

Comprehensive Multimodal Corridor Plan



San Vicente Comprehensive Multimodal Corridor Plan

SANDAG & California Department of Transportation

The San Diego Association of Governments (SANDAG) and California Department of Transportation (Caltrans) District 11 have developed a Comprehensive Multimodal Corridor Plan (CMCP) to address the current and future multimodal needs of the region. The CMCP process encourages cross-agency collaboration, seeks out public input, and leverages the knowledge of communities to develop strategies, programs, and projects. This report is a testament to successful collaboration across multiple agencies and community partners.

Disclaimer: The information and data contained in this document are for planning purposes only and should not be relied upon for final design of any project. Any information in this Comprehensive Multimodal Corridor Plan (CMCP) is subject to modification as conditions change and new information is obtained. Although planning information is dynamic and continually changing, SANDAG and Caltrans make every effort to ensure the accuracy and timeliness of the information contained in the CMCP. The information in the CMCP does not constitute a standard, specification, or regulation, nor is it intended to address design policies and procedures.

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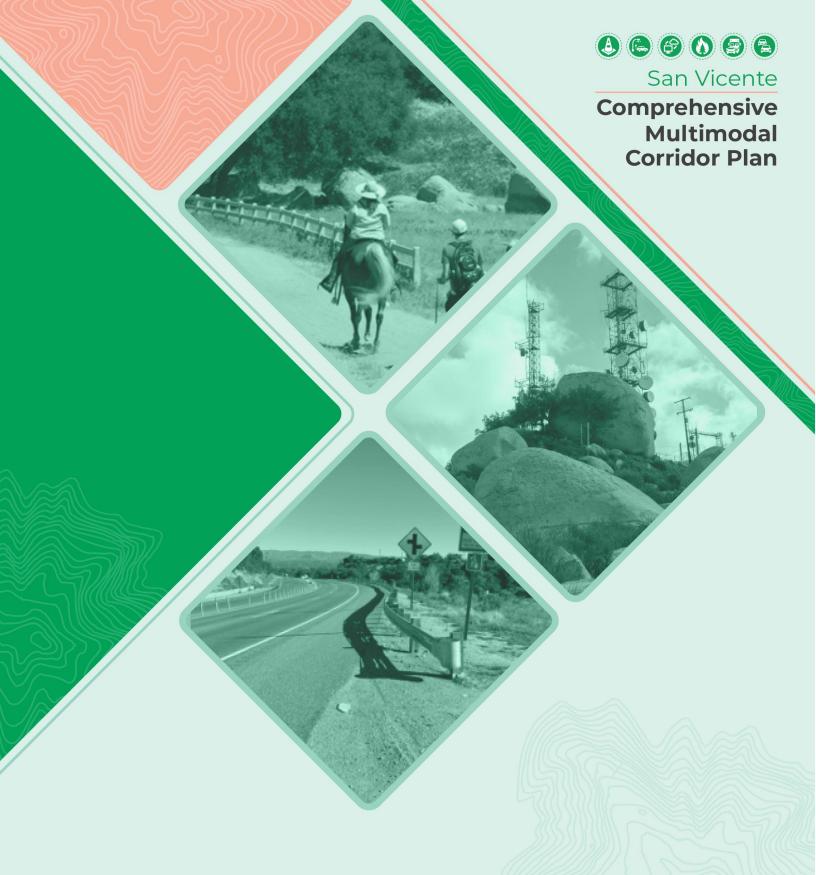
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Appendix H: Project Inventory by Implementation Timeline with Costs





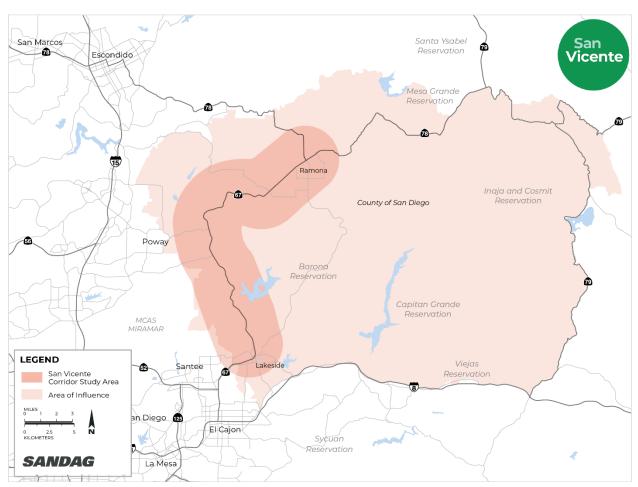


Executive Summary



EXECUTIVE SUMMARY

The San Vicente Comprehensive Multimodal Corridor Plan (CMCP) is a strategic blueprint for identifying and implementing multimodal projects and services within communities along State Route 67 between Lakeside and Ramona. This document builds on previous and current regional and local efforts to create a comprehensive strategy that sets a foundation for enhancing multimodal connectivity and accessibility across communities that depend on the San Vicente Corridor.











This document was developed by San Diego Association of Governments (SANDAG) and California Department of Transportation (Caltrans) in partnership with local agencies and partners, and through input from the general public. The following regional, state, and local initiatives guide the CMCP process:

- SANDAG 2021 Regional Plan
- California Transportation Plan 2050
- Climate Action Plan for Transportation Infrastructure
- Caltrans Corridor Planning Process Guide
- Other local plans

The San Vicente CMCP is a required prerequisite for agencies to pursue some Senate Bill 1 (SB 1) funding sources, and it can be leveraged for various other local, state, and federal funding opportunities. The primary objective of the CMCP is to identify and advance projects with a multi-modal approach that balance transportation improvements, community impacts, and environmental benefits. The development of this document also created a forum for creating a more connected regional network through cross-jurisdictional coordination.

The CMCP process, summarized in **Figure E-1** aimed to understand the San Vicente Corridor characteristics and identify needs through extensive public involvement to create equitable transportation solutions that align with state, regional, local, and corridor-specific goals.

The San Vicente Corridor provides critical access and connectivity for rural communities along SR 67. The Corridor connects the unincorporated communities of Ramona and Lakeside to the City of Poway and other portions of the County of San Diego and provides access to the tribal lands of the Barona Band of Mission Indians, lipay Nation of Santa Ysabel, and the Mesa Grande Band of Mission Indians. The unique rural character of the San Vicente Corridor requires a balanced approach to addressing the needs of transportation operations for all users while preserving existing community characteristics such as the natural landscape of mountains, hills, valleys, lakes, and creeks, as well as the "Main Street" feel of downtown Ramona. Although the San Vicente Corridor crosses several communities with diverse user groups and unique characteristics, it functions as one corridor with respect to travel for jobs, housing, sensitive goods movement (i.e., wine and livestock), and recreation.

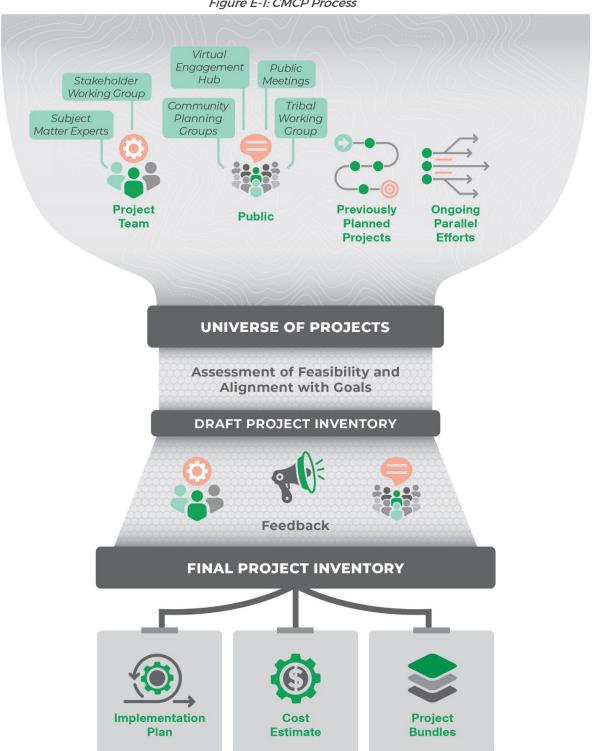








Figure E-1: CMCP Process











The San Vicente Corridor is affected by several unique challenges related to mobility and transportation:

- Safety and Evacuation Needs The San Vicente area has suffered two major wildfires: the Cedar Fire in 2003 and the Witch Creek Fire in 2007. Evacuation operational improvements are a major priority for this CMCP due to the extreme traffic congestion and lengthy evacuation times experienced during those past events, as well as community-led initiatives advocating for better evacuation processes.
- Limited transportation facilities for people who walk, bike, and/or ride horses There are limited active transportation facilities throughout the corridor, making it difficult to walk, bike, or ride horses for recreation or commuting purposes.
- Rural and underserved communities Twenty percent of the population within the Study Area have access to zero or one car per household. With no high-quality transit services and limited to no adequate active transportation facilities, there are limited mobility options for this portion of the population and there is little incentive for the remaining 80 percent of the population to use more sustainable, alternative modes of transportation. The rural and underserved communities in the San Vicente Corridor Study Area also have limited broadband access, making telecommunication unreliable for the community.

These unique challenges, combined with feedback from the community and partner agencies, and results from the Baseline Conditions Analysis, helped identify the key needs for the San Vicente Corridor.













A comprehensive outreach process was developed and implemented to inform and help make decisions around the prioritization of projects for the San Vicente CMCP. The process engaged subject matter experts, various planning working groups, and the general public. Virtual and in-person meetings were held regularly to help identify key needs, draft a project inventory of transportation solutions to address the Corridor needs, and provide feedback on the implementation plan. The outreach process helped ensure an inclusive approach to the development of the San Vicente CMCP. The vast majority of the 241 projects and programs included in the CMCP were either identified by stakeholders and members of the public directly, or developed in response to needs identified through the outreach process.

A cost methodology was developed, along with a project bundling process, that prioritizes projects that address multiple needs and/or received strong community support. **Table E-1** displays how projects were categorized into timelines for implementation: short-term (0-5 years), mid-term (5-15 years), and long-term (15 or more years). It should be noted that these timelines are rough in magnitude, and would heavily depend on the ability to obtain funding.

Timeline Number of Projects

Short-term (0-5 years) 58

Mid-term (5-15 years) 124

Long-term (15+ years) 59

Table E-1: Implementation Timeline Summary

The project team identified groups of short-term and mid-term projects from the inventory that could be implemented together to streamline the funding and construction processes. For the project bundling process, the team considered each project's geographic location, alignment with Corridor Study Area needs, alignment with state, regional, and local objectives, and level of public support.

- Prioritizing Evacuation: Short-Term and Long-Term Solutions
- Ramona Main Street Revitalization
- Mapleview Complete Streets
- Dynamic Curve Warning and In-Pavement Lighting
- Wildcat Canyon Road
- Recreation Access Improvements
- Wine Country Mobility Improvements









Through the implementation of the CMCP, the corridor is anticipated to:



Increase evacuation capacity



- Decrease overall vehicle miles traveled per resident and per employee
- Improve incident management and reliability



- Increase combined bicycle and pedestrian miles traveled by more than 10%
- Increase multimodal access via:
 - 105 miles of new, protected bike facilities with rest stop and parking amenities
 - 45 miles of new equestrian trails



Increase transit access to all social equity groups



Reduce the number and severity of collisions



Enhance local economic development

The San Vicente CMCP is organized as follows:

Chapter

Provides the framework used to develop the San Vicente CMCP.

Provides context for the San Vicente Corridor including route history, unique user groups, and key baseline conditions that influenced the development of the CMCP. Existing plans and studies were assessed to create a baseline understanding of needs and parallel project efforts.

Identifies the six key needs of the San Vicente Corridor: Safety; Evacuation; Active Transportation; Goods Movement; Traffic Congestion; and Utilities. Information & Technology was also identified as a necessary category to support the other needs of the Corridor.

Provides an overview of the final project inventory and corresponding inventory maps of the location-specific projects. The final inventory of transportation solutions in this CMCP will be considered for inclusion in SANDAG's next Regional Transportation Plan (RTP).

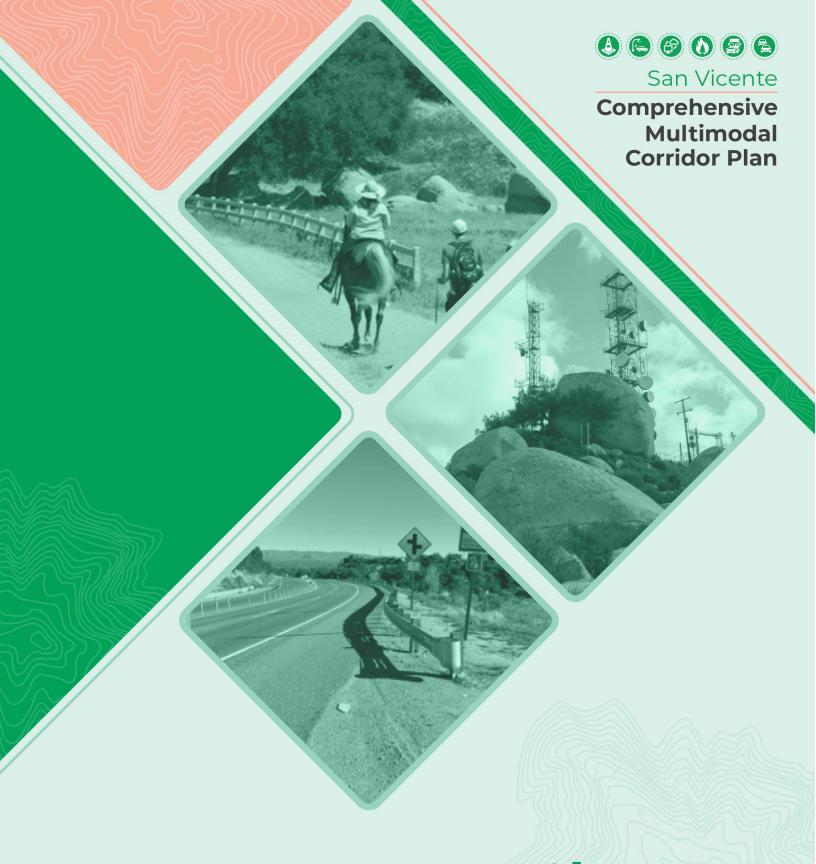
Chapter

Defines the implementation plan, including high-level cost estimates, implementation timelines, and analysis results for the proposed project inventory as compared to baseline conditions.









Chapter 1 CMCP Framework



CHAPTER 1: CMCP FRAMEWORK

What is a CMCP?

A Comprehensive Multimodal Corridor Plan (CMCP) is a strategic blueprint for identifying and implementing multimodal projects and services within communities predominantly along a specific corridor. The document is based on an integrated, ground-up planning process, which brings together residents, local jurisdictions, tribal governments, and other partner agencies.

A CMCP utilizes a multimodal planning process to create a balanced, equitable transportation system that integrates mobility options such as driving, biking, walking, transit, micro-mobility, and other mobility services to move people and goods within the designated corridor and beyond. A corridor study area may include multiple facilities such as local arterial

A CMCP is a data-informed planning document created to reflect the values, goals, and objectives of the communities served by the corridor.

roadways, state highways, rail lines, transit systems, and active transportation facilities.

A CMCP document plans for all modes of transportation by evaluating existing and future conditions, community priorities, and the potential benefit of proposed mobility strategies that align with state, regional, and project-specific goals.

WHAT IS EXPECTED FROM A CMCP?

A CMCP supports continuous improvement of the transportation system through a meaningful and collaborative planning process and is intended to be referenced and updated regularly. CMCPs are expected to:











Reimagine the approach to

mobility by focusing on quality of life, accessibility, sustainability, access to jobs, housing, education, and health for all



Enable regions to compete for state

funding under the SB1, the Road Repair and Accountability Act (2017), and the Congested Corridors Program



Address today's mobility challenges

while building a foundation for the future



Provide an integrated set of multimodal transportation

improvements that align with regional, state, and local objectives and inform future transportation plans



Develop a balanced implementation plan for

timely, phased (if necessary), integrated (with other parallel efforts), and effective results













As the implementation blueprint for multimodal mobility within a corridor, a CMCP helps to align community priorities and initiatives with state and regional goals to develop projects and services.

SAN VICENTE CMCP STRUCTURE

The San Vicente CMCP has the following basic structure:

- Chapter 1: CMCP Framework
- Chapter 2: Corridor Context
- Chapter 3: Needs Assessment
- Chapter 4: Transportation Solutions
- Chapter 5: Implementation and Phasing
- Appendix A: Literature Review
- Appendix B: Draft CMCP Public Comments
- Appendix C: Intraregional Tribal Transportation Strategy
- Appendix D: Public Engagement Events and Efforts Matrix
- Appendix E: Project Inventory by Need Category
- Appendix F: Funding Sources
- Appendix G: Performance Assessment
- Appendix H: Project Inventory by Implementation Timeline with Costs

Why does the San Vicente Corridor Need a CMCP?

CORRIDOR OVERVIEW

The San Vicente Corridor (the Corridor) provides critical access and connectivity for rural communities along State Route 67 (SR 67). The Corridor connects the unincorporated communities of Ramona and Lakeside to the City of Poway and the San Diego region and provides access to the tribal lands of the Barona Band of Mission Indians, lipay Nation of Santa Ysabel, and the Mesa Grande Band of Mission Indians. The Corridor Study Area and Area of Influence (see **Study Area and Area of Influence** subsection below) are home to a total of 107,000 people¹.

The unique rural character of the San Vicente Corridor requires a balanced approach to addressing transportation needs to preserve existing community characteristics such as the natural landscape of mountains, hills, valleys, lakes, and creeks, as well as the main-street feel

¹ United States Census (2020)









of Ramona. Although the San Vicente Corridor crosses several communities with diverse user groups, it functions as one corridor with respect to travel for jobs, housing, goods movement, and recreation. Due to the importance of this vital regional link, it is imperative that all who depend on it can articulate their needs and concerns through a CMCP process. These characteristics make the San Vicente Corridor ideal for the implementation of a CMCP.

Study Area and Area of Influence

As shown below in Figure 1-1, the Study Area is defined as the area within a two-mile radius of SR 67 extending from Mapleview Street to 10th Street and is the focus for proposed transportation solutions documented in the CMCP. The Area of Influence represents a boundary established by demographic and travel patterns developed from a larger, census tract-based area. This Area of Influence will inform and benefit from the proposed projects in the Corridor Study Area. Transportation solutions proposed in this document are only identified within the Corridor Study Area but may extend into the Area of Influence and beyond to complete network gaps or create a more comprehensive transportation system.

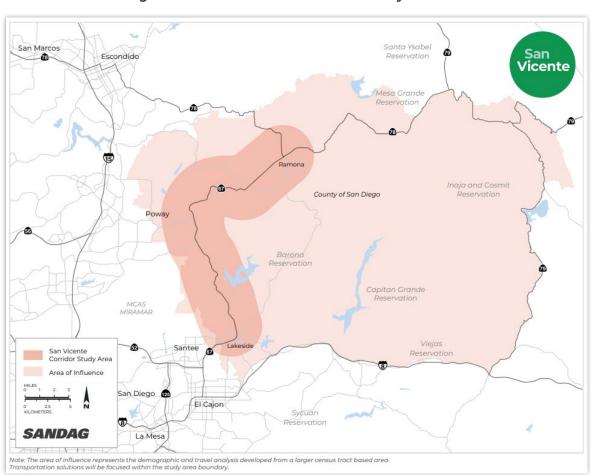


Figure 1-1: San Vicente CMCP Corridor Study Area











Jurisdictional Agencies

Agencies relevant to mobility planning within the San Vicente Area of Influence collaborated to develop the San Vicente CMCP. These agencies included: the California Department of Transportation District 11 (Caltrans), the San Diego Association of Governments (SANDAG), the County of San Diego, the San Diego Metropolitan Transit System (MTS), the North County Transit District (NCTD), and the City of Poway. More detail on this collaboration process is provided later in this chapter.

CHALLENGES THAT INHIBIT MOBILITY AND TRANSPORTATION IN THE CORRIDOR

The San Vicente Corridor is affected by several unique challenges related to mobility and transportation, which further support its implementation as a CMCP. These unique challenges include:

- Safety and evacuation needs
- Limited transportation facilities for people who walk, bike, and/or ride horses
- Rural and underserved communities

Each of these challenges are explained in more detail below.

Limited Transportation Facilities for People that Walk and Bike





Photo Source: Kimley-Horn







The San Vicente Corridor provides regional access to business and outdoor recreational areas, including tribal resorts and gaming, wineries, trailheads, and equestrian facilities. Corridor users include people who walk, bike, hike, use other micromobility devices, and ride horses, in addition to motorists. Approximately 3.3 percent of all trips in the Corridor are made by people who walk or bike². The limited and inadequate existing infrastructure designated for these vulnerable roadway users poses safety risks. The San Vicente CMCP aims to balance the needs of user groups to improve safety for all users.

Rural and Underserved Communities

The San Vicente Corridor Study Area encompasses several distinct communities, each with their own characteristics, challenges, and needs. The San Vicente Corridor provides access and connectivity to nearby and adjacent tribal lands, and is integral to supporting tribal commerce. The Area of Influence population includes 29 percent people of color³, 3 percent low income, and 6 percent seniors, with 2 percent of households having no access to a car⁴. The rural and underserved communities in the San Vicente Corridor Study Area also have limited broadband access, making telecommunication unreliable for the community. More details on tribal governments and social equity focus populations are provided in **Chapter 2**: **Corridor Context**. The San Vicente CMCP incorporates input from these communities, providing transportation solutions that meaningfully improve the Corridor for those who live and travel throughout it every day.

Safety and Evacuation Needs

The need for safety improvements is a top priority for community members and was a driving force for the initiation of the San Vicente CMCP. SR 67 and parallel / connecting roadways are characterized by the community as having dangerously high speeds, steep grades, sharp curves, and large intersections.

The San Vicente Corridor also has a history of wildfires with two major events occurring in the past 20 years: the Cedar Fire in 2003 and the Witch Creek Fire in 2007, the latter of which caused the evacuation of more than 500,000 people. Due to the extreme traffic congestion and lengthy evacuation times experienced during these events, evacuation operation improvements have become a major priority for this CMCP.

