendix D](#) for the staff memorandum). A summary of responses to comments on the evaluation methodology and disposition is in [Appendix E](#).

Goal 1: Enhance Health and Safety²

- **Evaluation Criterion 1: Improves safety for all modes.**
 - *Performance Measure:* Removes and/or improves nonstandard conditions.
Scoring: Higher scoring for concepts that would remedy nonstandard design features or other features that contribute to potentially unsafe conditions; based on the percentage of mandatory nonstandard conditions removed.
 - *Performance Measure:* Provides separation of transportation modes.
Scoring: Higher scoring for improvements that propose separated pedestrian/bicyclist infrastructure that improve access to transit and the surrounding area.
- **Evaluation Criterion 2: Enhances emergency response and evacuation.**
 - *Performance Measure:* Population in the area served by the interchange.
Scoring: Higher scoring for higher average daily traffic (ADT) on the arterial crossing Highway 101.
 - *Performance Measure:* Availability of alternative routes to Highway 101.
Scoring: Higher scoring for interchanges that have few alternative egress routes.
- **Evaluation Criterion 3: Promotes active transportation³.**

² The "Getting Around Marin" online survey identified safety as a priority after travel time and flexibility (TAM Strategic Vision Plan, Figure 16 page 47). Factors that rated lower than safety included cost, comfort, and environment. This is also consistent with goals listed in MTC Plan Bay Area 2040 (Table 2.1 page 27) and is listed in the Caltrans US 101 North Comprehensive Corridor Plan.

³ A guiding principle of the TAM Strategic Vision Plan was promoting a healthy environment and health population (Figure 1, page 14). The walking/biking network was identified as a means to support public health (page 37) by encouraging exercise.

Scoring: Higher scoring for concepts that provide the most improvement in connectivity for transit users, bicyclists, and pedestrians.

Goal 4: Promote Economic Vitality⁶

- **Evaluation Criterion 1: Accommodates future land use changes and growth.**
 - *Performance Measure:* Assessment of future operating conditions with forecasted growth.

Scoring: Higher scoring for improvements that accommodate future anticipated growth with multimodal solutions⁷.
- **Evaluation Criterion 2: Reduces transportation costs.**
 - *Performance Measure:* Reduction in delay⁸.

Scoring: Higher scoring for improvements with greater reduction in vehicle hours of delay (VHD) (PM peak) * value of time.
- **Evaluation Criterion 3: Promotes social equity.**
 - *Performance Measure:* Benefits Environmental Justice (EJ) communities.

Scoring: Higher scoring for relative incidence by interchange.

Goal 5: Implementability

- **Evaluation Criterion 1: Attractiveness to funding sources.**
 - *Performance Measure:* Funding criteria/potential.

Scoring: Higher scoring for projects that meet funding criteria⁹ or could be substantially funded by multiple sources.
- **Evaluation Criterion 2: Ease of regulatory approval.**
 - *Performance Measure:* Project can obtain the necessary approvals.

Scoring: Higher scoring projects with limited right-of-way and/or permitting needs.

A summary of the proposed goals and evaluation criteria is included in **Table 1**.

Table 1: Goals and Evaluation Methodology

⁶ Consistent with the goals of the Caltrans US 101 North Comprehensive Corridor Plan.

⁷ Table 10 (page 39) lists major development projects in the near-term (TAM Strategic Vision Plan).

⁸ US 101 is identified as a major goods movement corridor (MTC San Francisco Bay Area Goods Movement Plan). This highway also connects agriculture shippers with markets in the Bay Area. Highway reliability is a key to movement of goods (Table 4.1, page 27).

⁹For example, improvements that reduce traffic congestion, improve pedestrian/bicycle infrastructure, remove barriers to mobility, and expand transit services meet criteria established for eligibility under many federal, State and regional funding programs, including several categories of Marin County Measure AA funding (TAM 2021 CMP Update, Final Draft).

Goals & Objectives	Evaluation Criteria	Performance Measures
1. Enhance Health and Safety	Improves safety for all modes	Removes/improves nonstandard conditions
		Provides separation of active transportation modes
	Enhances emergency response and evacuation	Population served by interchange
		Availability of alternative routes to Highway 101
	Promotes active transportation	Improved pedestrian connectivity/ADA compliance
		Improved bicycle infrastructure and gap closure; level of comfort
2. Relieve Local Traffic Congestion	Alleviates congestion and improves traffic flow for current and future traffic	Vehicle hours of delay
3. Improve Multimodal Access to/from and across Highway 101	Enhances connectivity and removes access barriers	Improved connectivity for transit
		Improved intermodal pedestrian connectivity and ADA access
		Improved bicycle infrastructure and gap closure; level of comfort
4. Promote Economic Vitality	Accommodates future land use changes and growth	Assessment of future operating conditions with forecasted growth
	Reduces transportation costs	Cost of delay
	Promotes social equity	Benefits EJ communities
5. Implementability	Attractiveness to funding sources	Funding criteria/potential (removes barriers, improves safety, leveragability)
	Ease of regulatory approval	Ability to gain project approvals
	Benefit to costs	Delivers high benefit for project cost

SCORING AND WEIGHTING

Each performance measure could score within the range of 1 to 5. As there are a differing number of performance measures under each evaluation criteria and/or each Goal and Objective, the score was averaged across each performance measure to provide a single score for the overall goal category.

The scoring reflects the relative benefit provided under each measure, as follows:

- 5 – High
- 4 – Med/High
- 3 – Med
- 2 – Low/Med
- 1 – Low

A weighting factor was then applied to the goal category that provided a weighting rank as a percentage that would total 100%. The weighting factor was determined in consultation with the TAM Executive Committee, and it reflects the relative importance of each goal to the Executive Committee, as shown in **Table 2**.

Table 2: Weighting

Goal	Weight
1. Enhance Health and Safety	23%
2. Relieve Local Traffic Congestion	22%
3. Improve Multimodal Access to/from and across Highway 101	20%
4. Promote Economic Vitality	15%
5. Implementability	20%
Total	100%

The resulting scores are shown on the following chart, along with the estimated implementation costs (in 2021 dollars).

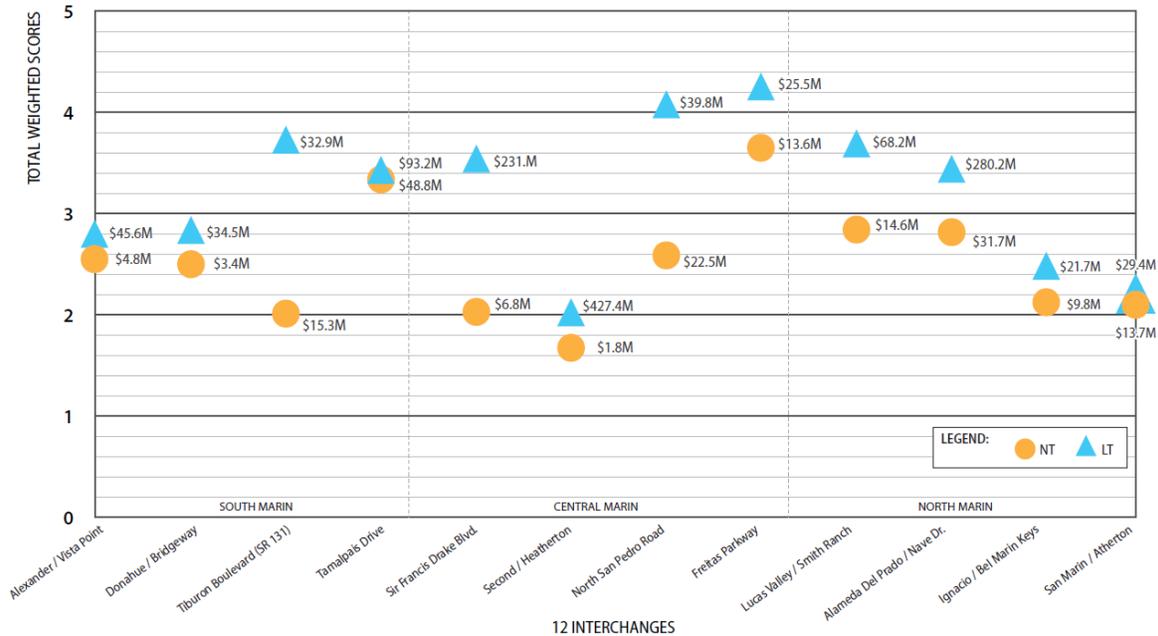


Figure 2: Total Weight Scores and Costs Graph

Figure 2 shows the 12 study interchanges on the Y-axis and a total weighted score range from 0 to 5 on the Y-axis. The blue triangles represent the long-term concepts, and the orange circles represent the near-term concepts. Each of the near- and long-term concepts have a cost to the right or above the symbol.

Sensitivity Tests

Separate “sensitivity test” evaluations were requested and conducted to see how different priorities could change the overall scores for each near- and long-term interchange concept. These included reducing the weighting that supported relief of local traffic congestion and increasing the weighting that supported equity parameters.

When focusing on **active transportation and transit**, most long-term concepts with current or expected traffic congestion issues scored slightly lower than under their original scores, while those without congestion concerns scored slightly higher. The exception to this is when a long-term concept could enable provision of a strong active transportation or transit improvement that would not be possible without the higher level of investment, for example at:

- Alexander Avenue/Vista Point
- Donahue Street/North Bridge Boulevard/Bridgeway
- Ignacio Boulevard/Bel Marin Keys Boulevard/Nave Drive
- San Marin Drive/Atherton Avenue

Most near-term concepts scored slightly higher than original scores and when prioritizing **equity**, the near- and long-term concepts generally scored similarly to the original scores. This finding validates that the original goal weights incorporated equity as a key consideration.

Overall, the sensitivity testing corroborated the original scoring results, (i.e., the general ranking of each interchange in comparison to other interchanges remained consistent).

The full evaluation scoring tables and graphs for the base evaluation and sensitivity testing are included in [Appendix F](#)

EVALUATION FINDINGS

The evaluation findings for long-term concepts are as follows:

- Long-term concepts generally score higher than near-term concepts, especially at interchange locations that experience or are expected to see traffic congestion issues
- Two long-term concepts rise to the top for each Marin region:
 - *South*: Blithedale Avenue/Tiburon Boulevard and Tamalpais Drive/Paradise Drive
 - *Central*: North San Pedro Road/Merrydale Road and Manuel T. Freitas Parkway/Civic Center Drive
 - *North*: Lucas Valley Road/Smith Ranch Road and Alameda del Prado/Nave Drive
- Total cost of improving all 12 long-term concepts is \$1.33 billion (2021 dollars)
 - Seven long-term concepts cost less than \$50 million
 - Lucas Valley Road/Smith Ranch Road = \$68 million, Tamalpais Drive/Paradise Drive = \$93 million, Alameda del Prado/Nave Drive = \$280 million

The evaluation findings for near-term concepts are as follows:

- Several near-term concepts have substantially lower costs than their long-term counterparts, but they score almost as high since congestion is not as significant an issue at these locations compared to other factors.
- Total cost of all 12 near-term concepts is \$182 million (2021 dollars).
- Interchanges with compatible near-term and long-term scores, but with near-term costs at least 50% less (by near-term rank) are:
 - Alameda del Prado/Nave Drive
 - Alexander Avenue/Vista Point
 - Donahue Street/North Bridge Boulevard/Bridgeway
 - Ignacio Boulevard/Bel Marin Keys Boulevard/Nave Drive
 - San Marin Drive/Atherton Avenue
 - Second Street/Hetherton Street

Funding Outlook

The Highway 101 Interchange and Approaching Roadway Study is funded through Measure AA. The funding will be used to leverage regional, State, and federal funds for a program of improvements that will be determined through the TAM Board in coordination with Caltrans, local jurisdictional, and other stakeholders.

Regional and State transportation funding opportunities increased with passage of the Bay Area's Regional Measure 3 in June 2018, and California's Senate Bill 1 (SB1) in 2017. Federal funding is anticipated to play a larger role with recent passage of the Infrastructure Investment and Jobs Act (IIJA) on November 15, 2021. In addition, the Highway 101 interchange improvement projects are anticipated to be competitive to a number of grant programs that promote regional and State goals for sustainability and equity, access and mobility, congestion management, clean air, and climate action, such as the Active Transportation Program (ATP), the Transportation Fund for Clean Air (TFCA), and the Climate Action Plan for Transportation Infrastructure (CAPTI).

The following section provides an overview of the various funding programs that may support the Highway 101 interchange improvements program. A more comprehensive listing of potential funding sources is included in [Appendix G](#).

FUNDING PROGRAMS

Local and Regional Programs

- The 2018 **Measure AA** Expenditure Plan allocates 3% of sales tax revenues under Implementation Category 1.3 to improve Highway 101 local interchanges and freeway access routes to reduce congestion, improve local traffic flow, and address flooding impacts throughout the county. According to the original Transportation Sales Tax Strategic Plan, it is expected to generate \$24.8 million within the measure's 30-year lifespan. Other potential sources of funding within the measure that may support elements of the Highway 101 interchange improvements program include several categories under Category 2: Maintain, Improve, and Manage Marin's Local Transportation Infrastructure, and under Category 3: Reduce School-Related Congestion and Provide Safer Access to Schools.
- The **One Bay Area Grant (OBAG)** program, created by MTC to establish policies and programming of federal surface transportation funds. Partly administered by TAM, these funds are required to be dedicated to areas that support OBAG goals. ,
- The **Lifeline Transportation Program** has historically been funded by a combination of federal and State operating and capital funding sources that support projects that

address mobility and accessibility needs in low-income communities throughout the region.

- The **Transportation Fund for Clean Air (TFCA)** revenues are collected from a \$4 surcharge fee on vehicles registered in the Bay Area that generates about \$22 million each year in the Bay Area to fund projects that reduce motor vehicle emissions within the Bay Area Air Quality Management District (BAAQMD). TAM serves as the county program manager for Marin County.
- **Traffic Impact/Mitigation Fees** are collected by some jurisdictions to compensate for impacts of new traffic generated by development projects within their respective communities, typically based on the basis of new trips generated.

State Programs

The following state sources provide funding to a variety of capital improvement projects, including highway, transit, local roadway, and bicycle/pedestrian projects. Marin County has relied on state funding for the development of highway improvement projects. State sources also include a variety of grant programs, such as the Cap-and-Trade Program with programs benefiting housing, GHG reduction, and equity policy goals.

- **California State Transportation Improvement Program (STIP)** – The STIP is a multi-year capital improvement program of transportation projects on and off the state highway system that are funded with revenues from the State Highway Account and other funding sources. The STIP is composed of two sub-elements: 75% of the STIP funds go toward the Regional Transportation Improvement Program (RTIP) and 25% go to the Interregional Transportation Improvement Program (ITIP). TAM adopts and forwards a program of RTIP projects to MTC for each STIP cycle. Due to advance programming several years ago, TAM does not expect to have STIP funds available for capital projects for several more cycles. As the Regional Transportation Planning Agency for the nine-county Bay Area, MTC is responsible for developing the regional priorities for the RTIP. MTC approves the region’s RTIP and submits it to the California Transportation Commission (CTC) for inclusion in the STIP. Caltrans is responsible for developing the ITIP.
- **Highway Safety Improvement Program (HSIP)** – The purpose of the HSIP program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal land. California’s share of HSIP funds is split between the State HSIP for State highways and the local HSIP for local roads.
- **State Highway Operations and Protection Program (SHOPP)** – The SHOPP is a four-year document of projects limited to capital improvements relative to the maintenance, safety, operation, and rehabilitation of the state highway system that do not add new capacity to the system. The 2022 SHOPP will implement \$17.9 billion in projects over the next four years.

- **Active Transportation Program (ATP)** –The ATP consolidates existing federal and State transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SRTS), into a single program with a focus to make California a national leader in active transportation. ATP funding cycles cover four fiscal years and are programmed every other year in the odd years. ATP funding encourages increased use of active modes of transportation by funding bicycle and pedestrian projects that will lead to improved connections between local and regional roads, public transit, and passenger rail. ATP funds are primarily distributed to two programs – State and regional programs. The State program is administered by CTC and the Regional Program is administered in the Bay Area by MTC.
- **Senate Bill 1 (SB1)** – The Roadway Repair and Accountability Act of 2017 was signed into law on April 28, 2017, by Governor Brown. SB1 invests \$5.2 billion annually over the next decade to fix California’s transportation system, and it does not sunset. \$26 billion will go to local roads (including Marin County), and \$26 billion will go towards the state highway system. SB1 funds a number of programs aimed at highway, bridge and culvert repairs, and congestion reduction through comprehensive multimodal approaches. SB1 has a number of funding programs relevant to the program:
 - **Solutions for Congested Corridors Program (SCCP)** provides funding to achieve a balanced set of transportation, environmental, and community access improvements to reduce congestion throughout the State. This statewide, competitive program makes \$250 million available annually for projects that implement specific transportation performance improvements, and that are part of a comprehensive corridor plan by providing more transportation choices while preserving the character of local communities and creating opportunities for neighborhood enhancement.
 - The **SB1 Local Streets and Roads Program (LSRP)** dedicates approximately \$1.5 billion annually for cities and counties to use on projects, such as road maintenance, safety enhancements, and complete streets.
 - The **SB1 Local Partnership Program** provides local and regional transportation agencies that have passed sales tax measures, developer fees, or other imposed transportation fees with a continuous appropriation of \$200 million annually to fund road maintenance and rehabilitation, sound walls, and other transportation improvement projects.

In addition, SB1 augmented funding for three existing funding programs:

- **SB1 ATP** will make \$100 million available annually over the next 10 years.
- **SHOPP** - The additional SB 1 SHOPP investment is estimated to provide approximately \$1.5 billion annually to improve the condition of the state highway system, and \$400 million annually for bridges and culverts.

- **STIP** - The STIP is the biennial five-year plan adopted by the CTC for future allocations of certain State transportation funds for state highway improvements, intercity rail, and regional highway and transit improvements. State law requires the CTC to update the STIP biennially, in even numbered years, with each new STIP adding two new years to prior programming commitments. SB 1 stabilizes funding for the **STIP**.

Federal Funding Sources

The IIJA, signed into law by President Biden on November 15, 2021, provides approximately \$350 billion for federal highway programs over a five-year period (fiscal years 2022 through 2026). Most of this funding is apportioned (distributed) to states based on formulas specified in federal law; however, it also provides funding through a wide range of competitive grant programs. Programs include congestion relief, healthy streets, resiliency, bridge investment, and safe streets.

- **Rebuilding American Infrastructure with Sustainability and Equity (RAISE)**, formerly called BUILD and TIGER under previous administrations, gets a modest increase to \$1.5 billion per year (\$7.5 billion over five years). The discretionary grants can be used for a wide variety of projects awarded on the basis of merit under statutory criteria, including safety, environmental sustainability, quality of life, economic competitiveness and opportunity, state of good repair, mobility and community connectivity, and partnership and innovation.
- **Infrastructure for Rebuilding America (INFRA) Grant Program** provides \$10.9 billion over 5 years for competitive grants, including highway or bridge projects to add capacity or improve mobility, intermodal or freight projects, and rail-highway grade crossing separations.
- **Safe Streets and Roads for All Grant Program (SS4A)** provides \$5 billion in competitive grants to support local initiatives to prevent death and serious injury on roads and streets, commonly referred to as “Vision Zero” or “Toward Zero Deaths” initiatives.
- **Innovative Technology to Enhance Arterials (IDEA)** funds help agencies improve the operation of major arterial roadways and make these streets better prepared for connected and automated vehicle technologies. The program's main goals are to reduce travel times and improve travel-time reliability on major arterials; improve safety for drivers, transit riders, bicyclists, and pedestrians; reduce vehicle emissions and fuel consumption; and advance public agencies' proficiency in the use of advanced technologies for arterial operations.
- **Reconnecting Communities Pilot (RCP)** is a new \$1 billion 5-year discretionary grant program that supports planning, capital construction, and technical assistance to restore community connectivity through the removal, retrofit, mitigation or replacement of eligible transportation infrastructure that creates barriers to mobility, access, or economic development.

Agency and Public Outreach

To help inform and support the project goals and objectives and to guide the development of conceptual improvements, the project team conducted several rounds of meetings with Caltrans, jurisdictional agencies along the project corridor, and transit agencies. TAM also conducted an online survey soliciting input from Marin County residents and travelers.

AGENCY OUTREACH

The project team met with the representatives from the Public Works and Planning departments of the jurisdictions along the project corridor, Marin Transit, and the Golden Gate Bridge, Highway and Transportation District (GGBHTD) to advise them of the project. The team solicited input from them to inform the concept development and to gain concurrence on the goals and objectives, evaluation methodology, and recommendations for project prioritization. A number of meetings were held at particular milestones for the project to keep the agencies abreast on project development:

- Project introduction to agency stakeholders, December 2020
- Concept development meeting with agency stakeholders, April-June 2021
- Presentation of near- and long-term concepts to agency stakeholders, August-September 2021
- Presentation of evaluation results to agency stakeholders, May 2022

The project team also held meetings with Caltrans District 4 Advance Planning representatives to inform them of the project status and to solicit input as needed. A total of four meetings were held in June 2020, June 2021, December 2021, and June 2022.

The project team also presented the project's Evaluation Methodology to the MPWA to solicit its input on the evaluation process.

TAM COMMITTEE AND BOARD ENGAGEMENT

In addition to meeting with representatives from local jurisdictions, the project team provided briefings to the TAM AP&P Executive Committee, and Board for selection of the 12th interchange, to establish the project goals and objectives for evaluation purposes, and to confirm the evaluation and scoring methodology. A total of four presentations were made to the AP&P Executive Committee, and a fifth presentation is planned to seek input on the study recommendations for program implementation in this report.

PUBLIC OUTREACH

An online survey was conducted between March 17 and April 16, 2021, to solicit input from Marin County residents and travelers on the project study interchange locations. The survey was conducted in both English and Spanish, and it solicited public input on how they travel through the specific interchange, travel purpose, and priorities for selected improvements to the interchange. More than 2,750 people responded to the survey. The feedback received informed the team on community values and preferences, and it provided valuable information on modes of travel, purpose, observed deficiencies, and priorities for improvement.

The study findings will be reported back to the public through expanded project content on the TAM website, including a report on the survey results; links to the Existing Conditions, Constraints, and Opportunities Reports developed under this study; and conceptual improvement plans for each of the 12 interchanges. Opportunity for further feedback will be provided through the website, with comments saved for possible future phases of project development.

The project website can be found at the following link: <https://www.tam.ca.gov/101study/>.

Implementation

PROJECT DEVELOPMENT PROCESS

All projects on the state highway system follow the Caltrans project development process as outlined in the Project Development Procedures Manual, and they require coordination with the Caltrans Systems Planning and Advance Planning groups, local jurisdictions, MTC, and CTC. MTC is the transportation planning, financing, and coordinating agency for the nine-county San Francisco Bay Area, and CTC is responsible for programming and allocating funds for the construction of highway, passenger rail, transit, and active transportation improvements throughout California. This coordination effort ensures there is consensus on the proposed improvement projects that are adopted into the financially constrained Regional Transportation Plan, and that they are compatible with regional and statewide goals and objectives for mobility and connectivity.

Project development involves the following:

Planning: The Existing Conditions, Constraints, and Opportunities Reports prepared under this study serve as feasibility studies to define the planning concepts and scope of the proposed improvement. Namely, they identify and clarify the specific transportation system problem, establish goals and objectives, and look for practical solutions.

Project Initiation: The next step is preparation of a Project Initiation Document (PID), which is used to obtain approval for inclusion of a project into a programming document or to get conceptual approval of a project-funded-by-others (i.e., projects that are sponsored by a local agency and do not use any State or federal funds).

The PID, typically a Project Study Report-Project Development Support (PSR-PDS), establishes a well-defined purpose and need statement, proposed project scope and schedule, and estimated support costs and resources necessary to advance the project to the Project Approval and Environmental Document (PA&ED) phase. However, the level of engineering detail and effort for developing a PSR-PDS is limited to the effort needed to develop the work plan for the PA&ED phase and to develop a “ballpark” estimate of the construction cost. A full PSR provides conceptual approval and is used to program all support, right of way acquisition, and construction costs. For projects to be programmed into the STIP, a project programming request (PPR), as described in the STIP Guidelines, must be included as an attachment to the PID. An approved PID is required for any major work on the state highway system regardless of how it is funded.

Project Approval and Environmental Document: When an environmental document is prepared for a project, it is a key project approval document. The environmental document is prepared to assure that the project complies with State and federal environmental laws. All project activities, such as the development of project alternatives, public input, and

selection of the preferred alternative, are discussed in the final environmental document. Projects with draft environmental documents require the preparation of a draft project report (DPR) prior to finalizing the project report (PR). The DPR documents the need for the transportation project and summarizes the studies of the cost, scope, and overall impact of project alternatives so that an informed decision can be made on whether or not to proceed to the public hearing phase of project development. After a public hearing and the selection of a preferred alternative, the DPR is updated to become the PR.

When a project is statutorily or categorically exempt under the California Environmental Quality Act of 1970 (CEQA) and categorically excluded under the National Environmental Policy Act of 1969 (NEPA), there is no environmental document so all information must be provided in the PR.

The PR documents approval by Caltrans for most types of state highway projects. This includes new facilities, as well as improvements, modifications, or repairs to existing facilities — whether done by Caltrans or by others under an encroachment permit.

When a PSR-PDS is used to initiate the project, a PR will be used to program the remaining support, right of way, and construction costs.

Project Design: Once the preferred alternative has been chosen and the project has been approved, project design (preparation of plans, specifications, and estimate [PS&E]) can be initiated. Typical steps involve 35%, 65%, 95%, draft 100%, and final PS&E with reviews by Caltrans District and Headquarters Division of Engineering Services. An environmental reevaluation should be conducted to confirm the project design is within the framework of the project approval document, which includes the environmental document.

Prepare and Advertise Project Contract: At the completion of design work, some additional details need to be completed prior to advertising the contract. Right of way certification and a CTC funds request approval must be obtained. The final project documents and bid package are then assembled to prepare the project for advertising.

Conduct and Complete Construction Project: Contract approval authorizes construction of the project. The project is constructed, and the contract is administered according to the PS&E that was developed by the project engineer. The resident engineer for the project prepares the final construction project records when the project is complete, including any design changes during construction. The final contract estimate, project history file, and the as-built plans for the project are completed before the project is complete.

A cooperative agreement with Caltrans is required if the phase, will involve the exchange of funds, effort, or materials between Caltrans and another public entity for each phase of the project development process.

An outline of the project development process and levels of environmental review is included in [Appendix H](#).

PROJECT DELIVERY

Identified improvement projects may be sponsored by Caltrans, TAM, or the local jurisdictions. It is anticipated that TAM will sponsor up to three PIDs under the Highway 101 Interchange program. They may also sponsor local projects that can be implemented under the DEER or EPOP processes, as described above, once environmental clearance is obtained.

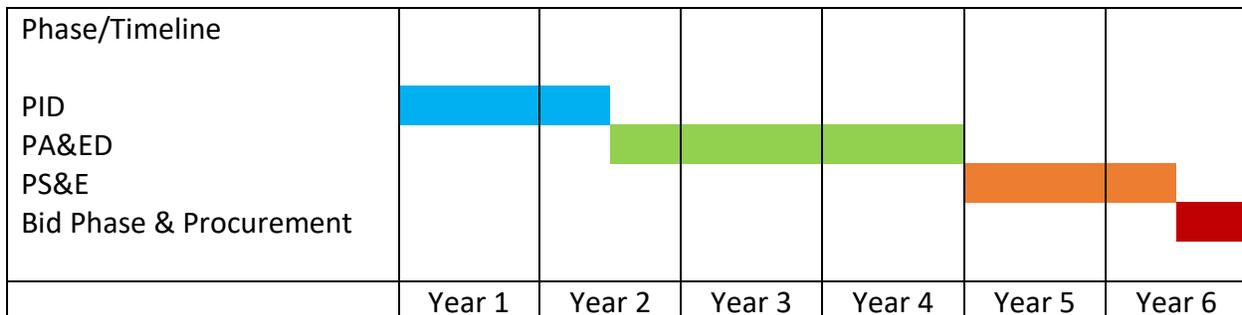
Other improvement projects or project elements that remain outside of State right of way could be completed by the local jurisdictions as standalone projects without entailing Caltrans project development processes or as phased implementation of a larger sequence of improvements, as funding availability permits.

Additionally, elements of the project could be incorporated into ongoing projects or new projects sponsored by Caltrans.

A list of potential local projects is included in [Appendix I](#). The current TAM 3-year PID listing is included as [Appendix J](#).

TIMELINE

The following chart provides a representative timeline for project development of a comprehensive improvement project that is going through the Caltrans project development process.

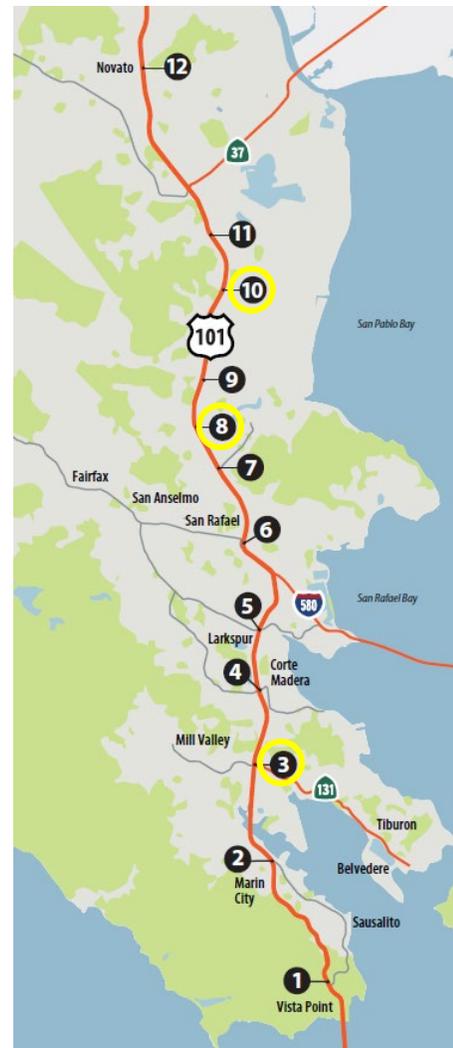


Study Recommendations

The estimated cost of implementing all 12 long-term interchange plans is \$1.33 billion (2021 dollars). This level cannot be met under foreseeable funding levels. An acceptable implementation strategy needs to reasonably consider limited funding that may be available over time as well as immediate needs against long-term issues and locations where development fees may support improvements. It should also consider geographic equity. Also, project implementation must align with funding plans and priorities (such as the Climate Action Plan for Transportation Infrastructure).