⁴ American Community Survey (2019)





² SANDAG Activity Based Model (ABM) DS 39

³ United States Census (2020)







Photo Source: 2007 Witch Creek Fire5

State, Regional, and Local Context

State, regional, and local transportation planning initiatives establish strategic policy and funding priorities within the State of California and the San Diego region. To successfully implement projects across multiple jurisdictions, San Vicente CMCP agencies,

CMCPs provide the framework for locally and sub-regionally driven solutions to state and regional initiatives.

operators, partners, and tribal government partners need to align with state and regional initiatives. This plan builds on previous and current regional and local efforts to create a comprehensive strategy that sets a foundation for enhancing multimodal connectivity and accessibility across San Vicente communities. Further information on previous plans and studies can be found in **Appendix A: Literature Review**.

CMCPs are expected to be leveraged for applicable state and federal funds for projects. When funding is obtained, the San Vicente CMCP transportation projects and programs will be added to the Regional Transportation Improvement Program (RTIP). The RTIP is a multibillion-dollar, five-year program of major transportation projects funded by the federal, state, and local governments. **Figure 1-2** shows how the CMCP process works in conjunction with state and regional planning efforts to make the recommended transportation projects a reality.

⁵ https://www.cbs8.com/article/news/politics/wildfire-evacuees-community-leaders-protest-sandag-plans-to-shelve-highway-safety-improvements/509-125dec8d-c6a0-424a-85d9-1bffeb5b3935







PROJECT TRANSPORTATION PLANNING IMPLEMENTATION REGIONAL PLAN CLIMATE ACTION AND VISION: PLAN FOR Sets a blueprint, complies with laws, REGIONAL TRANSPORTATION TRANSPORTATION IMPROVEMENT PROGRAM: INFRASTRUCTURE high-level Sets the timeline for implementation of projects CALIFORNIA Environmental TRANSPORTATION that have secured funding Documents **PLAN 2050** Secure **Funding** Design SB1 and IIJA other federal, state and local sources Construction

Figure 1-2: CMCP Process in the Larger Context

The following regional, state, and local initiatives guide the CMCP process:

- SANDAG 2021 Regional Plan
- California Transportation Plan 2050

CMCP DOCUMENT:

- Climate Action Plan for Transportation Infrastructure
- Caltrans Corridor Planning Process Guide
- Caltrans Smart Mobility Framework
- Other local plans

Each of these is described below.

SANDAG 2021 Regional Plan

The 2021 Regional Plan is the vision for how the San Diego region will grow through 2050 and implement a fast, fair, and clean transportation system and a resilient region. The 2021 Regional Plan was adopted by the SANDAG Board of Directors in December 2021 and combines three required planning documents: Regional Transportation Plan (RTP), Sustainable Communities Strategy (SCS), and Regional Comprehensive Plan (RCP).



SEPTEMBER 2022







The plan defines projects, policies, and programs to address regional land use and transportation challenges while meeting the following regional goals and areas of emphasis:

- Efficiently move people and goods by providing competitive alternatives to driving
- Access to affordable, reliable, and safe mobility options for everyone
- Healthier air and reduced GHG emissions regionwide by supporting shorter tripmaking through focused integration of transportation and land use

The 2021 Regional Plan incorporates five transformational strategies— "the 5 Big Moves"—into one *integrated* regional transportation system. Provided below, in **Figure 1-3**, are the moves and their associated descriptions.

Figure 1-3: SANDAG's 5 Big Moves

NEXT OS COMPLETE CORRIDORS The underlying technology that allows Roadways that offer dedicated, safe space for everyone, including people who walk, bike, drive, people to connect to transportation services and a digital platform that allows ride transit, and use Flexible Fleets, as well as those for dynamic management who drive freight vehicles. Complete Corridors of roadways and use technology to dynamically manage the transit services. flow of traffic. TRANSIT LEAP A complete network of fast, convenient, and reliable transit services that connect people from where they live to where they want to go. **FLEXIBLE FLEETS** Transportation services of many forms, varying in size from bikes to scooters MOBILITY HUBS to shuttles, that offer firstand last-mile connections Vibrant centers of activity where transit and to transit and alternatives on-demand travel options, supported by safe to driving alone. streets, connect people with their destinations and businesses with their customers. Mobility Hubs are also planned to accommodate





future growth and development.

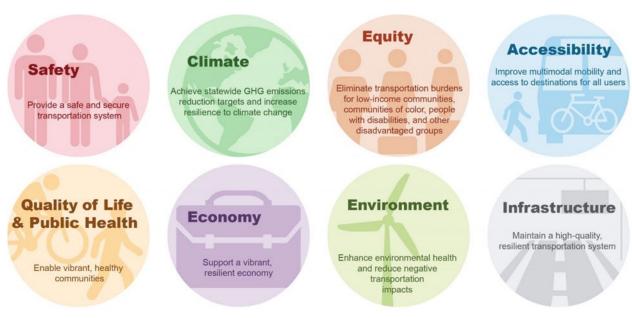




The 2021 Regional Plan used the aforementioned strategies to develop programs, projects, and implementation actions within the San Vicente Corridor Study Area phased through 2050. The CMCP builds on the projects and programs proposed within the 2021 Regional Plan and provides a detailed set of local solutions unique to the San Vicente Corridor.

California Transportation Plan 2050

The California Transportation Plan (CTP) 2050⁶ is a long-range transportation roadmap for achieving the state's vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The CTP 2050 provides a framework for making effective, transparent, and transformative transportation decisions in California. While no projects are included in the CTP 2050, it does provide people-focused policies, strategies, and investments that close the gap between the goals in regional transportation plans and the following state goals:



⁶ https://dot.ca.gov/programs/transportation-planning/state-planning/california-transportation-plan









Climate Action Plan for Transportation Infrastructure

In July 2021, the California State Transportation Agency (CalSTA) adopted its Climate Action Plan for Transportation Infrastructure⁷ (CAPTI) to prioritize transportation infrastructure investments that "...realize a truly low-carbon, sustainable, resilient, and economically competitive future for the state..."

As part of the CAPTI investment framework and CTP 2050, the State of California is taking a "fix-it-first" approach using existing funding sources and prioritizing projects that align with CAPTI's Guiding Principles, including:

- Building toward an integrated, statewide rail and transit network
- Investing in networks of safe and accessible bicycle and pedestrian infrastructure
- Investing in light, medium, and heavy-duty zero-emission vehicle (ZEV) infrastructure
- Strengthening commitment to social and racial equity by reducing public health and economic harms and maximizing community benefits
- Making safety improvements to reduce fatalities and severe injuries of all users towards zero
- Assessing physical climate risk
- Promoting projects that do not significantly increase passenger vehicle travel
- Promoting compact infill development while protecting residents and businesses from displacement
- Developing a zero-emission freight transportation system
- Protecting natural and working lands

https://calsta.ca.gov/-/media/calsta-media/documents/capti-july-2021-ally.pdf









In addition to the Guiding Principles for funding, the San Vicente CMCP advances five critical strategies of the CAPTI which include:

- Cultivate and Accelerate Sustainable Transportation Innovation by Leading with State Investments – promote innovative sustainable transportation solutions in Solutions for Congested Corridor Programs (SCCP) and require multimodal corridor plans.
- Support a Robust Economic Recovery by Revitalized Transit, Supporting ZEV
 Deployment, and Expanding Active Transportation Investments increase funding for active transportation projects.
- Elevate Community Voices in How We Plan and Fund Transportation Projects enhance and mainstream community engagement best practices.
- Strengthen Transportation and Land Use Connections explore a "Highways to Boulevards" conversion pilot program.
- Support Local and Regional Innovation to Advance Sustainable Mobility convene discussions regarding sustainable rural transportation solutions.

Caltrans Corridor Planning Process Guide

Caltrans Division of Transportation Planning published the Corridor Planning Process Guide (Guide) in February 2020 to provide direction on comprehensive analysis of transportation corridors to Caltrans and relevant partner agency staff⁸. The Guide provides an eight-step corridor planning process:

- Scope Effort
- Gather Information
- Conduct Baseline Performance Assessment
- Identify Potential Projects and Strategies
- Analyze Improvement Strategies
- Select and Prioritize Solutions
- Publish/Implement Corridor Plan
- Monitor and Evaluate Progress

The eight-step corridor planning process is the foundation for the development of the San Vicente CMCP process, which is outlined in the **CMCP Process** section of this document.

⁸ Corridor Planning Process Guide (Caltrans, 2020)









Caltrans Smart Mobility Framework

The Smart Mobility Framework (SMF) is guidance that emphasizes the integration of transportation and land use concepts to bring about smart growth transportation strategies across California. Principles outlined in the SMF are woven throughout the development of San Vicente CMCP – helping to guide the selection of solutions by emphasizing:

- Location efficiency integrating land use and transportation to improve accessibility, maximizing non-motorized modes and transit, and reducing the number and length of trips.
- **Reliable mobility** expanding multimodal options and operational strategies to better manage transportation network predictability.
- **Healthy and safety** designing, operating, and managing a system to improve user safety, encourage active lifestyles, and lessen exposure to pollution.
- **Environmental stewardship** reducing transportation greenhouse gas emissions while enhancing and protecting the State's built and natural environments.
- Social equity designing a transportation system that provides mobility for all users.
- **Robust economy** supporting the economic health of the State and local governments, competitiveness of businesses, and the welfare of residents.

Local Plans

The San Vicente CMCP leverages the work that partners in the San Vicente Corridor Study Area have completed—relying on local planning efforts to document local access needs into the sub-regional context of the San Vicente Corridor. As is described in the **CMCP Process** section of this document, a foundation of local understanding was built from the Literature Review (see **Appendix A: Literature Review**). The literature review document reflects the studies and projects available at the time the document was written. Additional documents have been published since that time that identified projects in the Study Area, which were incorporated into the CMCP process and are not listed in the original literature review.

Subsequently, the San Vicente CMCP engaged the City of Poway, the Ramona and Lakeside Community Planning Groups, the County of San Diego, and representatives from local tribal governments to ensure that the analysis, findings, and proposed projects and programs from the CMCP were compatible with existing and future local plans.

CMCP Process

The CMCP process aims to understand Corridor characteristics and identify needs through extensive public involvement to create equitable transportation solutions. The overall CMCP process is shown in **Figure 1-4** and the key steps are described in this section.

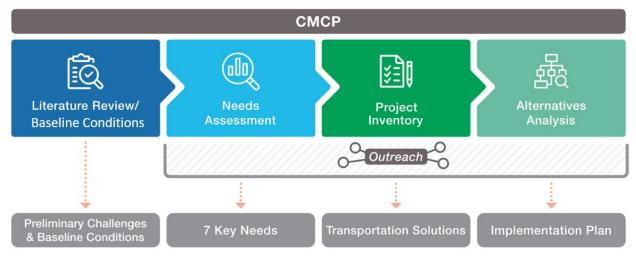








Figure 1-4: CMCP Process



CMCP DEVELOPMENT

Literature Review/Baseline Conditions

A review of existing literature documents pertaining to the San Vicente Corridor Study Area was conducted to identify planned projects, as well as challenges experienced by the Corridor partner agencies and tribal partners. The full literature review document completed for the Study Area is provided in **Appendix A: Literature Review**.

The Baseline Conditions Analysis supported the findings of the literature review and identified data-informed challenges and needs for the Corridor. The Baseline Conditions Analysis was based primarily on 2020 Census Data and on the SANDAG Activity Based Model (ABM) outputs for both 2016 (Existing Conditions) and 2050 Regional Plan Build Anticipated Conditions (2050 No-Build Conditions). The 2050 No-Build scenario assumes completion of projects programmed in the 2019 Federal Regional Transportation Plan and the general growth of population, employment. It does not account for any projects and programs that are proposed as part of this CMCP.

The literature review and Baseline Conditions Analysis provided key contextual information for the Corridor, discussed in **Chapter 2: Corridor Context**, helped identify the key Corridor challenges in **Chapter 3: Needs Assessment**, and inform the transportation solutions in **Chapter 4: Transportation Solutions**.









Needs Assessment

The results of the Baseline Conditions Analysis, combined with feedback from the various outreach groups, were compiled to highlight the recurring key themes that would become the overarching needs for the entire Corridor. This process resulted in seven needs that were used to identify a suite of proposed transportation improvements for the Study Area. The needs assessment is detailed in **Chapter 3: Needs Assessment**.

Project Inventory

In response to the Corridor needs, the project team developed an unconstrained list of transportation solutions. The set of solutions included every desirable project or service identified by the Baseline Conditions Analysis or suggested by the partner agency groups and tribal government partners. This unconstrained list was narrowed to a draft project inventory based on initial opinion of probable cost and feasibility. Following a second round of feedback from the partner agencies and tribal government partners, a final project inventory of transportation solutions was developed. The final project inventory is detailed in **Chapter 4: Transportation Solutions**.

Phasing Evaluation/Implementation Plan

The final project inventory was divided into short-term and long-term solutions to be included in the SANDAG Regional Model. The same performance measures used to analyze the Existing Conditions and the 2050 No-Build Conditions were used to analyze the Future Build Conditions with the CMCP project inventory. An implementation strategy was then developed for the phasing of the San Vicente CMCP and is detailed in **Chapter 5: Implementation and Phasing**.

ENGAGEMENT AND OUTREACH

Successful CMCP development and implementation requires alignment across transportation owners, operators, and the Corridor's diverse set of partner agencies and tribal government partners. To achieve this alignment, the CMCP team listened to their experiences, leveraged the knowledge of nearby Cities and communities, and collaborated in the development of implementable strategies, programs, and projects throughout all stages of the planning process described above.

Community outreach for the San Vicente CMCP included:

- Subject Matter Expert meetings,
- Stakeholder Working Group meetings,
- Tribal Technical Working Group meetings,
- Community Planning Group meetings,
- Public Workshops, and
- Maintenance of the Virtual Engagement Hub.





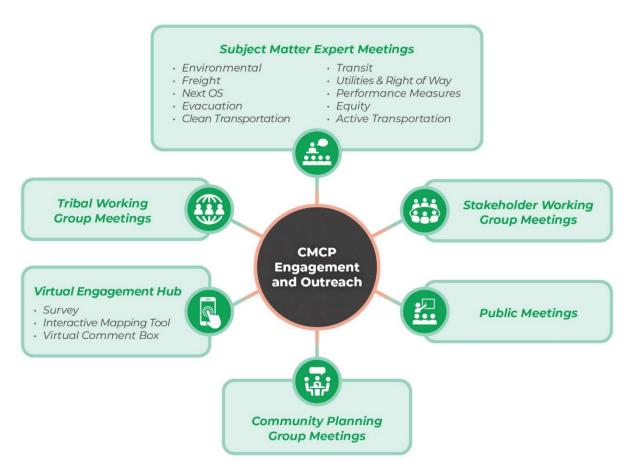




The Engagement and Outreach strategy for the San Vicente CMCP is summary in Figure 1-5.

The CMCP process maximized engagement of social equity focus communities through a robust engagement strategy, which included virtual and in-person opportunities. Virtual engagement materials and the virtual engagement hub were available in both English and Spanish. Real-time Spanish translation services were provided at the virtual public workshops with the presentation recordings made readily available online. Public workshops were held at accessible and reasonable times to ensure all interested persons could attend. In addition, the CMCP team attended in-person meetings to ensure forums were established for partners and tribal governments with limited internet access and proficiency.

Figure 1-5: CMCP Engagement and Outreach Efforts



22









Subject Matter Experts

The Subject Matter Experts (SMEs) included technical planners, engineers, service workers, and community members from various public, private, and advocacy organizations. The SMEs were grouped by the following topics:

- Environmental
- Freight
- Next OS
- Active Transportation
- Evacuation

- Clean Transportation
- Transit
- Utilities and Right-of-Way
- Performance Measures
- Equity

These groups provided initial input on the barriers and challenges that exist throughout the Corridor related to their area of expertise. This input informed the suite of proposed transportation improvements documented in the CMCP.



Stakeholder Working Group

The Stakeholder Working Group (SWG) consisted of key partner agencies and tribal government partners represented by:

- Caltrans
- SANDAG
- County of San Diego
- San Diego Metropolitan Transit
 System
- North County Transit District
- City of Poway
- CAL FIRE

- San Diego County Sheriff
- California Highway Patrol
- Ramona Community Planning Group representative
- Lakeside Community Planning Group representative
- Tribal Working Group representative

Throughout the CMCP process, the SWG collaborated to leverage each other's knowledge, experiences, and insights to align on CMCP initiatives. The SWG also assisted in completing the project survey, providing historical knowledge, voicing community concerns, and connecting outreach efforts to social equity focus communities. The SWG increased the diversity and geographic reach of the project outreach efforts.



Tribal Working Group

There are six tribal governments in the vicinity of the San Vicente CMCP Study Area, as shown in **Figure 1-6**.

- Barona Band of Mission Indians
- lipay Nation of Santa Ysabel
- Mesa Grande Band of Mission Indians
- Inaja-Cosmit Band of Indians,
- Viejas Band of Kumeyaay Indians
- Capitan Grande Band of Kumeyaay Indians









In particular, the Barona Band of Mission Indians is dependent on SR 67 for access and is directly impacted by future improvements to the San Vicente Corridor. The project team engaged the tribal governments directly on two separate occasions by presenting to the SANDAG Interagency Technical Working Group on Tribal Transportation Issues (Tribal TWG) to report on the progress of the San Vicente CMCP and solicited feedback from the tribes throughout the CMCP process.

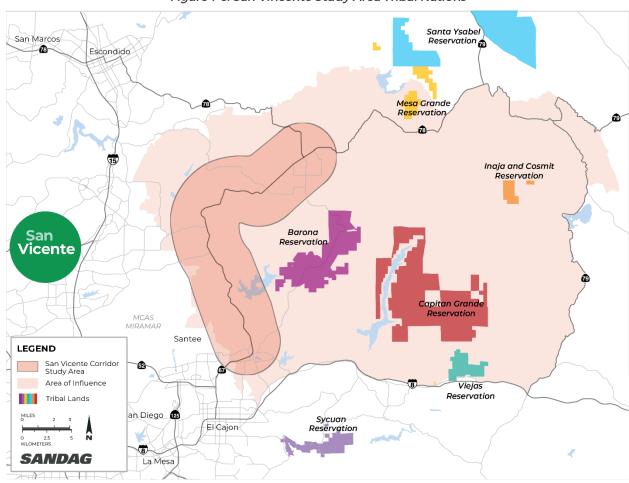


Figure 1-6: San Vincente Study Area Tribal Nations









Community Planning Groups

The Lakeside and Ramona Community Planning Groups (CPGs) consist of elected volunteers that help advise elected officials on public projects. The CPGs offer recommendations on projects and how to spend local funds based on community input. The San Vicente CMCP project team reported to both CPGs at key points during the CMCP process to solicit feedback on the Corridor challenges and needs, the projects identified for the San Vicente Corridor, and the implementation plan.



Public Engagement



There were two main avenues for engaging members of the general public: 1) the virtual engagement hub, shown in Figure 1-7; and 2) two public meetings. The virtual engagement hub included an online survey, interactive mapping, and comment input. The feedback obtained from these outreach efforts provided input for the CMCP, particularly with the suite of proposed transportation improvements. The survey results can be found in Appendix B: Public Engagement Comments.

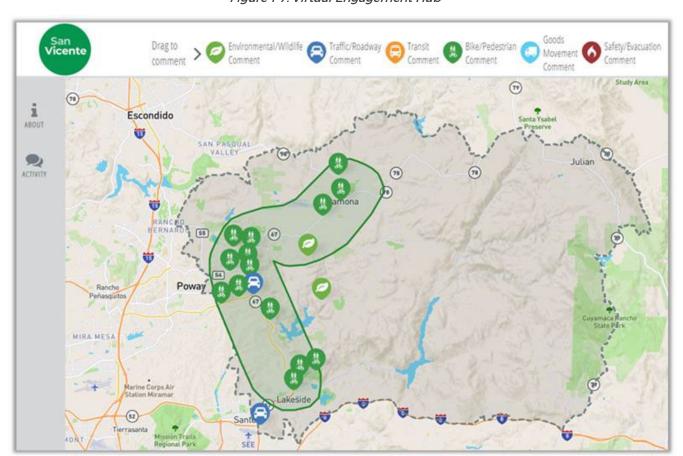
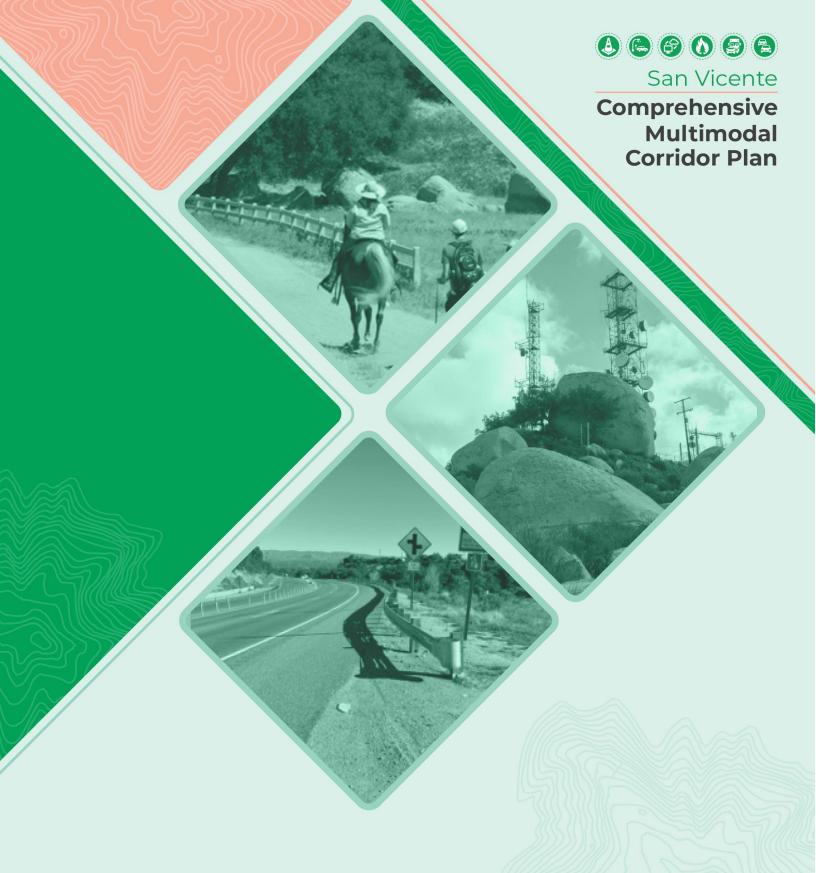


Figure 1-7: Virtual Engagement Hub









Chapter 2 Corridor Context



CHAPTER 2: CORRIDOR CONTEXT

This chapter provides information regarding the San Vicente Corridor that will help contextualize the overarching challenges (further detailed in **Chapter 3: Needs Assessment**) and inform the development of strategies to address them (further detailed in **Chapter 4: Transportation Solutions**). Information for this chapter was generated through a comprehensive review of existing plans and studies (see **Appendix A**), partner agency and tribal government feedback, and a data-driven Baseline Conditions Analysis. This chapter will bring into focus the historical context of the transportation system, its unique set of users, and the key existing conditions influencing the development of the Comprehensive Multimodal Corridor Plan (CMCP).