The evaluation process identified three interchange areas that should be pursued for comprehensive multimodal enhancements. The following three interchange areas were recommended for project planning, which is consistent with Caltrans' PID procedures:

- East Blithedale Avenue/Tiburon Boulevard (Highway 131) - #3
 - Highest scoring long-term concept in Southern Marin, including with equity focus
 - Addresses multimodal needs
 - Serves as gateway to several municipalities (Mill Valley, Strawberry, Tiburon, and Belvedere)
 - Modest long-term total cost of \$32.9 million; can potentially be phased
- Manuel T. Freitas Parkway/Civic Center Drive - #8
 - Highest scoring of all interchanges for near- and long-term concepts
 - Addresses multimodal needs
 - Provides key safety enhancements
 - Modest long-term total cost of \$25.5 million; can be phased
- Alameda del Prado/Nave Drive - #10
 - Near-term concept can retrofit existing facilities with modest new construction to meet goals at a fraction of long-term plan costs
 - Addresses multimodal needs
 - Modest near-term total cost of \$31.7 million; can be phased



TAM's Executive Committee and the Public Works Departments of the participating Marin jurisdictions concur with the above three priority interchanges.

For the remaining nine interchanges, it is recommended that planning and development of refined near-term project components be pursued over time and as practical. Potential enhancements include:

- Alexander Avenue/Vista Point
 - Identified near-term active transportation, transit, and safety projects
 - Coordinate with the Golden Gate Bridge, Highway and Transportation District and the National Park Service
- Donahue Street/North Bridge Boulevard/Bridgeway
 - Identified near-term active transportation, transit, and safety projects, including traffic signal and lighting upgrades
- Tamalpais Drive/Paradise Drive
 - Identified near-term active transportation, transit, and safety projects
 - Coordinate with Caltrans on ongoing project
 - Consider northbound auxiliary lane to Wornum Drive
- Sir Francis Drake Boulevard/Fifer Avenue/Industrial Way
 - Identified near-term active transportation, transit, and safety projects
 - Consider northbound auxiliary lane from Tamalpais Drive
 - Consider future PID and phased implementation
- Second Street/Hetherston Street
 - Potential near-term restriping of southbound on-ramp and mainline Highway 101
 - Long-term project development by Caltrans
- North San Pedro Road/Merrydale Road
 - Identified near-term active transportation, transit, and safety projects
 - Northbound off-ramp modification for buses
- Lucas Valley Road/Smith Ranch Road
 - Identified near-term active transportation, transit, and safety projects
 - Consider future PID in concert with potential development projects
- Ignacio Boulevard/Bel Marin Keys Boulevard/Nave Drive
 - Identified near-term active transportation, transit, and safety projects
 - Relocate bus stops
- San Marin Drive/Atherton Avenue
 - Identified near-term active transportation, transit, and safety projects
 - Roadway lane reallocations and signal upgrades

AGENCY NEXT STEPS

The following steps will need to be taken by TAM and the local jurisdictions/agencies to move projects forward towards implementation:

1. TAM Board to select project(s) to move forward into project development in consultation with agency stakeholders.
2. TAM and the local jurisdiction will coordinate with MTC to have the project included in the current Regional Transportation Plan (RTP).
3. TAM will secure funding for the PID and enter into a Cooperative Agreement with Caltrans for project development.
4. TAM will work with the local jurisdiction and a Project Development Team to prepare the PIDs for Caltrans approval.
5. TAM and the local jurisdiction will seek funding for subsequent phases of the project.

Appendices

- A. Goals and Objectives and Selection of 12th Study Interchange: TAM Board Action July 2020
- B. Interchange Concept Plans
- C. Evaluation Methodology Memo: Administration, Projects & Planning Executive Committee Discussion July 2021
- D. Evaluation Methodology Confirmation: TAM Board Action February 2022
- E. Evaluation Methodology Changes Memo
- F. Evaluation Tables and Graphs
 - a. Evaluation Goal 1 Rubric Summary
 - b. Evaluation Goal 2 Rubric Summary
 - c. Evaluation Goal 3 Rubric Summary
 - d. Evaluation Goal 4 Rubric Summary
 - e. Evaluation Goal 5 Rubric Summary
 - f. Active Transportation and Transit Focus Sensitivity Graph
 - g. Equity-focused Sensitivity Graph
- G. Funding Outlook Table
- H. Project Development and Approval Process
- I. List of Potential Local Projects
- J. Caltrans 3-Year PID List

Appendix A

Goals and Objectives and Selection of 12th Study Interchange: TAM Board Action July 2020

Appendix B

Interchange Concept Plans

Appendix C

Evaluation Methodology Memo: Administration, Projects & Planning Executive Committee Discussion July 2021

Appendix D

Evaluation Methodology Confirmation: TAM Board Action February 2022

Appendix E

Evaluation Methodology Changes Memo

Appendix F

Evaluation Tables and Graphs

- Evaluation Goal 1 Rubric Summary
- Evaluation Goal 2 Rubric Summary
- Evaluation Goal 3 Rubric Summary
- Evaluation Goal 4 Rubric Summary
- Evaluation Goal 5 Rubric Summary
- Active Transportation and Transit Focus Sensitivity Graph
- Equity-focused Sensitivity Graph

Appendix G

Funding Outlook Table

Appendix H

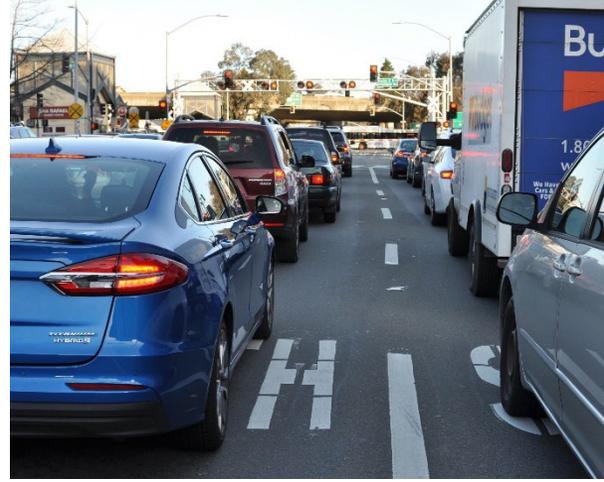
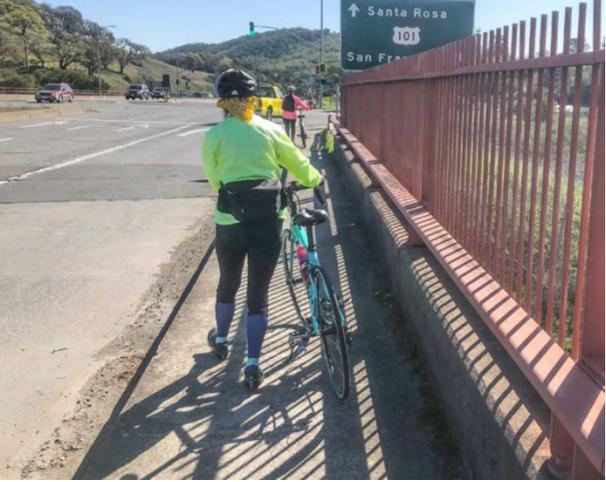
Project Development and Approval Process

Appendix I

List of Potential Local Projects

Appendix J

Caltrans 3-Year PID List



Preparation of Studies for Improvements to Highway 101 Interchanges and Approaching Roadways in Marin County

Concept Evaluation, Preliminary Findings and Implementation Plan

Transportation Authority of Marin

Bill Whitney, Principal Project Delivery Manager

July 11, 2022

Agenda

- Project Status
- Concept Evaluation and Preliminary Recommendations
 - Prioritization and Implementation Approach
 - Draft Implementation Plan
- Public Outreach – Promote Project Website
- Next Steps

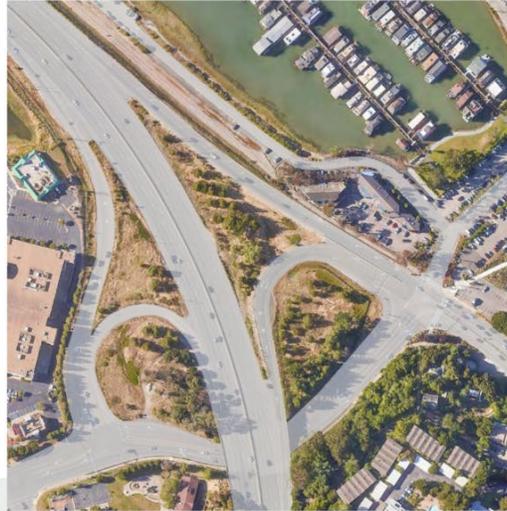
Project Status

- Completed
 - Existing Conditions Assessments
 - Online Survey
 - Opportunities & Concept Development
 - Cost Estimates
 - Existing Conditions, Constraints & Opportunities Memos
 - Evaluation & Prioritization
- Current Activities
 - Prioritization Recommendations & Draft Implementation Plan
 - Public Outreach
- Upcoming Activities
 - Finalize Implementation Plan
 - Develop Scope for Phase 4 – Project Initiation Documents

Existing Conditions, Constraints & Opportunities Reports



HIGHWAY 101 INTERCHANGE & APPROACHING ROADWAY STUDY



Donahue Street/North Bridge Boulevard/Bridgeway

EXISTING CONDITIONS, CONSTRAINTS & OPPORTUNITIES REPORT

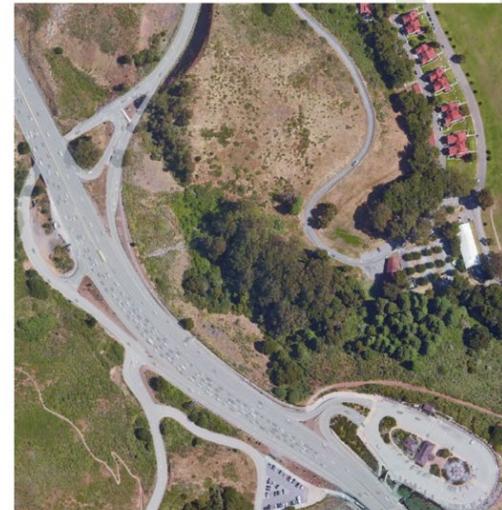


HNTB Parisi

DRAFT



HIGHWAY 101 INTERCHANGE & APPROACHING ROADWAY STUDY



Alexander Avenue/Vista Point

EXISTING CONDITIONS, CONSTRAINTS, & OPPORTUNITIES REPORT



HNTB Parisi

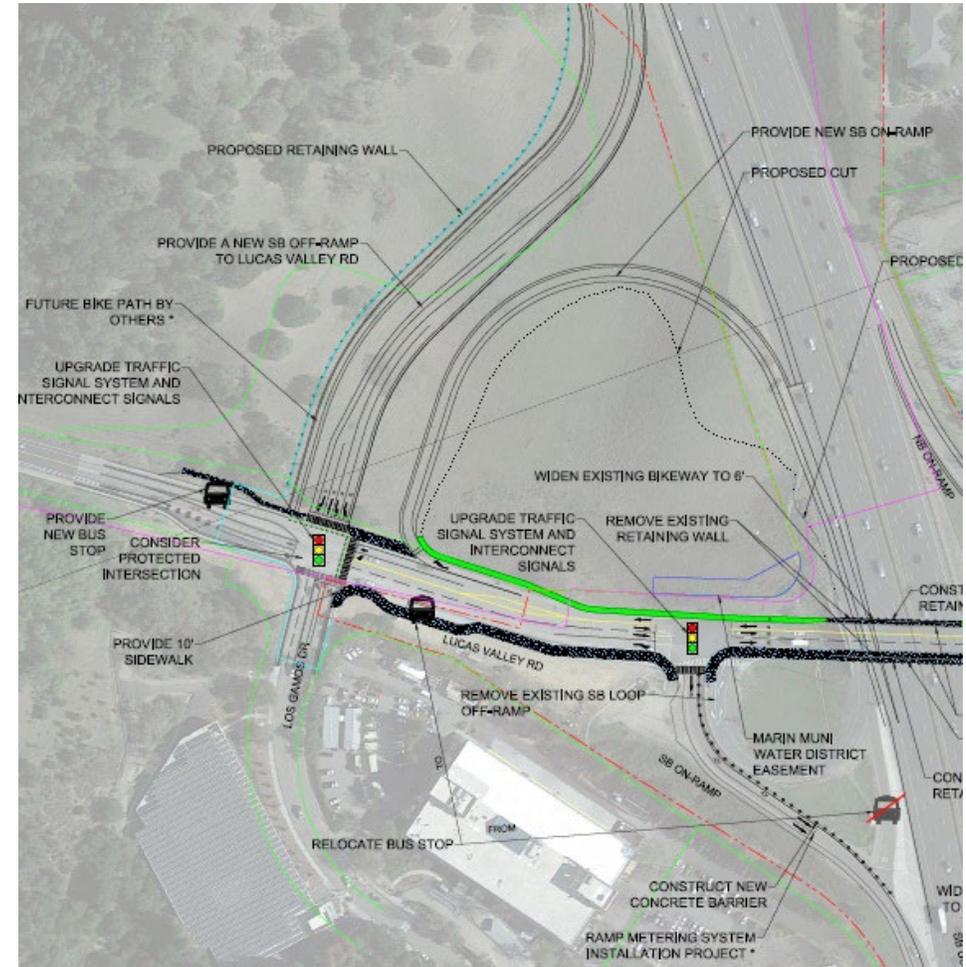
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JUNE 2022

Interchange Concepts Developed to Address Issues

“Long-term” concepts:

- Concept plans are representative of potential long-term measures
- Focus on addressing all identified multimodal needs
- Meet design standards
- Can involve significant infrastructure investment

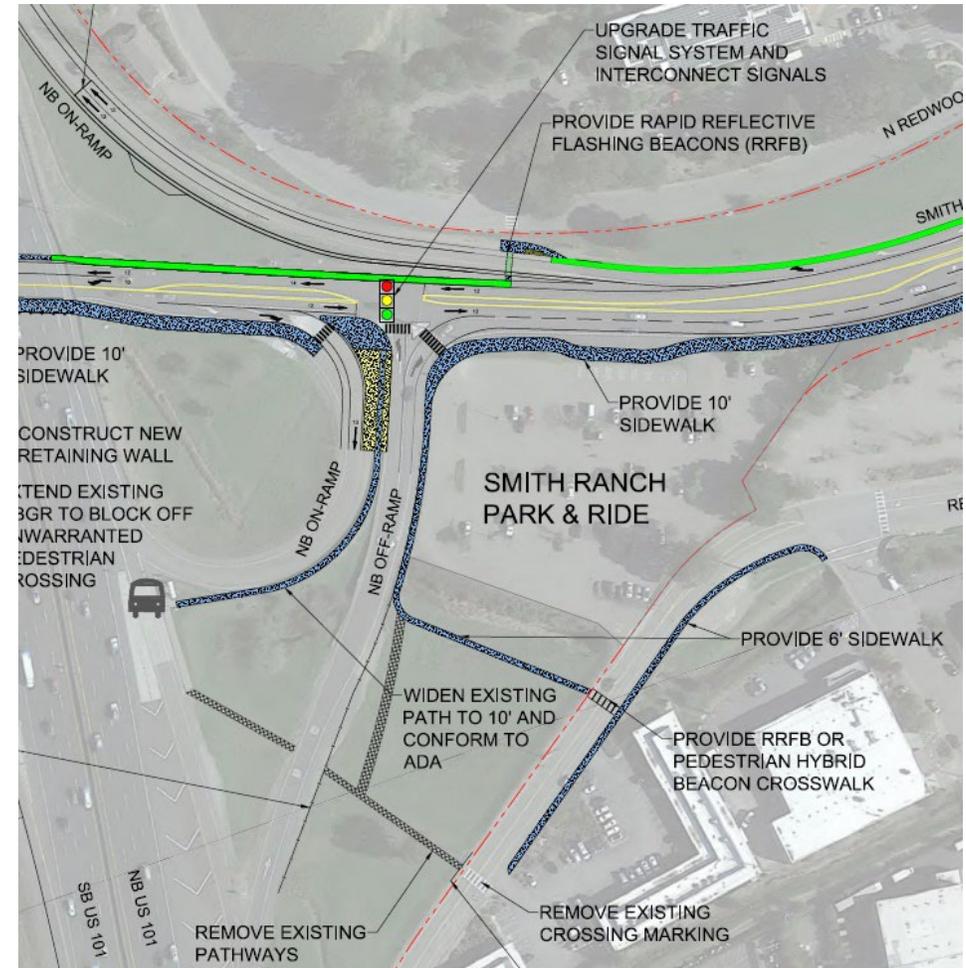


Sample long-term concept: Lucas Valley/Smith Ranch interchange

Interchange Concepts Developed to Address Issues

“Near-term” concepts:

- Concept plans are representative of potential near-term measures
- Focus on addressing pedestrian, bicycle and some transit needs, although some needs would require “long-term” remedies
- May not correct all existing nonstandard conditions
- Designed to transition/phase into long-term plans



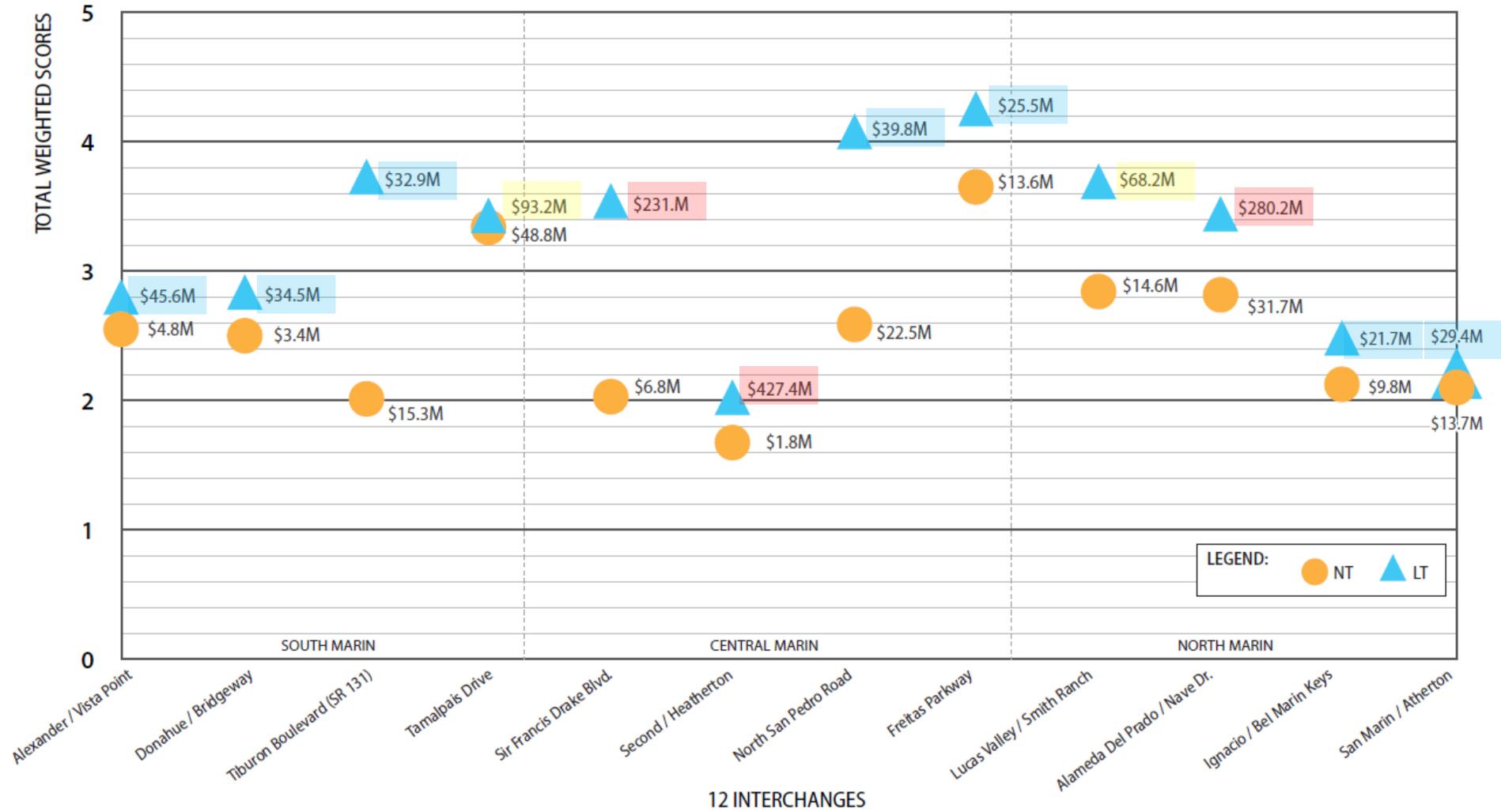
Sample near-term concept: Lucas Valley/Smith Ranch interchange

Concepts Evaluation Based on Weighted Goals

- All interchange concepts evaluated against goals weighted by Executive Committee:
 - Enhance health & safety
 - Relieve local traffic congestion
 - Improve multimodal access to/from & across Highway 101
 - Promote economic vitality
 - Implementability
- Most goals include addressing GHG reduction, VMT reduction and equity measures

Goal	Base Case
Enhance health & safety	23%
Relieve local traffic congestion	22%
Improve multimodal access	20%
Promote economic vitality	15%
Implementability	20%
Total	100%

Total Weighted Scores & Costs

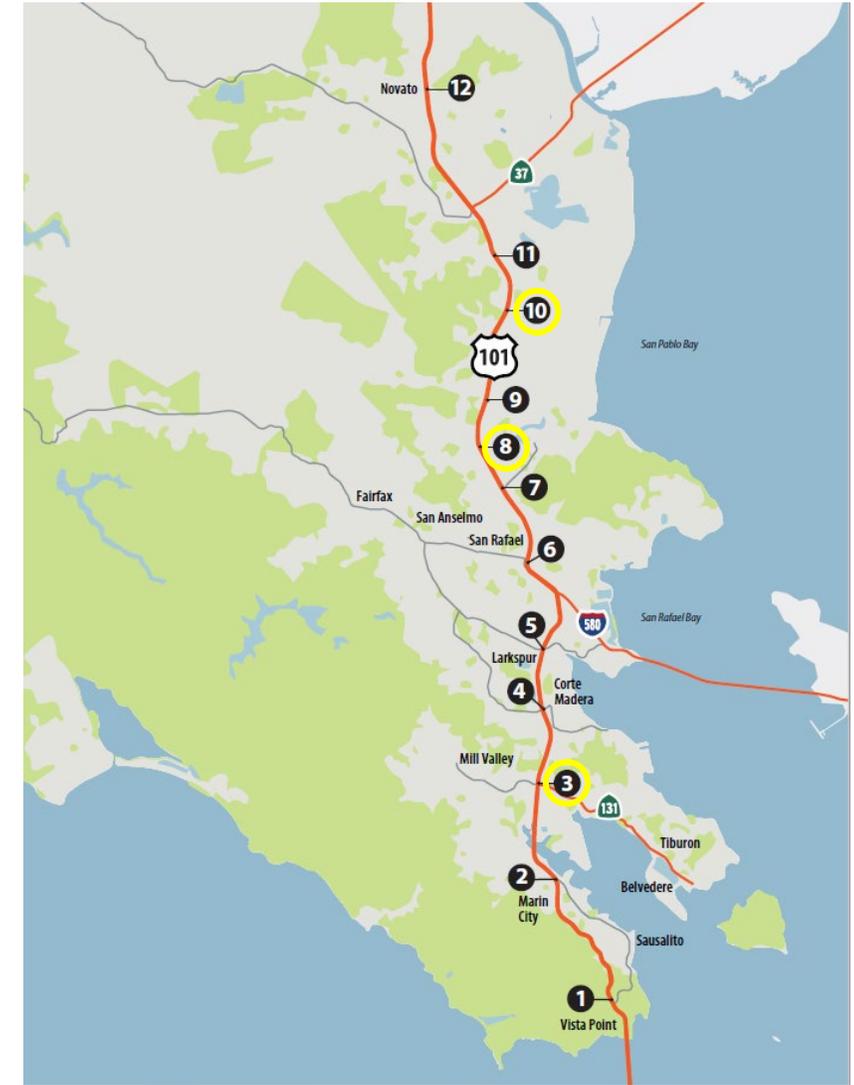


Prioritization & Implementation Approach

- Overall cost of implementing all 12 long-term plans is \$1.33 billion
- This level cannot be met under foreseeable funding levels; implementation strategy needs to reasonably consider limited funding that may be available over time
- Strategy should consider immediate needs against long-term issues, locations where development fees may support improvements, and may consider geographic equity
- Also, align with funding plans and priorities such as the Climate Action Plan for Transportation Infrastructure (CAPTI)
- Strategy to be discussed and refined with jurisdictions

Recommended Prioritization & Implementation Approach

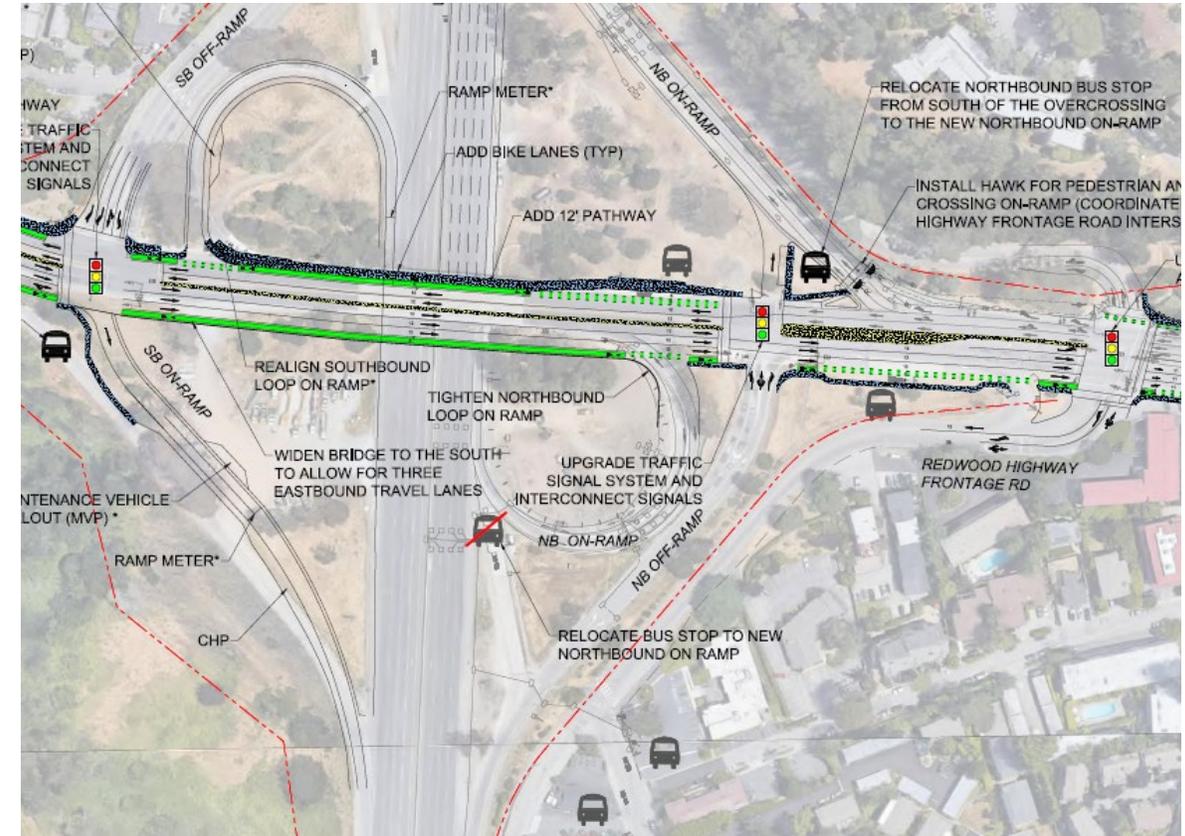
- Prioritize 3 interchanges for planning and phased implementation:
 - Blithedale Ave./Tiburon Blvd. (#3) - LT
 - Freitas Parkway/Civic Center Dr. (#8) - LT
 - Alameda del Prado/Nave Drive (#10) - NT
- Undertake planning and development of refined near-term (NT) projects for 9 interchanges



Recommended Prioritization & Implementation Approach

Blithedale Avenue/Tiburon Blvd.:

- Highest scoring long-term concept in Southern Marin, including with equity focus
- Addresses multimodal needs
- Main interchange serving several municipalities
- Modest long-term total cost of \$32.9 million; can be phased
- Potential for PID development



Long-term concept: E. Blithedale Avenue/Tiburon Boulevard interchange

Recommended Prioritization & Implementation Approach

Freitas Parkway/Civic Center Dr.:

- Highest scoring of all interchanges for long-term and short-term
- Addresses multimodal needs, including key safety enhancements
- Modest long-term total cost of \$25.5 million; can be phased
- Potential for Project Initiation Document (PID) development