This chapter is organized into the following sections:

- **Parallel Corridor Efforts** summarizes several ongoing parallel projects and studies that are within this CMCP's Study Area.
- **San Vicente Corridor Profile** explains the Corridor history and the unique set of users, travel patterns, and features that inform the purpose of the Corridor.
- San Vicente Corridor Segments divides the Corridor into six segments based on adjacent land uses, populations, and communities served, and documents the unique mobility challenges associated with each segment.

KEY TAKEAWAYS

3.

- The Corridor serves as a lifeline for East County San Diego communities. Residents of Lakeside and Ramona, along with the tribal governments of Barona, lipay, and Mesa Grande, depend on the Corridor for daily commuting, goods movement, access to recreational opportunities, and as a primary evacuation route during emergencies.
 - Although the population within the Area of Influence is anticipated to decrease slightly (-1.6 percent) by 2050, daily vehicle miles travelled (VMT) is anticipated to increase (+12 percent)⁹ meaning an increase in throughput travel in the Corridor. This could be a result of increased dependence on vehicle trips from the existing population in the Study Area, or increased population in communities outside the Study Area that use the Corridor for commuting or recreation.
 - Twenty percent of the population within the Study Area have access to zero or one car per household. With no high-quality transit services, and limited to no adequate active transportation facilities, there are limited mobility options for this portion of the population, and there is little incentive for the remaining 80 percent of the population to use more sustainable, alternative modes of transportation.

⁹ SANDAG Activity Based Model (ABM) DS 39







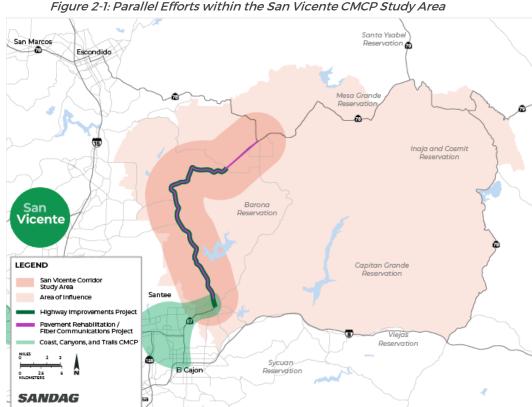


Parallel Corridor Efforts

The San Vicente Corridor is an area of regional focus for transportation improvements with projects currently underway that will improve the transportation system. The San Vicente CMCP builds on the improvements proposed in each of the following parallel project efforts:

- 1. SR 67 Highway Improvements Project
- 2. SR 67 Sliver Widening Project
- 3. SR 67 Pavement Rehabilitation / Fiber Communications Project
- 4. Intraregional Tribal Transportation Strategy
- 5. Downtown Ramona Clean California Project
- 6. County of San Diego Various Projects
- 7. Coast, Canyons, and Trails CMCP
- 8. Kumeyaay Corridor CMCP

Figure 2-1 shows the extent and overlap of the San Vicente CMCP, SR 67 Highway Improvements Project, SR 67 Pavement Rehabilitation / Fiber Communications Project, and the Coast, Canyons, and Trails CMCP project study areas.













SR 67 HIGHWAY IMPROVEMENTS PROJECT

Caltrans is studying potential improvements along 16 miles of SR 67 between Mapleview Street in the unincorporated community of Lakeside and Highland Valley/Dye Road in the unincorporated community of Ramona, passing through the City of Poway. Currently in the Project Approval and Environmental Document (PA&ED) phase, the SR 67 Highway Improvements Project prioritizes the safe and efficient movement of people and goods along this critical corridor.

The PA&ED phase of the SR 67 Highway Improvements project is a short-term implementation plan helping to advance some of the high-level CMCP concepts related to the SR 67 Highway. The project is studying the feasibility, design, and implementation of operation-enhancing physical improvements including, but not limited to, additional travel lanes, widened shoulders, raised medians, and traffic signals.

The PA&ED and San Vicente CMCP are both important projects to the users of the Corridor as they collectively improve the transportation system. The CMCP builds on the short-term implementation projects described in the PA&ED into a long-term, multi-faceted, high-level plan. The relationship between the PA&ED and the CMCP is described below in **Figure 2-2**.

Figure 2-2 CMCP and PA&ED Comparison

		San Vicente CMCP	SR 67 Highway Improvements Project
	What is it?	Plan	Project
	Study Area	City, County, and State roads within 2-mile radius of SR 67	SR 67 (Mapleview to Highland/Dye)
(0)	Focus	Vehicle, bike, pedestrian, equestrian, transit improvements	SR 67 Improvements
	Outcome	Wish list of projects and strategies	Preferred alternative concepts
(>>)	Next Steps	Environmental Documents (pending funding)	Design phase (pending funding)
(E)	Timeline	Anticipated to be published Summer of 2022	Environmental phase anticipated completion June 2025









SR 67 SLIVER WIDENING PROJECT

This project was a result of the Emergency Operations Center (EOC) Tabletop Exercise regarding evacuation. The shoulder widening of southbound SR 67 will accommodate two southbound lanes utilizing the shoulder in the event of evacuation for the segment of roadway in San Diego County on SR 67 from Poway Road to Running Deer Trail.

SR 67 PAVEMENT REHABILITATION PROJECT

The SR 67 Pavement Rehabilitation Project, led by Caltrans, proposes to repair and improve the overall ride quality on the 18.4-mile roadway and shoulders on SR 67, from just north of the San Diego River bridge in Lakeside to the State Route 78 (SR 78)/10th Street intersection in Ramona. The planned repair and improvements include micro-trenching and pavement rehabilitation, additional fiber conduit, and infrastructure expansion for future affordable broadband opportunities for San Vicente residents, including the community of Ramona, and residents of the Barona, lipay, and Mesa Grande tribal governments.

The California Transportation Commission has approved the installation of broadband for the project, which will be completed concurrent with the repaving project to expand affordable broadband opportunities to residents and businesses. This improvement project creates a foundation in the area and presents the opportunity for more broadband projects to be implemented to expand the system in the future.

In addition to this project that began construction in July 2022, the Coast, Canyons, and Trails (CCT) CMCP will identify a connection that will close the fiber network gap between SR 67 in Lakeview and State Route 52 (SR 52).

INTRAREGIONAL TRIBAL TRANSPORTATION STRATEGY

The Intraregional Tribal Transportation Strategy (ITTS) was the result of a collaborative effort between SANDAG, the Southern California Tribal Chairmen's Association (SCTCA), and the 17 tribal governments in San Diego to address tribal mobility needs in the San Diego region. The ITTS—which is currently being updated—identifies key multimodal projects that will improve tribal mobility consistent with regional, state, and federal goals.

Several of the projects identified in the ITTS are located within the San Vicente Study Area and the roadways accessed by SR 67. The Interagency Technical Working Group on Tribal Transportation Issues (Tribal TWG) serves as a forum for regional tribal governments to discuss transportation issues of mutual concern with local public planning agencies. The San Vicente CMCP worked in partnership with the Tribal TWG to discuss overlapping transportation issues.

The ITTS is included as Appendix C.









DOWNTOWN RAMONA CLEAN CALIFORNIA PROJECT

The Downtown Ramona Clean California Project will improve the safety and walkability of the Ramona Business District by enhancing crosswalks and signal lights at SR 78 and SR 67. The improvements along Main Street between 7th Street and 10th Street will add textured and colored asphalt crosswalks and will paint existing signal poles a tan color to increase a sense of place and community. This project was developed because the Ramona Village Center Form-Based Code Report identified this area as a high priority for safety and walkability improvements. The beautification will benefit residents and visitors by providing enhanced pedestrian safety and access to the community connecting active transportation elements along historic Main Street Ramona.

COUNTY OF SAN DIEGO VARIOUS PROJECTS

The County of San Diego has various projects and programs within the Study Area that are either recently completed, under construction, in the design phase, or underway. The County has a resurfacing program that seeks to maintain the integrity of the roadway surfaces, to improve the driver experience and enhance operations. Notably, Montecito Road, 12th Street, and 11th Street within the County right-of-way were recently resurfaced within fiscal year 2020-2021. Riverford Road and Wildcat Canyon Road will also be resurfaced within the next fiscal year.

In addition, the following County projects and programs will have positive impacts for the residents and visitors of the San Vicente Corridor:

- Ashwood Street Improvements Project: 1.3 miles of improvements including widening at El Capitan High School to provide a northbound left turn lane, signalizing the Willow Road intersection, and straightening a sharp curve north of Willow Road.
- Mapleview Green Streets Project: Improvements will be constructed along Mapleview Street between Vine Street and Pino Drive in Lakeside, and will include new biofiltration basins, open channel and storm drain upgrades, new sidewalk, and driveway improvements.
- Woodside Avenue Safety Improvements Project: Safety improvements will be constructed along Woodside Avenue including new sidewalk, traffic signal improvements, Class II bike lanes, crosswalk improvements and striping modifications.
- SR 67/Riverford Road Interchange Project: Geometry modifications will be
 constructed at the SR 67 on-ramp and off-ramp intersections with Riverford Road to
 facilitate travel demand, limit environmental impacts, improve bicycle and pedestrian
 access through the interchange, reduce traffic congestion, and improve traffic and
 safety operations.









Transit Opportunity Area (TOA) VMT Program: The County is also in the process of
preparing a Programmatic Environmental Impact Report (EIR) for further analyzing
VMT to provide environmental coverage for development projects located within
defined Transit Opportunity Areas (TOAs), and includes the development of a potential
regional VMT Mitigation Program in partnership with other agencies.

COAST, CANYONS, AND TRAILS CMCP

The study area for the CCT CMCP includes the cities of San Diego, Santee, and El Cajon, and the County of San Diego. Major transportation roadways in the study area include SR 52, portions of SR 67, and their connections to I-5, I-8, I-805, SR 163, I-15, and SR 125. This CMCP aims to improve connectivity between two major employment centers—Kearny Mesa and University City/Sorrento Valley with East San Diego County—to provide a seamless travel experience for all travel modes.

The easternmost portion of the CCT CMCP Study Area overlaps with the southernmost portion of the San Vicente CMCP Study Area. The development of the two corridor plans were coordinated to provide consistency. **Figure 2-3** shows the overlap between the two CMCP study areas.

KUMEYAAY CORRIDOR CMCP

The Kumeyaay Corridor CMCP study area is a two-mile wide east-west transportation corridor that runs along Interstate 8 (I-8) and is located on traditional, ancestral, and unceded lands of the Kumeyaay people. The study area includes parts of the cities of San Diego, Santee, La Mesa, Lemon Grove, and El Cajon, as well as the County of San Diego. Major transportation facilities in the study area include I-8 and its connections with I-5, I-805, I-15, SR 125, and SR 67, the MTS Green and Orange Line Trolleys and multiple MTS bus routes, as well as local roadways, bicycle, and pedestrian facilities. The Kumeyaay Corridor CMCP aims to guide the development of an innovative transportation network, transforming the way people and goods move through the central San Diego region.

The easternmost portion of the Kumeyaay Corridor CMCP Study Area overlaps with the southernmost portion of the San Vicente CMCP Study Area. The Kumeyaay Corridor CMCP started its planning process as the San Vicente CMCP was being finalized. The Kumeyaay Corridor CMCP will consider the transportation strategies identified in the San Vicente CMCP as that planning process progresses. **Figure 2-3** shows the overlap between the two CMCP study areas.

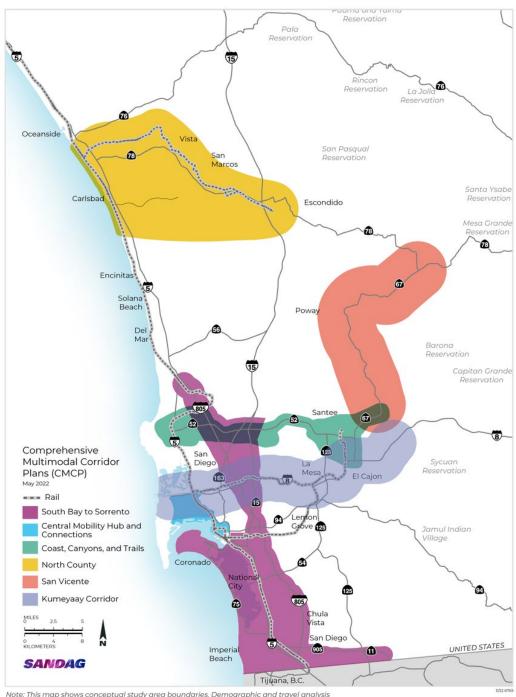








Figure 2-3 SANDAG CMCP Efforts



Note: This map shows conceptual study area boundaries. Demographic and travel analysis may include data from an area of influence developed from a larger census tract area.









San Vicente Corridor Profile

ROUTE HISTORY

SR 67 was first navigated by tribal communities before its development by settlers in 1872 who named the route Julian Road and used it for stagecoaches.

By 1881, a rail line was constructed connecting downtown San Diego to Lakeside, and Julian Road provided stagecoach access from the rail terminus to Julian, specifically for delivering newspapers. By 1925, the entire corridor was paved, and the route was added to the State



Photo Source: San Diego History Center

Highway System in 1933. In 1959, the entire route was added to the Freeway and Expressway (F&E) System. Freeway agreements with the City of El Cajon and the County of San Diego were executed in 1965 for the portion of the route from I-8 to the San Diego River. Today, there are two historic districts in Ramona – the Ramona Main Street Colonnade Historic District and the Ramona Old Town Historic District. These districts have associated design standards that should be factored into the design of improvements in those areas.

ROUTE PURPOSE

The San Vicente Corridor provides the primary north-south access route for travel between communities in East County San Diego and the rest of the region. The route provides access to I-8 and SR 52 for commuters to the City of San Diego and connects Julian and Escondido to Poway and Lakeside via SR 78. SR 67 serves as a vital corridor for the residents of East County San Diego who rely on it for daily commuting and for all phases of wildfire emergencies¹⁰, including mass evacuation. For the residents of Ramona, SR 67 is one of the few major connections to areas such as Poway, Lakeside, and the City of San Diego. Poway residents also rely on SR 67 for travel to Lakeside, Santee, and El Cajon. The route is important to adjacent tribal governments such as the Barona Band of Mission Indians, the lipay Nation of Santa Ysabel, the Mesa Grande Band of Mission Indians, the Inaja-Cosmit Band of Indians, the Viejas Band of Kumeyaay Indians, and the Capitan Grande Band of Kumeyaay Indians as it serves as the primary access to centrally located parts of the San Diego region. Additionally, the Corridor supports tribal economic development by providing a connection to Barona Resort & Casino via the Mapleview Street exit to Ashwood Street and Wildcat Canyon Road.

¹⁰ https://training.fema.gov/emiweb/downloads/is111 unit%204.pdf









TRAVEL PATTERNS

Weekday travel patterns throughout the San Vicente Corridor are influenced by where people live and work, while weekend travel patterns are influenced by recreational attractions and other weekend destinations within the Area of Influence. A majority of residents in the San Vicente Corridor communities of Ramona and Lakeside commute to other areas of the region for work. As shown in **Figure 2-4**, peak commuting patterns include Ramona and Lakeside to Poway, Barona Resort & Casino, Miramar, El Cajon, and Escondido. All of these commuting routes, with the exception of Ramona to Escondido, depend on the San Vicente Corridor. With affordable housing options in El Cajon, the heaviest commuting movements are from El Cajon to Poway and Barona Resort & Casino. Service industry employees in these areas depend on SR 67 for travel as well.

With access to numerous trailheads, wineries, and attractions, the San Vicente Corridor experiences a substantial amount of recreation traffic on the weekends.

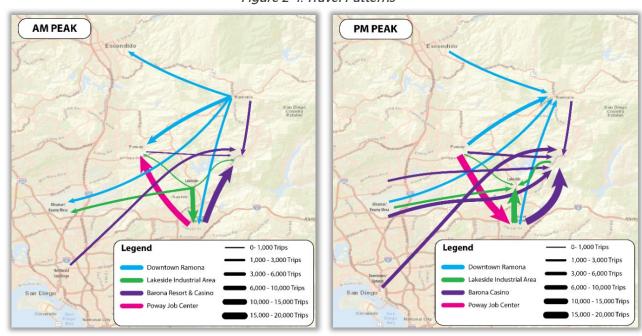


Figure 2-4: Travel Patterns¹¹

¹¹ Teralytics









CORRIDOR USERS

The San Vicente Corridor serves a diverse set of users, each with unique needs as described below.

Freight and Goods Movement

SR 67 is one of the few major goods movement corridors for communities in East County. Tribal communities also rely on the Corridor as a critical link to urban San Diego. The Corridor serves as an important connection to the region's freight system and allows businesses in East County to distribute their goods throughout the region and to parts of the state. Examples of commodities moving throughout the Corridor include aggregate, agricultural goods, wine, water, and equestrian supplies.

All of SR 67 is designated as a Surface Transportation Assistance Act (STAA) State Highway Terminal Access Route. In accordance with the Truck Kingpin-to-Rear Axle Length State Highway System Evaluation report, no portions of SR 67 are identified as geometrically inadequate for use by truck/semi-truck-trailer combinations having a 40-foot-kingpin to-rear-axle length. SR 67 is not currently included in the National Highway Freight Network¹², but portions have been added to the National Highway System (NHS) as part of Moving Ahead for Progress in the 21st Century Act (MAP-21).

As noted within the 2021 Regional Plan (Appendix Y of the 2021 Regional Plan), rural and tribal communities in the San Vicente Area of Influence—and the region as a whole—are subject to higher transportation costs and often longer, less flexible delivery options for goods. Although lower volumes of freight vehicles

With 12.4% of all retail sales projected to be online at the end of 2020, 73% of those sales will come from rural consumers.¹³

typically travel on rural roadways, delays still occur due to bottlenecks. The COVID-19 pandemic accelerated the expansion of e-commerce, and package and parcel deliveries have increased to rural communities¹³.

¹³ "SANDAG Regional Plan 2021 - Appendix Y: Goods Movement Planning and Draft 2021 San Diego and Imperial Counties Freight Gateway Study Update" https://sdforward.com/docs/default-source/2021-regional-plan/appendix-y---goods-movement-planning.pdf?sfvrsn=8544fd65_2





¹² https://ops.fhwa.dot.gov/Freight/infrastructure/nfn/index.htm







Photo Source: County of San Diego Parks and Recreation

Recreation/Tourism

There are several trailheads, parks, and county preservation areas within the San Vicente CMCP Area of Influence. Main trailhead attractions accessed via SR 67 include Mount Woodson and Iron Mountain. Other open spaces in the San Vicente Area of Influence include Sycamore Canyon and Goodan Ranch Preserves, Boulder Oaks Preserve, San Vicente Highlands Preserve, Ramona Grasslands Preserve, Ellie Lane Trailhead, and San Dieguito River Park lands.



Photo Source: County of San Diego Parks and Recreation

Equestrian

There are several trails and pathways throughout the San Vicente Study Area providing passive recreational modes of travel such as horseback riding. The equestrian lifestyle is very important to the Ramona and Lakeside communities, as well as the City of Poway, where there are between 8,000 and 12,000 horses that reside in the area; the Ramona Trails Association is also advocating for the preservation and creation of new trails.



Photo Source: County of San Diego Parks and Recreation

The San Vicente Corridor also provides access to the three major rodeo arenas in the Area of Influence that can be accessed via the Corridor:

- Lakeside Rodeo Arena
- Ramona Outdoor Community Center
- Poway Rodeo, accessed via SR 67

These arenas hold multi-day rodeo events at least once per year that draw large crowds.









The San Vicente Corridor provides direct access to the Barona Resort & Casino and connects to additional tribal gaming facilities within the Area of Influence. Additionally, the Corridor connects visitors to rural businesses, rodeo events, wineries, and other areas of interest. Notably, the San Vicente Corridor encompasses the Ramona Valley American Winery Viticultural Area which contains over 80 commercial wineries, as shown in **Figure 2-5**.

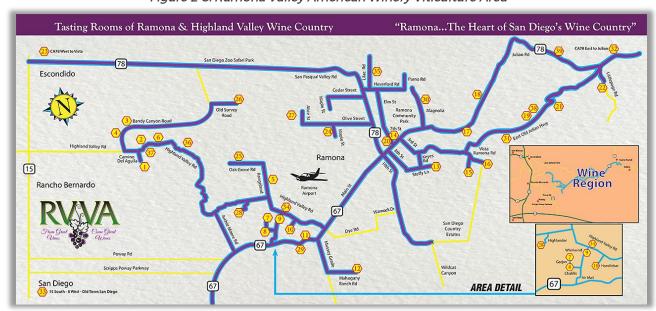


Figure 2-5: Ramona Valley American Winery Viticulture Area



Rural sidepath for people who walk and ride horses Photo Source: Unknown

People Who Walk and Bike

As mentioned in **Chapter 1: CMCP Framework**, approximately 3.3 percent of all trips in the Corridor are made by people who walk or bike. ¹⁴ The Corridor and Area of Influence lack adequate designated facilities for these vulnerable users. The transportation projects and programs identified in the San Vicente CMCP aim to better support the needs of people who walk, bike, or use other micromobility devices.

¹⁴ SANDAG Activity Based Model (ABM) DS 39









Agriculture/Livestock

Agriculture is very important to the San Vicente Study Area and its Area of Influence. There are grazing lands and farmlands adjacent to the Corridor that are part of the Department of Conservation Farmland Mapping and Monitoring Program (DOC FMMP). The DOC FMMP designates farmland for preservation. To maintain the rural characteristics of the San Vicente Corridor, the transportation planning



Photo Source: Gone Outdoors

projects identified in the San Vicente CMCP aim to protect and improve operations for any designated adjacent or nearby farmlands.



Photo Source: Infrastructure & Ecology Network Europe

Wildlife

There is significant wildlife activity throughout the San Vicente Corridor. With conservation lands and native habitats on either side, SR 67 affects wildlife movement. Habitat fragmentation from the Corridor poses potential threats to local species and biodiversity. In June 2017, San Diego State University published the Comprehensive Multi-Species Connectivity Assessment and Planning for the Highway 67 Region of San Diego County, California Report, which stated that, "State Route (SR) 67 was named

as one of the primary barriers to wildlife movement and connectivity in the [study area]."¹⁵ The study further indicated that retrofitting existing infrastructure and adding more wildlife crossings would be beneficial for biodiversity and resiliency of the species inhabiting the San Vicente Study Area¹⁶.

These species include California mice, woodrats, wrentits, mule deer, bobcats, pumas, ringtails, coachwhips, western whiptails, and western toads.

¹⁶ https://sdmmp.com/upload/SDMMP Repository/0/796b3tnyw2dcgzxm1pr50fvq4sh8k.pdf





¹⁵ https://sdmmp.com/upload/SDMMP Repository/0/796b3tnyw2dcgzxm1pr50fvq4sh8k.pdf





Wildlife connectivity is a vital part of the San Vicente CMCP. Adequate wildlife crossings not only improve habitat connectivity, but also seek to reduce the number of wildlife-vehicle collisions. There is an opportunity within the planning and design process to consider these unique users and upgrade existing crossings and/or construct new crossings that facilitate safe passage. As individual projects begin, wildlife connectivity should be considered within each project scope to support wildlife movement within the Corridor.

TOPOGRAPHY

SR 67 is characterized by uphill grades from Lakeside (elevation of 413 feet above sea level) to Ramona (elevation of 1,430 feet above sea level). The mountainous terrain adjacent to the roadway is steep with several sharp curves throughout the Corridor. The steep grade is primarily apparent along The Climb segment, where elevation changes more than 1,000 feet¹⁷.

POPULATION AND EMPLOYMENT

The population and employment trends throughout the San Vicente Corridor influence travel trends and traffic patterns. There are 107,000 people living within the San Vicente Area of Influence¹⁸. Notably, the Corridor Study Area does not fully encompass the communities of Lakeside or Ramona.

Forecasted by the SANDAG Activity Based Model (ABM), the population of the Area of Influence will drop slightly (decrease of 1.6 percent) by 2050. Despite the anticipated decrease, daily VMT throughout the Corridor is anticipated to grow by 12.5 percent, resulting in more travel through the Corridor and the Area of Influence ¹⁹.

Ramona

The Ramona Census Designated Place (Ramona) is a small community in unincorporated San Diego County northeast of Poway and southeast of Escondido. SR 67 is called Main Street within the rural community and serves as a central corridor. Ramona has a large equestrian presence and is a tourism destination for the region.



Photo Source: Airbnb

¹⁹ SANDAG Activity Based Model (DS 39)





¹⁷ San Diego Topographic Map

¹⁸ United States Census, 2020





In 2020, Ramona had an estimated population of 21,468, a slight increase from 20,292 in 2010²⁰. Per American Community Survey data averaged from 2015-2019, housing in the area has a median value of \$476,800 with a median monthly rent of \$1,480, up from \$1,089 in 2010. The median household income (in 2019 dollars) is \$84,289, and 6.2 percent of the population lives in poverty.

Of those age 16 years and over, 68 percent are in the civilian labor force. Eighty-nine percent of Ramona residents 25 and over graduated high school with 22 percent having a bachelor's degree or higher. The average commute time for Ramona residents is 33 minutes, compared to the County average of 26 minutes²¹.

Lakeside

The Lakeside Census Designated Place (Lakeside) is a suburban community in unincorporated San Diego County adjacent to Santee and just northwest of El Cajon. Lakeside sits at the edge of urbanized San Diego and is connected to I-8 and SR 67, which functions as both a freeway and a major arterial as it traverses the community. Similar to Ramona, Lakeside has a large equestrian presence.

Lakeside had a population of 21,152 in 2020, up slightly from 20,648 in 2010²². Per American Community Survey data from 2015-2019, the median value of owner-occupied housing units in the area is \$428,000 (up from \$371,420 in 2010) and the median rent is \$1,423. The median household income (in 2019 dollars) is \$74,823 and 9.7 percent of the population lives in poverty.

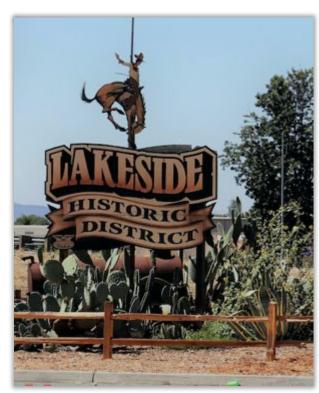


Photo Source: Mex Insurance

²² United States Census (2020)





²⁰ United States Census Bureau Quick Facts: Ramona CDP

²¹ United States Census (2020)





Of those age 16 years and over, 61 percent are in the civilian labor force. Ninety percent of Lakeside residents 25 and over graduated high school, with 18 percent having a bachelor's degree or higher. The average commute time for Lakeside residents is 27 minutes, compared to the County average of 26 minutes²³.

Poway

Poway is a city in San Diego County southwest of Ramona and south of Escondido. SR 67 runs through east Poway and functions as a freeway connecting the city to Ramona and Lakeside. Poway has over half of its 39.4 square-mile area dedicated to open space and features 76 miles of trails²⁴.

Poway had a population of 48,841 in 2020, a slight increase from 47,811 in 2010²⁵. Per American Community Survey data from 2016-2020, the median value of owner-occupied housing units in the area is \$716,300 and the median rent is \$1,630. The median household income (in 2020 dollars) is \$115,332 and 4.8 percent of the population lives in poverty.

Of those age 16 years and over, 63 percent are in the civilian labor force. Ninety-two percent of Poway residents 25 and over graduated high school, with 50 percent having a bachelor's degree or higher. The average commute time for Poway residents is 25 minutes, compared to the County average of 26 minutes²⁶.

Federally Recognized Indian Reservations

There are six tribal governments in the vicinity of the San Vicente CMCP Area of Influence: the Barona Band of Mission Indians, the lipay Nation of Santa Ysabel, the Mesa Grande Band of Mission Indians, the Inaja-Cosmit Band of Indians, the Viejas Band of Kumeyaay Indians, and the Capitan Grande Band of Kumeyaay Indians, which are shown in **Figure 2-6**. All six tribal governments depend on the Corridor for cultural observances.

The Barona reservation, which contains the Barona Resort & Casino, and the Mesa Grande reservation are deeply dependent on SR 67 for access and are directly impacted by future improvements to the San Vicente Corridor. The Mesa Grande reservation does not have a gaming facility but has a notable reservation population. The lipay Nation of Santa Ysabel has economic activity and residents on the reservation. The Capitan Grande Band of Kumeyaay Indians and the Inaja-Cosmit Band of Indians do not have significant populations on the reservation at the time of this report.

²⁶ United States Census (2020)





²³ United States Census (2020)

²⁴ City of Poway Community Profile (poway.org)

²⁵ United States Census (2020)





The Viejas reservation has a population and significant gaming facility, but the reservation is primarily accessed by I-8, rather than through the San Vicente Study Area or Area of Influence.

As mentioned in **Chapter 1: CMCP Framework**, this CMCP builds on the work of the ITTS. All tribes within the Area of Influence vicinity were engaged in the development of this CMCP, with an enhanced focus on the reservations most dependent on the Corridor—Barona and Mesa Grande.

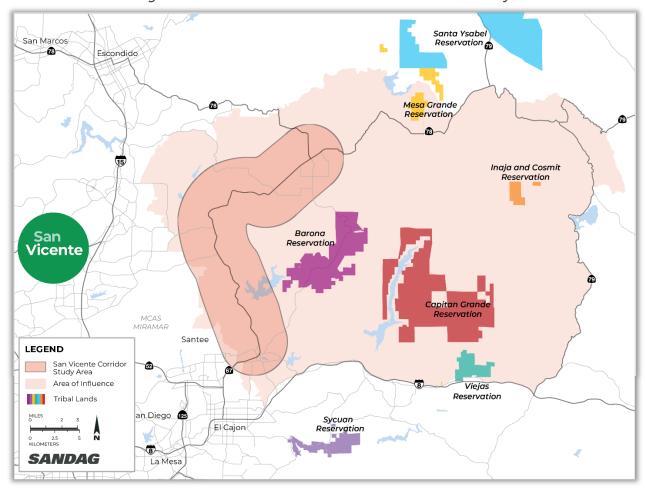


Figure 2-6: Tribal Governments in the Area of Influence Vicinity









SOCIAL EQUITY FOCUS COMMUNITIES

The following section summarizes baseline conditions data for social equity focus populations within the San Vicente Corridor, providing a baseline for both demographic and access data. Social equity focus communities are:

- Seniors: individual 75 and older
- **Low-income households:** annual income at or below 200 percent of the federal poverty level
- People of Color: Hispanic, Black, Asian American, Indigenous, and other people of color27, recognizing the significant disparities that have endured over time as a result of historical discrimination and racism
- Federally recognized Native American Tribes

Underserved/Historically Excluded Populations

There are approximately 107,000 people living in Census block groups within the San Vicente Area of Influence. Of the area's total population, 29 percent are People of Color²⁸, 6 percent are seniors²⁹, and 3 percent of the population are in low-income household bracket³⁰. People of color, seniors, and low-income populations are shown geographically in **Figure 2-7**, **Figure 2-8**, and **Figure 2-9**.

The SANDAG ABM anticipates a substantial increase to both the senior population (doubling) and the population of People of Color (approximately a 50 percent increase) within the Area of Influence between the 2016 Baseline Conditions and the 2050 No-Build Conditions. The low-income population, however, is anticipated to decrease by about 25 percent during the same time period³¹.

³¹ SANDAG ABM (DS 39)





²⁷ SANDAG 2021 Regional Plan, Appendix H: Social Equity: Engagement and Analysis

²⁸ United States Census (2020)

²⁹ American Community Survey (2019)

^{30 2019} Federal Poverty Guidelines





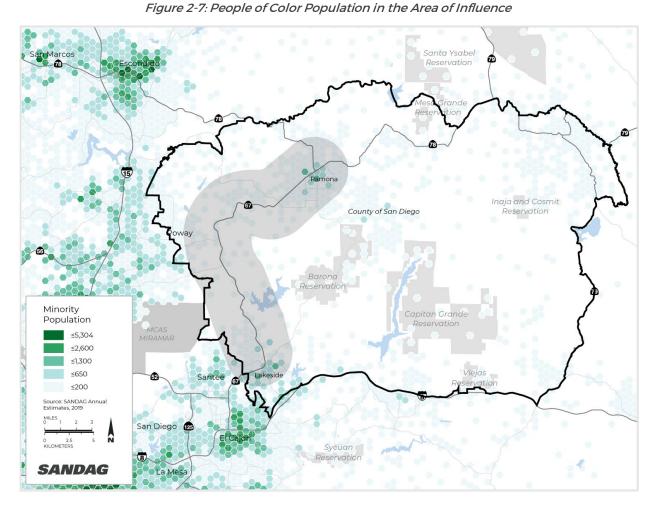










Figure 2-8: Low-Income Households in the Area of Influence

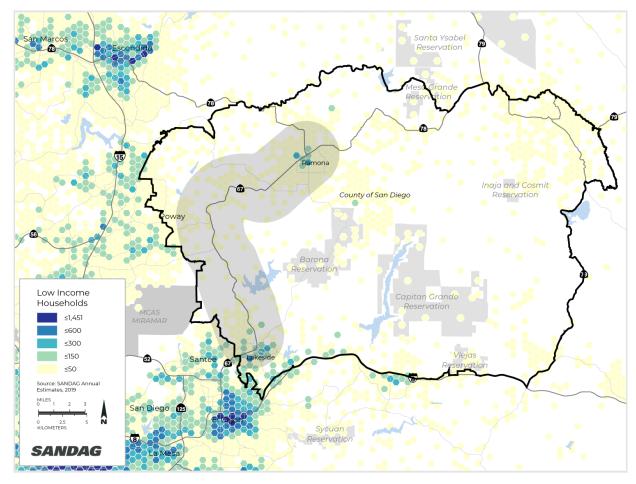


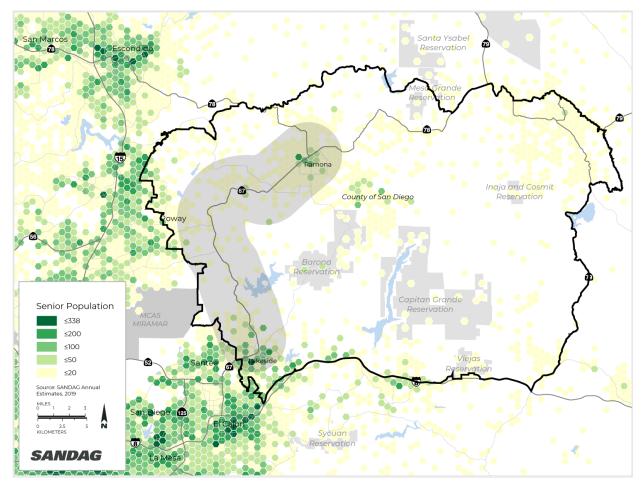








Figure 2-9: Senior Populations in the Area of Influence







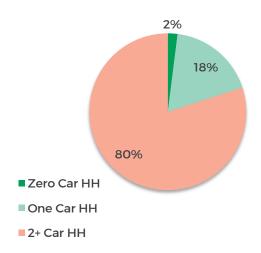




Car Ownership by Total Housing Units and Mode Choice

Car ownership by percentage of total housing units was evaluated to understand mobility-constrained populations within the Area of Influence and is shown in **Figure 2-10**. This is based on the total occupied housing units within the Area of Influence of 39,482 households. With few quality mobility options outside of the personal vehicle available in the San Vicente Corridor, the households with zero (two percent of households) or one car (18 percent of households) are vulnerable in terms of transportation dependence.

Figure 2-10: Car Ownership by Household (2019)



Alternative Modes

As mentioned, there are limited adequate active transportation facilities throughout the Corridor. Additionally, transit is not a viable alternative mode choice for a majority of the mobility-constrained residents in the San Vicente Corridor, with only one high-frequency transit line within the Area of Influence. The existing transit routes throughout the Corridor are operated by both MTS and NCTD. MTS provides the singular high-frequency transit line, but only features two stops within the CMCP Study Area. MTS also provides weekly service that runs from Borrego Springs to El Cajon Transit Center once per day in each direction on Thursday and Friday. NCTD provides daily service that operates during peak times and midday to connect Escondido and Ramona. These services can be considered "lifeline services," as they do connect the San Vicente Corridor to other parts of San Diego County but do not provide a feasible alternative transportation option. These services include:

- MTS Route 848
 - Operates every half hour on weekdays and every hour on weekends between Lakeside and El Cajon
- NCTD Route 371 FLEX
 - o Five round trips each weekday, approximately every 2 hours³²
- MTS Routes 891/892
 - o One round trip per day, operating only Thursdays and Fridays

³² https://gonctd.com/wp-content/uploads/transit/371.pdf









San Vicente Corridor Segments

To focus the efforts of the CMCP needs and solutions in the next two chapters, the San Vicente Study Area was divided into six distinct segments as shown in **Figure 2-11** and summarized below. The segment limits correspond with those identified in Caltrans' Transportation Concept Report for SR 67 and have been named based on their distinct characteristics, challenges, land uses and attractions, and users. The segments are described below starting at the south end of the Corridor in Lakeside and ending in Ramona.

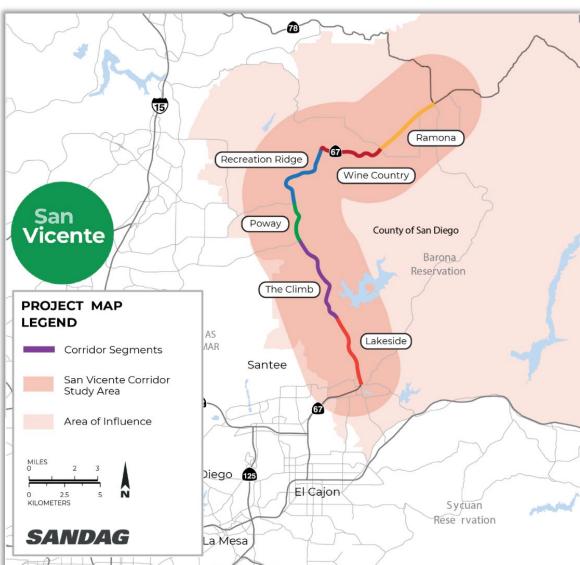


Figure 2-11: San Vicente Corridor Segments









CORRIDOR SEGMENT FACT SHEETS

Lakeside Segment

Mapleview Street to Vigilante Road - 3.2 Miles



- Roadway Classification: Urban Other Principal Arterial
- Jurisdiction: Unincorporated County of San Diego (Lakeside)
- Speed: 55 mph
- Terrain: Flat
- Cross-Section: 2-lane, undivided





- 🔛 Adjacent Land Uses: Residential, commercial, recreational, schools
- Key Features: San Diego River bridge, major signalized intersections, Class I path under San Diego River bridge, southern limit is the transition from the freeway to a conventional highway
- Key Destinations: El Capitan High School, primary access to Barona Resort & Casino via Wildcat Canyon Road, Lakeside Rodeo, various equestrian destinations

Spotlight: Community of Lakeside

Lakeside was historically a rural community that densified after the 1950's. Lakeside has become an affordable option for many residents of San Diego County. There are some employment centers within Lakeside, however, the majority of residents commute out of the area to places such as Poway and Barona, relying on SR 67 for their travel.











The Climb Segment

Vigilante Road to Scripps Poway Parkway – 4.3 Miles



- Roadway Classification: Rural Other Principal Arterial
- Jurisdiction: Unincorporated County of San Diego (Lakeside)
- Speed: 55 mph
- Terrain: Mountainous (1,150' elevation change, 4% average grade, with some segments >12% grade)
- Cross-Section: 3-lane undivided, and 4-lane divided





- Adjacent Land Uses: Park land (majority), residential (small portion)
- 🤼 Key Features: Very constrained right-of-way, sharp curves on steep grades, raised median barrier separating directions of travel
- Key Destinations: Sycamore Canyon Open Space Preserve











Poway Segment

Scripps Poway Parkway to Poway Road - 1.7 Miles



- Roadway Classification: Rural Minor Arterial
- Jurisdiction: Poway, Unincorporated County of San Diego (Lakeside)
- Speed: 55 mph
- Terrain: Majority is flat, small segment with > 5% grade
- Cross-Section: 3- and 4-lane undivided





- 🔛 Adjacent Land Uses: Park land (majority), residential (very small)
- 😭 Key Features: Two major signalized intersections (Poway Road, Scripps Poway Parkway)
- Key Destinations: Iron Mountain trailhead, Ellie Lane trailhead, Poway Rodeo, various equestrian and bike destinations, Park & Ride

Spotlight: City of Poway

Located in northeast San Diego County, Poway is known as "The City in the Country" and prides itself on the fact that over half of the city's 39.4 square-mile area is preserved as dedicated open space. The community offers a diverse range of housing options, an outstanding school district, a thriving business park with over 19,000 jobs, a broad range of dining and shopping opportunities, beautiful parks, 76 miles of trails, 25 parks, numerous community events throughout the year and well-known destinations include:

- Blue Sky Ecological Reserve
- Community Park
- Goodan Ranch
- Kumeyaay-Ipai Interpretive Center
- Lake Poway/Mt. Woodson Trailhead
- Old Poway Park
- Poway Center for the Performing Arts
- Poway Community Library











Recreation Ridge Segment

Poway Road to Archie Moore Road – 3.4 Miless



- Roadway Classification: Urban Minor Arterial
- Jurisdiction:
 Unincorporated County of San Diego (Ramona)
- ▶ Speed: 55 mph
- ▶ Terrain: Rolling
- Cross-Section: Majority 2-lane undivided, with small
 3- and 4-lane undivided segments





- Adjacent Land Uses: Open space, rural residential, and undeveloped land
- Key Features: Very constrained right-of-way
- Key Destinations: Mt. Woodson trailhead, Warren Canyon trailhead, CalFire Ramona Fire Station









Wine Country Segment

Archie Moore Road to Highland Valley Road / Dye Road - 2.8 Miles



- Roadway Classification: Urban Minor Arterial
- Jurisdiction: Unincorporated County of San Diego (Ramona)
- Speed: 55 mph
- ► Terrain: Flat
- ▶ Cross-Section: 2-lane undivided





- Adjacent Land Uses: Rural residential
- Key Features: Multiple access points to businesses and residences
- **Key Destinations:** Wineries, Mt. Woodson Elementary School, Dos Picos County Park, Ramona Grasslands Preserve, Fry Koegel trailhead, Mt. Woodson Golf Club









Ramona Segment



- Roadway Classification: Urban Other Principal Arterial
- Jurisdiction: Unincorporated County of San Diego (Ramona)
- Speed: 35-45 mph
- Terrain: Flat
- Cross-Section: 3- and 5-lane undivided





- Adjacent Land Uses: Commercial (majority), residential, agricultural (small)
- Key Features: Transitions to Main Street through downtown Ramona
- Key Destinations: Restaurants (sit-down and fast-food), grocery stores, coffee shops, small-business retail, Ramona High School, Hanson Elementary School, Barnett Ranch Preserve, Ramona Airport, Ramona Country Fair, Ramona Rodeo, Wellfield Park, equestrian destinations

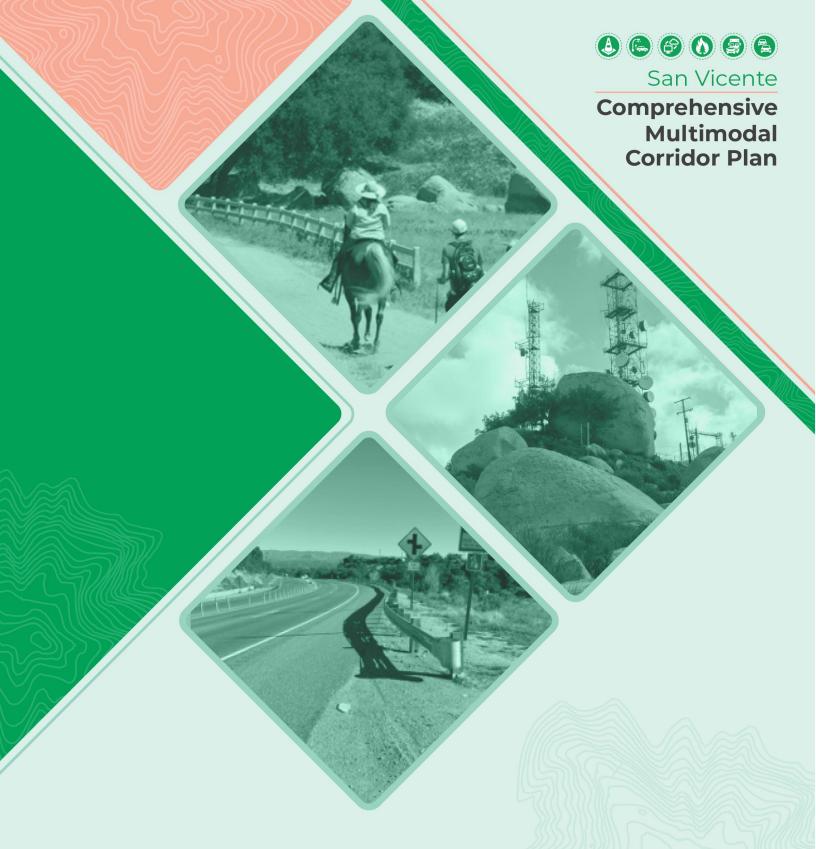
Spotlight: Town of Ramona

Ramona is a town in East County San Diego known for its climate and agricultural production. The town also has several resource conservation areas, open spaces, and other attractions. Primary access to Ramona is provided by SR 67 making the corridor a lifeline for residents of the town and the only access point for tourists travelling to the various attractions.