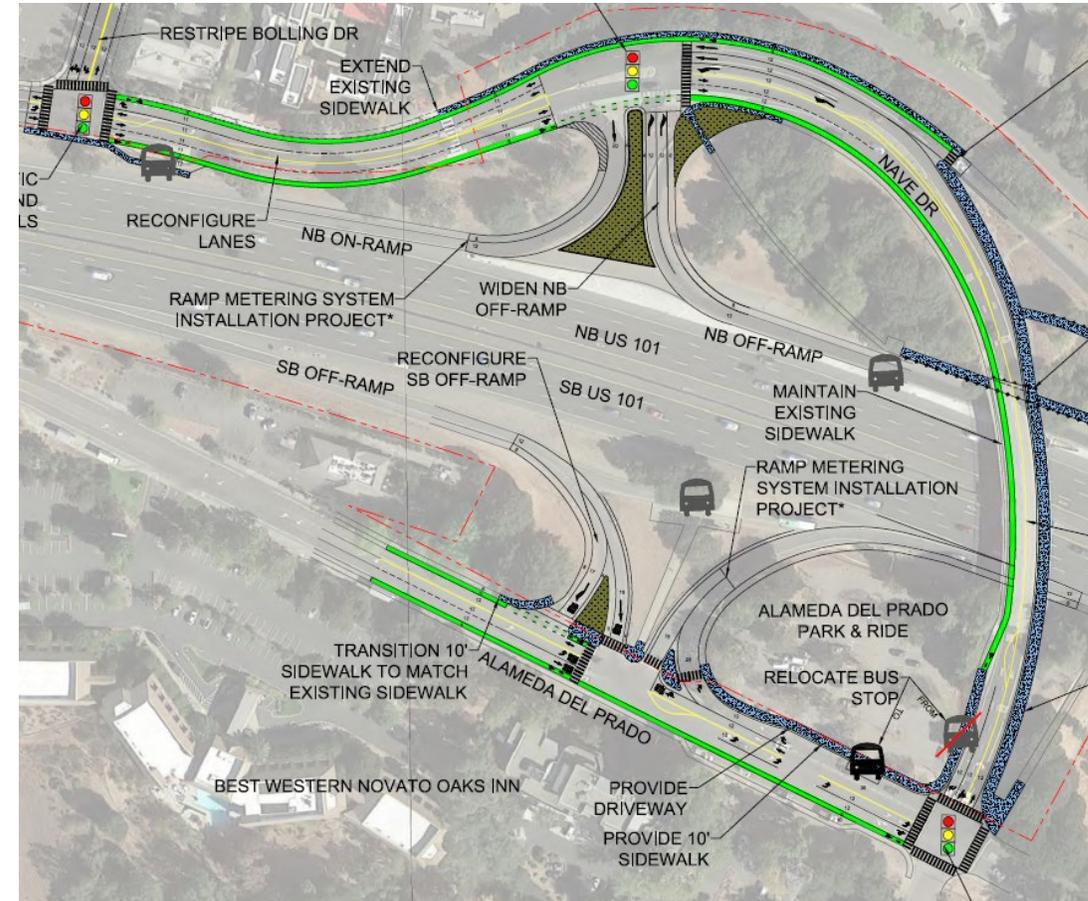


Long-term concept: Manual T. Freitas Parkway/Civic Center Drive interchange

Recommended Prioritization & Implementation Approach

Alameda del Prado/Nave Drive:

- Near-term concept can retrofit existing facilities, with modest new construction, to meet goals at fraction of cost of long-term plan
- Addresses multimodal needs
- Modest near-term total cost of \$31.7 million; can be phased
- Potential for PID development

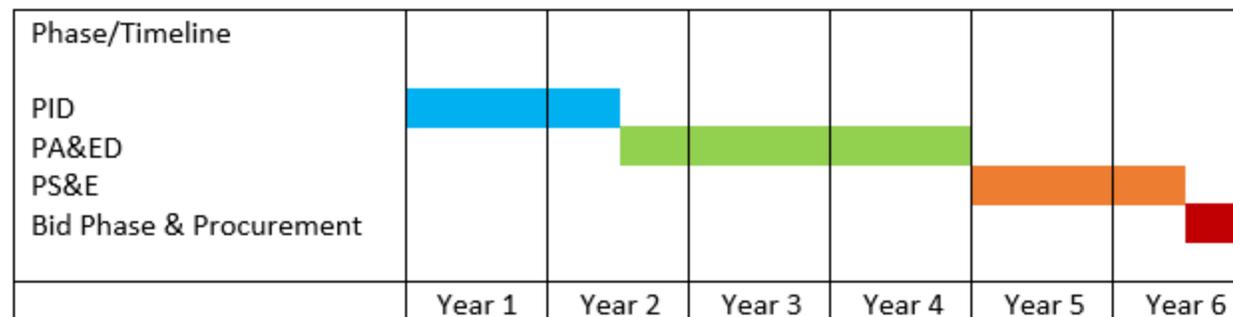


Near-term concept: Alameda del Prado/Nave Drive interchange

Project Delivery

- TAM to sponsor up to 3 PIDs
- TAM and/or Local Jurisdictions may sponsor improvement elements at other 9 interchanges:
 - Through Caltrans Encroachment Permit process
 - Outside of Caltrans ROW
- Other project elements could be incorporated into ongoing or new projects sponsored by Caltrans

Representative Project Timeline



Expanded Content on TAM Website

Expanded project overview

For each interchange:

- Report back on survey results
- Link to Existing Conditions, Constraints and Opportunities memo
- Concept plan graphics
- Provide opportunity for feedback and comment for future reference

[Hwy 101 Interchanges Overview Page](#)

[Alameda Del Prado/Nave Drive Page](#)



TAM
Transportation Authority of Marin

RETURN TO TAM SITE

← BACK TO PROJECT OVERVIEW

ALAMEDA DEL PRADO / NAVE DRIVE

The interchange at Alameda Del Prado and Nave Drive is in the city of Novato. It provides access to the Pacheco Valley and Hamilton neighborhoods, and the Pacheco Valley and Loma Verde Open Space Preserves. There are several existing physical and operational deficiencies associated with this interchange, such as nonstandard lane and shoulder widths, vertical clearance over Highway 101, and lack of continuous bicycle and pedestrian routes. These are described in the Existing Conditions, Constraints, and Opportunities Report.

DOWNLOAD INTERCHANGE REPORT

Interchange Improvements

The improvements TAM wants to make vary from easy fixes such as new crosswalks, curb ramp replacements and restriping, to more time-consuming solutions, such as new bike facilities, improved multimodal connectivity and widened bridges. The study examined the following to gain an important understanding of the interchange area:

- Existing Infrastructure
- Transit Routes and intermodal connectivity
- Weekday AM & PM Peak Period Congestion
- Crash Type and Severity
- Environmental Constraints

Many of the recommended improvements will enhance the operation and safety of these interchanges for all users, allowing smoother travel to, from, and across Highway 101 and local roads.

The near-term improvement concept focuses on improving connectivity for all modes by reducing conflicts, and improving traffic operations. It also provides new signalized intersections on Nave Drive at the northbound hook off-ramps and at Alameda Del Prado.

The long-term concept replaces the existing overcrossing with a compact diamond interchange configuration that supports standard vertical clearance over Highway 101 and eliminates the short acceleration and deceleration distances associated with the existing hook ramps.

Promotion/Distribution

Engagement materials can be distributed and promoted via the following channels to educate the public about interchange improvements and collect feedback:

- Updated website content on TAM.ca.gov
- E-blast to stakeholder and mailing list contacts
- Social media

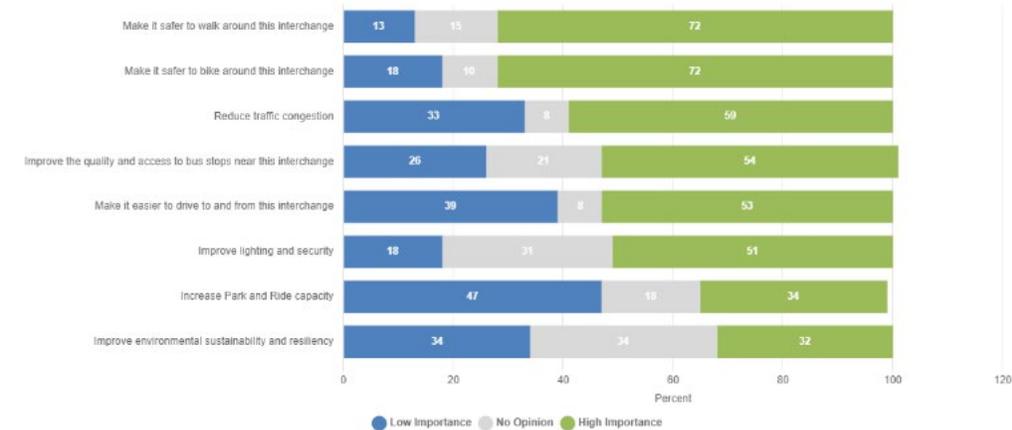


Public and Agency Input

Between March and April 2021, TAM surveyed residents of Marin to collect input about the 12 selected interchanges. More than 2,750 people responded to the survey. The survey was launched to gather the public's thoughts and priorities on improvements to the interchange. TAM has incorporated the feedback received to ensure the project reflects community values and preferences.

In the survey, 36 people commented on Alameda Del Prado. The majority of respondents agreed that making it safer to walk and bike in the area is the most important priority for this interchange. A summary of the survey results and comments received is included in the interchange report.

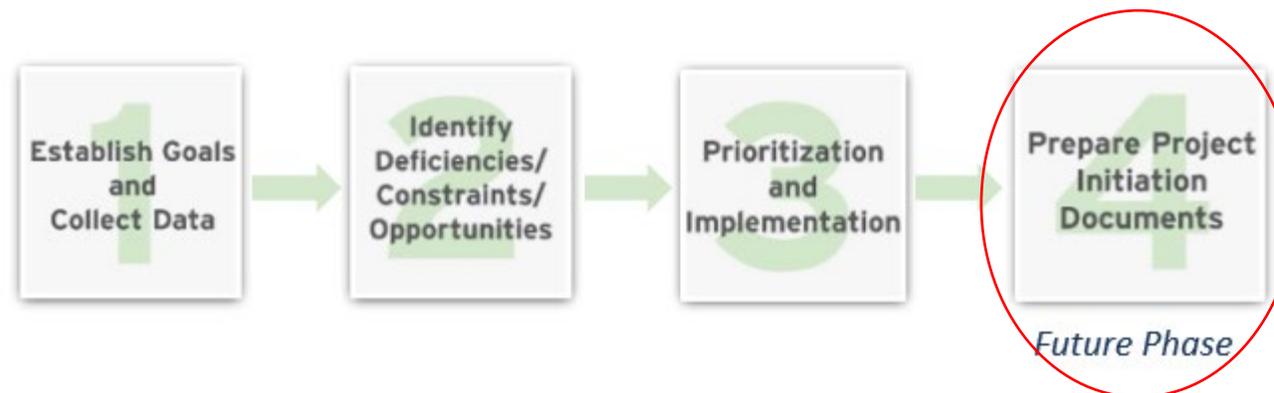
Residents rated the level of importance for eight potential improvements on a 5-point scale ranging from *not important* to *most important*.



Next Steps

- Public Outreach on Improvement Concepts
- Finalize Implementation Plan
- Develop Scope for Phase 4 – Project Initiation Documents

Study Process



Questions?

Thank you!

Bill Whitney

Transportation Authority of Marin

bwhitney@tam.ca.gov

415-226-0823



DATE: July 11, 2022

TO: Transportation Authority of Marin
Administration, Projects & Planning Executive Committee

FROM: Anne Richman, Executive Director *Anne Richman*
Bill Whitney, Principal Project Delivery Manager

SUBJECT: Local Road Safety Plan Update (Discussion), Agenda Item No. 8

RECOMMENDATION

This item is for discussion only.

BACKGROUND

In 2018, the County of Marin, in partnership with our member agencies, led an effort to prepare a Travel Safety Plan that was funded through a California Department of Transportation (Caltrans) grant under the Systemic Safety Analysis Report (SSAR) Program. The intent of the plan was to provide a proactive collision analysis of our roadway network and identify high risk locations and collision patterns using existing crash data, identifying low-cost and long-term countermeasures, and to help secure future grants to address key safety issues. The SSAR was used as supporting documentation of existing roadway safety conditions during a past grant application through the Caltrans Highway Safety Improvement Program (HSIP). Marin was awarded over \$6 million for capital improvements throughout multiple jurisdictions for this grant cycle. Marin's SSAR is listed on the Federal Highway Administration's (FHWA's) website as an example of good safety planning.

Following the completion of the SSAR, TAM and County staff worked together to prepare an Action Plan. The plan lays out steps that could be taken to guide the development of strategies and actions that would lead to safer roadways and reduce the number of traffic fatalities and serious injuries. Similar to the SSAR process, this effort also used a sub-committee of the Marin Public Works Association (MPWA), including a representative from Marin General Hospital to provide guidance in its development process. This plan was referred to as the Safe Roads Marin Action Plan. This plan was discussed during MPWA meetings but was not acted upon at the time. Due to the COVID Pandemic, implementation of the plan has been stalled.

Many agencies throughout the Bay Area have adopted some form of safety plan or vision zero policy to help them guide a process to improve safety on our roadways. The Metropolitan Transportation Commission (MTC) has adopted a Vision Zero Policy for the region and has supported local agencies to do the same (see Attachment B). MTC is also in the process of developing an extensive database on our regional roadways that documents accident data and roadway characteristics. Once finalized, this database will be made available to agency staff and eventually the public and will be a useful tool as we develop our Local Road Safety Plan (LRSP).

DISCUSSION/ANALYSIS

Recently, TAM was awarded a grant from Caltrans through HSIP in the amount of \$72,000 to prepare or update the LRSP and continue the focus on improving safety on our roadways. The LRSP will provide a comprehensive framework for organizing stakeholders to identify, analyze and prioritize roadway safety improvements.

A multi-disciplinary advisory working group could be formed and consist of members from public works, law enforcement, public health, and advocates for bicycles, motorcycles and pedestrians. The goal of the safety plan is to reduce traffic fatalities and serious injuries on all public roads.

The LRSP offers a proactive approach to addressing safety needs and demonstrates agency responsiveness to safety challenges. Once the LRSP has been updated, supplemental activities described in the plan can be carried out. These supplemental activities will be an ongoing effort and will require additional funds, potentially from other grant sources.

Preparing and updating the LRSP has recently been discussed with the MPWA membership. When the SSAR was prepared it was inclusive of the County, Cities and Towns as a multi-jurisdictional effort. When the grant applications for the Cycle 9 HSIP were submitted, the project(s) crossed jurisdictional boundaries. This approach is favored by the granting agency. It is proposed that the safety plan update use a similar multi-jurisdictional approach in the development process.

Funding Opportunities

On May 9, 2022, Caltrans issued a call-for-projects under Cycle 11 of the HSIP. TAM has been in contact with MTC and Caltrans. They have confirmed that the SSAR will satisfy the eligibility requirements and that all Marin jurisdictions can submit a grant application if they choose. However, TAM has been informed that an LRSP will be required to be eligible for the next round of HSIP funding.

Additionally, a new safety related program has been announced as part of the Federal Bipartisan Infrastructure Law (aka IIJA) established as the Safe Streets and Roads for All (SS4A) discretionary program with \$5 billion in appropriated funds over the next 5 years. There are two types of available grant categories from the SS4A program: (1) Develop or update a safety action plan or, (2) Implementation (capital improvements). The updated LRSP will meet the eligibility requirements during future grant applications to the SS4A program for either supplemental planning or implementation of capital projects. Multi-jurisdictional grant applications are strongly encouraged under the SS4A program.

FISCAL CONSIDERATION

Funding from the HSIP grant will be used to prepare and update the LRSP. Additional funding will be needed for future supplemental planning from potential sources such as the SS4A grant opportunity or from local contributions.

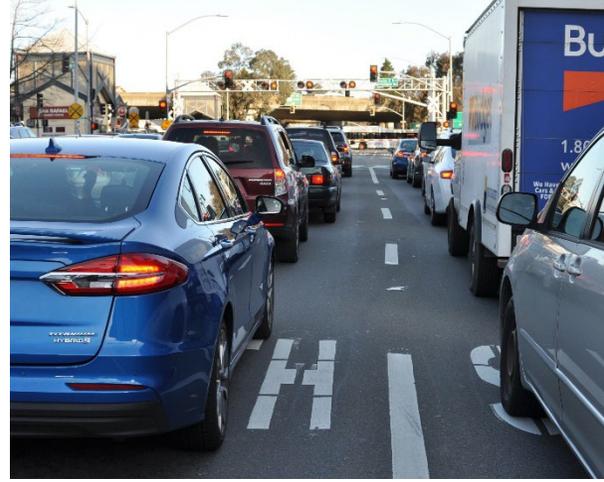
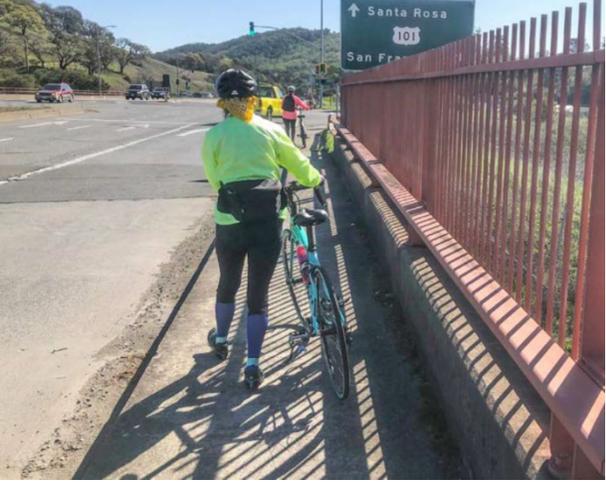
The HSIP and SS4A grants originate from federal sources and require a local funding match. TAM is providing the local match for the current HSIP grant in the amount of \$8,000.

NEXT STEPS

TAM will solicit consultant assistance in preparing the LRSP update. A contract will be brought back to the Board for consideration. Following consultant retention, TAM staff will work with our member agencies to develop the safety plan.

ATTACHMENTS

Attachment A – PowerPoint Presentation
Attachment B – MTC Vision Zero Policy



Administration, Projects & Planning Executive Committee

Local Road Safety Plan

Transportation Authority of Marin

Bill Whitney, Principal Project Delivery Manager

July 11, 2022

Background – Vision Zero

- **Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all.** (*Definition from Vision Zero Network*)
- Approaches differ across jurisdictions, generally include/promote:
 - Policy commitment
 - Systems approach
 - Data-driven decisions
 - Belief that traffic deaths and serious injuries are preventable
 - Integrate human failing in approach
 - Equity and engagement
 - Partnerships across departments, i.e., public works, police, health
- In the Bay Area, Vision Zero has been adopted in differing forms by: MTC, San Francisco, San Jose, Fremont, Lafayette, Alameda, Berkeley, Daly City, San Mateo, Contra Costa County, Menlo Park, and South San Francisco.

Marin Crash Data (2016-2020)

- Total: 14,159
- KSI Crashes: 504 (4.6%)
- Ped Crashes: 433 (3.1%)
 - Ped KSI Crashes: 86 (19.9% of ped crashes)
- Bike Crashes: 724 (5.1%)
 - Bike KSI Crashes: 111 (15.3% of bike crashes)

Current Road Safety Efforts

- TAM/Marin

- SSAR
- Street Smarts Refresh
- Safe Routes to Schools and Crossing Guard programs
- Safe Pathways project funding
- Local jurisdictions capital improvement projects
- Local agency Bike and Pedestrian Plans

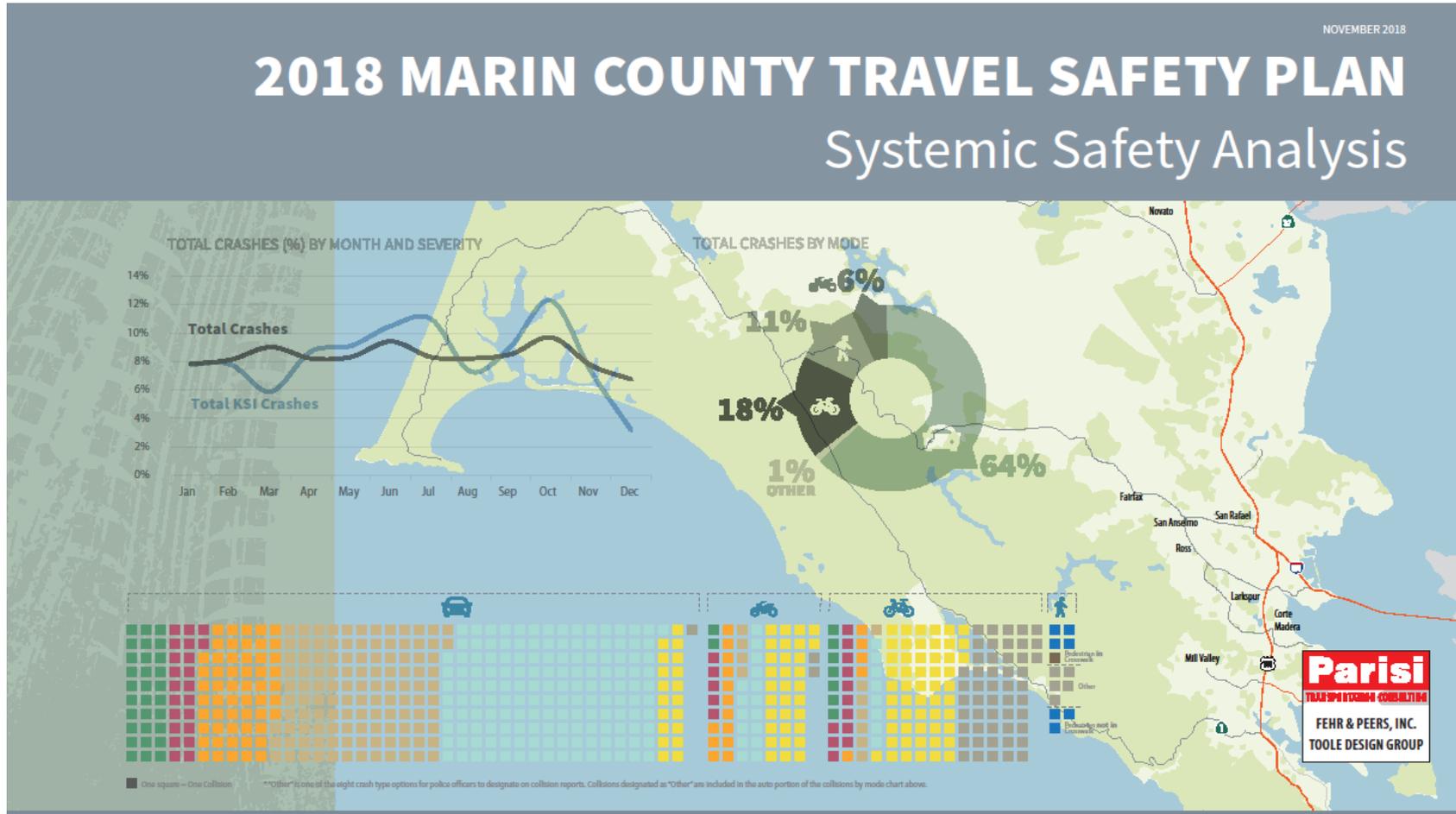
- MTC

- Adopted Vision Zero Policy and Goals
- Rolling out new Database tool
- Formed Bay Area Vision Zero Working Group
- Upcoming OBAG3 funding program (details TBD)
- MTC reaching out to TAM and other CTAs to support safety efforts

- State of California

- CHP TIMS database
- Caltrans State Highway Safety Plan, and State Systems Approach
- Funding programs such as ATP, HSIP

Local Planning – SSAR



SSAR is posted on the FHWA Website as a good example of Safety Planning



Local Project Example – 59 Intersections

NEWS RELEASE 6-14-22

- **59 Street Intersections to be Enhanced Countywide**
- *Municipalities in Marin to receive various traffic signal upgrades*
- **San Rafael, CA** – Fifty-nine traffic intersections across nine towns and cities in Marin County, as well as unincorporated areas of the county, will be upgraded in the coming months to enhance public safety. The [Marin County Department of Public Works](#) will function as the lead agency coordinating with the cities and towns to implement the improvements.
- The 59 intersections were identified through the [Systematic Safety Analysis Report](#), a detailed traffic safety study conducted in 2018 by an independent third-party consulting company. The planned upgrades are intended to improve traffic and pedestrian safety by reducing the potential of incidents as well as the severity of collisions at the targeted intersections.
- The \$1.5 million project is funded by a California Highway Safety Improvement Program grant through the California Department of Transportation. The work on the intersections is expected to begin in mid-July and is anticipated to take five months to complete. Much of the work consists of relatively low-cost items but adds up when multiplied by the high quantities needed across all the locations. By combining the individual cities and towns' improvements under one large project umbrella, the work can be accomplished more economically and efficiently.
- The [proposed improvements](#) include upgrading traffic signal heads to 12-inch LED signal heads for better visibility, adding signal head backplates, installing pedestrian crossing timers, adding audible pedestrian signals at pedestrian push buttons, updating signal hardware to incorporate "Lead Pedestrian Intervals" at crosswalks, replacing outdated electronic components such as cables, and implementing video or detection loops to create advanced detection zones.

State Funding Opportunities

- HSIP Cycle 11 call for projects.
 - An estimated \$210 million available, applications due September 12, 2022
 - Construction of capital improvement projects
 - Federal funds
 - The SSAR will satisfy the eligibility requirements and all Marin jurisdictions can submit a grant application if they choose.
 - A Local Road Safety Plan will be required to be eligible for the next round of HSIP funding.

- ATP Cycle 6
 - Six applications submitted from Marin by the June deadline
 - Cycles are normally every two years, but...
 - Program was also augmented with ~\$600 million from State Budget just approved – implementation TBD

Federal Funding Opportunity – Safe Streets & Roads for All (SS4A)

- \$1 Billion Available nationwide, applications due September 15
- Action Plan Grant: Grant Minimum \$200,000 – Maximum \$1,000,000, with a 20% Match
Prepare an Action Plan
- Supplemental Action Plan Grant:
Required to have an Existing Action Plan for Supplemental Activities
Implement Strategies presented in the Action Plan
- Implementation Grant: Grant Minimum \$5,000,000 – Maximum \$30,000,000, 20% Match
Implement Capital Improvements
We are confirming if the SSAR meets the eligibility requirements to apply for the Implementation Grant.
- More information at www.transportation.gov/SS4A

Local Road Safety Plan – “Action Plan”



- The County and TAM worked with the MPWA Sub-Committee along with a Public Health Representative to develop the Action Plan.
- MPWA Discussed the Action Plan but did not take action.
- Implementation of the Action Plan was suspended due to Pandemic and other issues.



Local Road Safety Plan – Moving Forward

- TAM was recently awarded \$72,000 from HSIP to update the Local Road Safety Plan.
- TAM will provide \$8,000 to match the grant.
- Intent is to update the Action Plan to ensure we meet eligibility requirements for HSIP, SS4A, and Future OBAG.
- Incorporate a Vision Zero Policy.
- Funds are limited so scope of work is under development.
- TAM will kick off this effort over the next few months and will request future MPWA feedback on the best ways to proceed to ensure all jurisdictions remain eligible for grant funding.
- Staff has consulted with MPWA on this update.

Policy Considerations for Further Discussion

- What would Vision Zero look like for Marin
- Others own the road network
- TAM, jurisdictions' roles to be defined
- Roadway injuries and deaths are rising nationwide
- Balancing policy priorities – safety, evacuation, cost/funding, etc.
- Other?

Local Road Safety Plan

Comments & Discussion

**Metropolitan Transportation Commission
MTC Planning Committee**

June 12, 2020

Agenda Item 4a

MTC Resolution No. 4400: Regional Safety / Vision Zero (VZ) Policy

Subject: Recommendation for adoption of MTC Resolution No. 4400: Regional Safety/Vision Zero (VZ) Policy.

Background: Traffic safety is a significant transportation challenge globally, nationally, and regionally. In the United States, over 30,000 people are killed annually in traffic collisions. These traffic deaths disproportionately affect those in communities of color, low-income communities, youth, the elderly and those walking and biking. The role of MPOs in addressing traffic safety is receiving increasing attention as local jurisdictions across the country acknowledge the tragic and preventable loss of lives on our roadways and are adopting VZ goals and principles.

Over 400 fatalities and 2,000 serious injuries occur on Bay Area roads each year. MTC has the opportunity to help save lives and ensure that all people have the right to safe mobility in the region. While Bay Area cities have acted to combat the trend in fatalities and serious injuries, MTC aims to motivate and facilitate action across the region. A regional safety strategy and approach can promote improved safety and potentially eliminate some duplication of costs among local jurisdictions, allowing local governments to redirect their limited safety dollars towards enforcement and engineering. MTC could supplement the efforts made by the VZ cities in our region provide data and technical assistance to jurisdictions that need it by leveraging our available resources to support them. Additionally, federal guidance requires MTC to adopt regional targets for road safety on an annual basis, and MTC has adopted three rounds of regional safety targets to date. Data-driven regional safety efforts will help us make progress in meeting our “Towards Zero Deaths” targets for fatalities and serious injuries by 2030.

Policy: The MTC Regional Safety/VZ Policy establishes a region-wide policy of intent to work with our partner agencies to encourage and support actions towards eliminating traffic fatalities and serious injuries in the Bay Area by 2030. This policy recognizes that MTC is uniquely positioned to facilitate region-wide safety planning and coordination. MTC is already required to adopt safety performance measures and targets, and this policy will augment this responsibility by providing assistance to local jurisdictions towards our regional safety goals. The policy establishes a framework of principles and actions to guide MTC staff in working towards the policy goals as summarized below:

1. Provide regional leadership to promote safety, engaging and incentivizing leadership across jurisdictions to prioritize safety and work towards aligning funding policy with safety goals.
2. Apply a data driven approach to inform safety policy and strategic use of available funds and resources. Regional safety data will be housed at MTC so that local jurisdictions can benefit from consistent and reliable data.
3. Promote equity in regional safety policies by considering and analyzing impacts on communities of concern and protecting vulnerable roadway users, such as pedestrians and bicyclists.
4. Support beneficial safety policies and legislation that target evidence-based solutions to safety problems.