Chapter 3

Needs Assessment





CHAPTER 3: NEEDS ASSESSMENT

This chapter contains the Needs Assessment for the San Vicente Corridor. The needs described are a consolidated set of key issues compiled from multiple sources of data and from feedback gathered through a comprehensive community outreach process involving key partner agencies, tribal government partners, subject matter experts, and members of the public. The Needs Assessment serves as the "problem statement" for this Comprehensive Multimodal Corridor Plan (CMCP)—the framework to guide the transportation solutions recommended for the Corridor (discussed in **Chapter 4: Transportation Solutions**).

Process Overview

The Needs Assessment is the culmination of both quantitative and qualitative analysis to understand challenges experienced by corridor users. The data analysis and outreach efforts used to inform the Needs Assessment are summarized below.

QUANTITATIVE INPUT

The key quantitative inputs to the Needs Assessment were:

- Literature Review of Related Studies and Documents (Appendix A)
- Baseline Conditions Analysis

Literature Review

A review of existing documents pertaining to or impacting SR 67, the surrounding communities, and the San Diego Region resulted in a set of preliminary challenges for the Corridor that served as a starting point for developing the Needs Assessment. The document review also supported the development of a consolidated inventory of transportation projects and strategies within the Study Area.

Baseline Conditions Analysis

The Baseline Conditions Analysis evaluated 2016 Existing Conditions and, where data was available, 2050 No-Build Conditions for the Corridor based on 30 performance measures. The analysis included a review and assessment of the following data sources: SANDAG Activity Based Model (ABM), existing plan documents, and collision data from the Statewide Integrated Traffic Records System (SWITRS). It should be noted that Traffic Accident Surveillance and Analysis System (TASAS) data was used in later phases of the project to supplement the SWITRS data.









This analysis provided a data-driven baseline and an initial understanding of the Corridor's constraints and needs as they relate to traffic operations, safety, equity and access, multimodal options, and active transportation. Key takeaways from the Baseline Conditions Analysis have been incorporated into this Needs Assessment.

QUALITATIVE INPUT

The qualitative inputs to the Needs Assessment involved robust outreach conducted with the following groups (each group is discussed in more detail in **Chapter 1: CMCP Framework** and a matrix of outreach events and efforts is provided in **Appendix D**).

- Subject Matter Experts
- Stakeholder Working Group
- Tribal Working Group
- Community Planning Groups
- Members of the Public via:
 - Public Workshop
 - San Vicente CMCP Virtual Engagement Hub: ongoing online public comment opportunities

Qualitative input was a crucial component of the Needs Assessment development to supplement the analysis completed in the Baseline Conditions Analysis phase. In a rural and geographically segmented area, like the San Vicente Study Area, improvements must be highly localized to best serve the adjacent communities. While quantitative data provided a broad outline of the strengths and shortcomings of the existing transportation system, qualitative input provided the context-sensitive details more directly experienced by those who depend on the San Vicente Corridor.

All input provided by stakeholders, tribal government partners, and members of the public was documented and reviewed for incorporation into the list of transportation projects and strategies. Specifically, the list of comments provided by members of the public via the San Vicente CMCP Virtual Engagement Hub is documented in **Appendix B**.

NEEDS DEVELOPMENT

The Corridor needs presented in this chapter were created through a combination of feedback from the Project Team, stakeholders, tribal government partners, and members of the public. Key themes from each step in the process were organized into the seven common needs. The final needs described in this chapter are the culmination of many parallel efforts and were approved by all parties involved. **Figure 3-1** below summarizes the multi-faceted input elements incorporated into the Needs Assessment.

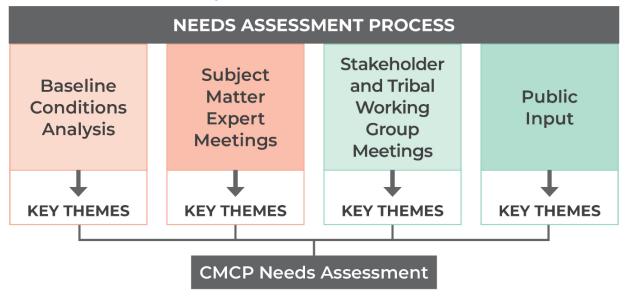








Figure 3-1: Needs Assessment Process



The following seven needs were identified for the San Vicente Corridor:

- Safety
- Evacuation
- Active Transportation
- Goods Movement
- Traffic Congestion
- Utilities
- Information and Technology—identified as necessary to support the other needs of the corridor

The needs described in this chapter were used to establish a baseline and serve as a reference point for the CMCP. An overview of each need is identified below.

Needs Assessment

SAFETY

The need for safety improvements is a top priority for Corridor community members and was a driving force for the initiation of the San Vicente CMCP. Throughout the project, members of the public provided feedback focused on the immediate need for safety improvements.









SR 67 and parallel/connecting roadways are characterized by steep grades, sharp curves, and large intersections. Historical collision data, sourced from the Statewide Integrated Traffic Records System (SWITRS) between 2015-2019, helped to identify collision locations. **Figure 3-2** provides a map showing collision hot spots throughout the San Vicente Corridor Study Area and provides collision trends at the key hot spot locations. Key findings from the safety evaluation are detailed below.

- The following hot spot collision locations were identified:
 - SR 67 and Highland Valley Road/Dye Road intersection (note that this intersection was redesigned in 2016)
 - o SR 67 and Scripps Poway Parkway intersection
 - Sharp curves in The Climb segment, Vigilante Road, and throughout the communities of Lakeside and Ramona³³
 - Lakeside and Ramona segments (the communities where most of the residential population and social equity focus populations in the Study Area reside)
- The most common primary collision factor was unsafe speeds (38 percent)
- The most common collision types were rear end (31 percent) and hit object (28 percent)
- The top factors impacting roadway safety, as ranked by participants during the public meeting, were the following:
- High Speeds
- Sharp Curves
- Conflicts with Recreation Parking
- Impaired Drivers
- Turnout/Driveway conflicts

San Vicente CMCP Study Area (County Roads and SR 67)





Source: Statewide Integrated Traffic Records System (SWITRS) 2015 – 2019

³³ Statewide Integrated Traffic Records System (SWITRS) 2015 - 2019









These factors align closely with the quantitative analysis.

Caltrans also reviews TASAS data regularly to identify locations within a 0.2-mile length of highway with three or more collisions. Caltrans evaluates these flagged locations and identifies safety countermeasures for addressing safety concerns.

In addition to the historical collision data from SWITRS and the TASAS data, the Project Team reviewed the *Comprehensive Multi-Species Connectivity Assessment and Planning for the Highway 67 Region of San Diego County, California Report*⁵⁴, which examined concerns of safe wildlife crossings and collisions between vehicles and wildlife and created a connectivity plan, implementation guidance, and a wildlife infrastructure plan for key roadways within the Study Area. It is noted that the San Vicente Corridor bisects several different wildlife habitats and corridors, creating a man-made barrier to wildlife travel patterns and reducing wildlife biodiversity. Therefore, the CMCP will support the findings from the study to restore and enhance habitat connections.

³⁴ Highway 67 Wildlife Movement Study (2017)









73 Ramona **Highland/Dye Hotspot** (Ramona) **Total Collisions: 57** Ramona Hotspot **Total Collisions: 304** 67 (Recreation Ridge) Wine Country Poway SOWAY RD **Scripps Poway Hotspot** Poway **Total Collisions: 75** Barona Reservation CRIPPS POWAY PKW **Climb Curve Hotspot Total Collisions: 75** The Climb **Lakeside Hotspot Total Collisions: 107 COLLISIONS 2015 - 2019** (SWITRS) Lakeside **LEGEND** Low Collision Concentration High Collision Concentration San Vicente Corridor Study Area Lakeside Area of Influence

Figure 3-2: Historical SWITRS Collision Data - Hot Spot Locations Map









EVACUATION

Evacuation is another key need for the San Vicente Corridor as the area has a history of wildfires, with two major evacuation events taking place in the past 20 years: the Cedar Fire in 2003 and the Witch Creek Fire in 2007. Due to the extreme traffic congestion and lengthy evacuation times experienced during these events, evacuation operation improvements are a major priority for this CMCP. Analysis of evacuation capacity on SR 67 is being conducted as part of a separate, ongoing study as indicated below. The CMCP will supplement this study with additional considerations and a suite of solutions to comprehensively address the evacuation need.

The following considerations were noted during the Needs Assessment phase:

- SR 67 Highway Improvements Project
- As part of our engagement process, we heard from community members that expansion to a four-lane facility is desired along SR 67 to increase evacuation capacity. The Highway Improvements Project will be considering a range of alternatives to increase evacuation capacity. These alternatives include options such as expansion to a four-lane facility, shoulder widening, and repurposing a proposed multi-use path as an additional lane for emergency use. The project alternatives will undergo environmental review to determine which will most effectively address the evacuation and safety needs of the corridor.
- The CMCP was developed in parallel to the SR 67 Highway Improvements Project. The Highway Improvements Project is developing an Evacuation Plan Recommendations Report. As a result, the CMCP did not conduct duplicative analysis of evacuation capacity, and will support recommended alternative of the Highway Improvements Project.
- The defined evacuation area for analysis includes census tracts from Ramona Village, the Ramona Planning area, and the Barona Reservation as shown in Figure 3-3. This area is home to 31,576 residents^{35.} The majority (80 percent) of evacuating vehicles are expected to use the San Vicente Corridor to evacuate.





³⁵ SR 67 PA&ED Draft Evacuation Plan Recommendations Report









- Using a series of quantitative assumptions, the SR 67 PA&ED Draft Evacuation Plan Recommendations Report analyzed the base highway capacity that would be needed to temporarily accommodate the traffic volumes generated by a mass evacuation in the selected evacuation area of study and provide alternatives utilizing various crosssection options that would meet the operational improvement needs to make the corridor more resilient in the face of wildfires and other emergencies. Notably, evacuation lanes can consist of travel lanes, shoulders, and bike lanes (of appropriate widths and materials).
 - Livestock Population
 - As noted by representatives of the Ramona and Lakeside Community Planning Groups (CPGs), corridor evacuation events involve the unique participation of livestock, including 8,000-12,000 horses³⁶.
 - Many livestock owners do not have vehicular capacity to transport their livestock at the same time and would therefore need to make return trips during evacuation scenarios.
 - Landslides, Earthquakes, and Climate Change
 - The San Vicente Study Area is rated by CAL FIRE as having a moderate level of wildfire concern, with communities to the east rated as having a high level of wildfire concern^{37.} Today, fire hazard areas in Southern California are expected to experience landslides on a nearly annual basis and major landslide events are expected every decade^{38.}
 - The San Vicente Corridor, like most of Southern California, is within a seismically active area (there are six known active faults within 50 miles of the Study Area) and, therefore, can be subject to strong seismic ground motion.
 - Climate change is anticipated to increase the wildfire danger already present within the San Vicente Corridor and the surrounding Area of Influence³⁹.
- Information and Technology
 - The public also noted that lack of timely information during previous wildfire events was a top factor in evacuation delays. This was considered when developing strategies to address evacuation needs as discussed in **Chapter 4: Transportation Solutions.**

³⁹ Caltrans Climate Change Vulnerability Assessment Summary Report (Caltrans, 2019)





³⁶ Ramona Community Trails and Pathways Plan (County of San Diego, 2005)

³⁷ https://egis.fire.ca.gov/FHSZ/

³⁸https://www.usgs.gov/natural-hazards/landslide-hazards/science/emergency-assessment-post-fire-debris-flow-hazards?qt-science_center_objects=0#qt-science_center_objects





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ACTIVE TRANSPORTATION

The San Vicente Corridor will benefit from high-quality active transportation facilities to provide mobility options for connectivity to communities and key regional attractions. The majority of the Corridor currently provides little to no protection for people who walk, bike, use micromobility devices, or ride horses. The lack of adequate facilities for vulnerable users has been expressed as a major concern by the Lakeside and Ramona communities.

The key findings regarding active transportation from the Needs Assessment phase include:

Under existing conditions, very few trips are taken by people who walk, bike, or use other micromobility devices. Data from the SANDAG ABM projects mode share for driving, taking transit, biking, and walking in Figure 3-4, below⁴⁰. The mode share breakdown is expected to remain relatively unchanged under the 2050 No-Build Conditions, which incorporates the 2019 Federal RTP projects. The lack of change under current planning efforts further supports the need for active transportation projects within this CMCP.

⁴⁰ SANDAG Activity Based Model DS 39 Forecast





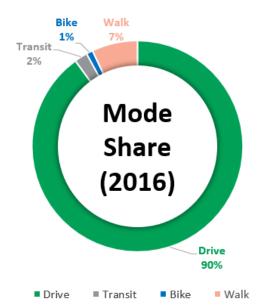




- Data on active transportation users and volumes within the Corridor is limited, but model data estimates that active transportation accounted for 8 percent of total trips in the Corridor in 2016.
- o If all the planned County of San Diego bicycle and pedestrian facility plans are implemented from the County Active Transportation Plan, the resulting active transportation network may still fall short of community expectations. The lack of adequate facilities for vulnerable users was repeatedly expressed as a major concern by the Lakeside and Ramona communities and members of the public, as noted in **Appendix B**.
- The idea of a multi-use, protected pathway along the length of the Corridor was popular during public and stakeholder outreach, with a special focus on creating comfortable connections for people who walk, bike, use micromobility devices and ride horses within the communities of Lakeside and Ramona.
- Safety is a major concern for those bicycling, walking, using micromobility devices and riding horses, and the lack of dedicated/protected facilities is a hindrance to more use

of these modes in the San Vicente Study Area. Specifically, 19 of the collisions in the Study Area involved pedestrians, and 20 of the collisions involved bicyclists. The majority of the Corridor does not have sidewalks and the few sections of sidewalk network in Ramona and Lakeside are disconnected. Many of the intersections throughout the Corridor require people to cross multiple lanes without crosswalk markings or signal enhancements.

Figure 3-4: San Vincente Study Area Mode Share (2016)









Source: 2005 Ramona Community Trails and Pathways Plan

- Equestrian needs must be considered in the development of an improved active transportation network as there are between 8,000 and 12,000 horses in the Study Area. Facility needs for horses are different than for pedestrians or bicyclists and should be separated, soft-surface trails with dedicated roadway crossings and modified push-button crossings for safe transportation and recreation.
- Recreational cycling is popular in the Study Area, with significant ridership in the northern portion of the Corridor (north of Scripps Poway Parkway) on SR 67 and parallel/connecting roadways⁴¹.
- Active transportation is key to supporting transit riders. No households in the Corridor
 are within one-half mile of a transit station that provides quality service, as the existing
 transit services within the Corridor are considered "lifeline services" and connection
 from Ramona to the City of El Cajon is provided twice weekly.

GOODS MOVEMENT

Goods Movement includes the transport of commercial and private commodities in light-, medium-, and heavy-duty vehicles. SR 67 is one of the few major goods movement routes for the tribal governments and East County communities within the San Vicente Area of Influence. Some of the key characteristics of goods movement within the Study Area include:

- In 2018, trucks made up an average of 7 percent of total daily vehicles on SR 67⁴².
- The Lakeside and Ramona CPGs noted the presence of special events throughout the corridor, such as rodeos, which draw significant truck traffic. Unique and fragile commodities are also transported throughout the Corridor including aggregate, agriculture, wine, livestock, and equestrian supplies.
- The corridor is characterized by sharp curves, potholes, and rough road conditions which can damage or disturb many of the fragile commodities listed above.



⁴² Caltrans, 2018 Average Annual Daily Traffic (AADT) SR 67





⁴¹ Strava Global Heatmap





The Corridor's freight hubs include tribal gaming facilities and aggregate mines.

Aggregate is an invaluable building resource for the development of infrastructure. As noted within the SANDAG Aggregate Supply Study, the largest congregation of aggregate mining facilities in the region is located throughout the San Vicente Corridor, specifically within the Lakeside segment⁴³.

- Trucks in the Area of Influence spend a combined average of 295 hours in traffic, daily⁴⁴. For the goods movement industry, vehicle hours of delay result in economic loss (in addition to increased emissions).
- The highest percentage of truck collisions occur near the Vigilante Road intersection and the Lakeside segment of the Corridor.
- Lakeside segment of the Corridor.
 With freight travel focused on efficient movement and complete streets focused on safer (often

slower) vehicle movement, this CMCP has

Trucks in the Corridor spend a combined average of

295 hours in traffic daily

Source: SANDAG ABM DS 39

considered the tradeoffs between these two goals in tandem. The planning for Main Street in Ramona has considered strategies to provide a safe environment for all users while still allowing the efficient movement of freight through and to the Corridor for regional and local delivery operations.

TRAFFIC CONGESTION

Traffic congestion is an excess of vehicles on a portion of roadway at a particular time that results in slower than "free flow" speeds. Portions of roadway that regularly experience traffic congestion are known as "bottlenecks."

The San Vicente Corridor is one of the few major connections between rural communities and the urbanized San Diego region—serving East County communities, goods movement, tribal lands, and recreational travel patterns—in which users do not have access to alternative mode choice. Traffic congestion increases emissions, decreases access for rural communities, and can result in economic loss for goods movement⁴⁵.

⁴⁵ https://www.statista.com/chart/21085/annual-economic-losses-from-traffic-congestion/





⁴³ San Diego Region Aggregate Supply Study (SANDAG, 2010)

⁴⁴ SANDAG ABM, DS 39 Model Data





The key characteristics of roadway operations include:

- Eighty-one percent of commute trips made in the San Vicente Corridor are made by those driving alone⁴⁶.
- The most heavily traveled origin-destination patterns identified within the Corridor include (see **Figure 3-5**)⁴⁷:
 - o Ramona to Poway
 - o Lakeside to El Cajon
 - Lakeside to Poway
 - o El Cajon to Barona
- Congestion bottlenecks, measured as estimated volume over roadway capacity, along SR 67 are often related to intersections, especially those where multiple origindestination patterns intersect (see Figure 3-6)⁴⁸.
 - o Poway Road and SR 67
 - Scripps Poway Parkway and SR 67
 - o Highland Valley Road and SR 67
 - Vigilante Road and SR 67
- The critical peak direction for the Corridor under existing conditions is the Southbound/Westbound direction of travel during the AM peak period⁴⁹ (6 AM – 10 AM).
- Although the population within the Area of Influence is anticipated to decrease slightly (-1.6 percent) by 2050, daily vehicle miles traveled (VMT) is anticipated to increase (+12 percent).
- Twenty percent of the households in the Corridor have limited transportation options, where they have access to one car or less. For these households:
- Transit is not viable alternative mode choice for the majority of the mobility-constrained residents in the San Vicente Corridor, with only one high-frequency transit line within the Area of Influence. MTS provides the singular high-frequency transit line, but only features

of households in the Corridor have limited transportation options

two stops within the CMCP Study Area. MTS also service that runs from Borrego Springs to El Cajon Transit Center once per day in each direction on Thursday and Friday. NCTD provides daily service that operates during peak times and midday to connect Escondido and Ramona.

⁴⁹ SANDAG ABM DS 39





⁴⁶ SANDAG ABM DS 39

⁴⁷ Teralytics

⁴⁸ SANDAG ABM DS 39





- These can be considered "lifeline routes" that connect the San Vicente Study Area to other parts of San Diego County, but the services do not provide a feasible alternative transportation option for daily commuting to relieve traffic congestion or provide more equitable access to regional opportunities.
- As discussed in the active transportation section of this chapter, walking and biking are not viable alternatives to driving due to the inadequate active transportation facilities.
- The Corridor is most heavily used during the weekday peak commute periods but is also a key access point for recreational purposes and, therefore, traffic congestion can also be an issue on weekends.

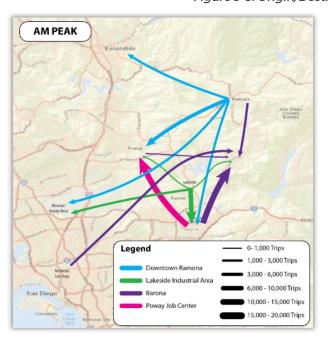


Figure 3-5: Origin/Destination Map

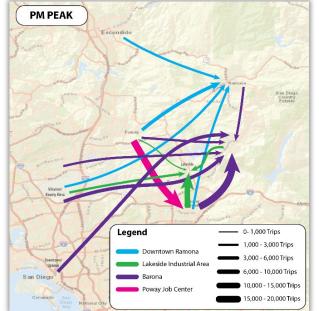
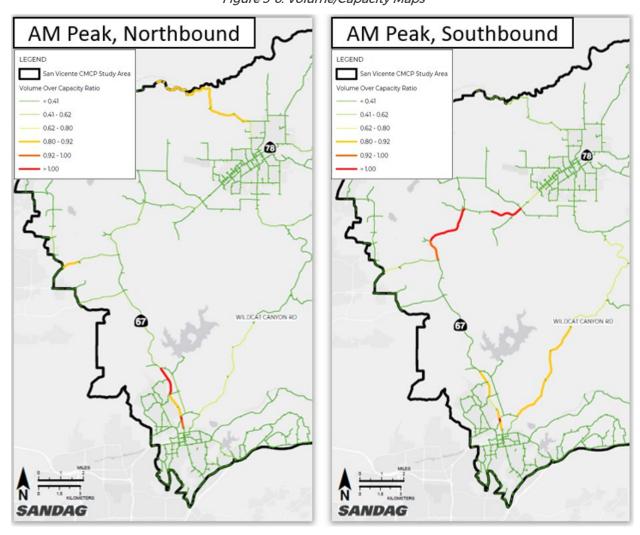








Figure 3-6: Volume/Capacity Maps









UTILITIES

For the purposes of this CMCP, utilities are defined as infrastructure to support safe and efficient transportation in the San Vicente Corridor, both today and in the future. Specifically, stakeholders, tribal government partners, and members of the public expressed a need for:

- Hardening critical operations infrastructure with power backups for emergency evacuations.
- Implementing conduit infrastructure to expand broadband access within the Area of Influence.
- Increasing electric vehicle (EV) charging infrastructure to support the transition to cleaner technologies.

Key data that supports these needs include:

- Utility Hardening
- Public safety power shutoffs in the communities of Ramona, Lakeside, and the City of Poway are common during high wind events to prevent wildfires⁵⁰.
- These power shutoffs impact the traffic signals on SR 67 and other parallel routes, as well as critical communications equipment, including broadband, cellular, emergency notification equipment, and EV chargers.
- Building redundancy into these utilities is critical to safe operations during evacuations and power outages.
- Broadband Infrastructure
 - Sixty-six percent of rural communities in San Diego County have access to fixed broadband⁵¹ (see Figure 3-7).
 - The Interagency Technical Working Group on Tribal Transportation Issues produced a 2021 update to the Intraregional Tribal Transportation Study (ITTS) in March 2022. Tribal communities within the San Vicente Area of Influence rank increasing broadband access among their top priorities.
 - The first "Dig-Once" demonstration project (SR 67 Pavement Rehabilitation Project) in the state will add fiber along an 18-mile stretch of SR 67 from Lakeside to Ramona. This parallel project includes micro-trenching to create fiber conduit throughout a majority of the Study Area. The California Transportation Commission (CTC) has approved the installation of fiber for the Corridor with SANDAG allocating an additional \$7 million in funding to fill the critical gap in the region's

⁵¹ https://www.sandag.org/uploads/projectid/projectid_614_31273.pdf





⁵⁰ Public Outreach Comments - Appendix B





- fiber network⁵². This is in accordance with the Caltrans policy on broadband, which creates the opportunity for wired broadband to be installed on state right-of-way when there is a benefit to the public⁵³.
- Expanding digital infrastructure throughout this Corridor will also enable the
 deployment of several transportation technology solutions and support evacuation
 management. Examples of technology solutions include signal-vehicle
 communications infrastructure, advanced evacuation communication equipment,
 and coordinated microgrids and battery backup systems to maintain power to the
 Corridor.
- EV Charging Infrastructure
- Existing EV infrastructure in the study area consists of two publicly-accessible charging stations off Main Street in Ramona and one charging station located on the grounds of the Barona Resort and Casino, which is only accessible to guests of the resort and casino⁵⁴. The State of California has an objective to achieve five million zero-emission vehicles (ZEVs) on the road by 2030 and 250,000 electric vehicle charging stations by 2025 as directed in the Executive Order (E.O.) B-48-18). Additionally, all new cars and passenger trucks sold in California must be ZEVs by 2035 (E.O. N-79-20)⁵⁵. As the region transitions to more electric passenger vehicles, trucks, and buses, more high-speed chargers will be needed throughout this critical people- and goods-movement corridor.

⁵⁵ California Public Utilities Commission - Transportation Electrification https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/infrastructure/transportation-electrification





⁵² San Diego Region Allocated \$7 Million to Expand Broadband Along SR 67 https://www.sandag.org/index.asp?newsid=1291&fuseaction=news.detail

SS Caltrans Broadband Policy https://dot.ca.gov/-/media/dot media/programs/design/documents/broadband-faqs-ally.pdf

⁵⁴ EV Charging Stations in San Diego https://www.plugshare.com/directory/us/california/san-diego





Fixed Broadband
Service Coverage in
San Diego County

Tribal Lands

Meets Federal

Threshold (25% Mpbs)

Below Federal

Threshold (25% Mpbs)

Source Cafferin Make William Community
Fixed Consumer Devianger in each and a source to the state of the source of the source

Figure 3-7: Fixed Broadband Service Coverage in San Diego County

INFORMATION AND TECHNOLOGY

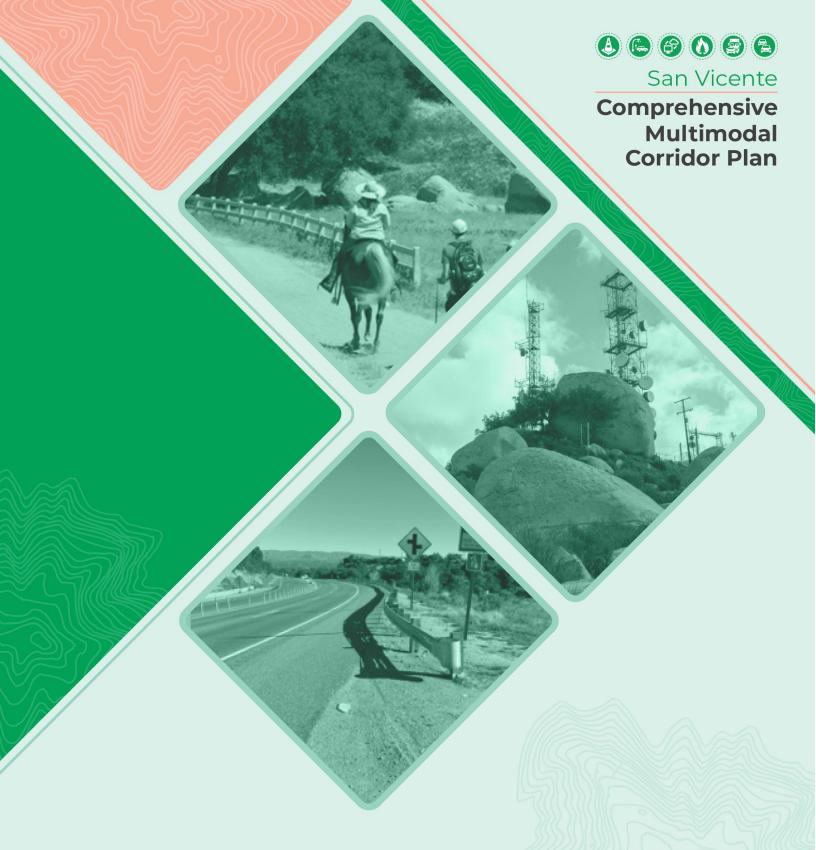
The Corridor needs accessible information for all users and the technology to support efficient and safe operations, especially to support the deployment of the other six needs listed in this chapter. In addition, high percentages of households are impacted by the digital divide—the growing gap between people who do and do not have access to the high quality, affordable internet that is needed to perform online activities and access services like telework, telehealth, education, and online shopping. The strategic use of technology supports the transportation solutions

of rural communities in San Diego County have access to fixed broadband

developed in response to all needs identified for this CMCP, including bridging the digital divide. Refer to **Chapter 4: Transportation Solutions** for more information on strategies identified for this need category.







Chapter 4 Project Inventory



CHAPTER 4: PROJECT INVENTORY

The development of the San Vicente project inventory was an iterative process that allowed the project team to consider a wide variety of solutions and collaborate with diverse stakeholders and tribal government partners to develop a final inventory. The development of the inventory can be roughly divided into three phases, which are described below and in **Figure 4-1**

- Universe of Projects: The original project inventory list, or "universe of projects," was
 primarily comprised of previously planned projects identified in the literature review,
 as well as feedback from the public during the first round of the public engagement
 process. These projects were then evaluated by the project team and Subject Matter
 Experts (SMEs), to develop the draft project inventory for the Corridor.
- **Draft Project Inventory**: The draft project inventory was then presented for feedback to the Stakeholder Working Group (twice), to the Ramona and Lakeside Community Planning Groups, and to members of the public at the second public meeting. Breakout meetings were also held with the County of San Diego, the City of Poway, and the active transportation SMEs to come to consensus on the active transportation and evacuation projects identified for the Corridor.
- Final Project Inventory: The final project inventory, discussed in this chapter, was developed with additional feedback during the second round of engagement with the Community Planning Groups, the Stakeholder Working Group, and the public.

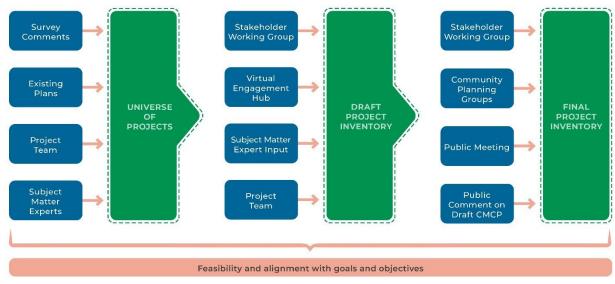








Figure 4-1: Development of the Project Inventory



This chapter is organized by the need categories defined in **Chapter 3: Needs Assessment**. For each need category, this chapter provides a high-level overview of the key projects identified, followed by an inventory map of all projects. While the project team categorized each project and program based on the primary need addressed, many of the transportation solutions in the inventory address challenges represented by multiple need categories.

Safety

Safety for all users, including the social equity focus populations found along the San Vicente Corridor, is the highest priority for the San Vicente CMCP. While safety was considered in the development of all projects in this inventory, the suite of projects identified in the safety need category (shown in **Figure 4-2** and detailed in **Appendix E**) is directly focused on addressing specific safety issues found throughout the Corridor. Safety projects were developed with a foundation of Proven Safety Countermeasures and based on approved lists of improvements from both the Federal Highway Administration (FHWA⁵⁶) and Caltrans⁵⁷.

The following goals were considered when developing the project inventory list for the safety need category:

⁵⁷ https://dot.ca.gov/programs/safety-programs/proven-safety-countermeasures





⁵⁶ https://safety.fhwa.dot.gov/provencountermeasures/





- Incorporate a Safe Systems approach by anticipating human mistakes and seeking to reduce the severity of a potential collision with safer vehicles, speeds, roads, and road users.
- Address existing safety issues at hot spot locations based on the Statewide Integrated Traffic Records System (SWITRS) historical crash data from the California Highway Patrol.
- Decrease the likelihood of creating a future hot spot by systemically applying safety countermeasures at locations with similar roadway characteristics to collision hot-spot locations.

The following project types have been identified in the project inventory to address the safety need:

- Falling Rock Protection Devices: Install
 warning signs and treatments to alert drivers
 of the potential for falling rock and prevent
 fallen rock from reaching the roadway
 surface.
- Intersection Reconfiguration / Safety
 Enhancements: Adjust intersection
 geometry, sight distances, and operations
 based on an analysis of historical collision
 characteristics.
- Speed Studies and Traffic Calming: Evaluate speed limits per AB 43 changes to Cal.
 Vehicle Code § 22352, and subsequently modify roadway geometry or implement traffic calming strategies to support reduced speed limits.
 - Traffic calming is recommended along the Ramona segment between Highland Valley Road/Dye Road and Etcheverry Street to support the downtown environment and prioritize the safety of vulnerable users.
 - Traffic calming is recommended on Poway Road to enhance safety of vulnerable users accessing recreational areas along SR 67.



Photo Source: Shandong Xingying Environmental Energy Technology



Photo Source: California Highway Patrol

 Enforcement should be considered upon project implementation to help bring awareness to reduced speed limits.









- Gateway signs should be considered as a form of traffic calming by creating a sense of arrival to a location where people may be walking, biking, or using other micromobility devices.
- Runaway Truck Ramps: Add runaway truck ramps to improve safety due to the steep grades for freight traffic using the Corridor.
- **Two-Way Left-Turn Lane Study:** Evaluate the Corridor to identify locations where turn lanes should be installed to remove slower traffic from through traffic and minimize risk of rear-end collisions and reduce bi-directional conflicts.
- Median Barrier: Install barrier along the median to prevent head-on collisions.
- Gateway Signs: Install pole mounted or overhead gateway signs approach downtown
 areas of Lakeside and Ramona in order to create a sense of arrival for vehicles and
 consequently implement traffic calming as vehicles approach areas with higher
 volumes of people walking, biking, and using other micromobility devices.

Corridor-wide safety improvements identified in the San Vicente CMCP include:

• **Dynamic Message Signs** to enhance the safety of all users on the Corridor with real time conditions like slow or stopped traffic. During an evacuation or emergency event, dynamic message signs could also be used to inform drivers of open shoulders or

contraflow traffic conditions.

• Curve Visibility
Enhancements
including enhanced
roadway delineation,
dynamic and/or radarenforced curve warning
signs, and surface
friction treatments for
curves along SR 67.



Photo Source: Traffic and Parking Control Co., Inc.

- Intelligent Transportation System (ITS) Speed Safety Elements including speed feedback signage, dynamic speed limit signs, and automated speed enforcement (upon Caltrans' approval) to promote safe driving behavior in the corridor.
- **Guard rail evaluations** to identify locations where increased protection in the event of a collision in necessary.









 Wildlife crossings to restore and enhance wildlife habitat connecivity and reduce vehicle/wildlife conflicts.
 Wildlife crossing locations identified in the CMCP are derived from a wildlife movement study of SR 67 by San Diego State University's Conservation Ecology Lab. The San Vicente CMCP recommends that an additional Wildlife Corridor Connectivity Independent Study be conducted to gather information on wildlife movement and habitat connectivity within the entirety of the San Vicente



Photo Source: The Nevada Independent

- Corridor. This will help to ensure that opportunities for adding enhanced connectivity elements can be accurately identified and supported with individual projects.
- Callboxes to provide emergency communications access for crashes, stranded vehicles, and other emergency situations until broadband service is more reliable in the San Vicente Study Area.















(i) SUPPORTING INFORMATION

- ► Truck-related collisions concentrated near Vigilante Road intersection and the Lakeside Segment
- ► Collision hotspots (based on 2015-2019 SWITRS data): intersections, sharp curves, urban segments (Lakeside and Ramona)
- ► Corridor bisects several wildlife habitats

San Vicente CMCP Study Area (County Roads & SR 67)

38% of collisions occurred at unsafe speeds

31% of collisions were rear end

28% involved a vehicle hitting an object

Source: Statewide Integrated Traffic Records System (SWITRS) 2015 – 2019

© GOALS

- Address existing safety issues at hot spot collision locations (based on 2015-2019 SWITRS data) and flagged segments (based on TASAS data)
- Systemically apply safety countermeasures at locations with roadway characteristics similar to collision hot spot locations
- ► Incorporate a "Safe Systems" approach
- Restore and enhance habitat connections



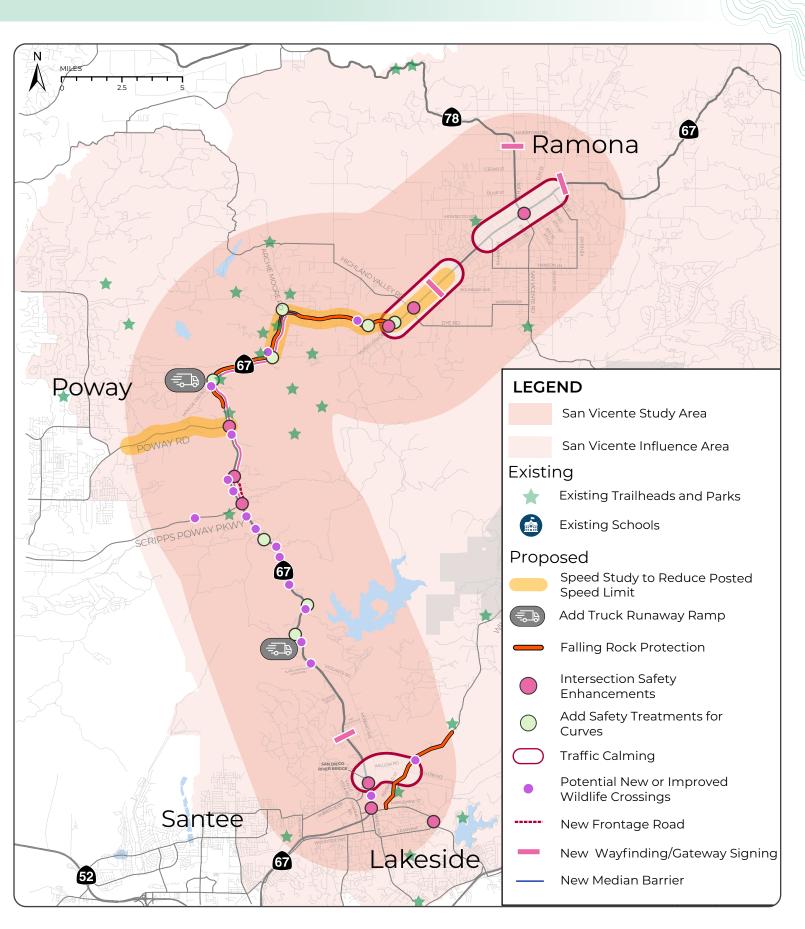
Runaway Truck Ramp



Wildlife Underpass



Falling Rock Prevention Devices







Evacuation

The San Vicente Corridor plays a critical role in ensuring safe and efficient evacuation for communities during emergencies and natural disasters. Social equity focus populations in the study area are especially vulnerable to both the negative impacts of emergencies and natural disasters within the region, such as flooding and wildfires, due to their already limited resources. The strategies for addressing the evacuation need (shown in **Figure 4-3** and detailed in **Appendix E**) are two-pronged, and aim to:

- Increase evacuation capacity
- Distribute information quickly during emergencies

As discussed in **Chapter 3: Needs Assessment**, the preliminary findings of the SR 67 PA&ED Draft Evacuation Plan Recommendations Report indicates that four outbound evacuation lanes and one inbound evacuation lane would be required on SR 67 to adequately evacuate the evacuation study area. Notably, an evacuation lane is not limited to a vehicular travel lane and can also be a roadway shoulder or multi-use path of appropriate width. As a result, alternative cross sections of each segment of the Corridor are being evaluated as part of the Project Approval and Environmental Document (PA&ED) phase of the SR 67 Highway Improvements Project.

As the primary recommendation to increase evacuation capacity, this CMCP supports the selected alternative of the PA&ED phase of the SR 67 Highway Improvements Project. It is anticipated that the preferred alternative (anticipated to be finalized in summer 2024) will include shoulder widening to accommodate the four outbound evacuation lanes and a Class I multi-use path that will accommodate the one inbound evacuation lane.

In addition to roadway improvements recommended by the SR 67 Highway Improvements Project, the following projects are recommended to remove physical bottlenecks that obstruct evacuation operations:

- Widen roadway shoulders and San Diego River bridge to provide additional capacity during evacuations, with dynamic signage alerting drivers when shoulders should be used.
- Remove on-street parking at the heavily frequented Iron Mountain and Mount
 Woodson trailheads to maximize evacuation capacity, pending the expansion of offstreet parking capacity.
- Tow-truck deployment are recommended to be implemented at key locations including: 10th Street and Main Street (SR 67) in Ramona; Poway Road and SR 67; Scripps Poway Parkway and SR 67; and Willow Road and SR 67 in Lakeside.









- Corridor-wide closed-circuit television (CCTV) cameras are recommended corridor-wide as traffic flow measurement devices with live data stream to Emergency Operations Center (EOC)/Traffic Management Center (TMC); recording capabilities and 15-minute traffic data intervals for post-processing the afteraction report are also recommended for both data streams.

- Smart Intersection Systems can be used Photo Source: Chicago Tribune during evacuations to provide signal priority for emergency responders and modified operations for evacuation events. CCTV cameras will inform these systems and allow for more accurate monitoring by EOC/TMC to respond to stranded vehicles or other obstructions.
- Emergency signal modifications can allow for alternative signal timing plans that can be activated during emergency scenarios to serve the necessary approaches or movements.
- Utilize the proposed multi-use path along SR 67 (recommended for the active transportation need) as an additional evacuation lane.

Recommended strategies that will assist in disseminating information and reducing the spread of a wildfire during the evacuation process include:

- Emergency communications systems including Dynamic Message Signs (DMS) to allow customized messaging to drivers during an event (i.e., slow-down ahead, high winds, etc.), variable message signs to indicate lane operations during an event, and push notifications for residents and visitors during an emergency or scheduled power shut-off.
- Warning alerts and sirens help convey information in a timely and more comprehensive manner, especially to those without access to cellular phones, internet, or broadband.
- Brush management throughout the Corridor to improve safety from wildfires.
- An evacuation staging area is planned to be designated at the Iron Mountain Trailhead.
- **Fire access road improvements** to Mina de Oro Road and Foster Truck Trail will provide easier access for emergency responders. Access improvements at the CAL FIRE Ramona Fire Station will also improve emergency response capacity.