5. Engage key regional stakeholders for safety policy development, implementation, and collaboration on safety best practices. Provide education and technical assistance within budgetary constraints.

Strategies:

To complement the Regional Safety/VZ Policy, MTC staff is working to establish a regional safety program that would rely on a three-pronged approach to enhance safety in the region. First, MTC staff is working on enhancing the region's and jurisdictions' access to reliable and consistent data by integrating several available sources into a single regional safety data repository. Second, MTC will use data to inform and develop regional policy and support legislation that has been proven effective, such as lowered speed limits and automated speed enforcement. Finally, and dependent on resources available, MTC will support jurisdictions by providing technical assistance with safety planning. These strategies will tie into key Plan Bay Area 2050 goals, by encouraging active transportation, reducing reliance on greenhouse gas emitting modes of transportation, and addressing significant equity issues. The program will also support and enhance other agency efforts, including Complete Streets, the Active Transportation Program, and Safe Routes to Schools and Transit.

This framework is the starting point for regional safety efforts and staff plans on updating the Committee periodically on specific proposals to help achieve the region's safety goals.

Steps Taken:

As we worked on developing a Regional Safety/Vision Zero Policy, staff has already begun engaging with partners and collaborating towards this end:

1. Organized a Safety Data Integration Peer Exchange with regional, state and national stakeholders to learn from and share safety best practices;
2. Presented a regional safety program policy concept to state, county, and regional stakeholder groups and convened Bay Area VZ cities to identify how we can support their ongoing efforts;
3. Adopted ambitious regional safety targets in line with a "Towards Zero Deaths" goal by 2030;
4. Applied for and received funding for the development of a Regional Safety Data System and the development of a State of Safety in the Region Report; and
5. As part of the effort to encourage safety policies, MTC adopted a Priority Development Area (PDA) Connected Communities Safety Policy which requires jurisdictions to adopt a Safety/VZ action plan to support growth in PDAs with limited transit.
6. The proposed policy was presented to the Policy Advisory Council (Council) on May 22, 2020. Attachment C summarizes the Council's action to support the policy.

Issues:

1. Ongoing resources and staffing required is still under development, but the level of resource needs is scalable.
2. As a practical matter, traffic injuries and deaths are likely to be down this year because of COVID-19 and decreased trips. But we fully expect the safety issue to return as travel increases, and some studies suggest we will see more personal vehicles on the road as people avoid public transit. It is important we continue to plan for the future.

Recommendations: MTC staff recommends the MTC Planning Committee approve MTC Resolution No. 4400 and refer it to the Commission for final action on June 24, 2020.

Attachments: Attachment A: MTC Resolution No. 4400: Regional Vision Zero Policy
Attachment B: Presentation
Attachment C: Policy Advisory Council's Memo



Therese W. McMillan

Date: June 24, 2020
W.I.: 1233
Referred by: Planning

ABSTRACT
Resolution No. 4400

This resolution sets forth MTC's Regional Safety/Vision Zero Policy to support achievement of safety targets adopted by MTC.

Further discussion of these actions is contained in the MTC Executive Director's Memorandum to the Planning Committee dated June 12, 2020.

Date: June 24, 2020
W.I.: 1233
Referred by: Planning

Re: Regional Safety/Vision Zero Policy

METROPOLITAN TRANSPORTATION COMMISSION
RESOLUTION NO. 4400

WHEREAS, pursuant to Government Code § 66500 et seq., the Metropolitan Transportation Commission (“MTC”) is the regional transportation planning agency for the San Francisco Bay Area; and

WHEREAS, MTC is the designated Metropolitan Planning Organization (MPO) for the nine-county San Francisco Bay Area region, and safety has been a goal included in MTC’s Regional Transportation Plans for twenty years; and

WHEREAS the Moving Ahead for Progress in the 21st Century (MAP-21) Act and the Fixing America’s Surface Transportation (FAST) Act require metropolitan planning organizations to frequently set short range performance targets related to safety; and MTC has adopted aspirational regional safety targets as shown in Attachment A; and

WHEREAS, short-range federally-required targets will be incorporated into planning and programming processes in the coming years in compliance with the final Metropolitan Planning rule as adopted by the Federal Highway Administration and Federal Transit Administration on May 27, 2016;

WHEREAS, 23 U.S. Code §450 requires the Regional Transportation plan to include a system performance report, including progress achieved by the MPO in meeting safety performance targets, and requires the Transportation Improvement Program (TIP), once implemented is designed to make progress toward achieving the safety performance target.

WHEREAS, “Vision Zero (VZ)” is defined as a strategy to eliminate traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all. Effective VZ strategies must be data-driven, and must consider equity and community concerns in all stages; and:

MTC Resolution No. 4400

Page 2

RESOLVED, that MTC hereby adopts a Regional Safety/VZ policy to support achievement of safety targets adopted by MTC, as stated in Attachment A; and:

RESOLVED, that MTC establishes “Proposed Principles and Actions for a Regional Vision Zero Policy” to guide staff in working towards supporting reduction of fatalities and serious injuries across the region, as detailed in Attachment A.

METROPOLITAN TRANSPORTATION COMMISSION

Scott Haggerty, Chair

The above resolution was approved by the Metropolitan Transportation Commission at a regular meeting of the Commission held in San Francisco, California, and at other remote locations, on June 24, 2020.

Date: June 24, 2020
W.I.: 1233
Referred by: Planning

Attachment A
Resolution No. 4400
Page 1 of 2

REGIONAL SAFETY/VISION ZERO POLICY STATEMENT:

Working together with our partner agencies, encourage and support equitable and data-driven actions towards eliminating traffic fatalities and serious injuries for the Bay Area region by 2030.

REGIONAL SAFETY TARGETS:

MTC's current safety targets for the region are based on a Toward Zero Deaths framework, basing targets on a linear reduction to zero fatalities and serious injuries in the region by the year 2030.

PROPOSED PRINCIPLES AND ACTIONS FOR A REGIONAL VISION ZERO POLICY:

Provide Regional Leadership to Promote Safety

1. MTC will engage and incentivize leadership across local jurisdictions in prioritizing safety and work towards aligning funding investments with safety goals.

Apply a Data Driven Approach

2. MTC's safety policies shall be driven and informed by data to allow available funds to be used strategically. Regional safety data will be used for safety target-setting, and monitoring of progress towards regional safety goals.
3. MTC will serve as a regional safety data bank so that cities - especially those with more limited resources - can benefit from an integrated safety data repository and a consistent and reliable source of safety data for traffic safety analysis, evaluation and applying for safety funding.

Promote Equity in Regional Safety Policies

4. MTC will advance equity through safety policies noting that communities of concern are the most at risk of suffering from traffic fatalities and serious injuries.
5. MTC will emphasize the importance of protecting all roadway users, including vulnerable users such as pedestrians, bicyclists, and users of new mobility.

Support Beneficial Safety Policies and Legislation

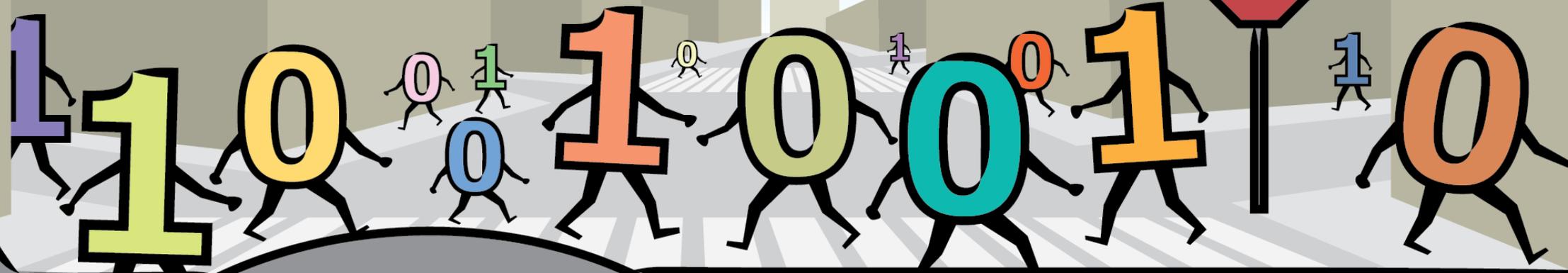
6. MTC will encourage safety policies and support safety legislation that targets evidence based solutions to safety problems.

Educate & Engage

7. Within budgetary constraints, MTC will conduct public outreach and provide technical assistance - reliable safety data, analytical toolkits, technical expertise - for local jurisdictions across the region, especially those that lack expertise or resources to implement a successful safety program.
8. MTC will engage key regional stakeholders in safety policy development and implementation, including local jurisdictions, counties, police departments, emergency response and others, to collaborate on safety best practices.

SAFETY IN NUMBERS

Harnessing Data to Reduce Traffic Fatalities and Injuries



Planning Committee: June 12, 2020

Shruti Hari



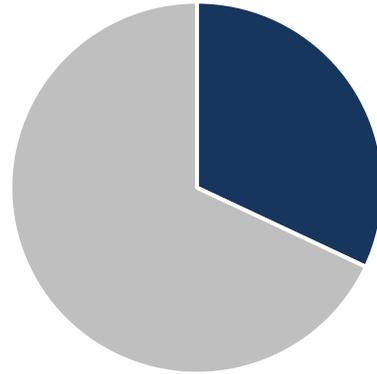
Why We Need to Act Now



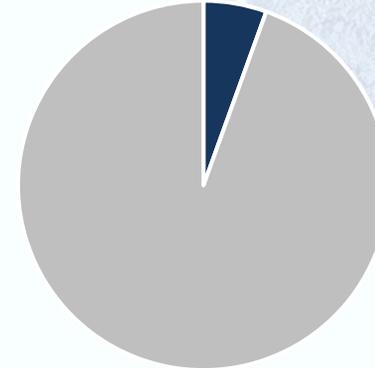
Why We Need to Act Now

Active modes are disproportionately represented.

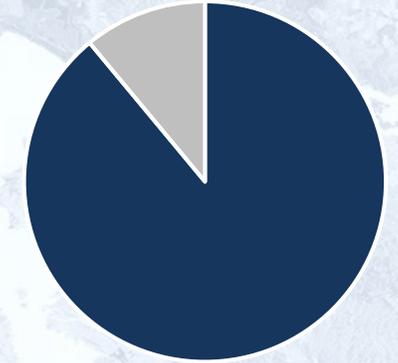
Fatal and Severe Injuries



Mode Share



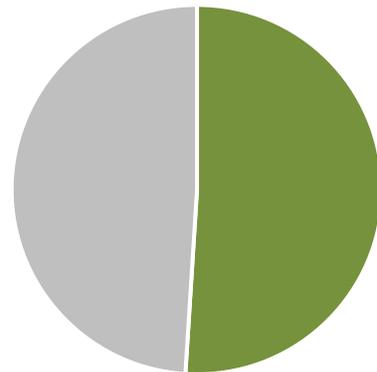
Relative Share



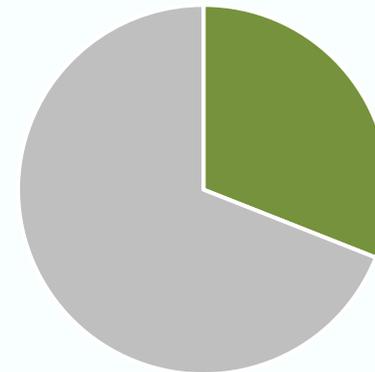
■ Pedestrians and Bicyclists ■ Other

Communities of concern are disproportionately represented.

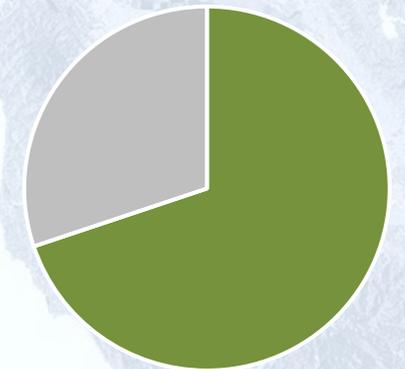
High Injury Network



All roads



Relative Share

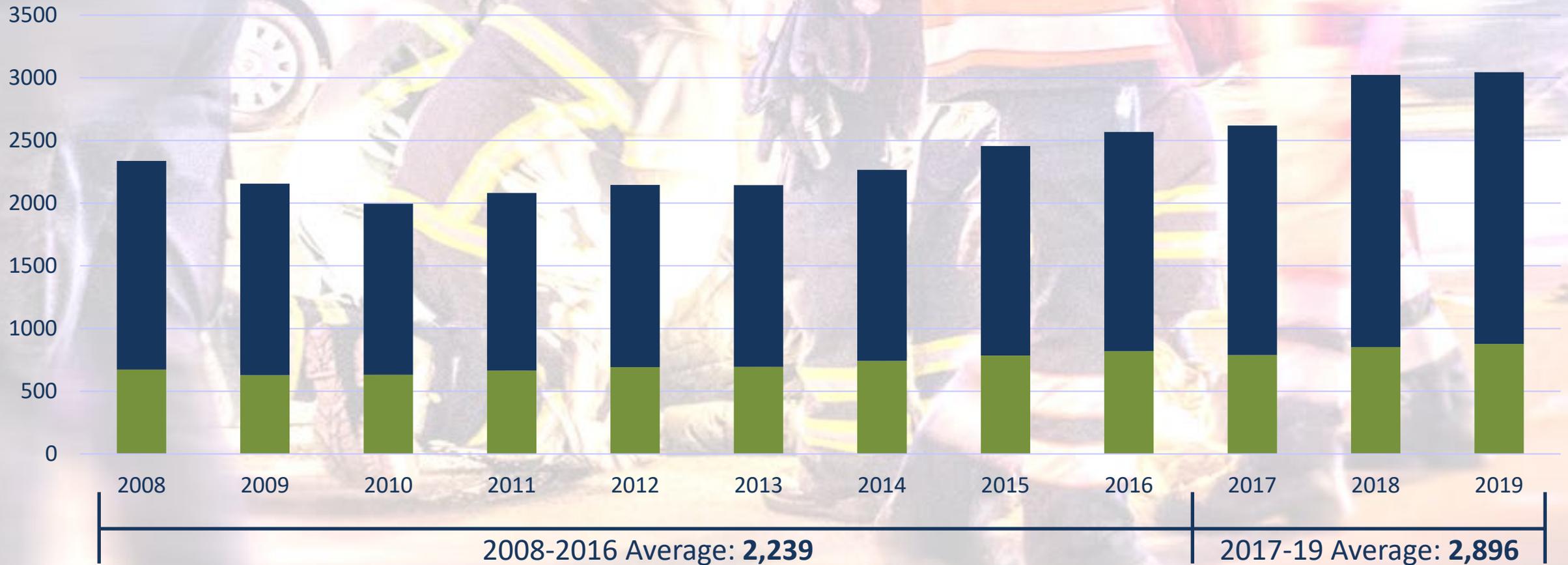


■ Communities of Concern ■ Other

Fatalities and Serious Injuries have increased over 50% since 2010

Bay Area Fatalities and Serious Injuries 2008-2019

■ Pedestrians and Bicyclists ■ Motorists





VISION ZERO

Why It's Important for MTC to Act Now

Federal/State Policies

- FAST Act requires MPOs to adopt Safety performance measures/targets
- MPO CERT Review
- HSIP funds to require Safety Plans for eligibility

Regional Leadership

- Plan Bay Area goals
- Caltrans/Cities look to MTC for safety leadership in region

Benefits

- MTC uniquely positioned to stimulate a regional collaborative process on safety
- Region-wide safety planning would supplement individual safety efforts and reduce duplication of costs
- More data and technical assistance will help jurisdictions get safety funding
- Traffic safety is an equity issue
- Incentivizes Active Transportation and consistent with other PBA goals

MTC Proposed Safety/Vision Zero Policy

Working together with our partner agencies, encourage and support equitable and data-driven actions towards eliminating traffic fatalities and serious injuries for the Bay Area region by 2030



**DATA
DRIVEN**



**POLICY INITIATIVES
AND LEGISLATION**



**EDUCATION
AND ENGAGEMENT**

REGIONAL LEADERSHIP AND EQUITY FOCUS

Principles & Actions



Regional Safety Leadership

- Encourage local jurisdictions to prioritize safety.
- Work towards aligning funding investments with safety goals.



Data Driven

- Regional safety data to inform safety policies, performance monitoring and target-setting.
- Serve as a regional safety data bank so cities can benefit from an integrated, reliable source of safety data.



Equity Focused

- Focus on equity and consider effects of any safety policies on communities of concern.
- Emphasize the concerns of all roadway users, including vulnerable users.



Evidence-based Policy and Legislation

- Support legislation and policy grounded in research and evidence.



Education and Engagement

- Engage with key stakeholders for safety policy development and implementation.
- Conduct public outreach and provide education and technical assistance for local jurisdictions.

Policy Initiatives

- Encourage policies to foster culture of safety
- Align funding policies with safety goals
- Support safety legislation

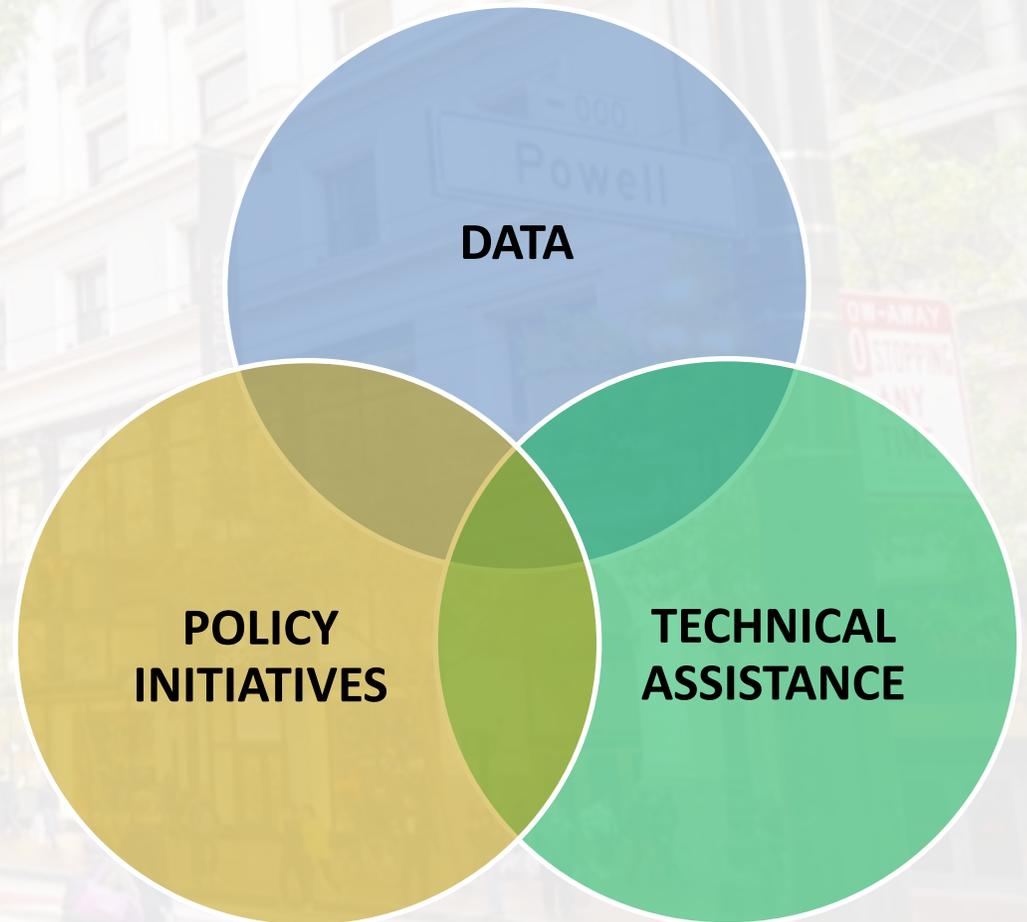
Data

- Consistent and reliable source of safety data
- Incorporate equity considerations
- Analyze traffic safety region-wide

Technical Assistance

- Analytical toolkit and safety best practices
- Funding advocacy for region
- Public outreach and education

Regional Focus and Input



REGIONAL SAFETY – STEPS TAKEN SO FAR

1. Safety Data Integration Peer Exchange

- Partnership with FHWA

2. Coordination with Cities/CMAAs

- Need for regional safety data, safety advocacy, regional safety campaigns and safety funding

3. Awarded State Funding for Safety Effort

- \$500,000 in SSARP funds for a Regional Safety Data System and a Safety Report

4. Adopted 2019 & 2020 regional safety targets

- In line with Towards Zero Deaths by 2030 for fatalities

5. PDA Connected Communities Requirement

- Incentivized jurisdictions to adopt a Safety/VZ action plan to support growth in PDAs with limited transit



THANK YOU.

For more information contact:
Shruti Hari, shari@bayareametro.gov



METROPOLITAN
TRANSPORTATION
COMMISSION

Bay Area Metro Center
375 Beale Street
San Francisco, CA 94105
TEL 415.778.6700
WEB www.mtc.ca.gov

Memorandum

TO: MTC Commission
FR: MTC Policy Advisory Council
RE: Regional Safety/Vision Zero

DATE: June 24, 2020
W.I. 1114

At its Friday, May 22, 2020 meeting, the Policy Advisory Council received a presentation on the proposed adoption of a Regional Safety/Vision Zero (VZ) Policy. The Council discussed MTC's role in providing regional leadership to promote safety, the need to apply a data driven approach to inform safety policy, and the importance of promoting equity in regional safety policies.

The Council moved unanimously to support the proposed Regional Safety/Vision Zero Policy and the eventual development of an analytical toolkit and safety best practices to assist local jurisdictions.



London Breed, Mayor

Gwyneth Borden, Chair
Amanda Eaken, Vice Chair

Cheryl Brinkman, Director
Steve Heminger, Director

Jeffrey Tumlin, Director of Transportation

June 10, 2020

James P. Spering
Chair, Joint MTC Planning Committee with the ABAG Administrative Committee
Bay Area Metro Center
375 Beale Street
San Francisco, CA 94105

RE: Support for MTC Resolution No. 4400: Regional Safety / Vision Zero Policy

Dear Chair Spering:

I am writing on behalf of the San Francisco Municipal Transportation Agency to support the recommendation to adopt MTC's Regional Vision Zero Policy at the MTC Planning Committee. Every year in San Francisco about 30 people lose their lives and over 500 more are severely injured by while traveling on city streets. The City and County of San Francisco adopted Vision Zero in 2014 as a commitment to eliminate traffic fatalities and reduce severe injuries. MTC's proposal to adopt a Regional Vision Zero Policy will continue to support our region in advancing this commitment to stopping further loss of life.

MTC's Regional Vision Zero Policy is an important step to bring together cities across the region to support actions that can eliminate traffic fatalities. Many of the goals in the MTC Regional Vision Zero Policy elevate and support San Francisco's existing commitments in our 2019 Action Strategy. Our Action Strategy identifies the need for new and proven tools that can save lives, such as automated technology to enforce speed limits, but these tools will require state law changes. MTC's Regional Vision Zero Policy will elevate the policy areas where state legislation is needed to improve street safety. MTC's Policy also expands opportunities for education and messaging on Vision Zero to the broader region. A regional education program can help to expand the reach of our existing messaging and leverage new resources to promote Vision Zero messaging. The MTC Policy also provides for an opportunity to share best practices across cities in order to elevate data-driven and equity-focused policies to advance Vision Zero.

Thank you for your leadership to advance Vision Zero at the regional level. We encourage you to adopt this resolution and we look forward to continuing to partner with MTC on our commitment to eliminate traffic fatalities.

Sincerely,

A handwritten signature in blue ink that reads "Jeffrey P. Tumlin".

Jeffrey P. Tumlin
Director of Transportation

Cc: Members of the Joint MTC Planning Committee and ABAG Administrative Committee
Therese McMillan, Executive Director, MTC

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DATE: July 11, 2022

TO: Transportation Authority of Marin
Administration, Projects & Planning Executive Committee

FROM: Anne Richman, Executive Director *Anne Richman*
Derek McGill, Director of Planning

SUBJECT: Accept the Canal Neighborhood Community Based Transportation Plan (Action), Agenda Item No. 9

RECOMMENDATION

The Administration, Projects & Planning (AP&P) Executive Committee reviews and recommends that the TAM Board accepts the Canal Neighborhood Community Based Transportation Plan (CBTP).

BACKGROUND

The Metropolitan Transportation Commission (MTC) established the CBTP Program in 2002, following recommendations from the *Lifeline Transportation Network Report* (2001) and the *2001 Regional Transportation Plan Environmental Justice Report*. The CBTP program requires County Transportation Agencies (CTAs) to bring local residents, community organizations and transportation agencies together to improve mobility options for low-income communities. The focus of the CBTP program is to work with communities that have historically been underserved by or excluded from the transportation planning process to identify mobility challenges and prioritize solutions.

In Marin County, the CBTP process has been central to transportation equity planning efforts in the county. TAM led the development of CBTPs in 2006 with CBTPs developed for the Canal Neighborhood in San Rafael and for Marin City in Southern Marin. In 2015, TAM updated the Marin City CBTP and led the development of a CBTP in the town of Novato to support equity populations there that are typically not recognized through regional definitions.

In 2018, MTC provided TAM with supplemental Congestion Management Agency (CMA) Planning funds for updates to CBTPs and amended the CMA planning agreement to conduct updates or new CBTPs. With completion of the Marin City and Novato plans, TAM staff began working with the City of San Rafael to determine if there was interest in updating the Canal Neighborhood CBTP as part of the General Plan process that the city is undertaking.

In March 2019, the TAM Board authorized \$75,000 in CMA planning funds to the City of San Rafael to lead the development of an update to the CBTP. Since that time, TAM has worked with the City to update the plan, including providing local city/county fees in lieu of federal funding, and serving on the technical advisory committee. The plan was adopted by the City of San Rafael Council on June 21, 2022. According to MTC Guidelines, the TAM Board is also required to accept the CBTP report.

DISCUSSION/ANALYSIS

The Canal Neighborhood CBTP was developed by the City of San Rafael through community outreach, including a stakeholder committee, a technical advisory committee, online surveys distributed by Voces Del Canal, focus group workshops and a community open house. The outreach was conducted in Spanish, with English translation available. The plan refreshed the community profile including demographic information and completed reports and studies since 2006.

The following eleven transportation solutions are recommended to address transportation issues identified by the community during the CBTP process. Some projects are short-term, some are long-term, or mixed, and potential lead agencies vary for each solution:

1. Pedestrian and Bicycle Bridge/Canal Crossing to 3rd Street
2. Access to Bikes/Scooters, Secure Bike Parking, and Bicycle Education
3. Traffic Calming and Crossing Improvements
4. Bicycle and Pedestrian Crossing Improvements at Gateways
5. Streets Team and Transit Ambassador Program
6. Sidewalk and Streetscape Improvements
7. Lighting of Commonly Traveled Pedestrian Routes
8. Transit Bus Stop Improvements
9. Transit Bus Stop Maintenance
10. Expanded Transit Service
11. Transportation to Schools

Improved street lighting was a major concern prior to the CBTP and continued to be a top issue throughout the CBTP process. The CBTP process highlights mobility challenges currently faced by members of the community. Longer term or emerging planning priorities typically require additional coordination or planning to address, and many of these solutions may provide opportunities to advance longer-term goals of sea level rise adaptation or electric mobility.

Implementation of projects will occur as funding becomes available and many competitive local, regional and state funding processes reward additional scores for projects identified through the CBTP process or robust public engagement processes such as the CBTP.

FISCAL CONSIDERATION

Funding for this plan was approved by the TAM Board in March 2019. No additional funding is required at this time for the CBTP itself.

NEXT STEPS

TAM is required to monitor implementation of CBTP projects and will develop a tracking program to support implementation of CBTP solutions. In April 2022, MTC released updated guidance for conducting CBTPs, and is providing \$150,000 in funding for CBTPs in Marin County between FY 2022-23 and FY 2026-27. Staff is currently exploring options for updates to CBTPs based on this new guidance and will return to the Board at a later date with recommendations.

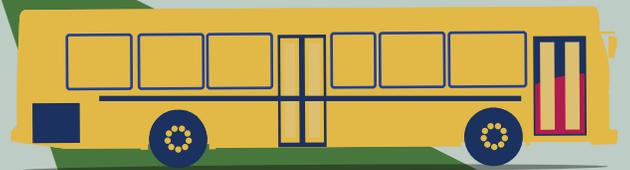
Relatedly, this Fall, staff will return to the Board with a draft Equity Statement for consideration. This statement is intended to provide overall strategic direction on advancing equity through TAM's processes and highlight next steps for equity initiatives.

ATTACHMENTS

Attachment A – Canal Neighborhood CBTP
Attachment B – Staff Presentation

June 2022

Canal Neighborhood Community-Based Transportation Plan



SAN RAFAEL
THE CITY WITH A MISSION



**METROPOLITAN
TRANSPORTATION
COMMISSION**



FEHR & PEERS

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Executive Summary

The Metropolitan Transportation Commission (MTC) initiated the Community-Based Transportation Planning (CBTP) program in 2002 to identify and create an action plan to address mobility needs for lower-income communities through a collaborative effort from residents, community organizations, and transportation agencies. This plan documents the efforts and results of the community-based planning process for the city of San Rafael's Canal neighborhood. This is the second CBTP prepared for the Canal neighborhood - the first CBTP was completed in 2006. Study Background is described in Chapter 1. Chapter 2 highlights the demographic and travel characteristics of the neighborhood. Chapter 3 summarizes previous plans with bearing on the neighborhood and lists any Canal-specific recommendations. Chapter 4 documents the engagement process and community-identified transportation gaps, and Chapter 5 includes solutions to address the transportation gaps. Finally, Chapter 6 discusses considerations for implementation and potential funding sources.

Canal CBTP Overview

The CBTP team worked with a resident Stakeholder Committee (SC) and agency Technical Advisory Committee (TAC) to develop the community-based transportation plan. Both the SC and TAC met with the CBTP team three times over a period of six months to discuss key transportation issues, solutions, and ongoing projects in the Canal neighborhood and to help guide the planning process.

Key Findings and Issues

- The share of Latinx/Hispanic residents in the Canal neighborhood and the share of residents who speak Spanish at home has increased since 2006. Translating project materials into Spanish was critical to the success of the CBTP and will be critical to all future planning efforts.
- Over a third of Canal neighborhood residents live in poverty. Transportation costs are a substantial portion of their household budget.
- The Canal neighborhood is physically isolated from other parts of San Rafael by the San Rafael Creek/Canal and the Highway 101 and Interstate 580 freeways. It is particularly difficult to get in and out of the Canal neighborhood on foot or by bicycle. Many residents do not have access to a car and as a result, transit is a lifeline service for residents.
- Canal neighborhood residents ride transit more frequently than other residents of San Rafael and Marin County and even with service increases over the past decade, demand still exceeds service levels at certain times of day and along certain routes.
- Timely connections to schools for both students and parents are a concern for many parents.
- Safety and security are among the top concerns in the neighborhood with residents citing crime, poorly lit streets, high vehicle speeds, trash and dirty conditions on streets and at bus stops, and narrow sidewalks with numerous pedestrian barriers.

Recommended Solutions

The following transportation solutions are recommended for the Canal neighborhood to address transportation gaps identified by the community. The improvements listed below were reviewed and prioritized based upon level of community support and are described in more detail in Chapter 5.

Higher Priority Solutions

- #1 Pedestrian and Bicycle Bridge/Canal Crossing to Third Street
- #3 Traffic Calming and Pedestrian Crossing Improvements
- #7 Lighting
- #8 Transit Bus Stop Improvements
- #9 Transit Bus Stop Maintenance
- #10 Expanded Transit Service
- #11 Transportation to Schools

Medium Priority Solutions

- #2 Access to Bikes/Scooters, Secure Bicycle Parking, and Bicycle Education

Lower Priority Solutions

- #4 Bicycle and Pedestrian Crossing Improvements at Gateways
- #5 Streets Team and Transit Ambassador Program
- #6 Sidewalk and Streetscape Improvements

Some components of the above solutions have been identified for quick-build implementation, meaning that temporary materials or short-term fixes can be put in place while funding is identified, and formal designs are prepared for permanent implementation. The quick-build projects will deliver many of the same benefits of the permanent projects and will allow the community to provide feedback ahead of permanent installation.

Quick-build Solutions

(part of #3) Pedestrian crossing bulb-outs and crosswalks

(part of #7) Upgrades to existing fixtures

(part of #8) Temporary bus boarding islands

Chapter 1: Introduction

The Metropolitan Transportation Commission (MTC) initiated the Community-Based Transportation Planning (CBTP) program in 2002 to identify the needs for low-income communities through a collaborative effort from residents, community organizations, and transportation agencies.

CBTPs include a demographic analysis of the area, a list of community-prioritized transportation gaps and barriers, strategies and/or solutions to address these gaps, identification of potential funding sources, a list of stakeholders to implement the plan, and documented results of community outreach strategies. Since 2002, more than 30 lower-income communities in all nine Bay Area counties have developed CBTPs.

The San Rafael Canal neighborhood is a proposed Priority Development Area (PDA) by the City of San Rafael, as well as an Equity Priority Community (EPC) as identified by MTC, making it a CBTP candidate. Because of its PDA designation, the Canal neighborhood will require a Specific or Precise Plan to be adopted by 2025 to address the community's needs and make it eligible for PDA funding sources. The solutions identified in this document will feed into future specific plan efforts.

Canal Neighborhood Community-Based Transportation Plan Update

In 2018, MTC provided supplemental Congestion Management Agency (CMA) Planning funds to CMAs for updates to CBTPs and amended the CMA planning agreement to conduct updates or new CBTPs. In 2019, the Transportation Authority of Marin (TAM) was awarded funds to update the 2006 Canal Neighborhood CBTP and passed the funds and project management role to the City of San Rafael. The City, in turn, contracted with Fehr & Peers transportation consultants and Canal Alliance, a local community-based organization, to lead the community-based planning effort.

Chapter 2 Community Profile

The San Rafael General Plan 2040 identifies the Canal neighborhood, as shown in **Figure 1**, as the area south of the San Rafael Canal, east of Highway 101 and Interstate 580, north of, but including the Bellam Boulevard corridor, and west of Spinnaker Point and Baypoint Lagoons. Spinnaker Point and Bay Point Lagoons are included in the study area but are comprised of private roadways facilities and were therefore a secondary focus of the CBTP.

Figure 1: Study Area

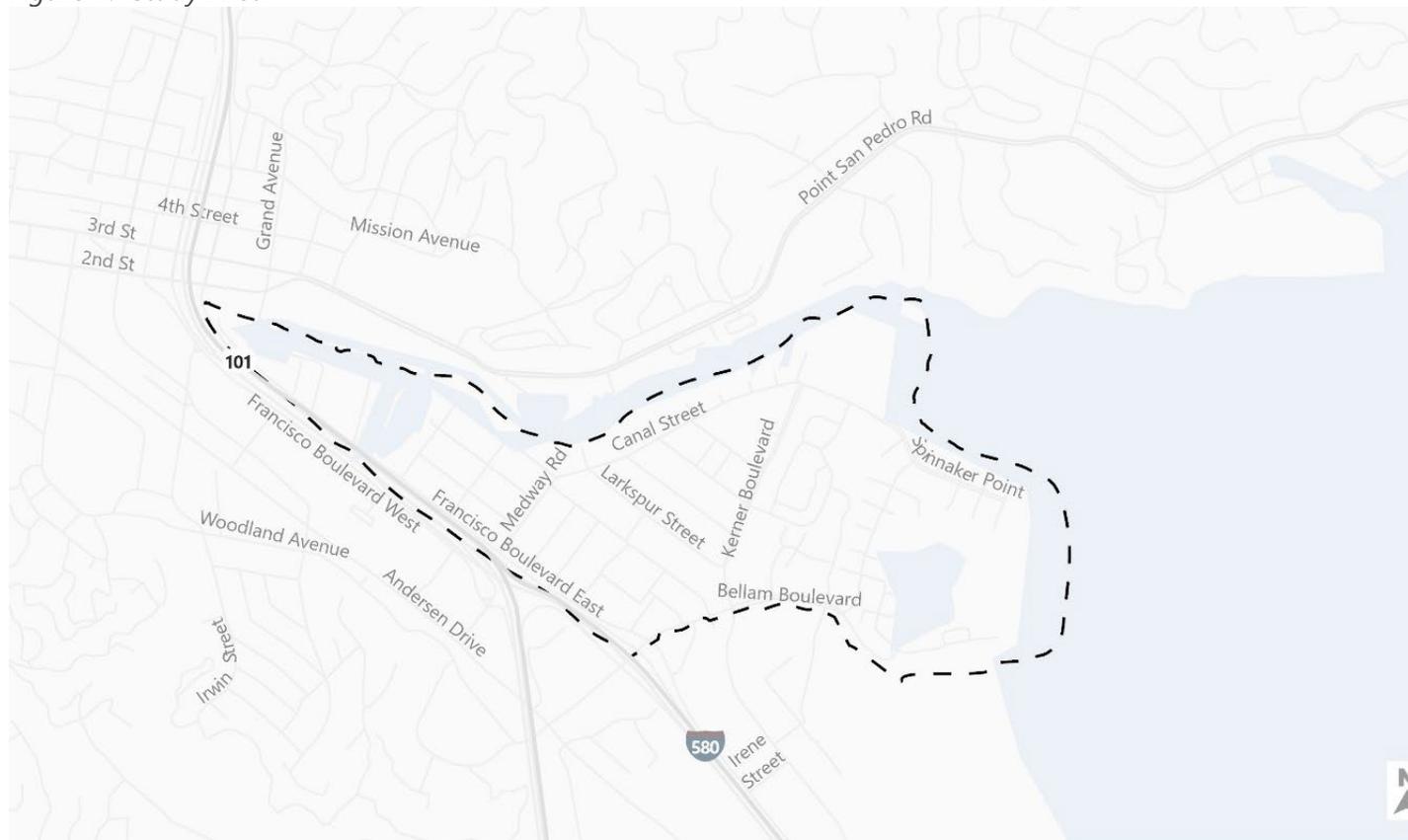


Figure 1



Canal Study Area

Study Area

The Canal neighborhood includes a high-density residential neighborhood, a commercial district, Pickleweed Park, the Albert J. Boro Community Center, and Bahia Vista Elementary School. The Canal neighborhood area is roughly 230 acres and is home to approximately 13,000 residents. Roughly one in five San Rafael residents lives in the Canal neighborhood, but the neighborhood represents just 2% of the city's land area. The residential area of the Canal neighborhood was the primary focus for this community-based transportation plan update. This chapter summarizes the existing conditions of the study area.

Land Use

The Canal neighborhood has more high-density housing than the rest of San Rafael. Most of the housing consists of two- and three-story apartment complexes built in the 1960s and 1970s. More than two-thirds of all occupied housing units meet the Census definition of "overcrowded." Housing has become increasingly unaffordable for many residents, creating a high risk of displacement with few options for relocation.

The northern part of the Canal neighborhood includes natural features including the San Rafael Canal, the Starkweather Shoreline Park, a segment of the Bay Trail, and parks and schools such as Pickleweed Park and Bahia Vista Elementary School. The southern part of the neighborhood includes a mix of local serving commercial uses, office buildings, auto repair and sales businesses, and miscellaneous commercial and industrial services. The southern part of the Canal neighborhood's street network is arranged in a grid pattern paralleling Francisco Boulevard East.

Socio-Economic Characteristics

The Canal neighborhood is divided between three census tracts in the city of San Rafael: 1122.02, 1122.03, and 1122.04. A map of the census tracts is provided in **Figure 2**. This section includes a description of age, ethnic, economic, employment, and travel characteristics of the community.

Table 1: 2020 Socio-Economic Characteristics of the Canal Neighborhood

Attribute	Census Tract 1122.02	Census Tract 1122.03	Census Tract 1122.04
Area Size (Sq Mi)	1.5	0.042	0.1
Population Size	5,658	2,461	4,806
Median Age	28	25	27
Ethnicity	73% Latinx	91% Latinx	89% Latinx
Language	63% Spanish	78% Spanish	76% Spanish
Household Size (persons per household)	3.9	4.6	4.1
Median Household Income	\$70,870	\$56,974	\$40,000
Poverty Level (persons below poverty line)	9.6%	36.4%	39%
Renter or Owner-Occupied Units	70% renter occupied	87% renter occupied	95% renter occupied

Source: Census Reporter, ACS 2020 5-Year Data, 2022.

Figure 2: Census Tracts in the Canal Neighborhood

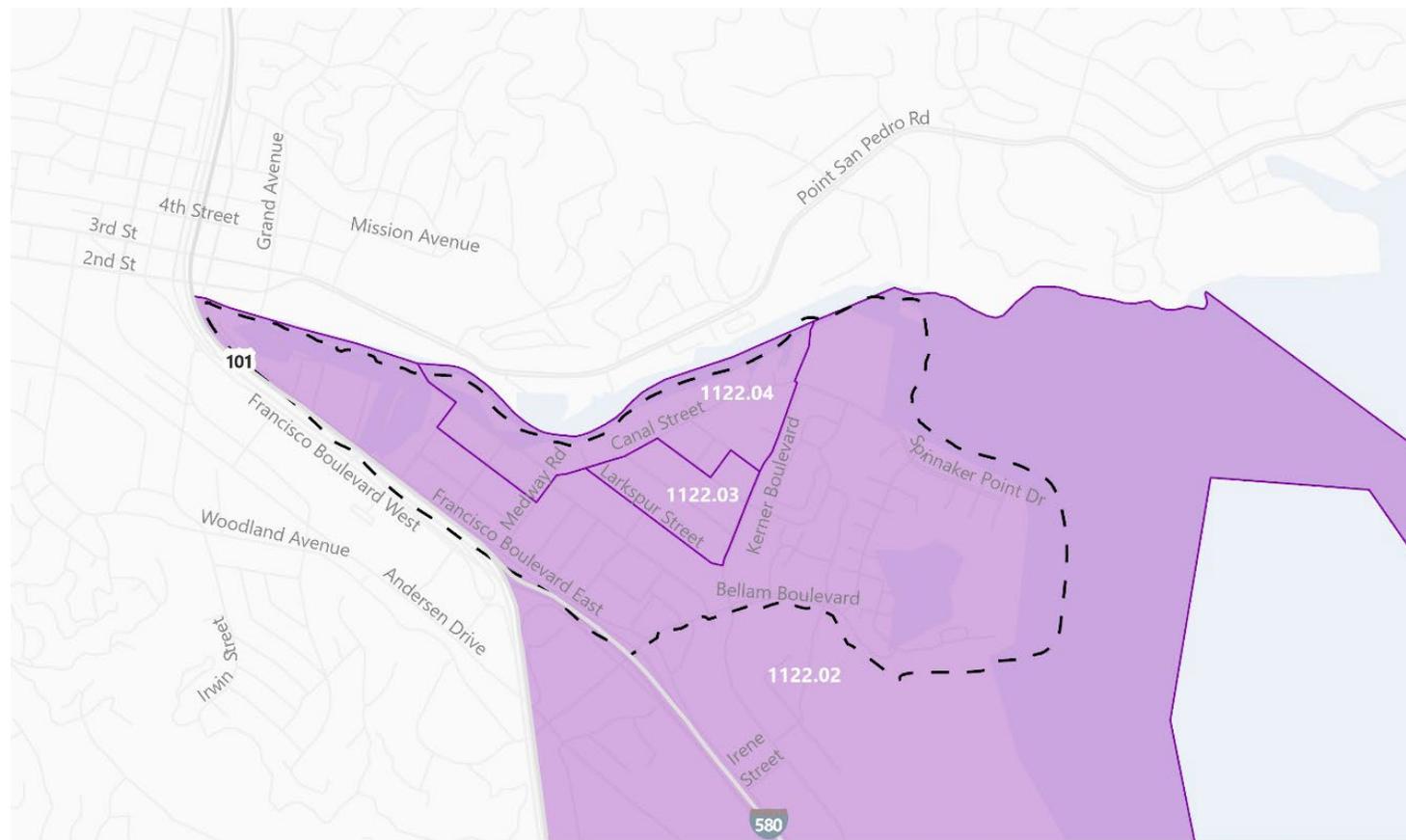


Figure 2



-  Canal Study Area
-  Canal Census Tracts

Census Tracts in the Canal

Population

According to the 2020 American Community Survey 5-Year Data Profiles, the Canal neighborhood has 12,925 residents. This represents 22% of the total population of the city of San Rafael. Of the total population, there is a higher percentage of males in the Canal neighborhood (54%) than in San Rafael (49%). In addition, the population of the Canal neighborhood is generally younger than the population of the city of San Rafael. The median age in the Canal neighborhood is 27 compared to 43 in San Rafael.

Ethnicity and Language

The Canal neighborhood has a significant Latinx population (89%) compared to the population of San Rafael (30%). In the Canal neighborhood, Spanish is cited as the primary language spoken at home in 76% of households compared to the city of San Rafael citing English as the primary language in 67% of households.

Households

The Canal neighborhood has a significantly larger average household size (almost 50% larger) than that found in San Rafael. Households in the Canal neighborhood average 4.1 persons per household while in San Rafael they average 2.4 persons per household. Most Canal neighborhood households include school-aged children.

Income and Poverty Levels

Canal neighborhood residents have lower household incomes and higher poverty levels than residents of the city of San Rafael as a whole. The median income for the Canal neighborhood in 2020 was \$56,974 while for the city of San Rafael the median income was \$97,009. Of households in the Canal neighborhood, 36% of residents are living below the poverty level compared to less than 11% for all of San Rafael.

Household Tenure and Costs

Over 87% of housing units in the Canal neighborhood are renter-occupied units compared to 51% across the city of San Rafael. In the Canal neighborhood, most residents moved into in their homes between 2010 – 2014; 31% have lived in their homes since the 2000s and only 9% have been in their homes since the 1990s. This number is comparable to San Rafael as a whole where 27% of residents moved into their homes between 2010 – 2014, 26% since the 2000s, and 11% since the 1990s.

Employment

The population of Canal neighborhood residents 16 years and older has a higher proportion of residents in the labor force and a lower unemployment rate than the city as a whole. The Canal neighborhood has 74.1% of its 16-years and older population in the labor force compared to 65.9% of San Rafael. The citywide unemployment rate is at 5% while it is at 3.6% in the Canal neighborhood. Approximately one-third of Canal neighborhood residents work in service occupations and 17% of residents work in retail industries. This differs from San Rafael as a whole - 48.7% of San Rafael residents work in management occupations and 20.3% work in the educational services or health care industries.

Travel to Work

When asked about travel to work, the census asks which mode is used most frequently. The following information does not include workers who have commutes involving more than one method, such as walking or bicycling to meet a carpool or catch a bus.

Although a high percentage of Canal neighborhood workers drove alone (47.4%), this percentage is much lower than the 61.5% reported for all of San Rafael. Workers from the Canal neighborhood were also more likely to carpool (24.6%) and use transit (10.8%) compared to all San Rafael residents (9.1% carpool, 8.2% transit).

When asked about vehicle availability, only 1% of Canal neighborhood residents did not have access to a vehicle compared to 3% for all of San Rafael. In the Canal neighborhood, 38% of residents had access to at least two vehicles compared to 42.3% for all of San Rafael. These vehicle access statistics did not match feedback from community members, however; many residents shared that they did not have access to a vehicle even though someone in their household had a vehicle. This may be attributable to confusion with how the census question is worded.

Where people work will affect the length of the commute trip and the modes available. Approximately 88% of Canal neighborhood residents work within Marin County. These numbers are somewhat higher compared to San Rafael as a whole, with 70.4% of respondents working within Marin County. Travel time to work refers to the total number of minutes that it usually takes a person to get from home to work each day. Twenty percent of Canal residents cited a commute of 15 to 19 minutes, followed by 16% citing a commute of 30 to 34 minutes, and 15% citing a commute of over 60 minutes. Commute times are very similar for San Rafael as a whole.

Transportation Infrastructure and Service

This section describes the roadway network in the Canal neighborhood, transit services, bicycle and pedestrian facilities, and new mobility trends.

Roadway Network

Regional access to the Canal neighborhood is available via the Highway 101 and Interstate 580 freeways. Highway 101 provides a north-south connection to San Francisco, Marin, and Sonoma counties. Interstate 580 provides an east-west connection over the San Rafael-Richmond Bridge to the East Bay through Contra Costa and Alameda counties. Access to the freeways is available from the Bellam Boulevard interchange in the Canal neighborhood.

Local street connections between the Canal neighborhood and the rest of the city are limited by the constraints of the San Rafael Canal waterway, Highway 101, and Interstate 580. Vehicle access is available at two locations: Francisco Boulevard East/Grand Avenue to the north and Bellam Boulevard/Anderson Drive to the west. Major arterials in the neighborhood include Bellam Boulevard, Francisco Boulevard East, Canal Street, Medway Road, and Kerner Boulevard. Neighborhood streets within the Canal neighborhood are generally narrower than other streets in San Rafael. Parking takes up a large portion of street space, yet parking demand is very high and finding a space is extremely difficult. The majority of the streets in the Canal neighborhood are two lanes besides Bellam Boulevard and Francisco Boulevard East. Bellam Boulevard includes 4-6 lanes and Francisco Boulevard East includes 3-4 lanes.

Recent upgrades or upcoming changes to the network include:

- Replacement of the Grand Avenue Bridge
- Restriping of Medway Road and Mill Street
- Restriping of Medway Road and Front Street
- Restriping of Bellam Boulevard and Vista Del Mar
- Streetlight improvements on Bellam Boulevard and Windward Way

- Spinnaker Point medians and parking changes
- Fire Station 54 replacement (underway)
- US-101 northbound central San Rafael off-ramp bridge replacement (Caltrans) (underway)

Transit

Transit service in Marin County is available for both regional and local trips. Regional service, which includes connections to Sonoma, San Francisco, and Contra Costa counties, is operated by [Golden Gate Transit](#). Local transit service throughout San Rafael and other Marin County cities is operated by [Marin Transit](#). Marin Transit contracts with Golden Gate Transit to operate local bus service within Marin County and the Canal neighborhood. School bus service to elementary and middle school students is provided directly through yellow bus service from the San Rafael City School District, while bus service to high school students is provided through supplemental routes offered by Marin Transit.

Community outreach for the CBTP was conducted during the COVID-19 pandemic, at which time there was a decrease in service on Golden Gate Transit routes serving San Rafael. Marin Transit largely maintained service levels on local routes throughout the pandemic. Throughout the past few years, there have been many capital improvements in the Canal neighborhood to bus stops, including ADA upgrades and route frequency increases.

The San Rafael Transit Center is a regional transit hub located half a mile northwest of the Canal neighborhood. The Transit Center provides coordinated/timed bus connections between local bus routes and regional bus service, airporter service to both San Francisco and Oakland Airports, taxi service, and SMART train connections.

Marin Transit and the City are currently designing a new eastbound bus stop on East Francisco Boulevard at Medway Road. The goal is to allow passengers bound for the western part of the Canal neighborhood to get off the bus near to their destination without going around the whole loop.

Routes

Since 2006, there have not been many changes to the Golden Gate Transit route that serves the Canal neighborhood; route 580 (formerly route 40) connects the Canal neighborhood to the East Bay via the Richmond Bridge. Marin Transit has introduced new direct connections to the Canal neighborhood since 2006 and undergone many service changes. In the late 2000s, Marin Transit added the 23, 23x, and 29 lines in the Canal neighborhood. These lines provide increased frequencies and transit service capacity to the Canal neighborhood. Route 645 provides supplemental service connecting the Canal neighborhood to San Rafael High School and Terra Linda High School.

Local bus service in the Canal neighborhood is available on routes 23, 23x, 29, 35, and 36. Lines 23 and 23x provide access to Fairfax, line 29 provides access to Marin Health Centers, line 35 provides access to Novato, and line 36 provides access to Marin City. The local bus routes are displayed in **Figure 3**.

Figure 3: Local Bus Routes

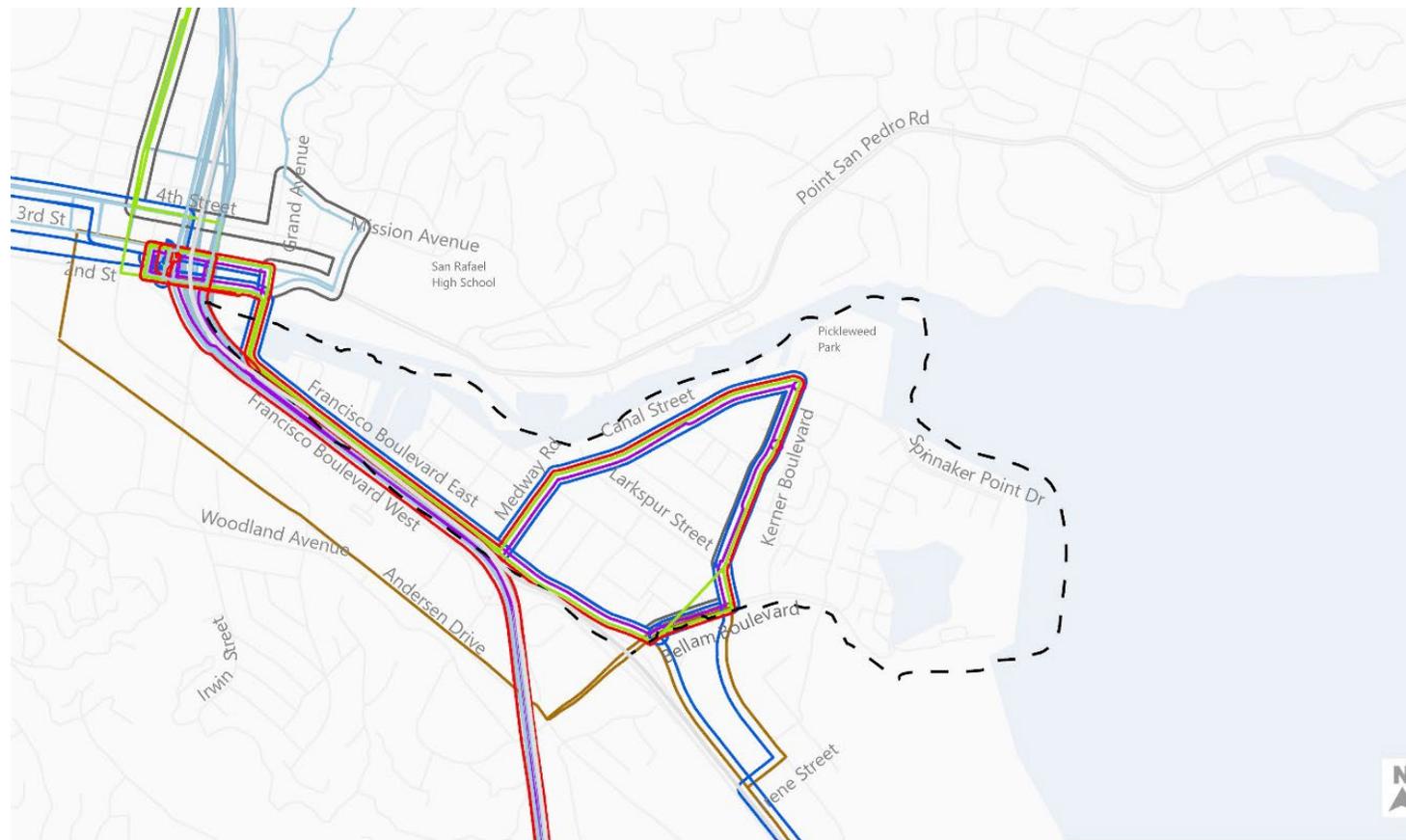
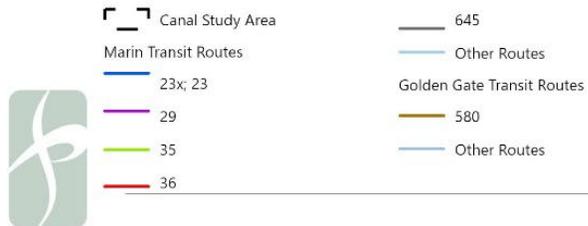


Figure 3



Marin Transit Bus Routes

Table 2: Canal Neighborhood Transit Service Summary

Line	Route	Weekday		Weekend	
		Hours	Headway	Hours	Headway
23	Canal to Downtown Fairfax	5:51 AM to 9:51 AM	1 hour	7:06 AM to 9:06 PM (Saturday) 7:06 AM to 8:06 PM (Sunday)	1 hour
23X	Canal to Fairfax Manor	7:15 AM to 6:16 PM	2 morning trips – 1 hour, 4 evening trips – 1 Hour	N/A	N/A
29	Canal to Marin Health Centers	6:46 AM to 5:46 AM	3 morning trips -1 hour, 4 evening trips – 1 hour	N/A	N/A
35	Canal to Novato	5:08 AM to 2:08 AM	15 – 30 minutes	5:08 AM to 2:08 AM	30 minutes
36	Canal to Marin City	6:01 AM to 8:01 PM	30 minutes	7:23 AM to 6:23 PM	30 minutes
645	Canal to Terra Linda High School	7:34 AM (north) 3:55 PM (south on Monday, Tuesday, Thursday) 3:05 PM (south on Wednesday and Friday)	N/A	N/A	N/A
580 (Golden Gate Transit)	San Rafael to El Cerrito Del Norte BART Station	6:30 AM to 9:30 PM	30 minutes (before noon); 1 hour (afternoon)	7:30 AM to 7:30 PM	1 hour

Source: Marin Transit, 2022; Golden Gate Transit, 2022.

Pedestrian Facilities

Although most streets in the Canal neighborhood have sidewalks, there are few locations where sidewalks are wide enough for wheelchair and stroller access. Generally, sidewalks are relatively narrow, and the effective sidewalk width is further constrained by poles, street furniture, or other obstructions. There are intersections without curb ramps and locations where sidewalks and ramps do not meet ADA requirements. The San Rafael Bicycle and Pedestrian Master Plan Update (BPMP, 2018) identified the lack of bicycle/pedestrian bridge connections to other parts of San Rafael from the Canal neighborhood. Specific locations needing pedestrian improvements within the Canal neighborhood were identified in the 2018 BPMP. These locations include:

- The undercrossing at Bellam Boulevard and I-580
- Francisco Boulevard East near Bay Street
- The intersection at Belvedere and Tiburon Street

The BPMP has proposed recommendations for specific pedestrian projects. These projects include both physical and programmatic components. Many of the projects would improve conditions for pedestrians

including improved or additional roadway crossings, traffic calming, enforcement, street lighting, and elimination of travel barriers. These projects are described in Chapter 3. A few intersections in the Canal neighborhood recently received curb ramp, lighting, and/or rectangular rapid flashing beacons (RRFBs) improvements:

- Bellam/Vista del Mar
- Medway/Front
- Medway/Mill
- Kerner/Sonoma
- Canal-Spinnaker/Bahia
- Belvedere/Vivian
- Bellam/Windward

Bicyclist Facilities

Since the City's adoption of the 2011 Bicycle and Pedestrian Plan, the City of San Rafael has made progress towards its goals. The City has implemented 26% of its proposed bicycle projects (by miles), including 0.43 miles of Class I multi-use paths, 3.05 miles of Class II bicycle lanes, 3.85 miles of Class III bicycle routes, and 0.15 of Class IV protected bikeways. Existing bicycle facilities in the Canal neighborhood study area, as shown in **Figure 4**, include:

- Class I paths along Pickleweed Park, the Bay Trail Shoreline Path, and Starkweather Path
- Class II bike lane on Baypoint Village Drive connecting Bellam Boulevard to the Bay Trail Shoreline Path
- Class III bike routes along Canal Street, Bellam Boulevard, Medway Road, and Francisco Boulevard East

The 2018 BPMP has proposed recommendations for specific bicyclist projects. These projects help address existing network gaps in the bicycle network and are described in Chapter 3.