Emergency evacuation siren Photo Source: Unknown









 Enhance pavement resilience with concrete or asphalt ad-mixtures to increase resilience to fire.

The project inventory includes a **public awareness campaign** targeted towards the Ramona and Lakeside communities to provide educational outreach on fire prevention and safety. The City of Poway recently received CAL FIRE General Fund 2021-2022 Wildfire Prevention Grant Award funding for this type of effort. It is recommended to obtain similar grant funding to expand the educational outreach to other communities along the SR 67 Corridor.

A **neighborhood resilience center** for the Corridor should also be considered in the future to provide infrastructure during emergency evacuations. A resilience center can utilize existing infrastructure such as a library or a school, or it can be a separate facility that is used for community services or educational efforts during non-emergency times. The exact location and type would be reviewed during the planning and design of this potential project, in collaboration with implementing agencies and community groups.







EVACUATION











SUPPORTING INFORMATION

- ► Climate change is anticipated to increase wildfire threat/danger
- ▶ Study Area has a moderate level of wildfire concern; communities to the east have a high level of wildfire concern
- ▶ Potential improvements for evacuation are under analysis as part of the Project Approval Environmental Document (PA&ED) phase of the SR 67 Highway Improvements Project
- ▶ Corridor evacuation events involve the unique participation of livestock, including 8,000 to 12,000 horses



31,576 Residents in the evacuation area



Source: SR 67 Highway Improvements Project - Project Approval & Environmental Document Phase: Draft Evacuation Plan Recommendations Report (December 2021)

GOALS

- Increase evacuation capacity
- Leverage technology to improve distribution of information and evacuation operations
- Address physical bottlenecks that impact evacuation
- ▶ Provide for defensible spaces and increase roadway resilience



Dynamic Message Signage

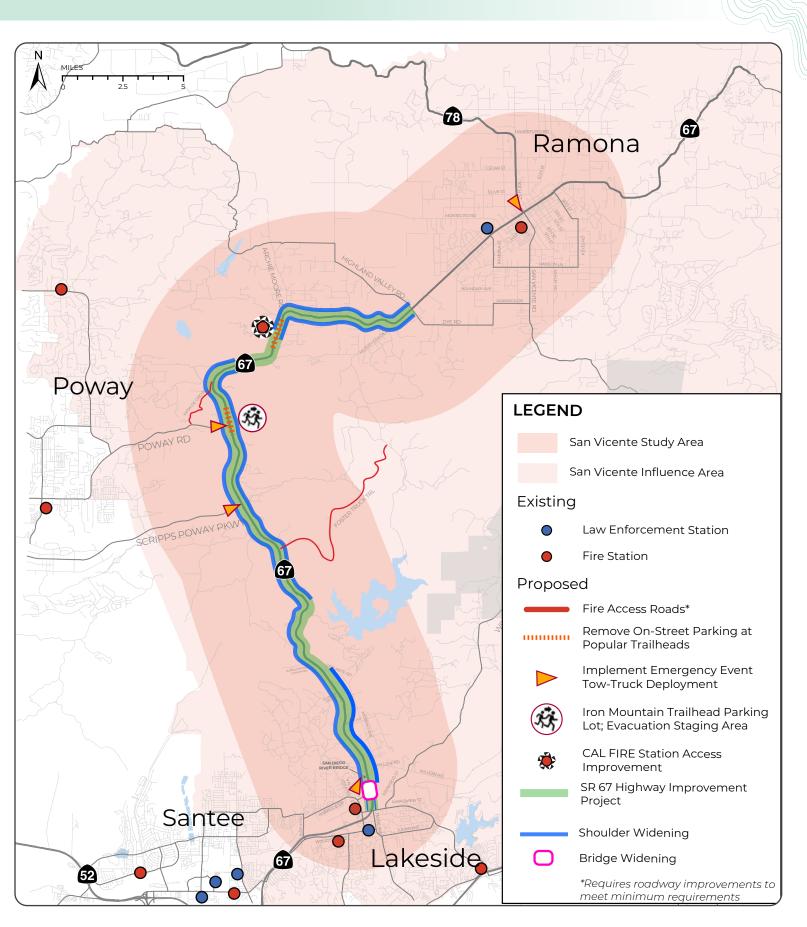


Emergency Evacuation Siren



Evacuation Staging Area

82







Active Transportation

As noted in **Chapter 3**: **Needs Assessment**, existing facilities and planned projects currently provide little to no protection for people who walk, bike, use micromobility devices, and ride horses. Of additional concern, members of the social equity focus communities are more likely to rely on these modes of active transportation yet don't have safe infrastructure to support them. The active transportation inventory of projects and programs is designed to provide a comfortable, connected network of options for users of all ages and abilities. This network will improve access to destinations such as schools and popular recreation areas, and is designed with all users in mind.

The network of bicycle facilities planned in this CMCP is based on the Bicycle Facility Selection Plan within the 2021 Regional Plan⁵⁸ (see **Figure 4-4**). Facility types were recommended based on this matrix and are in alignment with the FHWA All Ages and Abilities guidance with some flexibility for treatments from the Small Town and Rural Design Guide⁵⁹.

Planned improvements are designed to create a network in which people who walk, bike, ride horses, or use micromobility devices can feel safe, comfortable, and dignified.

In the San Vicente Corridor, the project team has created a network that plans for the unique user of people who ride horses (equestrian). Members of the community noted that equestrian paths should be implemented with separation from biking paths because bicycles can startle horses, presenting a safety hazard for both users. At a minimum, a landscaped strip should be provided to separate people biking from people riding horses.

Many of the active transportation improvements listed in this project inventory support and build upon the County of San Diego Active Transportation Plan and provide options for residents and visitors to access destinations depending on their level of comfort. Additionally, planning for new equestrian facilities was based on the Community Trails and Pathways Plans developed by the County of San Diego for both Ramona and Lakeside. The network of active transportation facilities within this CMCP builds upon and is in alignment with existing plans.

⁵⁹ https://safety.fhwa.dot.gov/ped_bike/tools_solve/docs/fhwasa18077.pdf





⁵⁸https://sdforward.com/docs/default-source/2021-regional-plan/appendix-l---activetransportation.pdf?sfvrsn=f944fd65 2





Figure 4-4: SANDAG Bicycle Facility Selection Plan

		Traffic	Motor Traffic		Facility Type"		
Corridor Typology	Road Classificiation	Volume (ADT)	Operating Speed ¹ (mph)	Lanes per Direction	Local Network	Primary Network	Bicycle Highway / Regional Network
Corridor F ^{III}	Local or Minor Collector	<1500	≤20 mph	No Centerline or 1 Lane	Mixed Traffic	Bicycle Blvd.	Bicycle Blvd. w/ Priority at intersections
		1500 to 4000				Bike Lane	Protected Bikeway w/ Priority at
		>4000			Bike lane or Protected Bikeway ^{IV}		intersections
Corridor E	Collector or Arterial	Any	≤30 mph	1 Lane			
				2 Lane			
				3 Lane	Buffered Bike Lane or Protected Bikeway		
Corridor D	Arterial		≤50 mph	- Any	Protected Bikeway		
Corridor C	Highway						
Corridor B	Freeway ^v		>50 mph		Protected Bikeway or Alternate Route		
Corridor A	Freeway						

Active transportation project types include the following:

 Class I Bike Paths or Multi-Use Paths: Offstreet, fully protected facilities intended for use by people who walk and bike; it is assumed that wildlife cannot utilize multiuse paths for crossing the Corridor; width of the path during the design phase should consider speed differentials between bidirectional bikes and high speeds of downhill bikes.



Photo Source: Bike the by Ways









 Class II Buffered Bike Lanes: Dedicated in-road space for bicyclists; it is recommended that all bike lanes proposed in this plan would be installed with striped buffers, appropriate on lower speed, lower volume roadways or to be installed with traffic calming measures.



Photo Source: Bike Sport Feeds

 Class IV Bikeways: Dedicated in-road space for bicyclists that includes horizontal buffer space and vertical protection devices between the bikeway and travel lane; width of the bikeway during the design phase should consider speed differentials between bikes and adjacent vehicles, and should be able to accommodate street sweepers to avoid debris.



Photo Source: The San Diego Union-Tribune

Bike Refuge Area / Fix-It Stations: These stations support safety for bicyclists using the Corridor by allowing bicyclists to fix an occasional flat tire, for example, when they may not have cell service to call for help. There are six bike fix-it stations planned along SR 67. These were strategically planned to be located near major recreational destinations or at viewpoint pull-off areas.



Photo Source: Bikes Sport Feeds









 Bike Parking: The provision of bike parking within the downtown areas of Ramona and Lakeside, as well as other key destinations, prioritizes alternative modes of transportation and promotes a bike-friendly atmosphere.



Photo Source: Southern California Regional Rocks and Roads

Equestrian Trails and Crossing Enhancements: Dedicated soft-surface paths for equestrian users. To align with existing City of Poway and County of San Diego policies, it is assumed that wildlife can utilize soft-surface paths for crossing the Corridor. It is also assumed that people who walk can utilize the equestrian trails, if desired. High push buttons at intersections with major equestrian trail crossings are also recommended.



Photo Source: County of San Diego Parks and Recreation

• Sidewalk Improvements

- Sidewalk gap closures and/or widening: Encourage free-flow movement of pedestrian activity.
- Pedestrian-scale lighting: Lighting improvements which are directed towards the sidewalk and positioned lower/spaced more closely than roadway lighting to enhance the safety and visibility of users on pedestrian.



Photo Source: Maricopa Association of Governments









Intersection Improvements

o Pedestrian Improvements: Treatments for enhancing comfort, safety, and/or visibility of people using the sidewalk such as high-visibility crosswalk markings, curb extensions to reduce crossing distances, countdown timers to indicate how much time is remaining to cross, mid-block crossing treatments such as refuge islands and Rectangular Rapid Flashing Beacons



Photo Source: Kittelson & Associates

(RRFBs), and lead pedestrian intervals for individuals to enter the crosswalk ahead of the green light for vehicles.

- Bicycle Improvements: Treatments for enhancing comfort, safety, navigability, and/or visibility of people biking—such as two-stage turn boxes—to help bicyclists navigate left-turn movements, bike boxes to minimize right-turn conflicts between vehicles and bicyclists, protected intersections to increase protection for bicyclists, and diverters to reduce vehicle traffic on bike routes.
- Smart Sensor Technology: This technology will reduce conflicts at intersections by detecting the location and speed of users of all modes and communicating this information to the signal to adapt operations accordingly.
- Mid-Block Crossings: Treatments that allow pedestrians and bikes to cross at a
 desired location where signalized or controlled crossings are too far away. These
 crossings often feature median islands for enhanced safety and RRFBs for
 increased visibility.
- Trailhead Parking Improvements: This can include expansion of off-street parking capacity, repaving existing or paving new parking lots, and adding 'clean' parking, lighting, and solar-powered pedestrian canopies.

The suite of active transportation projects identified for the San Vicente Corridor is shown in **Figure 4-5** and detailed in **Appendix E**. Some of the key projects identified on the project inventory map include:

SR 67 Class I Multi-Use Path: A Class I path adjacent to SR 67 would provide a
protected facility for people walking, biking, or using other micromobility devices
throughout the Corridor. This path, in combination with the Class IV facilities on either
end, would create a protected trunk line for active transportation users on SR 67, and
provide connections to key destinations adjacent to the Corridor via an integrated
network of bike facilities.









- Main Street Ramona: Main Street in Ramona has been identified for a complete streets revitalization including sidewalk enhancements, a four- to three-lane road reallocation creating space for dedicated buffered bike lanes, intersection crossing enhancements for vulnerable users, and bike amenities such as parking areas. Placemaking strategies such as street furniture could also be included. In the transition area between Highland Valley Road/Dye Road and Etcheverry Street, a Class IV bikeway is proposed since there are fewer driveways. A speed limit study is also recommended in this section to help with the transition from highway to main street speeds and create a sense of arrival to the downtown area.
- Ramona Parallel Low-Stress Routes: Two routes parallel to Main Street in Ramona have been identified as low-stress alternatives for people walking, biking, or using other micromobility devices. To the north of Main Street, a combination of La Brea Street and B Street, and to the south, a combination of Raymond Avenue and D Street, could become neighborhood bicycle boulevards. This would allow residents of all ages and abilities to access the many destinations on Main Street without having to travel on Main Street itself. The projects would require paths to be constructed through the existing roadway gaps. Making these paths accessible only by pedestrians and bicycles would create modal filters, prioritizing people walking, biking, and using other micromobility modes, while preventing vehicles from using them as cut-through routes for avoiding Main Street.
- Scripps Poway Parkway Class I Multi-Use Path: Due to the high speeds and traffic volumes on Scripps Poway Parkway, it is necessary to provide vertical protection for vulnerable users on this roadway. Based on a preliminary evaluation, it may be possible to construct a Class I path within the existing roadway right-of-way by reducing the inside shoulder width. If during the design phase, a Class I facility is determined to not be feasible, a Class IV bikeway would be the preferred alternative.
- Poway Road Class IV Bikeway: Poway Road is a major desire line for people biking between Poway and the recreational destinations along Poway Road and SR 67.
 However, the narrow roadway with a 50-mph speed limit presents a safety barrier for bicyclists accessing their desired destinations. A Class IV bikeway would require roadway widening, and would create a necessary direct connection along the desire line that is already navigated by bicyclists today.
- Mina de Oro Multi-Use Path: Mina de Oro, located on the north side of Poway Road, currently serves a handful of residences as well as some equestrian destinations. The roadway is only paved for approximately 800 feet. It connects to Misty Meadow Road and then to SR 67 via a series of unpaved trails. It is recommended to formalize the trails by paving a minimum width of 20 feet for emergency vehicle access. Since the road would not be accessible by privately owned vehicles, this road could double as an active transportation route where the paved section could be a multi-use path, and a soft shoulder could double as an equestrian trail (offset from the path by a landscaped buffer).









- Wine Country Frontage Road Bike Route: As part of the traffic safety project inventory,
 a frontage road has been recommended along the north side of SR 67 in the Wine
 Country segment to consolidate the number of driveways. It is also recommended to
 implement Class II bike lanes on the new frontage road to provide a parallel alternative
 for walking and biking on SR 67.
- Mapleview Street: A major connection within the Lakeside community, Mapleview Street is planned to have a Class IV bikeway and sidewalk enhancements to provide safe access for people who walk, bike, or use other micromobility devices. This will provide a connection to the San Diego River Trail multi-use path and an alternate route to access Lakeside Avenue if a Class I or Class IV facility cannot be accommodated on the bridge over the San Diego River.
- Community Connections within Lakeside and Parallel Low Stress Routes: To better connect neighborhoods within the Lakeside community, parallel routes are proposed through the Eucalyptus Hills neighborhood west of SR 67 and on Moreno Avenue east of SR 67. These parallel routes will provide a low-stress alternative to walking, biking, or using other micromobility devices on SR 67. It should be noted, a protected facility along SR 67 between Willow Road and Lakeside Avenue is necessary to help facilitate the connectivity across SR 67 and into the neighborhoods to the east and west. These routes, along with intersection improvements at SR 67 and Willow Road, SR 67 and Lakeside Avenue, and SR 67 and San Vicente Avenue, are planned to provide a more comprehensive network of safe connections in Lakeside.







ACTIVE TRANSPORTATION





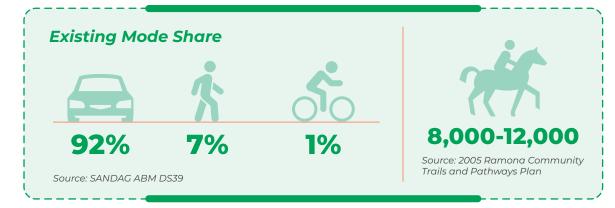






i SUPPORTING INFORMATION

- Existing facilities and planned projects currently provide little to no protection for people who walk, bike, use other micromobility devices, and ride horses
- Existing facilities for people biking are substandard shared facilities or shoulders along high volumes, high speed roadways
- Existing facilities for people walking are disconnected and non-compliant based on the Americans with Disabilities Act
- ▶ Currently planned projects may fall short of community expectations



(©) GOALS

- Provide a connected network of mobility options for all ages and abilities to access key destinations including schools and recreational areas
- ▶ Provide low-stress alternative routes parallel to SR 67 where feasible
- ► Incorporate traffic calming
- ► Increase comfort and visibility for all users
- ▶ Support and advance a "Main Street" environment in Ramona and Lakeside
- ▶ Support and supplement the County of San Diego Active Transportation Plan



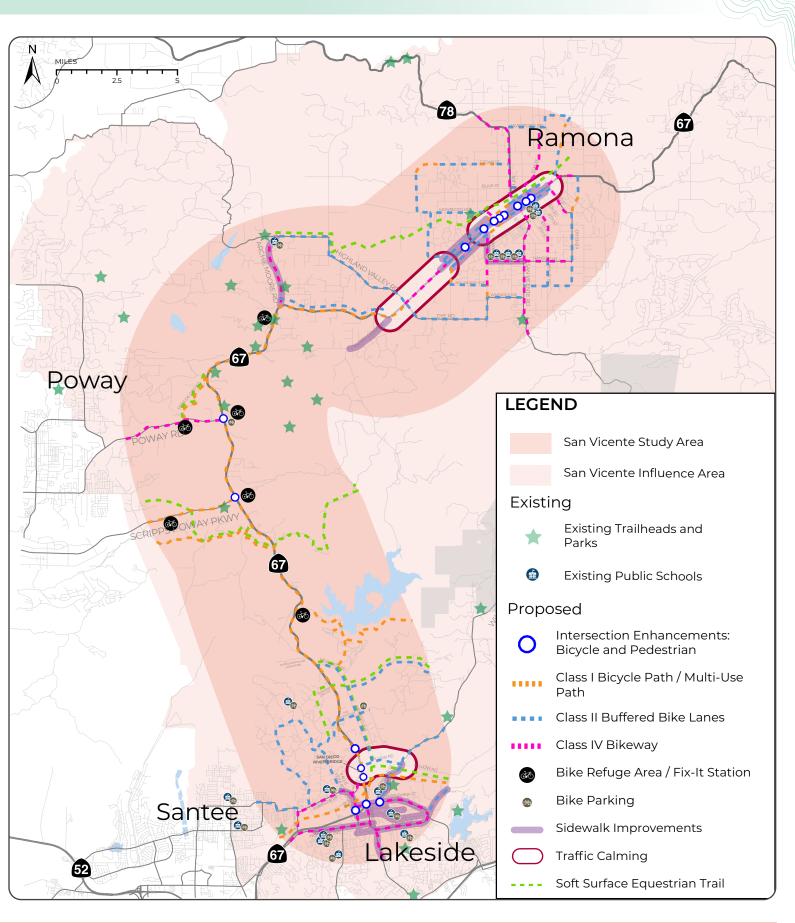
Class II: Buffered Bike Lane



Lead Pedestrian Intervals



Equestrian Trails







Traffic Congestion and Goods Movement

As a lifeline corridor for East County communities, traffic congestion along SR 67 and the Study Area roadways impact residents commuting for work and accessing resources and recreation, as well as the transportation of goods throughout the Corridor. It is important for traffic congestion strategies to focus on incentivizing the use of alternative modes of transportation, knowing that SR 67 does not have the capacity to accommodate single-occupancy vehicles for every current and future user of the Corridor. Currently, the fixed-route transit service in the Corridor is infrequent and underutilized, there are no flexible fleet services in operation, and the active transportation facilities are inadequate. Therefore, a vast majority of Corridor users rely on vehicles for access to work and other destinations, contributing to the congestion issues experienced today. Increasing alternative modes of transportation will directly improve social equity focus communities' ability to travel within and around the study area and larger San Diego region.

The approach to developing projects for the traffic congestion and goods movement needs categories (shown in **Figure 4-6** and detailed in **Appendix E**) is to:

- Address key congestion bottlenecks (identified through an analysis of volume and capacity which can be found in Chapter 3: Needs Assessment)
- Increase accessibility of alternative transportation modes

It should be noted that the CMCP does not include recommendations for additional vehicular travel lanes for the entire SR 67 Corridor since this does not align with local, statewide, and regional environmental goals for reduction of vehicle miles traveled (VMT). Recommendations are consistent with SANDAG's Federal congestion management process (CMP). Proposed projects utilizing federal funds that may add single occupancy vehicle (SOV) capacity undergo evaluation for non-SOV inducing and multimodal alternatives prior to programming. Projects captured on the CMP network are regularly monitored through State of the Commute reports. More information, including levels of analysis and reporting, can be found in **Technical Appendix N** of the **2021 Regional Transportation Plan.**⁶⁰





⁶⁰ "SANDAG Regional Plan 2021 - Technical Appendix N: https://sdforward.com/docs/default-source/final-2021-regional-plan/appendix-n---federal-congestion-management-process.pdf?sfvrsn=b3c1fd65_2





To address key congestion bottlenecks, the following project types have been identified:

- **Truck Climbing Lanes**: Support flow of passenger and commercial vehicles (at different speeds) on steep uphill grades.
- Intersection Control Evaluations:
 Evaluate intersection control options including all-way stop control, signalized intersections (pending signal warrant analyses), and other innovative intersection design layouts; roundabouts are not currently under consideration for SR 67 due to challenges presented during the evacuation process.
- Turnout/Viewpoints: Provide a safe location for vehicles to turn off the roadway for sightseeing or other reasons.



Photo Source: The Press-Enterprise

- Wayfinding Signage: Allow drivers to position their vehicle where necessary in advance of a maneuver to access destinations to reduce traffic congestion and enhance safety.
- **Frontage Roads**: Consolidate driveways to minimize vehicle conflicts between the state highway and private driveways.
- Truck Information and Routing System: In addition to smart intersections systems, corridor improvements can include the implementation of truck information applications that can increase safety between passenger and freight vehicles by providing real-time truck routing information and notifying operators of any incidents or restrictions. The routing module system will include system-wide roadway truck restrictions based on load limits and HazMat routing restrictions.
- Curbside Management: Create passenger pick-up / drop-off spaces to facilitate goods delivery for businesses on Main Street, rideshare services and future flexible fleet opportunities.