Figure 4: Bicycle Facilities



Figure 4



Bikeways

- Proposed
- Class I Bike Path
- Class II Bike Lane
- Class III Bike Route
- Class IV Protected Bike Lane

San Rafael Bikeways

New Mobility Trends

Since the last CBTP in 2006, there have been many new mobility trends throughout the Bay Area. Specifically, San Rafael has seen an increase in drive-alone commuting and an increase in access to vehicles.

In the early 2010s, the rise of transportation network companies (TNCs) began offering ridehail options to travelers. Ridehailing services are now available through many phone applications, but most commonly through Uber or Lyft. Ridehailing provides an alternative to driving alone or carpooling for those traveling. Community members indicated that use of ridehailing services is uncommon in the Canal neighborhood. One exception is the TAM GetSMART pilot program. The GetSMART program operated from 2018 to 2019 through a partnership with TAM, Lyft, and Whistlestop. The program provided first mile/last mile services for passengers using the SMART commuter rail service in Marin County. Users were offered \$5 coupon codes to use on Lyft shared rides to/from SMART stations. The downtown San Rafael SMART station and the Transit Center were identified as the most heavily used transit locations. The most popular trip destination for trips originating at the Transit Center was southeast San Rafael including the business districts along Francisco Boulevard East and Kerner Boulevard.

Work-from-home has become more common since the COVID-19 pandemic began in 2020. More people work-from-home today than before, and a hybrid option remains in place for office workers as the world returns to a new normal. This option is not available to service or retail employees.

In 2013, bikeshare launched in the Bay Area providing Bay Area residents with access to bicycles to rent for short periods of time, providing first mile/last mile solutions. Bikeshare has evolved many times since then and scootershare is also available in some Bay Area cities. TAM is in the process of launching a pilot bikeshare program throughout Marin and Sonoma counties.

Electric vehicles (EVs) have also become a popular option and alternative to an internal combustion engine (ICE), or gas-powered, vehicle. Many Electric Vehicle Supply Equipment (EVSE) companies provide public charging options to EVs through parking garage or curbside chargers. The city of San Rafael currently has free EV charging available at four parking lots in downtown San Rafael.

Chapter 3 Relevant Studies and Reports

Many studies have been completed since the 2006 CBTP that plan for the future of the Canal neighborhood study area. This chapter summarizes recent reports to understand the impact of these studies on past, current, and future transportation planning for the Canal neighborhood and city of San Rafael. This review of relevant studies and reports also helped to recognize what has already been accomplished and what issues are long-standing concerns of residents and public officials. Completed studies and reports are reviewed below while parallel or upcoming efforts are described in Chapter 6.

Neighborhood Studies

[Community-Based Transportation Plan \(2006\)](#)

The 2006 CBTP is the predecessor to this plan update. It identified mobility barriers and solutions for transportation in the Canal neighborhood through a community-based planning process. Key projects highlighted by the plan include the following, many of which continue to be pain points for the community today:

- Adjustment to bus transit service
- Crosswalk and lighting improvements
- Canal crossing from the Canal neighborhood to downtown, San Rafael High School, and the Montecito Shopping Center
- Safe Routes to School (SR2S) improvements
- Canal Neighborhood Safety and Streetscape Improvement Project
- Highway crossing between the Canal, Interstate 580/Highway 101, and Andersen Drive
- Streets smarts program
- Rides to School for Parents program
- Neighborhood transportation information kiosk
- Canal-front Paseo
- Modified transit fare to downtown
- Carshare program

[Voces Del Canal Lighting Study](#)

In collaboration with Dominican University and Canal Alliance, members of Voces del Canal (a coalition of resident leaders from the Canal neighborhood) partnered on developing a project to advocate for public lighting improvements in the Canal neighborhood. Voces del Canal is a collation of parents, essential workers, and community leaders dedicated to improving the health and economic well-being of Canal neighborhood residents. Voces del Canal identified public safety as a significant concern that could be addressed by increased public lighting. Voces del Canal identified seven routes that need lighting improvements in the neighborhood. The team's recommendations include:

- Increasing lighting along the seven routes identified
- Improve pedestrian safety including adding pedestrian lighting and beacons at crosswalks
- Increase parking availability
- Install security cameras
- Increase communication and collaboration with the police to develop a Neighborhood Safety Committee
- Provide a safe space for children to play outdoors by increasing lighting around Pickleweed Park

City of San Rafael Studies

[General Plan 2040 \(2021\)](#)

The *San Rafael General Plan 2040* was adopted in August 2021 by the City Council. The General Plan provides policy and action guidance for the City of San Rafael to plan its future development. The General Plan 2040 did not include a housing element, but the housing element update is currently underway. The General Plan recommends the following transportation improvements for the Canal neighborhood:

- Policy M-6.1 Encourage Walking and Cycling
 - Program M-6.1C: Canal Community-Based Transportation Plan (CBTP) update the CBTP for the Canal neighborhood, including provisions to improve walking and cycling within

the Canal and East San Rafael communities, explore water transportation, and better connect the Canal area to downtown, the waterfront, and the rest of the community.

- Policy M-6.2: Pedestrian and Bicycle Safety
 - Program M-6.2A: Implementation of safety measures including those described in the 2018 BPMP.
- Policy M-6.3 Connectivity
 - Program M-6.3A: Implementation of pathway improvements including an improved crossing of the San Rafael Canal.

[Bicycle and Pedestrian Master Plan \(2018\)](#)

The 2018 BPMP is an update to the *2011 Bicycle and Pedestrian Plan*. The updated BPMP gathered input from the City's Bicycle and Pedestrian Advisory Committee (BPAC), stakeholders, and interested residents to develop a vision for bicycling and walking and resulted in 537 online and in-person survey responses to existing bicycling and walking conditions. The plan provided recommendations for both pedestrian and bicyclist improvements described below:

Recommended pedestrian improvements in or adjacent to the Canal neighborhood:

- Project D-13 Anderson Drive Intersection: Create diagonal path through intersection to connect the Mahon Creek Connector to the Albert Park Path.
- Project D-14 Lindaro Street Intersection: Add high-visibility crosswalks at Davidson Middle School.
- Project F-3 Second Street: Sidewalk and curb improvements, and intersection and driveway reconfiguration at Second Street and Grand Avenue.
- Project F-4 Montecito Plaza Waterfront Trail: Pedestrian pathway and landscaping improvements to Montecito Plaza Waterfront Trail (also called Canal Paseo).
- Project F-13 Bellam Boulevard: Improve pedestrian conditions.

Recommended bicyclist improvements in or adjacent to the Canal neighborhood:

- Project D-1 Downtown East-West Connection: Study the feasibility of an east-west bikeway through downtown San Rafael.
- Project D-3 Davidson Middle School Path: Study the feasibility of a Class I multi-use path.
- Project D-4 Fourth Street Path: Study the feasibility of east-west and north-south Class I multi-use paths running through San Rafael High School playing fields.
- Project D-5 Third Street Bikeway: Create Class I multi-use path along Third Street.
- Project F-2 Grand Avenue: Study feasibility of Class IV two-way protected northbound bikeway.
- Project F-5 Canal Crossing: Study potential bicycle and pedestrian bridge over San Rafael Canal at Third Street.
- Project F-6 Yacht Club Drive Connector: Study improved bicycle access from the Canal neighborhood to Beach Park via Class III bicycle route and addition of short-term bicycle parking at Beach Park.
- Project F-7 Harbor Street Connector: Create Class III bicycle boulevard on Harbor Street, incorporating bicycle pavement markings, wayfinding signage, and traffic calming elements.

- Project F-9 Canal Street Connector: Study upgrade of existing Class III bicycle route to Class III bicycle boulevard, Class II bicycle lanes, or advisory bicycle lanes.
- Project F-10 Canal Street: Close gap between Class III bicycle route on Canal Street at Sorrento Way and existing Class I multi-use path at Pickleweed Park.
- Project F-11 Bahia Place Creek Pathway: Study feasibility of paving creek pathway.
- Project F-12 Bellam Boulevard/Baypoint Village Drive: Study feasibility of Class IV protected bicycle facilities on Bellam Boulevard and Baypoint Village Drive corridor connecting to the San Francisco Bay Trail.
- Project F-14 Kerner Boulevard: Study feasibility of Class IV parking-protected bikeway, Class II bicycle lanes, or Class III bicycle route.
- Project F-15 Kerner Boulevard Pathway: Study feasibility of Class I multi-use path.
- Project F-16 Kerner Boulevard: Study feasibility of Class IV protected bikeway on Kerner Boulevard.
- Project F-17 San Francisco Bay Trail: Close gap in existing Class I multi-use pathway.
- Project F-18 Pedestrian and Bicyclist Overcrossing: Study the feasibility of a pedestrian overcrossing over Highway 101 to connect the Canal neighborhood with Francisco Boulevard West.
- Project F-19 Bicycle Parking: Install bicycle parking in the Canal neighborhood.

[Capital Improvements Program Active Projects](#)

The Capital Improvements Program (CIP) is a multi-year planning tool used to identify and implement the City's capital needs over the upcoming 3-year period. The CIP document summarizes the City's planned capital and infrastructure projects and their funding sources and prioritizes projects after analysis and coordination with other City departments. The following are active or recently completed projects in the city of San Rafael:

- Canal Neighborhood Pedestrian Safety Improvements
 - Installing ADA accessible curb ramps at the intersections of Kerner Boulevard and Sonoma Street and at Vivian Street and Belvedere Street
 - Restriping of crosswalks at Canal Street – Spinnaker Point Drive and Bahia Way
 - Restriping of crosswalks with new, high-visibility striping at Vivian Street and Belvedere Street
- Francisco Boulevard East Sidewalk Improvements
 - Widening the sidewalk along Francisco Boulevard East to improve pedestrian and bicycle usage
 - Provide connectivity between the Grand Avenue Bridge and wider sidewalk south of Vivian Street

County and Regional Studies

[Marin Transit Short Range Transit Plan \(2020\)](#)

The *Marin Transit Short Range Transit Plan* is updated every two years in compliance with the Measure AA expenditure plan to effectively respond to the changing transit needs of Marin County travelers. The plan

evaluates systemwide performance, corridor-level performance, route-level performance, and district performance, and establishes goals for future performance levels.

In response to prior community concerns, the *Marin Transit Short Range Transit Plan (2020)* recommended several adjustments to their transit service.

- To ensure reliable services, Marin Transit aims to have a 90% on-time performance target at major stops and transfer hubs and an 80% on-time performance target at minor timepoint stops for fixed-route operations. The District also aims to have less than 1% of fixed-route trips missed or removed from the daily schedule.
- Increase service on routes serving the Canal neighborhood to provide comparable seating capacity for the transition of articulated buses to standard 40' buses impacting routes 23X, 29, and 35. This change would provide 8–10-minute service frequencies during peak hours.

[Golden Gate Transit Short Range Transit Plan \(2019\)](#)

The Golden Gate Bridge and Highway and Transportation District (GGBHTD) operates Golden Gate Transit bus service throughout San Francisco, Marin, Sonoma, Napa, Mendocino, and Del Norte counties. Golden Gate Transit provides regional, commute, and commute shuttle routes. The Short Range Transit Plan establishes goals, objectives, performance measures, and standards per transit service of the GGBHTD. The plan calls for modifying service levels to accommodate SMART rail service, enhancing bus service levels, and creating a new recreational bus service.

[San Rafael Transit Center Relocation Study \(2017\)](#)

The San Rafael Transit Center Relocation Study sought to identify transit center solutions to address the near-term and long-term needs of transit riders, operators, and agencies. The interim solution determined by the study modifies Tamalpais Avenue to provide three bus bays along northbound Tamalpais Avenue between Second and Third Streets and two bus bays along southbound Tamalpais Avenue between Third and Fourth Streets. All parking on these two blocks is removed. The new bus bays will include shelters, benches, security elements, and concrete bus pads. Signal modifications are needed at Tamalpais Avenue & Second Street to accommodate changes to curbs and a shift in lane alignment, and at Tamalpais Avenue & Third Street to accommodate a bus-only phase and a shift in lane alignment. Long-term improvements were also explored and require further environmental analysis.

Chapter 4 Community Outreach

Engagement with the Canal neighborhood community was central to the community-based planning process. It was important to discuss transportation needs, deficiencies, and solutions with Canal neighborhood community members in order to involve community voices from start to finish. Engagement included coordination with a resident Stakeholder Committee and a Technical Advisory Committee (TAC), a brief Facebook and WhatsApp survey, a series of focus groups, and a Community Open House. In this chapter, the outreach and engagement efforts are described followed by a summary of the input collected. Raw materials, poster results, and photos from the process can be found in the **Appendix**.

Outreach Methodology

Stakeholder Committee

The Stakeholder Committee was composed of neighborhood residents and representatives from community-based organizations and coalitions. Committee meetings were held in Spanish to accommodate the committee members. The committee met three times during the planning process to oversee the preparation of the CBTP. Many committee members participated in the focus group workshop and hosted stations at the community open house. The Stakeholder Committee meetings were held online via Zoom. Each document prepared as part of the CBTP was reviewed and revised by the committee. Committee members were compensated for their time spent at meetings, promoting the open house, and hosting stations at the open house. The Stakeholder Committee meetings included:

- Meeting 1: Introduction to CBTP Update, description of plan process, roles and responsibilities of Stakeholder Committee members, deliberating top themes for focus group discussions.
- Meeting 2: Discussion of the focus group workshop, possible transportation solutions and priorities for implementation, and planning for the community open house.
- Meeting 3: Review, comment on draft plan.

Technical Advisory Committee

The Technical Advisory Committee was comprised of various agencies at the local and county level focused on transportation, including representatives from TAM, Marin Transit, Golden Gate Transit, SMART, City of San Rafael Public Works, San Rafael Bicycle and Pedestrian Committee, and the San Rafael Chamber of Commerce East San Rafael Working Group. The TAC met three times during the planning process to oversee the preparation of the CBTP and listen to and respond to comments made by the Stakeholder Committee. TAC meetings were held online via Zoom and the TAC reviewed each document prepared as part of the CBTP.

Facebook and WhatsApp Surveys

In January 2022, Canal Alliance conducted a Spanish language survey of Canal neighborhood residents and of Voces del Canal members concerning top transportation pain points in the Canal neighborhood. The survey asked: "What are the three greatest transportation challenges in the Canal?" and allowed respondents to choose up to three of nine categories:

1. Insufficient parking supply
2. Inadequate public lighting
3. Lack of safe crosswalks and sidewalks
4. Lack of traffic signage
5. Lack of pedestrian crosswalks and bike path connections to other parts of San Rafael and Marin County
6. Lack of vehicular connections to other parts of San Rafael and Marin County
7. Unsafe connections to schools
8. Unsafe driver behavior
9. Insufficient public transit service or infrastructure

This list was assembled based on recent community feedback collected for the San Rafael General Plan Update and insights from City staff. The survey was distributed in Spanish via Facebook and the Voces del Canal WhatsApp group. A total of 34 responses were recorded: 18 from Facebook and 16 from WhatsApp. The survey results were used to narrow in on focus group topics with the Stakeholder Committee.

Focus Group Workshop

The focus group workshop was held on February 28, 2022, via Zoom, to identify transportation gaps and potential solutions. The workshop discussed three topics in three separate sessions. The first session included all participants while the second and third sessions occurred simultaneously in separate breakout rooms. This format gave participants the opportunity to participate in at least two sessions. The focus group topics were those that received the most votes through the Facebook and WhatsApp surveys:

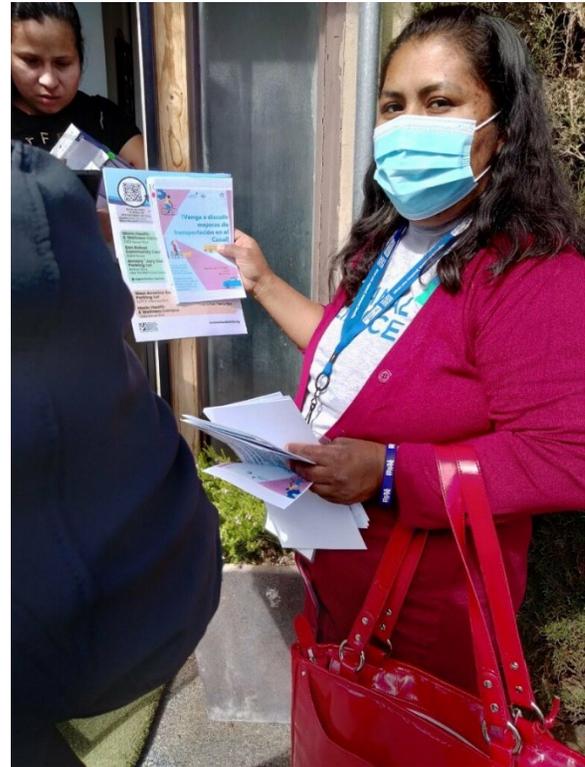
- Session 1: Connections to work and school (via transit, bicycling, or walking)
- Session 2: Transit stops (locations, amenities, and security)
- Session 3: Lighting improvements and safe routes for walking

The workshop was conducted with a flexible attendance policy to allow participants some flexibility as to when and how long to attend. The Stakeholder Committee felt that the open house format (including three sessions in one workshop) would be a better fit with attendees' busy schedules. Presentation materials were prepared in Spanish and discussions were held in Spanish with English translation available for City and agency staff. Community attendees were compensated for their time.

Advertisement for the Community Open House

To ensure a good turnout, Canal Alliance and Voces del Canal distributed approximately 700 flyers 2-3 weeks before the community open house. The open house flyer included information for the event date and invited the community to participate in recommending transportation solutions for the Canal neighborhood. The flyer and event information were distributed through the following:

- Door-to-door outreach
- Flyers at community centers
- Emails to focus group attendees
- Digital outreach on Canal Alliance's Facebook page and WhatsApp





Community Open House

The City hosted a community open house with Canal Alliance and the Stakeholder Committee members on Alto Street in the Canal neighborhood on Saturday April 23, 2022, from 1 PM – 4 PM. More than 100 residents and interested parties attended. The open house format built upon improvement/project recommendations from both the Stakeholder Committee and the focus group participants resulting in four stations:

- Station 1: Bicyclist and Pedestrian Improvements and Access
- Station 2: Lighting
- Station 3: Transit Stops and Service
- Station 4: Final Prioritization of All Topics



There were five additional stations present for the event:

- Children’s Activities: Providing transportation games and activities
- COVID-19 vaccine sign-ups
- Marin Transit: Providing information on their transit services
- SMART: Providing information on their transit services
- Canal Alliance: Providing information on their organization



Each station had Spanish and English facilitators available to explain improvement recommendations and how the Stakeholder Committee arrived at these potential improvements. Poster information was presented in Spanish and English with pictures of improvement types. Community members were asked to vote on specific improvements identified at each topic station and to vote on the top two topics that would be most beneficial to their community. Post-it notes were available at each station for any location-specific improvements or additional questions.

Station 1: Bicyclist and Pedestrian Improvements and Access

Four posters were displayed at the station showing improvement recommendations from the Stakeholder Committee and focus group:

- Poster 1: Pedestrian improvements
- Poster 2: Bicyclist improvements
- Poster 3: Bridge connecting the Canal neighborhood to Third Street/Point San Pedro
- Poster 4: Map of the Canal neighborhood for location-specific recommendations

Participants were asked to use two stickers (per person) to place on any of the improvements in Posters 1 through 3 that were the most important to them. Participants could place both stickers on one improvement type if that was the most important to them or place the stickers on separate improvement types.

Table 3: Station 1 (Bicycle and Pedestrian Improvements and Access) Tally Results

Improvement Category	Description	Tallies
Bicycle	Bike lanes	5
	Bike parking	0
	Bikeshare system	2
	Bike signage	0
	Traffic calming	23
Pedestrian	Pedestrian crossings and RRFBs	35
	Speed limit signs	1
Bridge connections	Swing bridge from Harbor/Canal to Third/Point San Pedro	45

Source: Fehr & Peers, 2022.

Station 2: Lighting

Stakeholder Committee members presented survey results and previous recommendations on lighting route improvements based on a joint study with Dominican University. A poster showing a map of the lighting routes was provided for reference, as was a second poster for participants to vote on which routes were the most important to them. Participants were given two stickers to place on the top two lighting routes that were most important to them. Participants also had the ability to write other location-specific lighting improvements on post-it notes.

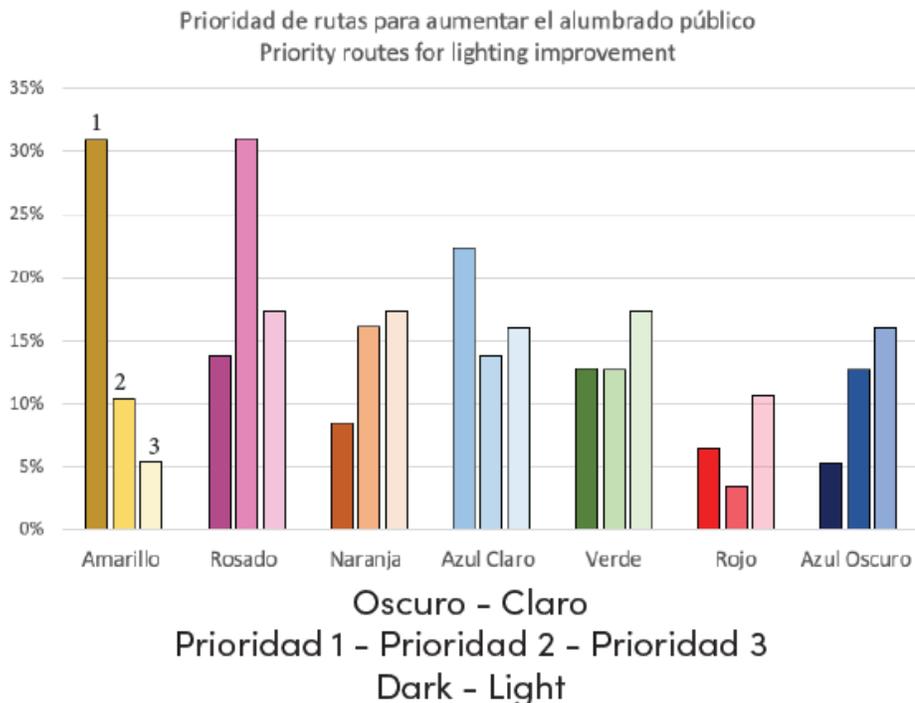


Table 4: Station 2 (Lighting) Tally Results

Lighting Routes ¹	Location	Tallies
Route #1 (Yellow)	Between Harbor and Hoag until Mi Rancho	11
Route #2 (Pink)	Pickleweed Park beginning at the picnic area, around the park, and in the soccer field	11
Route #3 (Orange)	Beginning at Playa del Rey behind Bahia Vista Elementary School and exiting on Canal Street	4
Route #4 (Light Blue)	Kerner, Novato, and Canal streets	20
Route #5 (Green)	Kerner, Larkspur, and Canal streets	17
Route #6 (Red)	Fairfax, Elaine, Sonoma, and Canal streets	16
Route #7 (Dark Blue)	The Bay Trail	18

Source: Fehr & Peers, 2022.

Encuesta: Experiencia de Noche en el Canal



These results were combined with prioritization activities previously undertaken by Voces del Canal and Dominican University, the results of which are above.

Station 3: Transit Stops and Service

Stakeholder Committee members presented three posters to the community:

- Poster 1: Transit Stop Improvements
- Poster 2: Transit Route Frequency Improvements

¹ Additional street specific lighting requests were made via sticky note at: The Bay Trail (4 notes), Larkspur St (5), Canal St (3), Fairfax St (7), Novato St (7), Pickleweed Park (3), streets with auto body shops (2).

- Poster 3: Marin County Map asking, “Where Would You Like To Go On Transit?”

Participants were asked to use two stickers for bus stop improvements, one sticker for transit route frequency recommendations, and one sticker for the map activity. Participants were also given post-it notes for any location-specific bus stop improvement recommendations or describing places they would like to travel to.

Table 5: Station 3 (Transit Stops and Service) Tally Results

Improvement Category ²	Description	Tallies
Transit Stops	Bus shelters	16
	Bus shelters with lighting	25
	Bus stop maintenance	27
	Discount passes	9
	Real-time arrivals	8
	Transit information	1
Transit Routes	#23 Canal – Downtown Fairfax via San Rafael, San Anselmo	2
	#23X Canal – Fairfax Manor via San Rafael, Fairfax	10
	#29 Canal – Marin Health via Larkspur Landing, COM	1
	#35 Canal – Novato via San Rafael, Civic Center, Northgate	12
	#36 Canal – Marin City via San Rafael, Hwy 101	3
	#645 Canal – Terra Linda HS via Civic Center	6
	GGT #580 San Rafael – El Cerrito Del Norte BART Station via I-580	0
	New route – Transit Center Canal Circulator	6

Source: Fehr & Peers, 2022.

Station 4: Final Prioritization of All Topics

Participants were thanked for attending and asked to participate in a final prioritization selection. Participants were given two stickers to place on the top two improvement categories most important to them, out of all four station topics. If a topic that was important to them was not covered, there was an additional poster to write out what the stations missed. While Stations 1 through 3 had a lot of participation, Station 4 was not frequented as often and provides limited usable information.

Key Issues and Highlights of Public Outreach

Many transportation issues discussed in previous planning studies were also raised through the present-day Stakeholder Committee meetings, focus group workshop, and community open house. These reoccurring transportation issues include the following:

Access to locations immediately surrounding the Canal neighborhood

The canal and highways create barriers between the Canal neighborhood and other areas of San Rafael. As a result, travel to locations outside the Canal neighborhood can take a long time and be extremely congested. Heavy traffic, high traffic speeds, infrequent transit, and narrow sidewalks make travel difficult

² Additional places identified as “Where Would You Like To Go On Transit?” were identified via sticky notes. This includes locations such as: Civic Center in Francisco (3 notes), Corte Madera (3), Greenbrae (4), San Anselmo (2), between Marin Civic Center and Marinwood (8), and Novato (9).

for residents. The San Rafael Transit Center, San Pedro Elementary School, San Rafael High School, and Davidson Middle School were most often noted as difficult to access by walking, biking, or transit.

Safety and Comfort

Lack of public lighting, transit stop maintenance, trash/littering, and crime at night play a role in the lack of safety and comfort for many residents. The lack of public lighting was cited as a potential cause for crime on neighborhood streets and at recreational facilities, preventing residents from walking at night or using the picnic area and soccer fields at Pickleweed Park. Residents mentioned trash/littering at or near transit stops would result in overflowing trash cans, vermin, and an unpleasant transit experience. Transit stops were often unkempt and had insufficient lighting or uncomfortable waiting space. The Medway/Mill stop was most often noted as uncomfortable.

Difficulties for pedestrian travel within the Canal neighborhood

Walking in the neighborhood was a concern for many residents. Narrow sidewalks, lack of safe crosswalks, inadequate public lighting on walking routes, and unsafe driver behavior were all cited. There was general concern about driver speeds on neighborhood streets, failure of motorists to stop at stop signs or yield to pedestrians at crosswalks or intersections, and lack of pedestrian-scale lighting at night. It was recommended that additional lighting be implemented on neighborhood and recreational streets, adding rectangular rapid flashing beacons (RRFBs), making crosswalk improvements, and adding traffic calming elements to the Canal neighborhood.

Transit access between the Canal neighborhood and other locations in the Bay Area

Transit continues to be a barrier for Canal neighborhood residents as cited by the last CBTP. Although six routes serve the Canal neighborhood with frequent service, residents identified multiple areas in which service is not meeting demand. The highest ridership bus stops are located at Medway & Mill and Kerner & Larkspur. Residents identified buses being extremely crowded (particularly in the morning) and buses not following the advertised schedules, resulting in missed transfers and late arrivals to their destinations. Additionally, residents requested more frequent service in the early morning and late evening hours for essential trips to work and school. The most frequently mentioned underserved locations include schools (San Pedro Elementary, San Rafael High School, Davidson Middle School, and Terra Linda High School), and the routes to Fairfax and Novato. Additional morning routes to Terra Linda High School and an express route to Novato were requested by many residents. In the outreach process there were numerous observations and comments that indicated lack of Canal neighborhood community awareness of available transit options and transit discounts. Additional outreach and education programs would go a long way in connecting ongoing needs with existing services and programs.

Summary of Public Comments:

Regarding transit:

- Free trips for seniors or people with disabilities are needed
- Improve the bus shelter at Medway/Mill to protect riders from the sun or rain
- All Canal neighborhood bus stops and the San Rafael Transit Center need more lighting and cleaning
- Transit routes to Sausalito and San Geronimo are needed
- The Canal neighborhood should have prioritized service in the mornings
- Route #35 needs more frequent early morning service
- More frequent service is needed in the Canal neighborhood to address overcapacity buses
- Route #35 and #23x, in particular, need more frequent service and maybe express service

- More school-route buses are needed so children do not arrive to school late
- Education around bus ramp access and improved communication between passengers and drivers

Regarding walking:

- Sidewalks are not wide enough for wheelchairs, strollers, or grocery carts in a lot of places
- Alto and Larkspur need a pedestrian crossing with RRFBs
- RRFBs near bus stops are necessary
- All sidewalks need repairs
- Many drivers speed through red lights and stop signs
- Many drivers speed on neighborhood streets, especially on Larkspur and Canal

Regarding lighting:

- Safety in the morning is needed for people who walk in the Canal neighborhood
- The Bay Trail area is very dark
- Lighting is very important to some people because they must work at night
- Lighting is needed in all public spaces

Regarding biking:

- Classes to learn how to ride a bike would help increase bicycle usage and provide a safe space to learn and practice how to ride a bike
- Bike path behind Bahia Vista Elementary School is not a well-connected bike path for commuting (note: this is a path on private property)

Regarding driving:

- Alto Street has many double-parked cars in the mornings
- Alto Street needs more parking enforcement
- The Canal neighborhood is really congested

Chapter 5 Transportation Solutions

Eleven transportation solutions are recommended to address transportation issues identified by the community during the CBTP process. The solutions are prioritized at the end of the chapter by relative level of community support.

Lead agency, estimated cost, and timeframe for implementation are noted for each solution. Solutions include both physical improvements and operational or programmatic improvements. The timeframe for implementation is described as short-term (1-3 years), medium-term (3-8 years), or long-term (8 years or more) and is based on a combination of implementation difficulty and community priority. A final timeframe category is quick-build, which means that a solution using temporary materials can be implemented within a year. The recommended solutions (not in order of priority) are the following:

1. Pedestrian and Bicycle Bridge/Canal Crossing to Third Street
2. Access to Bikes/Scooters, Secure Bike Parking, and Bicycle Education
3. Traffic Calming and Pedestrian Crossing Improvements
4. Bicycle and Pedestrian Crossing Improvements at Gateways
5. Streets Team and Transit Ambassador Program
6. Sidewalk, Curbspace, and Streetscape Survey & Improvements

7. Lighting
8. Transit Bus Stop Improvements
9. Transit Bus Stop Maintenance
10. Expanded Transit Service
11. Transportation to Schools

Solutions

1. Pedestrian and Bicycle Bridge/Canal Crossing to Third Street

Lead Agency: City of San Rafael
Estimated Cost: \$5-10 million
Timeframe: Short-term (feasibility study, funding), medium-term (design, environmental clearance), medium- to long-term (construction)

A canal crossing to the north of the Canal neighborhood has been a community request since the first CBTP in 2006. This improvement idea received more votes at the open house than any other improvement. Currently, the only way to walk or bike to the Montecito Shopping Center, San Rafael High School, and San Pedro Elementary School is by walking on Francisco Boulevard East to the Grand Avenue Bridge. While recent upgrades to Francisco Boulevard East have increased the sidewalk widths to better accommodate pedestrians and bicyclists, this route is lengthy for bicyclists and pedestrians and can add up to a mile (or 20 minutes) to the trip to Third Street destinations including schools, shops, restaurants, and community services. The *San Rafael Bicycle and Pedestrian Master Plan 2018 Update* also identifies the need for a bridge crossing to improve access to Third Street.

To determine the best bridge type/crossing option the following must be conducted:

1. Feasibility Study to analyze various bicycle/pedestrian bridge options over the San Rafael Canal. The bridge must allow for boats to traverse the canal. The feasibility study would identify and compare potential bridge options and provide a conceptual plan, potential environmental impacts, preliminary engineering considerations, and estimated costs for construction and operation.
2. Engineering and Design concepts to take the conceptual bridge to project implementation.
3. Construction of the canal crossing. The timeframe and cost of construction will be dependent upon the type of crossing selected.

2. Access to Bikes/Scooters, Secure Bike Parking, and Bicycle Education

Lead Agency: Transportation Authority of Marin, City of San Rafael, local community organization(s)
Estimated Cost: \$300,000 – \$500,000
Timeframe: Short-term (TAM program pilot) to medium-term

Many Canal neighborhood residents voiced the need for shared bicycles or scooters and bicycle education classes. This is a need among all age groups but would be particularly helpful for high school students trying to access school and jobs outside of the Canal neighborhood. Residents that have existing access to bicycles struggle to take their bikes on transit due to the limited number of bike racks on each

bus and the unpredictability of their availability. Residents also shared concerns about parking personal bicycles safely; bicycle theft and damage are common challenges in the Canal neighborhood. Secure bicycle parking recommendations are explained in more detail in the *San Rafael Bicycle and Pedestrian Master Plan 2018 Update*.

A bikeshare/scootershare program open to youth and providing stations adjacent to transit for first mile/last mile trips would help the greatest number of Canal neighborhood residents overcome transportation challenges. Adding secure bicycle parking in the Canal neighborhood for shared bikes and personal bikes is another important component of this program. The Transportation Authority of Marin will launch a joint bikeshare pilot program with Sonoma County in 2022, with Canal neighborhood docking stations proposed near Pickleweed Park and Cardenas Market. The program will not initially be available for those under 18. After this system completes a pilot trial period, the City and County should re-assess the need for additional bikeshare/scootershare options.

One option to supplement a county bikeshare program is a local bikeshare/scootershare library system. Richmond has an existing program called Rich City Rides, and Oakland is starting a program in 2022, both of which could be emulated. The library system could be operated by the City of San Rafael or TAM with a local non-profit partner to oversee daily operations and bike/scooter check-outs. The City of San Rafael or TAM could also partner with a bicycle-based non-profit organization to offer bicycle education classes for those interested in using the library system.

3. Traffic Calming and Pedestrian Crossing Improvements

Lead Agency: City of San Rafael
Estimated Cost: \$100,000-\$200,000 for quick-build bulbouts, signing, and striping \$500,000-\$1M for permanent crossing improvements at up to 10 intersections \$250,000-\$350,000 for traffic calming improvements and educational campaign at up to 10 locations
Timeframe: Quick-build (bulbouts signing, and striping), short-term (permanent crossing improvements and traffic calming improvements)

Pedestrian crossing improvements received the second most votes at the community open house. Community members were appreciative of the higher visibility crosswalks and RRFBs that were recently installed in the Canal neighborhood and requested that these and other crossing improvements be installed in more places. In addition to high-visibility crosswalks and RRFBs, crossing safety improvements could include wider corner radii, pedestrian bulbouts, and removal of sightline obstructions (parked cars, trees, etc.) at corners. All crossing improvement projects would be ADA-compliant. Paint and bollard/planter box bulbouts can be implemented as quick-build projects. RRFBs are a newer treatment type and should be paired with educational signage when first installed. Because not all treatments are compatible with transit vehicles and additional crossings can cause delays for transit, specific design treatments at each location should be evaluated independently. Lighting at crossings is another important improvement that is addressed in solution #7.

The following locations were identified by the community for crossing improvements:

- Larkspur & Canal
- 125 Larkspur (new mid-block crossing)
- Larkspur & Alto
- Larkspur & Kerner

- Canal & Medway
- Canal & Larkspur/Novato/Fairfax/Sonoma (add crossing to third leg)
- Near Supermercado Mi Tierra

Paired with crossing treatments, traffic calming solutions can reduce vehicle speeds throughout the Canal neighborhood and improve comfort levels for pedestrians and bicyclists. Community members shared that physical design improvements seem more effective at reducing driving speeds than signs or paint treatment alone. Additional tree plantings are another effective traffic calming measure that the City could consider. For the best results, traffic calming treatments should be paired with a safe speed educational campaign targeted at Canal neighborhood drivers. Canal Street, Larkspur Street, and Belvedere Street were identified as community priorities for traffic calming treatments.

4. Bicycle and Pedestrian Crossing Improvements at Gateways

Lead Agency: City of San Rafael, Transportation Authority of Marin, Caltrans
Estimated Cost: \$150,000 - \$200,000 (feasibility study) \$TBD (construction costs are unknown at this stage given the breadth of options; cost estimates would be estimated as part of the feasibility study)
Timeframe: Medium-term (study and design), long-term (construction)

The two gateways to/from the Canal neighborhood – Bellam Boulevard and Grand Avenue – are heavily congested and high-stress bicycle and pedestrian routes. One of the most important regional trails, the SMART Multi-use Pathway is a 5-minute bike ride and 10-minute walk from the Canal neighborhood but requires crossing Francisco Boulevard East, I-580 on-ramps and off-ramps, and Andersen Drive, all of which are high speed, heavily trafficked routes. On the other side of the Canal neighborhood, bicyclists and pedestrian could quickly access downtown, the Transit Center, and another entrance to the SMART Multi-use Pathway but are faced with the equally busy options of Grand Avenue to Second Street, Third Street, or Fourth Street. Given the vehicle volumes and speeds at these gateways, protected or even fully grade separated crossing options would enhance bicyclist and pedestrian safety and comfort. This solution expands on the recommendation in the *San Rafael Bicycle and Pedestrian Master Plan 2018 Update* to study an overcrossing between the Canal neighborhood and Francisco Boulevard West.

To determine which of the gateways offers the best crossing option the following must be conducted:

1. Feasibility Study to analyze various protected crossing options including on-street, off-street, and over-crossing options. This feasibility study should be completed as part of the I-580/US-101 interchange project. The feasibility study would identify and compare options at both gateways, identify a preferred concept, provide a conceptual plan, identify potential environmental impacts, flag preliminary engineering considerations, and calculate estimated costs for construction and operation.
2. Engineering and Design concepts to take the conceptual facility to project implementation.
3. Construction of the protected facility. The timeframe and cost of construction will depend on the type of facility selected and coordination with the I-580/US-101 interchange construction.

5. Streets Team and Transit Ambassador Program

Lead Agency: City of San Rafael, Marin Transit

Estimated Cost: \$30,000-\$60,000/year combined Canal Streets Team and Transit Ambassadors Program
Timeframe: Short-term/Ongoing

Many residents expressed feeling unsafe while walking in the Canal neighborhood, particularly to and from bus stops in the early morning and evening, due to illegal activity. Community conversations also highlighted trash and cleanliness issues on the streets and at the bus stops. Since 2013, the city has worked with a downtown Streets Team comprised of unhoused or at-risk neighbors to beautify and clean-up downtown San Rafael and, in recent years, the program was expanded to cover the commercial core of the Canal neighborhood. Participants of the Streets Team receive access to case management, system navigations, and employment placement services from trained case managers and employment specialists while participating in clean-up projects.

The current Canal Streets Team struggles to keep up with trash issues in the Canal neighborhood and does not currently cover bus stops in the northern residential portion of the Canal neighborhood. A partnership between the downtown Streets Team and Marin Transit could fund a dual-role clean-up/transit ambassadors crew covering all Canal neighborhood bus stops on top of the work that the Canal Streets Team already does. To the extent possible, the program should select Spanish-speaking community members for this team. Throughout the CBTP outreach process, there were numerous observations and comments that indicated lack of Canal neighborhood community awareness of available transit services and transit discounts. In addition to keeping sidewalks clean and clear, the Streets Team bus stop crew could receive regular briefings on service, fare, and policies changes so that they are able to answer questions and share updates with riders. This solution could also address the recommendation from the Voces del Canal Lighting report to “develop a Neighborhood Safety Committee.”

6. Sidewalk, Curbspace, and Streetscape Survey & Improvements

Lead Agency: City of San Rafael
Estimated Cost: \$100,000-\$200,000 (survey) \$TBD (recommendations are unknown at this time; design and construction estimate would follow the survey)
Timeframe: Medium-term (survey), medium-term to long-term (design and construction)

Many residents shared frustrations about narrow sidewalks and a lack of pedestrian amenities like trash cans and shade trees. These are challenging issues to address in the Canal neighborhood, which is characterized by narrow streets and limited public right-of-way. Street trees and trash cans should not be added to already narrow sidewalks if they would block pedestrian travel or restrict wheelchair users, strollers, or other carts. Widening sidewalks into private property is costly and time-consuming. Widening a sidewalk into the public street would typically require parking removal, which is a concern in the Canal neighborhood where parking is in high demand. Despite these challenges, replacement and/or widening of sidewalks, where feasible, is recommended as a strategy to improve the pedestrian environment in the Canal neighborhood.

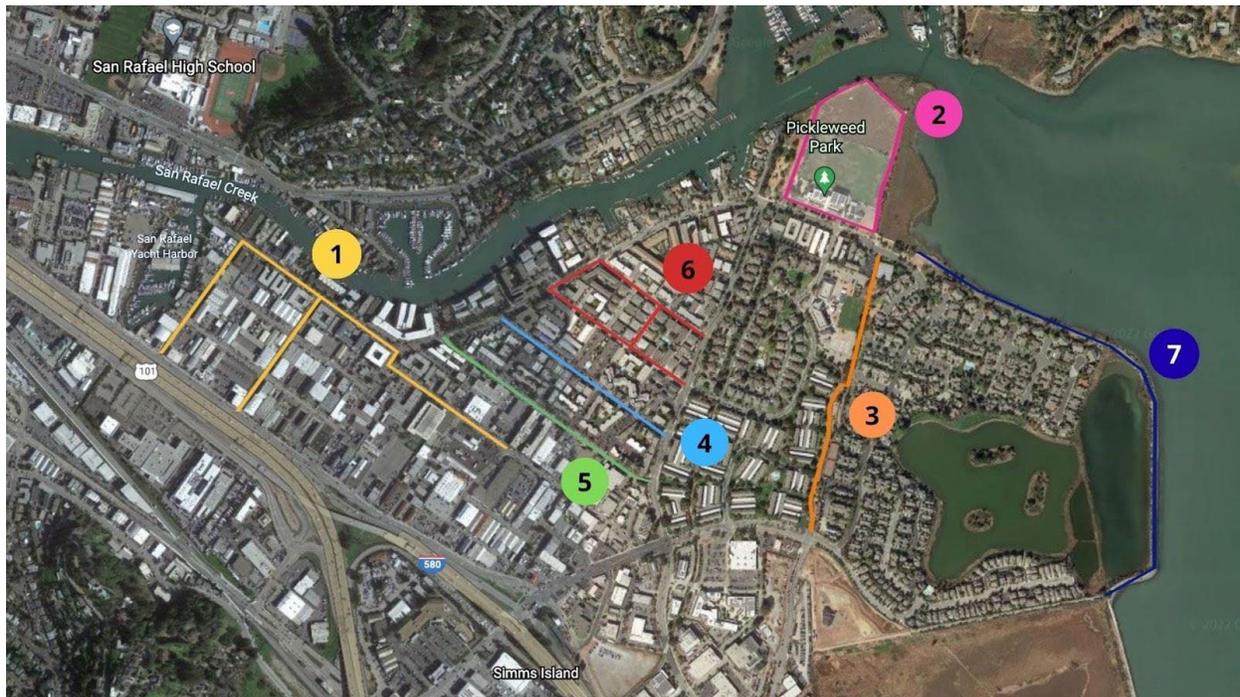
All of these pieces—sidewalks, curbspace, and streetscape elements—must be considered together to understand the tradeoffs and options available. This is also an opportunity for the Canal neighborhood to prepare an EV charging station strategy, including designating some amount of public curbspace for charging infrastructure and electric vehicle parking. The recommended strategy has three stages:

1. Survey of sidewalk, curbspace (parking supply and demand), streetscape elements, and available right-of-way.
2. Community-driven decision of how to best utilize limited street space.
3. Design, engineering, and construction of streetscape changes.

7. Lighting

Lead Agency: City of San Rafael
Estimated Cost: \$50,000 (quick-build – fixture upgrades) \$1.5M - \$2.5M (new fixtures) plus ongoing electric and maintenance costs, which can be lower if solar fixtures are used, especially along bayfront trails
Timeframe: Quick-build (upgrades to existing fixtures), short-term to medium-term (new pole and fixture locations)

Community members identified the need for new and improved lighting at several locations within the neighborhood. Members of the Voces del Canal group worked on a lighting plan, with Dominican University and Canal Alliance, to identify seven priority routes (figure below) for improved lighting in the Canal neighborhood. During their project, the Voces del Canal group collected testimonies from Canal neighborhood residents describing their experience with illumination in the Canal neighborhood and used survey data to prioritize routes. Throughout both processes, residents described public safety concerns during the early morning and night hours while walking in the neighborhood or accessing public parks and recreational trails.



Building on the above plan, the City's Department of Public Works (DPW) has identified 45 locations on five of the seven pathways to install new lighting fixtures. DPW also identified 65 locations where existing light fixtures can be made brighter. DPW will work with Pacific Gas & Electric Company (PG&E) to seek approval to implement these solutions on five routes. Lighting improvements are located along block faces as well as at intersections. Lighting improvements near transit stops and pedestrian crossing

locations will be prioritized. Consistent with General Plan Policy CDP-4.11, lighting projects will aim to improve safety and security while preventing excessive light spillover and glare.

Two of the other pathways, Bahia Way and Starkweather Path, and a larger area of Pickleweed Park will require additional approvals before the city can proceed with lighting improvements. Bahia Way is a privately maintained street and the Starkweather and Pickleweed waterfront paths are regulated by the Bay Conservation and Development Commission (BCDC). The City will work with these entities to seek approval for additional lighting improvements.

8. Transit Bus Stop Improvements

Lead Agency: City of San Rafael, Marin Transit, Golden Gate Transit
Estimated Cost: \$100,000 - \$300,000
Timeframe: Quick-build (temporary boarding islands), short-term to medium-term (stop upgrades)

The Canal neighborhood is Marin Transit's highest ridership area in the county.³ Canal community members have shared the need for transit stop improvements since the first CBTP in 2006. Many improvements have been implemented since 2006 including the addition of more shelters and real-time arrival information boards. Additional requests for this update include more shelters along high ridership routes, bus shelter/stop lighting improvements, and accurate real-time arrival information.

In some locations the existing bus shelters are inadequate due to their small size, lack of lighting, or cleanliness issues, or they are missing completely. This recommendation is focused on counterclockwise stops in the Canal neighborhood.

Based on stop-level ridership data, Marin Transit and the City agreed to focus quick-build and short-term efforts on Medway & Mill and Kerner Boulevard. On Kerner Boulevard, stop consolidation opportunities will be evaluated in more detail with the goal of delivering one high-quality stop/shelter rather than distributing resources. Stop consolidation on this short stretch would also improve travel times and reliability. The City will also pursue quick-build boarding island solutions at these locations to expand the available sidewalk waiting area. Upgrades at additional Canal neighborhood stops will be implemented as funds become available. All stops would benefit from improvements to signage for bus service and customer service numbers (including bilingual information in Spanish), real-time arrivals information, additional seating capacity, and trash receptacles.

9. Transit Bus Stop Maintenance

Lead Agency: City of San Rafael, Marin Transit, Golden Gate Transit
Estimated Cost: \$5,000 - \$10,000/year (to approximately double cleaning and service visits)
Timeframe: Short-term/Ongoing

In addition to capital improvements, the community requested more regular transit stop maintenance at all Canal neighborhood transit stops. Community members cited excess trash and illegal dumping at/near

³ Canal census tracts score medium-high or high in Marin Transit's Transit Propensity Index. Marin Transit, Short-Range Transit Plan 2020 – 2029, 2020, p I-19.

transit stops, rodent issues, dim or dead lights, and non-functioning real-time arrival boards. The current condition of bus stops creates an unpleasant waiting experience.

The recommended strategy is to determine a regular cleaning and maintenance servicing schedule for bus stops, a trash solution for transit stops, and a dumpster program in the community to discourage illegal dumping. This solution is paired with solution #5 to tackle this challenge from multiple angles – it needs to be a combined agency, city, and community effort.

10. Expanded Transit Service

Lead Agency: Marin Transit
Estimated Cost: \$1.6M - \$2M (capital cost for new buses), \$150/additional revenue hour with the exact number of added revenue hours TBD
Timeframe: Short-term to medium-term

Canal neighborhood demand for transit service is high both during and outside of peak commute times. Although high-occupancy buses are used during most of the day, many buses serving the Canal neighborhood are crowded.

Community members report that overcrowding of buses in the peak periods sometimes prevents them from boarding; that transfers at the San Rafael Transit Center are not always timed appropriately making travel time estimates unreliable; and that service in the early mornings and late evenings is too infrequent given that many Canal neighborhood residents work early and late shifts.

The following additional service was requested by multiple community members:

- More frequent and convenient service to Novato. Community members expressed concern that the existing 35 route to Novato is not frequent enough. This may require a new bus purchase.
- More convenient service to Fairfax Manor on route 23X. Route 23X was the community's second ranked choice for increased frequencies. This may require a new bus purchase.
- Earlier route departures and increased early morning and evening frequency on all routes, but especially route 35.

The specifics of these requests were not explored as part of this process and should be determined through on-board surveys of these routes conducted in both English and Spanish.

11. Transportation to Schools

Lead Agency: Marin Transit, San Rafael City Schools
Estimated Cost: Expanded route 645 service: \$800,000-\$1M (capital), \$45,000 (annual operating) Subsidized shuttle and taxi service: \$30,000-\$60,000/year
Timeframe: Short-term/Ongoing

Providing additional bus service to schools was a major identified need for Canal neighborhood community members. The community cited the need for additional bus service for students to San Rafael High School, Terra Linda High School, and Davidson Middle School, and transportation for parents to San

Pedro Elementary School and Davidson Middle School. Supplemental school service requests were as follows:

- Additional morning trips for the 645 route to San Rafael High School and Terra Linda High School
- New low-income discount for school bus service
- Expanded yellow bus service to Davidson Middle School
- School transportation options for parents to attend special events and parent/teacher conferences, and to volunteer, especially at San Pedro Elementary School and Davidson Middle School

Increasing morning trips on the 645 route will help students arrive to school on time and provide multiple direct transit options. Marin Transit offers other transfer bus services, but the community cited these as overly complicated and time-consuming and requiring a long walk for many students. This additional service would likely require Marin Transit to purchase an additional bus.

While yellow bus service exists for students at most elementary and middle schools, Canal neighborhood community members mentioned the cost to use the yellow bus is not affordable to all parents. The San Rafael City Schools District offers a sliding-scale discount for using yellow bus service eligible to low-income families and students who qualify for free/reduced lunch. To apply for yellow bus service, families must fill out an application form and pay a \$40 application fee. Reducing or waiving the application fee would help resolve the cost burden on families that qualify for the sliding-scale discount. The school district and Marin Transit each have their own student transit application form; these should be consolidated into a single intake form and families should be informed of all transport options available for their student whether provided by Marin Transit or yellow bus.

Until the COVID-19 pandemic canceled school events, special school trips for parents were organized by individual schools by providing special shuttles or taxi service. Residents specifically requested that shuttle services be brought back and promoted for large school events at San Pedro Elementary, such as parent nights, open houses, school performances, and holiday celebrations. For smaller events at schools, such as parent-teacher conferences or volunteer events where attendance varies, San Rafael City Schools District can partner with a Marin Transit dial-a-ride or a taxi service to provide subsidized rides between the Canal neighborhood and schools. Marin Transit's on-demand service can be scheduled via phone or the Uber application. Subsidized rides to San Pedro Elementary School have been available for many years with funding from a Golden Gate Bridge District Lifeline grant. During the 2021-22 school year, 94 families received a subsidized taxi ride to or from San Pedro Elementary. A sustainable funding source will be needed to maintain these services over the long term.

Community Prioritization of Solutions

Prioritization of transportation solutions was developed based on community input collected during the CBTP engagement process and heard through parallel efforts.

Table 6: Community Prioritization of Solutions

#	Solution	Level of Community Support
1	Pedestrian and Bicycle Bridge/Canal Crossing to Third Street	H
2	Access to Bikes/Scooters, Secure Bike Parking, and Bicycle Education	M
3	Traffic Calming and Pedestrian Crossing Improvements	H
4	Bicycle and Pedestrian Crossing Improvements at Gateways	L
5	Streets Team and Transit Ambassador Program	L
6	Sidewalk, Curbspace, and Streetscape Survey & Improvements	L
7	Lighting	H
8	Transit Bus Stop Improvements	H
9	Transit Bus Stop Maintenance	H
10	Expanded Transit Service	H
11	Transportation to Schools	H

Notes: H = solution received a lot of support (25 or more dots, comments, and feedback from Stakeholder Committee or focus group), M = solution received some support (8-12 dots, comments, and feedback from Stakeholder Committee or focus group), L = solution received little support (less than 8 dots, comments, and feedback from Stakeholder Committee or focus group).

Based on the relative level of community support, the solutions are prioritized as follows:

Higher Priority Solutions

Pedestrian and Bicycle Bridge/Canal Crossing to Third Street

Lighting

Traffic Calming and Pedestrian Crossing Improvements

Transit Bus Stop Improvements

Transit Bus Stop Maintenance

Expanded Transit Service

Transportation to Schools

Medium Priority Solutions

Access to Bikes/Scooters, Secure Bicycle Parking, and Bicycle Education

Lower Priority Solutions

Bicycle and Pedestrian Crossing Improvements at Gateways
Sidewalk, Curbspace, and Streetscape Survey & Improvements Streets Team and Transit Ambassador Program

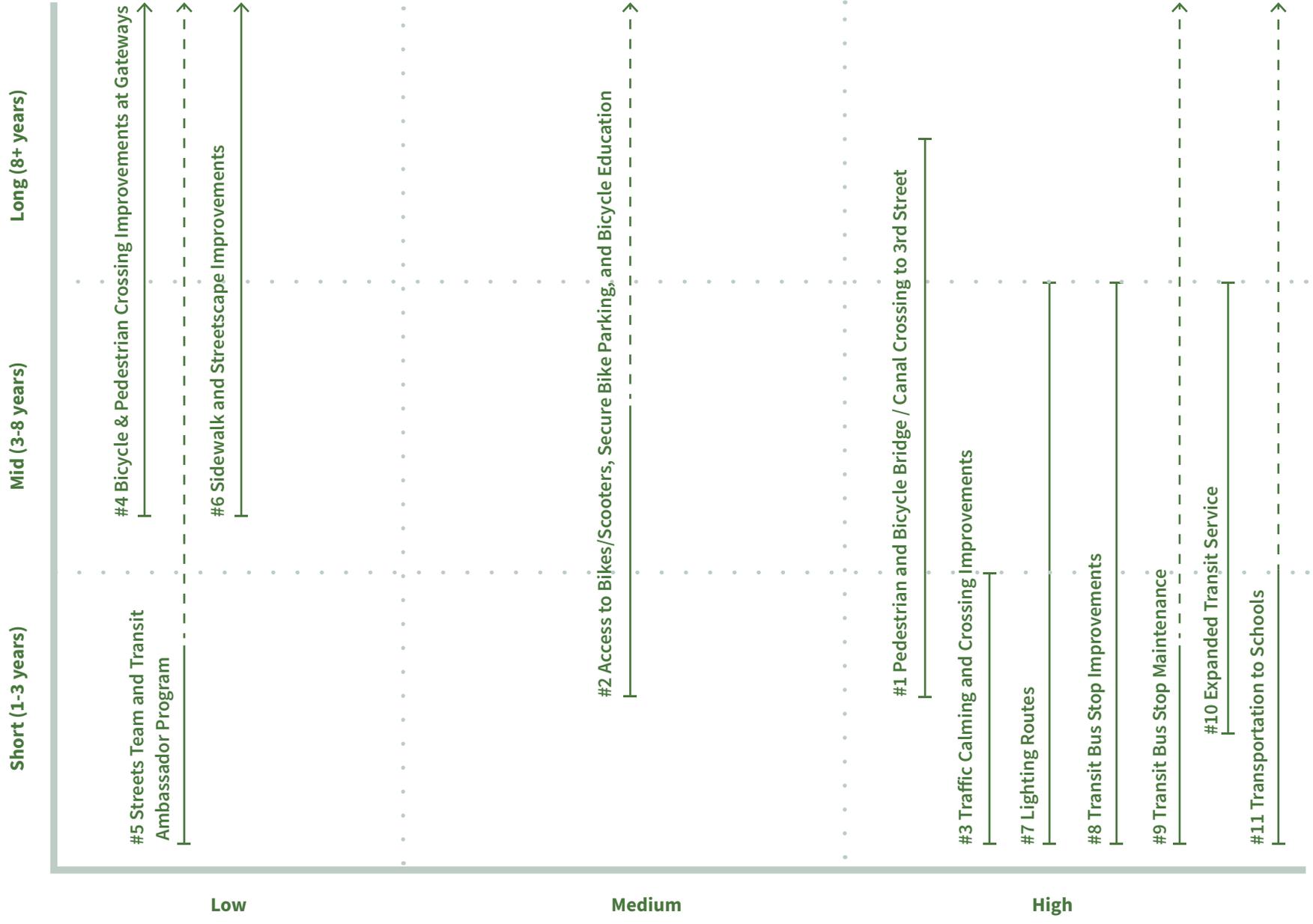
Some components of the above solutions have been identified for quick-build implementation, meaning that temporary materials or short-term fixes can be put in place while funding is identified, and formal designs are prepared for permanent implementation. The quick-build projects will deliver many of the same benefits of the permanent projects and will allow the community to provide feedback ahead of permanent installation.

Quick-build Solutions

Pedestrian crossing bulbouts and crosswalks
Upgrades to existing fixtures
Temporary bus boarding islands

The solutions are programmed for implementation over time, based on the relative level of community priority and their level of implementation complexity. This is illustrated in the figure below.

Implementation Time Frame



Community Priority

Chapter 6 Implementation

Funding

This Community-Based Transportation Plan provides a list of solutions to support efforts by the City of San Rafael, TAM, and local transit agencies to pursue federal, state, regional, and local funds to implement the recommended projects and programs. The following funding sources were identified as potential resources for implementation of the proposed CBTP solutions. To compete for the funds, a project must be well-defined, included in local plans for the jurisdiction, and have community and public agency support. All of the solutions defined in this CBTP Update have community support and support from the Technical Advisory Committee agencies. Full descriptions of each funding source can be found in the **Appendix**. Funding sources appropriate to each solution are summarized in **Table 7**.

Federal – New Competitive Programs

The Infrastructure Investment & Jobs Act (IIJA) signed into law in November 2021 provides funding for \$570 billion in transportation investments over five years including \$274 billion in new one-time spending. IIJA provides about \$120 billion in national competitive grant programs including the following relevant programs:

- Bus and Bus Facilities Program
- Healthy Streets Program
- RAISE Grant Program
- PROTECT Resilience Program
- Reconnecting Communities Pilot Program
- Safe Streets and Roads for All (SS4A) Program

State

- Caltrans Sustainable Communities Planning Grants
- Active Transportation Program (ATP)
- State Transit Assistance (STA)
- State Transportation Improvement Program (STIP)
- Highway Safety Program (HSIP)

Regional/Local

- Transportation Fund for Clean Air (TFCA)
- MTC's One Bay Area Grant Program (OBAG)
- MTC's Lifeline Transportation Program
- MTC's Bikeshare Capital Program
- Regional Measure 3 – North Bay set-asides
- Measure AA
- Measure B
- City of San Rafael General Fund
- City of San Rafael Development Impact Fees

Non-Traditional

- CALSTART's Clean Mobility Options (CMO)
- California Conservation Corps (CCC)
- Marin Community Foundation (MCF)

Table 7: Funding Sources by Solution

#	Solution	Funding Sources
1	Pedestrian and Bicycle Bridge/Canal Crossing to Third Street	Active Transportation Program (ATP), Caltrans Sustainable Communities Planning Grants (Planning grant only), MTC's Lifeline Transportation Program, RAISE Grant Program, Reconnecting Communities Pilot Program, City of San Rafael Development Impact Fees
2	Access to Bikes/Scooters, Secure Bike Parking, and Bicycle Education	MTC Bikeshare Capital Program, Transportation Fund for Clean Air (TFCA), MTC's Lifeline Transportation Program, Clean Mobility Options Program (CMO), City of San Rafael General Fund
3	Traffic Calming and Pedestrian Crossing Improvements	Active Transportation Program (ATP), MTC's Lifeline Transportation Program, Measure AA, RAISE Grant Program, Safe Streets and Roads for All (SS4A) Program, Highway Safety Program (HSIP)
4	Bicycle and Pedestrian Crossing Improvements at Gateways	Active Transportation Program (ATP), Transportation Fund for Clean Air (TFCA), MTC's Lifeline Transportation Program, Measure AA, RAISE Grant Program, Reconnecting Communities Pilot Program, Safe Streets and Roads for All (SS4A) Program, Highway Safety Program (HSIP), City of San Rafael Development Impact Fees
5	Streets Team and Transit Ambassador Program	San Rafael General Fund, Transportation Fund for Clean Air (TFCA), Measure AA, Measure B, RAISE Grant Program, Marin Transit, City of San Rafael General Fund
6	Sidewalk, Curbspace, and Streetscape Survey & Improvements	Active Transportation Program (ATP), MTC's Lifeline Transportation Program, Measure AA, Healthy Streets Program, Safe Streets and Roads for All (SS4A) Program, Highway Safety Program (HSIP), City of San Rafael General Fund
7	Lighting	Active Transportation Program (ATP), Measure AA, PROTECT Resilience Program, Safe Streets and Roads for All (SS4A) Program, Highway Safety Program (HSIP), City of San Rafael General Fund
8	Transit Bus Stop Improvements	Transportation Fund for Clean Air (TFCA), MTC's Lifeline Transportation Program, RAISE Grant Program
9	Transit Bus Stop Maintenance	MTC's Lifeline Transportation Program, Measure AA, RAISE Grant Program, City of San Rafael General Fund
10	Expanded Transit Service	State Transit Assistance (STA), Transportation Fund for Clean Air (TFCA), MTC's Lifeline Transportation Program, Measure AA, RAISE Grant Program, Bus and Bus Facilities Program, PROTECT Resilience Program, Regional Measure 3 – North Bay set-asides
11	Transportation to Schools	Active Transportation Program (ATP), MTC's Lifeline Transportation Program, MTC's Climate Initiatives Program, MTC's OBAG, Measure AA, RAISE Grant Program, PROTECT Resilience Program

Source: Fehr & Peers, 2022.

Monitoring Progress

The five-year goals identified in **Table 8** are intended to keep the community and the lead agencies on track to address these issues in a timely manner. Many of the solutions will take longer than five years to complete, but all solutions can expect to see some progress by 2027. The City of San Rafael should evaluate progress on the CBTP each year with the five-year goal in mind as a mid-term target. At the five-year mark, the City should update the CBTP with a new five-year goal for each solution that is not already complete.

Table 8: Five-Year Goals for Transportation Solutions

#	Solution	Description	Project Type	Lead Agency	5-Year Goal (by 2027)
1	Pedestrian and Bicycle Bridge/Canal Crossing to Third Street	Bridge connection from Canal/Harbor to Third Street	Multimodal	City of San Rafael	Secure funding for and complete feasibility study. Secure funding for design and engineering.
2	Access to Bikes/Scooters, Secure Bike Parking, and Bicycle Education	Bikeshare and/or Scootershare program in the Canal neighborhood for adults and youth, secure parking, and bicycle education classes for adults and youth	Bicycle	City of San Rafael, CBOs, Local community organization(s)	Evaluate success of TAM bikeshare pilot with community input and adjust TAM program and/or secure funding to launch supplemental program.
3	Traffic Calming and Pedestrian Crossing Improvements	Various locations around the Canal neighborhood	Pedestrian, Safety	City of San Rafael	All quick-build crossing projects fully implemented and traffic calming programs implemented on the streets identified in this report.
4	Bicycle and Pedestrian Crossing Improvements at Gateways	Bicycle crossing improvements at Bellam/US-101/I-580, Grand/Second, and Grand/Third	Bicycle, Pedestrian	City of San Rafael, TAM, Caltrans	Identify study partners and interface with US-101/I-580 Connector project. Secure funding for and complete feasibility study.
9	Streets Team and Transit Ambassador Program	Address neighborhood cleanliness and provide transit information	Multimodal	City of San Rafael, Marin Transit	Pilot a combined Streets Team/Transit Ambassadors program.
6	Sidewalk, Curbspace, and Streetscape Survey & Improvements	Various locations around the Canal neighborhood		City of San Rafael	Secure funding for sidewalk, curbspace, and streetscape survey.

7	Lighting	Lighting improvements throughout the Canal neighborhood	Safety	City of San Rafael	Upgrade existing fixtures and add fixtures to all existing utility poles on the five City-owned routes identified by the community. Solidify a plan to install new poles and fixtures in remaining gaps. Solidify a plan for the two privately owned routes and secure funding to install lighting on those routes.
8	Transit Bus Stop Improvements	Bus shelter upgrades and real-time arrival information	Transit	City of San Rafael, Marin Transit	Implement improvements at Medway/Mill and Kerner/Larkspur or relocated Kerner stop. Secure funding for and start to implement improvements at other stops.
9	Transit Bus Stop Maintenance	Address trash and illegal dumping at transit stops, address the rodent issues	Transit	City of San Rafael, Marin Transit, Golden Gate Transit	Establish a streamlined maintenance process amongst all responsible agencies and increase maintenance schedule.
10	Expanded Transit Service	Provide frequent service, expand early morning/late evening service, provide accurate schedules	Transit	Marin Transit	Conduct focused ridership survey on the 35 and 23x to establish route and frequency improvements. Identify funding for required capital purchases and operational funding.
11	Transportation to Schools	Provide additional morning service to high schools, promotion of sliding-scale discounts for yellow school bus service to elementary and middle schools, provide parent transportation to school events	Multimodal	Marin Transit, San Rafael City Schools	Secure funding and add an additional morning run to route 645. Identify a sustainable funding source for parent transportation needs and provide subsidized rides for one-off needs and shuttles for large events.

Source: Fehr & Peers, 2022.

Staff Capacity

Given the level of investment outlined above, this report also recommends securing funding for additional project and/or program management at the City of San Rafael, which is identified as one of, if not the sole, lead agency on most of the transportation solutions. This could be a full-time staff hire or a contract hire depending on the quantity and duration of desired support. In the short-term, and if grant funding is secured for any projects, it is likely that a full-time hire would be needed to implement the recommendations and keep the rest of the CBTP implementation moving.

Parallel Efforts

Local and regional jurisdictions are working on parallel efforts to the Canal CBTP update. Some of the recent efforts are listed below.

- Marin Transit Youth Discount: Fare free for youth 18 and under for summer 2022 (June 12-August 14). Paratransit and dial-a-ride, Muir Woods Shuttle are exempt.
- Golden Gate Transit: Restoring service that was previously suspended due to the pandemic. Service restoration to the San Rafael Transit Center to provide connections to the Canal neighborhood, increasing peak service on Route 101 to every 30 minutes.
- TAM Bike Share Pilot: Hoping to launch by summer 2022 in Sonoma and Marin counties. Will include bikeshare stations and bikes in the Canal neighborhood.
- East San Rafael Parking Group: The City convenes a community task force to address the parking needs of the community.
- Housing Element Update: The Housing Element is part of the San Rafael General Plan and describes the City's plans to meet housing needs for current and future residents. State law requires all cities and counties in the Bay Area to update housing policies by the end of 2022.
- Citywide Parks and Recreation Master Plan: The City is developing a master plan to guide development of parks and recreational programs, to create and maintaining funding sources, and set priorities for the future.
- Northbound US-101 to Eastbound I-580 Director Connector: The Northbound US-101 to Eastbound I-580 Director Connector project is a project of TAM, Caltrans, and the cities of San Rafael and Larkspur. The project will construct a freeway-to-freeway direct connection from northbound US-101 to eastbound I-580. The connector will be two lanes with the possible addition of a third lane for high-occupancy vehicle (HOV) bypass. Additional benefits of the project include:
 - Replacement of the eastbound Bellam Boulevard undercrossing
 - Bicycle and pedestrian infrastructure improvements along Bellam Boulevard
 - Addition of an eastbound auxiliary lane on I-580

Appendix

1. Stakeholder Committee Workshop #1 Notes
2. Focus Group Workshop Notes
3. Stakeholder Committee Workshop #2 Notes
4. Open House Documentation
5. Stakeholder Committee Workshop #3 Notes
6. Comments on Draft Canal CBTP
7. Full Descriptions of Funding Sources

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Canal Neighborhood Community Based Transportation Plan Update

Transportation Authority of Marin

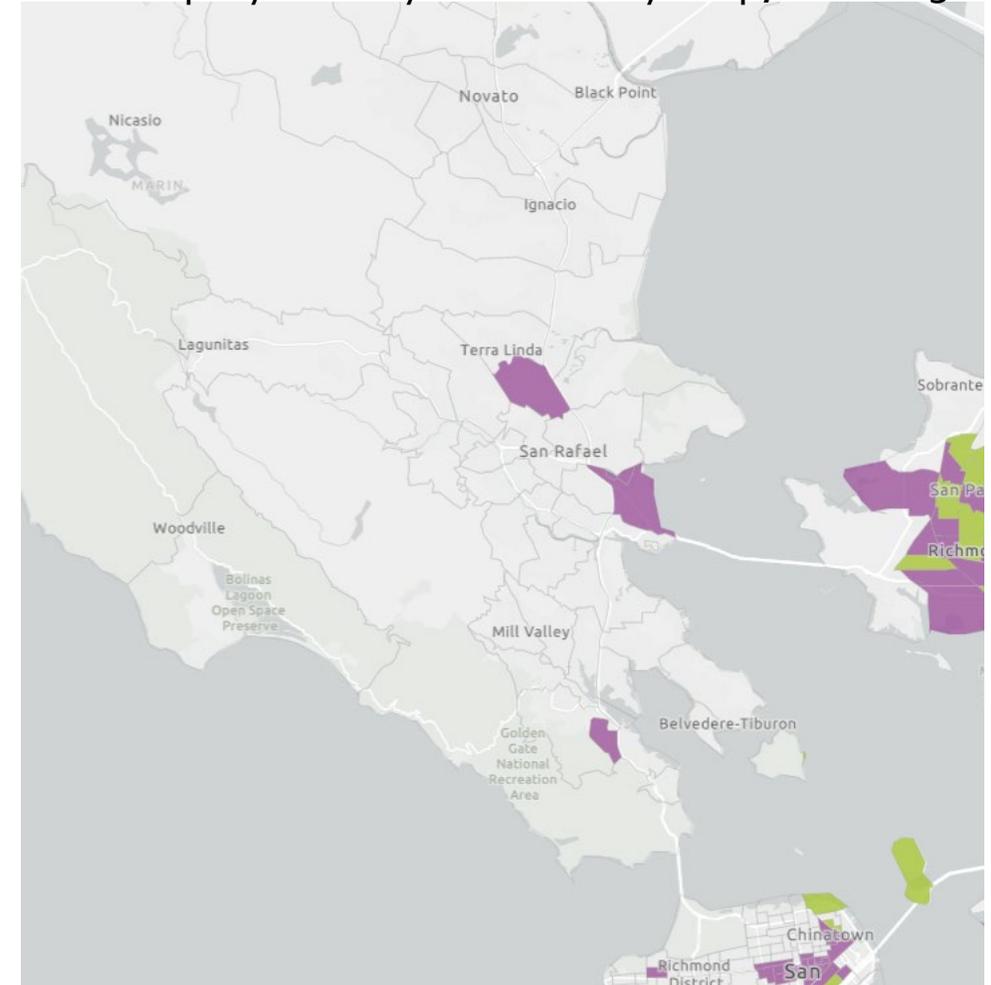
Derek McGill, Director of Planning

July 11, 2022

Community Based Planning Program

- Established in 2002 by MTC, TAM responsible for developing CBTPs in Marin County
- CBTPs are *community driven* planning processes focused on populations historically underserved or excluded from transportation planning processes
- Marin County has 3 CBTPs:
 - Marin City (2006, 2015)
 - City of Novato (2015)
 - Canal Neighborhood in San Rafael (2006)
- CBTPs are key element of TAM's Equity Planning efforts.

MTC Equity Priority Community Map, PBA 2050

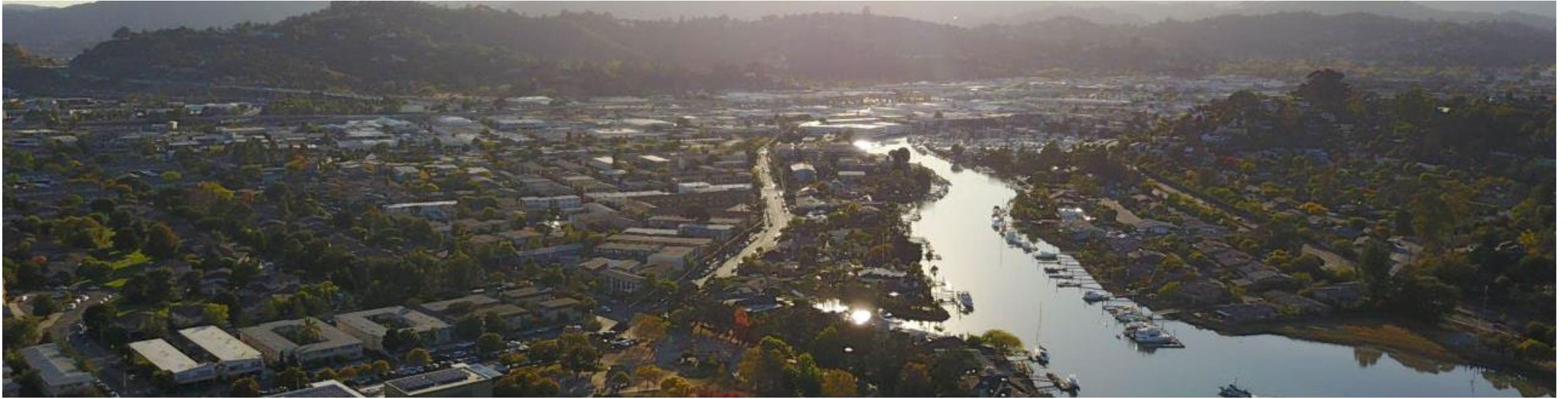


Canal Neighborhood CBTP

- In 2018, TAM received \$75,000 from MTC for CBTPs.
- In 2019, TAM board authorized \$75,000 for City of San Rafael to develop update to the Canal CBTP.
- Plan conducted during 2021-2022
- Adopted by San Rafael Council in June
- MTC Guidelines require TAM to also adopt the Plan

CBTP Program Look Ahead

- In April 2022, MTC updated CBTP guidance and authorized \$150,000 for TAM in funding CBTP updates for FY 22/23-26/27.
- Staff will be exploring how best to update or develop new CBTPs.
 - Options for consideration may include:
 - Update community engagement and priority project lists for existing CBTPs
 - Develop new CBTP for Los Ranchitos in San Rafael
 - Develop countywide approach (recognizing mobility solutions may extend beyond day-to-day mobility challenges)
 - CBTP Implementation Planning
 - Hybrid approach of above options & others
- This Fall, staff will present a discussion on a draft Equity Statement, which is intended to provide strategic direction and next steps for advancing equity.



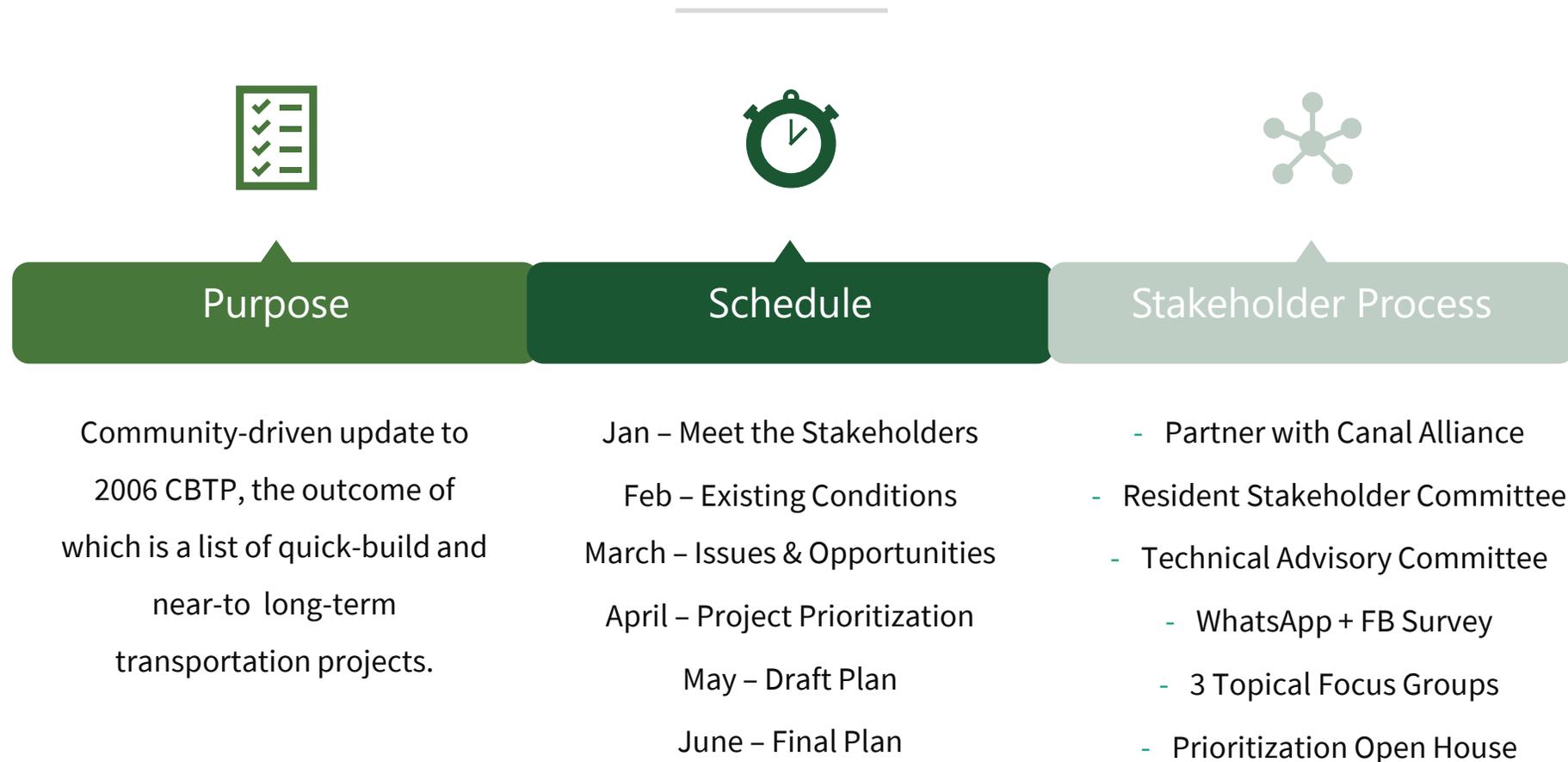
CANAL COMMUNITY-BASED TRANSPORTATION PLAN UPDATE

J U L Y 1 1 , 2 0 2 2

TAM Executive Committee



CANAL CBTP UPDATE



VIRTUAL FOCUS GROUPS

FEBRUARY 2, 6:30 - 8:30 PM

Grupo de enfoque 2:
Paradas de transito



- 10 participants
- Conversations held in Spanish
- Participation from Marin Transit and Councilmember Llorens-Gulati
- Three topics:
 1. Lighting
 2. Transit stops
 3. Routes in/out of Canal



EVENT DETAILS

 April 23rd 1-3:30pm

 Alto St., San Rafael



OPEN HOUSE

- Hosted by Stakeholder Committee, Voces del Canal, Canal Alliance, & City of San Rafael
- Free food and drink for participants
- Approximately 100 attendees
- Marin Transit, SMART, Canal Alliance, and COVID Information Stations
- Four CBTP Prioritization Stations
 1. Bicycle & Pedestrian Improvements
 2. Lighting
 3. Transit Stops & Service
 4. Final Prioritization of All Topics

CANAL TRANSPORTATION SOLUTIONS

Solution	Description	Project Type	Lead Agency
Pedestrian and Bicycle Bridge / Canal Crossing to 3rd Street	Bridge connection from Canal/Harbor to 3 rd Street	Multimodal	City of San Rafael
Traffic Calming and Pedestrian Crossing Improvements	Various locations around the Canal	Pedestrian, Safety	City of San Rafael
Lighting	Lighting improvements throughout the Canal neighborhood	Safety	City of San Rafael
Transit Bus Stop Improvements	Bus shelter upgrades and real-time arrival information	Transit	City of San Rafael, Marin Transit, Golden Gate Transit
Transit Bus Stop Maintenance	Address trash and illegal dumping at transit stops, address the rodent issues	Transit	City of San Rafael, Marin Transit, Golden Gate Transit
Expanded Transit Service	Provide frequent service, expand early morning/ late evening service, provide accurate schedules	Transit	Marin Transit
Transportation to Schools	Provide additional morning service to high schools, promotion of sliding-scale discounts for yellow school bus service to elementary and middle schools, provide parent transportation to school events	Multimodal	Marin Transit, San Rafael City Schools
Access to Bikes/Scooters, Secure Bicycle Parking, and Bicycle Education	Bikeshare and/or Scootershare program in the Canal for adults and youth, secure parking, and bicycle education classes for adults and youth	Bicycle	City of San Rafael, Local community organization(s)
Bicycle and Pedestrian Crossing Improvements at Gateways	Bicycle crossing improvements at Bellam/ US-101/I-580, and/or Grand/2 nd and Grand/3 rd	Bicycle, Pedestrian	City of San Rafael, TAM, Caltrans
Streets Team and Transit Ambassador Program	Address neighborhood cleanliness and provide transit information	Multimodal	City of San Rafael, Marin Transit
Sidewalk and Streetscape Improvements	Various locations around the Canal	Multimodal	City of San Rafael

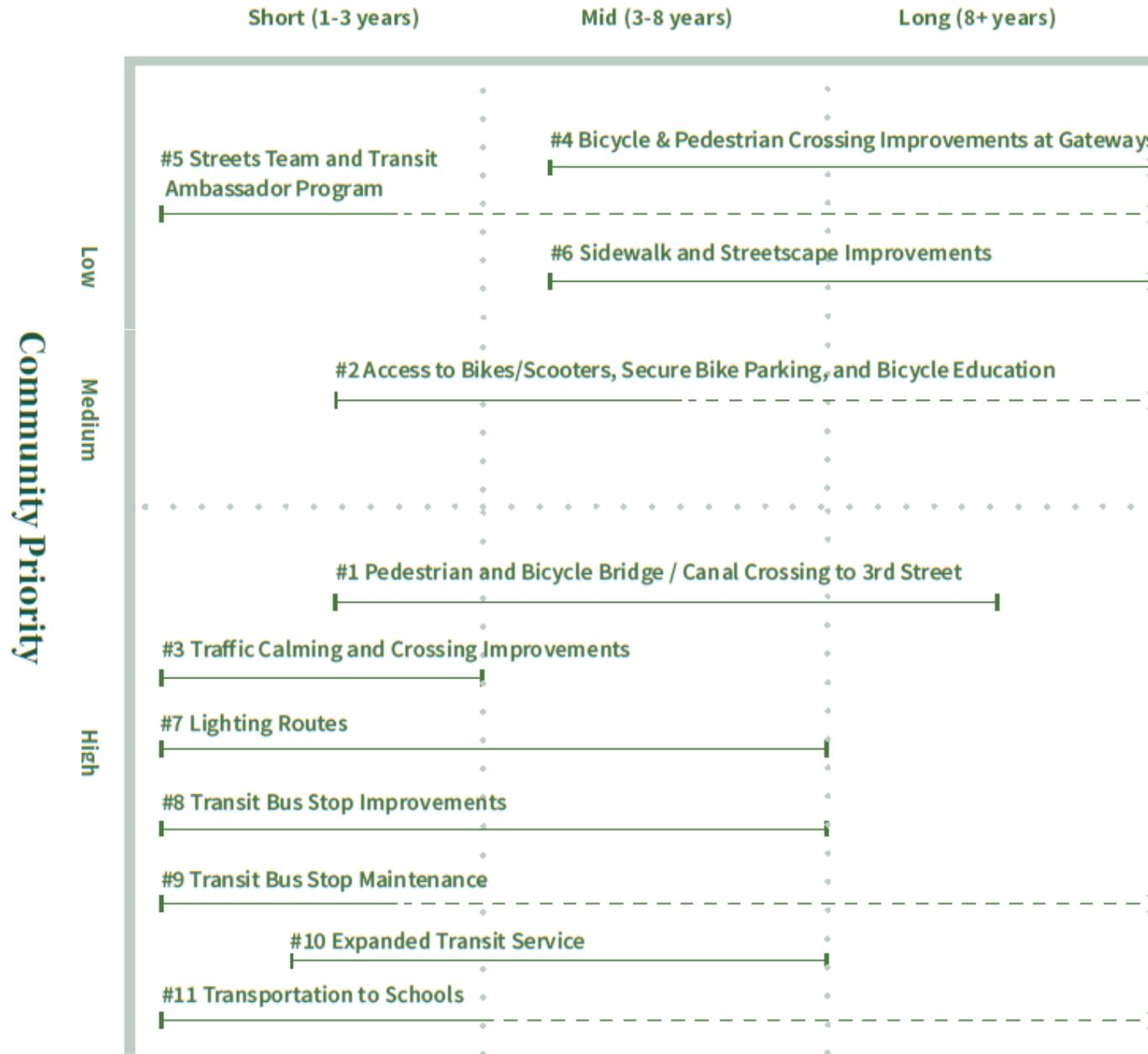
CANAL TRANSPORTATION SOLUTIONS

Solution	Level of Community Support	Comment Tallies
Pedestrian and Bicycle Bridge / Canal Crossing to 3 rd Street	H	47
Traffic Calming and Pedestrian Crossing Improvements	H	72
Lighting	H	126
Transit Bus Stop-Improvements	H	71
Transit Bus Stop Maintenance	H	37
Expanded Transit Service	H	57
Transportation to Schools	H	25
Access to Bikes/Scooters, Secure Bicycle Parking, and Bicycle Education	M	17
Bicycle and Pedestrian Crossing Improvements at Gateways	L	0*
Streets Team and Transit Ambassador Program	L	0*
Sidewalk and Streetscape Improvements	L	5

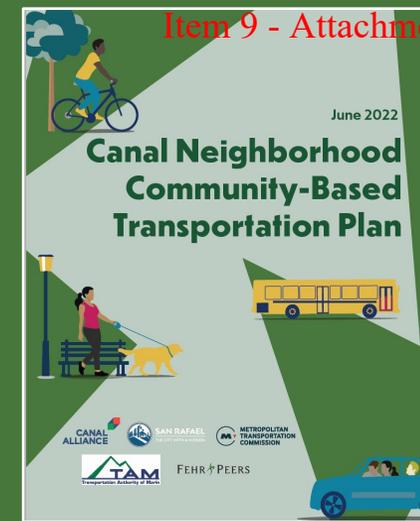
H = solution received a lot of support (25 or more dots, comments, feedback from SC and FG), M = solution received some support (15-25 dots, comments, feedback from SC and FG), L = solution received little support (less than 15 dots, comments, feedback from SC and FG).

**Recommended by the City*

Implementation Time Frame



CBTP IMPLEMENTATION



AGENCY & COMMUNITY COORDINATION

The City team learned valuable lessons through coordination with Canal Alliance, Voces del Canal, TAM, Marin Transit, Golden Gate Transit, San Rafael City Schools, and the Downtown Streets Team. Implementation will be easier if we make these meetings a regular occurrence.

FUNDING PURSUITS

Many funding sources are available at the federal, state, and local level with criteria that fit the Canal CBTP solutions. Publishing the CBTP will help the City and agency partners pursue competitive grants. Examples include new competitive programs in the Federal Infrastructure Bill, Caltrans Active Transportation Grants, and MTC grants.

STAFF CAPACITY

There is a lot to do to set transportation mobility in the Canal on equal footing with other parts of San Rafael. This includes monitoring CBTP implementation progress annually. In addition to funding needs, staff capacity is the other barrier that stands to interfere with timely implementation of the CBTP solutions.

THANK YOU!



CANAL ALLIANCE **SAN RAFAEL**
THE CITY WITH A HISTORY

¡Venga a discutir mejoras de transporte en el Canal!

Pase por comida, actividades para jóvenes, rifas, e invitados especiales.

Sábado abril 23, 2022
1-4 pm
Alto Street

Comparta sus ideas sobre caminar, andar en bicicleta, manejar, y el transporte público en su vecindario.

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