Photo Source: glacierview-alaska.com









- Active Transportation Demand Management (ATDM): Implement ATDM which
 provides the ability to dynamically manage and control travel and traffic demand
 based on current and historical data⁶¹. ATDM improvements planned for the corridor in
 the 2021 Regional Plan could further support incident management with dynamic
 lane assignment, DMS information, and alternative routing during emergencies. ATDM
 can also be used to help manage congestion during peak travel times and during
 incidents.
- On-Street Parking Modifications: Converting parallel parking to angle parking increases parking capacity, reduces parking time for vehicles, and reduces the potential for collisions.
- **New Roadway**: Construct a new roadway between Dos Picos Park and SR 67 to provide more direct connection for visitors of the park area and nearby residents. The exact alignment of the roadway and location for this connection on SR 67 would be determined at the planning and design level of the project.

In addition to the active transportation projects discussed in the previous section, the following projects have been identified for increasing accessibility of alternative transportation modes on the Corridor:

- New Fixed-Route Service: Connect Ramona and Poway via Scripps Poway Parkway to serve major employment centers and local destinations.
- On-Demand Microtransit Shuttles: Proposed to connect key destinations within Lakeside and along the Ramona and Wine Country segments.



Photo Source: TransLink

- Gateway Connector Concepts (Flexible Fleet Implementation Strategic Plan): A regional concept for flexible fleets that would provide connections within the communities of Ramona, Lakeside, and the Barona Resort & Casino via on-demand mobility services.
- **Upgrade Existing Service**: Upgrade the existing bus service between Ramona and Escondido.

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https://ops.fhwa.dot.gov/atdm/about/index.htm#:~:text=The%20ATDM%20Concept%20is%20the,a%20combination%20of%20real%2Dtime







TRAFFIC CONGESTION AND GOODS MOVEMENT

Figure 4-6





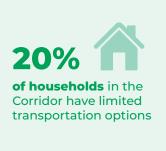






i SUPPORTING INFORMATION

- Unique and fragile commodities are transported throughout the corridor including aggregate, agriculture, wine, livestock, and equestrian supplies
- ► The Corridor is heavily utilized for both commuting and recreational purposes, therefore traffic congestion can be an issue on both weekdays and weekends
- ► Specific congestion issues experienced along the Recreation Ridge segment for Ramona community members commuting to and from work in Poway
- Alternative transportation options are limited



Source: SANDAG ABM DS 39

Trucks make up an average of of total vehicles on SR 67

Daily Traffic (AADT) 2018

Trucks in the Corridor spend a combined average of

295 hours in traffic daily

Source: Caltrans Average Annual Source: SANDAG ABM DS 39



🎯) GOALS

- Minimize congestion bottlenecks at key pinch-points
- Maximize Corridor efficiency using technology
- Explore alternative designs at major intersections
- ▶ Increase accessibility of alternative transportation modes



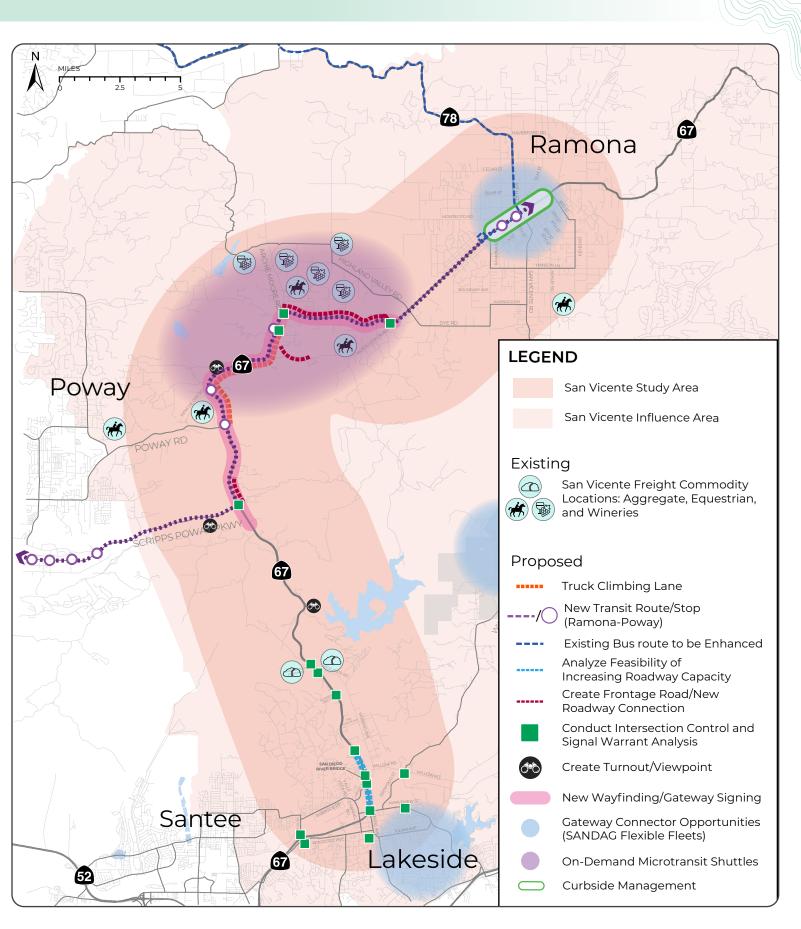




Truck Climbing Lane



Turnout / Viewpoint Area



G Caltrans





Utilities

Proposed projects primarily aligned with the utilities need are focused on creating the infrastructure for expanded broadband access, general utility infrastructure, and increasing the number of electric vehicle (EV) charging locations to better support the Corridor's resiliency to natural disasters. The proposed projects will have the combined effects of creating a corridor more resilient to emergencies and the impacts of climate change, enabling the Next OS⁶² and other smart transportation improvements, and helping to bridge the digital divide for San Vicente Corridor residents (including social equity focus communities) by increasing the availability of reliable, affordable, and high-quality broadband services. The goals of the utility-related projects (shown in **Figure 4-7** and detailed in **Appendix E**) include:

- Expand the digital infrastructure needed to support the transportation system
- Increase utility resiliency to emergencies and climate change

Major projects identified for addressing the utilities need include:

- Fiber Optic Telecommunication / Broadband Access: Close coordination and
 partnership with public and private agencies will be required to bridge current
 broadband infrastructure gaps; the following projects will incorporate conduit sharing
 or joint-use trenching to provide the infrastructure for future deployment of
 broadband which will help to reduce VMT by preparing local communities for smart
 intersection systems and implementing Transportation Demand Management (TDM)
 strategies such as teleworking:
 - SR 67 Pavement Rehabilitation / Fiber Communications Project: An ongoing microtrenching project along SR 67 between the San Diego River Bridge and Highland Valley Road/Dye Road will add fiber optic telecommunications infrastructure to serve communities east of the San Vicente Study Area. The project—also referred to as the SR 67 Dig Once Demonstration—will help to connect public facilities, implement transportation technology solutions, and will expand broadband access for residents.
 - The San Vicente CMCP proposes to extend the utilities infrastructure from Highland Valley Road/Dye Road through Ramona to provide conduit infrastructure for future broadband service.

⁶² https://www.sdforward.com/mobility-planning/next-os









- Utility infrastructure enhancements: to ensure all utilities along the Corridor have redundancy for resiliency to wildfires, earthquakes, or other natural disasters. In order to prepare for the integration of 5G level 5 automation (self-driving vehicles) small cell wireless communication facilities should be installed adjacent to the highway to support large cell wireless communication facilities.
- EV Charging
- Light Duty Vehicles: The proposed addition of new EV charging and expansion of existing locations will provide more access to EV users.
- Medium-Duty/Heavy-Duty Vehicles: High-power charging and hydrogen fuel stations are proposed to support the critical goods movement flow through the San Vicente Corridor. SANDAG is also currently developing the San Diego Regional Medium-Duty and Heavy-Duty Zero-Emission Blueprint and the San Diego and Imperial Counties Sustainable Freight Implementation Strategy to identify potential charging locations and funding opportunities.



Photo Source: EV Update Media

- Note: quick charging stations could be feasible with upgraded and specific infrastructure. Quick charging station feasibility, including battery type and setup, is dependent upon further analysis that will need to be conducted by the implementing agency.
- **Backup Power Sources**: backup power, provided by battery storage and renewable sources, will provide critical transportation infrastructure throughout the San Vicente Corridor during scheduled power shut offs.
- **Smart parking systems:** at major trailheads, Lakeside, and Ramona to allow visitors to reserve parking and/or efficiently navigate to available parking rather than searching for parking throughout the Corridor.
- Dam safety: to ensure structural stability in the event of an earthquake.
- **Stormwater quality green infrastructure**: to improve stormwater quality and treat runoff prior to discharge.







UTILITIES











SUPPORTING INFORMATION

- > SANDAG formed a Regional Digital Divide Taskforce and developed the Regional Digital Equity Strategy and Action Plan to address service disparities and gaps in the broadband network for the region
- As the region transitions to more electric passenger vehicles, trucks, and buses, high-speed chargers will be needed along this critical people- and goods-movement corridor
- ▶ Power shut offs are common during high wind events, and impact the traffic signals on SR 67 and other parallel routes, as well as critical communications equipment, including broadband, cellular, emergency notification equipment, and EV chargers
- Expanding digital infrastructure will enable the deployment of several transportation technology solutions and support evacuation management

Percentage of San Diego County households with **no internet subscription at home** (by income)

29.6%

\$20K - \$75K 12.9% > \$75K

Source: Regional Digital Equity Strategy and Action Plan, SANDAG 2021



broadband

of rural communities in San Diego County

have access to fixed



- ▶ Increase utility resiliency to emergencies and climate change
- ▶ Build redundancy into critical utility systems
- Modernize broadband access and speeds for communities in the San Vicente Area of Influence



Electric Vehicle Charging Stations

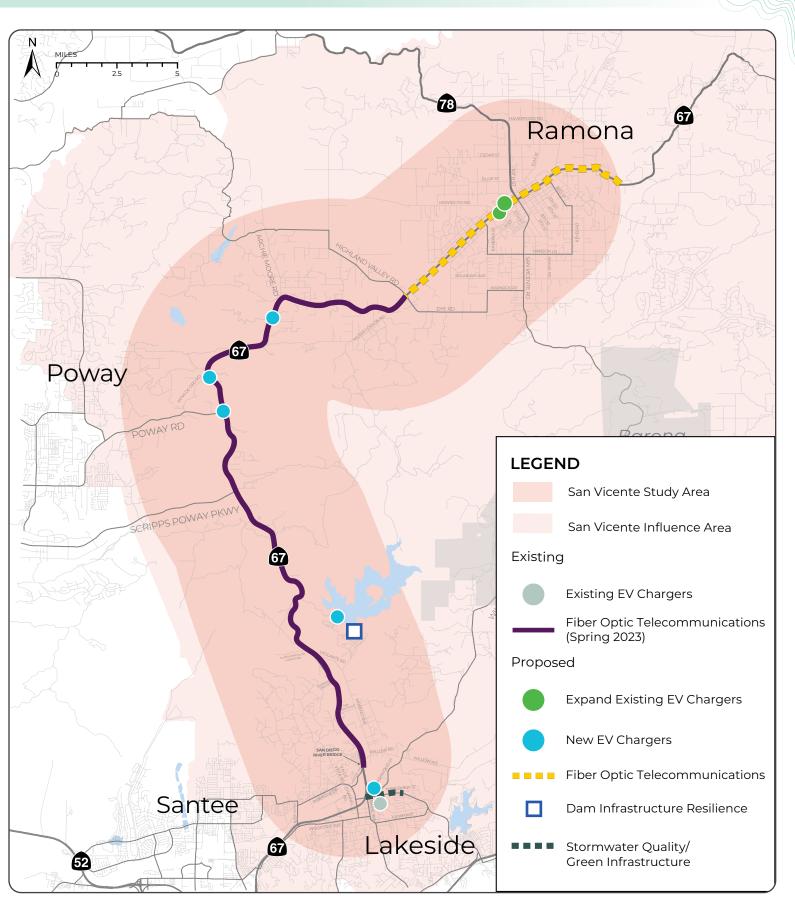


Electric Vehicle Charging Stations



Utility Infrastructure

97



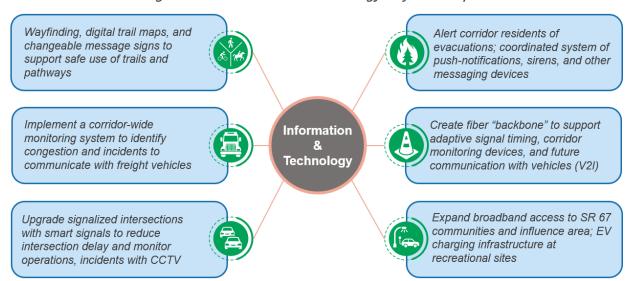




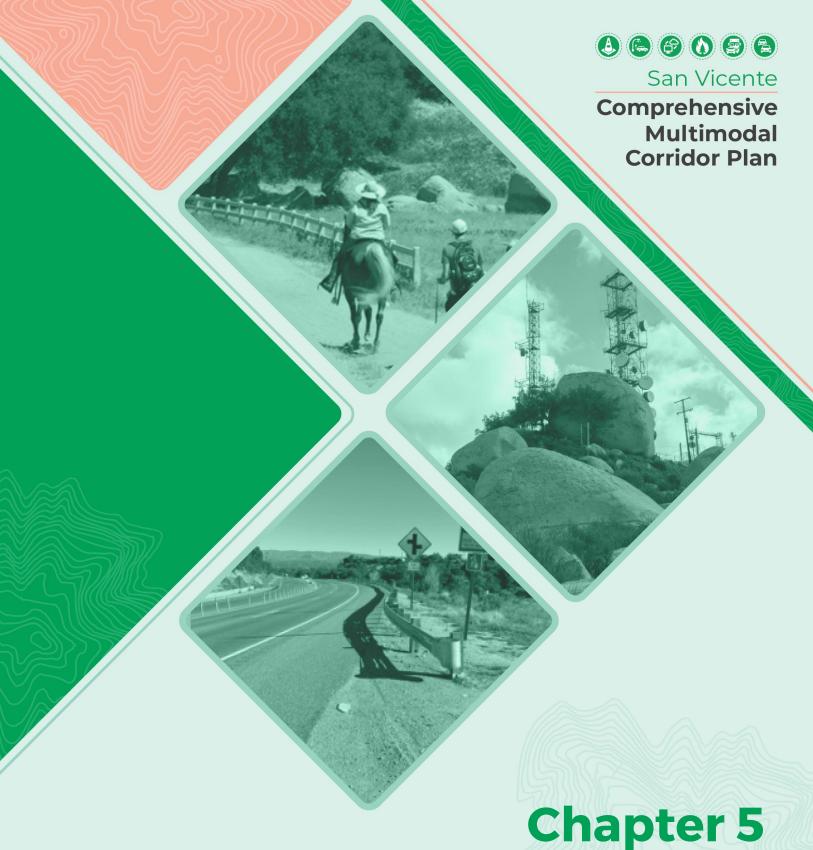
Information and Technology

The information and technology need category is unique in that the projects identified for this challenge area are intended to assist with the deployment of the other needs assessment categories. A project inventory map was not developed for this need category since all of the projects have been incorporated into one of the other five project inventory maps. **Figure 4-8** provides examples of how each of the other need categories are supported by information and technology.

Figure 4-8: Information and Technology Project Examples







Implementation and Phasing



CHAPTER 5: IMPLEMENTATION AND PHASING

Chapter Overview

This chapter presents the implementation plan for the transportation projects identified in **Chapter 4: Project Inventory** for the San Vicente Corridor. A project and program funding sources guide is also provided in **Appendix F: Funding Sources** to identify potential funding opportunities available via federal, state, local, and non-traditional programs.

As mentioned in **Chapter 1: CMCP Framework**, this CMCP was developed with guidance from local, regional, and statewide planning efforts. In turn, the San Vicente CMCP will also guide future iterations of local, regional, and statewide planning documents. Specifically, the final project inventory of transportation solutions in this CMCP will be considered in the development of SANDAG's next Regional Transportation Plan (RTP).

This chapter is structured as follows:

- Cost Estimating Methodology
- Project and Program Funding Sources Guide
- CMCP Project Phasing
 - Short-Term Transportation Solutions
 - Mid-Term Transportation Solutions
 - o Long-Term Transportation Solutions
- Implementing the Project Inventory
- Future Conditions Analysis and Performance Measures

Cost Estimating Methodology

The development of the planning-level, preliminary cost estimates for the San Vicente CMCP consisted of the following steps:

Compile previously identified unit costs from peer studies and adjust to 2022 dollars

 Using recent peer studies and planning documents developed by SANDAG and Caltrans, identify unit costs relevant to projects and programs in the San Vicente CMCP.









 Adjust unit costs to present-day dollars using the Caltrans Construction Cost Index (CCI)⁶³.

Generate unit costs for additional projects and programs not recently studied

 Perform web-based research and apply professional engineering judgement to generate additional unit costs.

Apply unit costs to each project and program in the project inventory to develop a preliminary cost estimate

• For each project and program, individually evaluate project constraints and project size to apply unit costs and generate a preliminary cost estimate.

Preliminary cost estimates identified within the San Vicente CMCP are only inclusive of construction/installation costs. These preliminary estimates are not inclusive of costs associated with design, planning, support, overhead, or contingency which may be necessary for the specific project or program. Depending on the project or program, these costs may significantly increase the overall cost of the improvement.

Project and Program Funding Sources Guide

Funding for transportation improvements and enhancements is available through several federal, state, local, and non-traditional sources and programs. Depending on the source, eligible projects vary by transportation mode, scope, and project phase. Some funding programs allocate resources through competitive grant processes or other discretionary means, while other funds are distributed by formula to state, regional, or local public agencies. There are two main types of grants available for transportation solutions within the San Vicente CMCP: discretionary and formula.

Discretionary grants permit the agency to exercise judgment in selecting recipients through a competitive grant process. Formula grants are noncompetitive and awarded if the recipients meet specific conditions. The award amount is calculated by formulas in statutes that factor in statistical criteria for specific types of work. **Appendix F** summarizes some of the relevant funding sources that may potentially be available for transportation projects identified in the San Vicente CMCP.

⁶³ http://ppmoe.dot.ca.gov/des/oe/docs/CCI.pdf









FEDERAL FUNDING SOURCES

Federal transportation funding is administered by the U.S. Department of Transportation (DOT) and authorized by federal transportation bills. The most recent federal transportation funding bill—the Infrastructure Investment and Jobs Act (IIJA)—was signed into law in 2021. A significant portion of the funding available through the U.S. DOT's Highway Trust Fund is allocated to California based on the state's population. The state of California, in turn, distributes funds to local agencies, by formula or by discretionary means, through competitive grant programs. The majority of resources through the federally-funded Surface Transportation Program are programmed into the Statewide Transportation Improvement Program (STIP). Additionally, federal and state funding sources for bicycle and pedestrian projects are consolidated under California's Active Transportation Program (ATP) and distributed through a competitive process.

There are several federal discretionary grant programs available for local agencies to apply for funding, including Rebuilding American Infrastructure with Sustainability and Equity (RAISE), Infrastructure for Rebuilding America (INFRA), Rural Surface Transportation Grant (RURAL), the Mega Grant (MEGA; statutorily known as the National Infrastructure Project Assistance Program), among others. In addition to these federal grant programs, the Transportation Infrastructure Finance and Innovation Act (TIFIA) Program is an available option to help finance transportation projects. The TIFIA Program provides federal credit assistance to eligible surface transportation projects, including highway and transit projects of regional or national significance. These grant programs—and others available from specific U.S. DOT operating administrations as presented in **Appendix F**, **Table F-1**—provide opportunities for local and regional agencies to apply for substantial funding for regionally significant projects.

STATE FUNDING SOURCES

In addition to federal grant programs, there are several state funding sources for local and regional transportation projects that are available to public agencies. One of note is California Senate Bill 1 (SB 1), the Road Repair and Accountability Act of 2017, which is a \$54- billion-dollar landmark investment package that spans a 10-year period. It is focused on fixing roads, freeways, and bridges in communities across California and putting more dollars toward transit and safety.

SB 1 augmented other sources of funding, such as the Active Transportation Program (ATP) and State Highway Operation and Protection Program (SHOPP) and created new and relevant funding programs such as the Solutions for Congested Corridors and Trade Corridor Enhancement programs.









Relevant potential state funding sources for transportation improvements identified in the San Vicente CMCP are summarized in **Appendix F**, **Table F-2**. Additional information on state funding opportunities can be found on the California Grants Portal⁶⁴.

LOCAL FUNDING SOURCES

The primary local funding source for transportation improvement/enhancement projects in the San Diego Region is the *TransNet* Program, which is a voter-approved half-cent sales tax used for transportation purposes. Originally approved in 1987, voters approved an extension ordinance in 2004 that prolongs the *TransNet* program to 2048. *TransNet*, administered by SANDAG, has funded more than 650 highway, transit, bicycle and pedestrian, habitat conservation, and local street repair projects totaling more than \$13.7 billion.

As part of the *TransNet* program, SANDAG has identified a variety of high-priority, *TransNet*-funded transportation improvements for the region. These prioritized infrastructure projects are part of the Early Action Program to accelerate the implementation of roadway, structures, and transit projects.

TransNet also provides funding for two competitive grant programs that support local efforts to increase walking, biking, and the use of transit throughout the region: the Smart Growth Incentive Program (SGIP) and Active Transportation Grant Program (ATGP). The SGIP provides funding for transportation-related infrastructure improvements and planning efforts that support smart growth development in designated Smart Growth Opportunity Areas. The goal of the ATGP is to encourage local jurisdictions to plan and build facilities that promote multiple travel choices and increase connectivity to transit, schools, retail centers, parks, work, and other community gathering places. The grant program also encourages local jurisdictions to provide bike parking, education, encouragement, and awareness programs that support pedestrian and bike infrastructure.

Another local sales tax funding source includes the Transportation Development Act (TDA), which is a statewide one-quarter-percent sales tax to be used for transportation purposes. In the San Diego region, the TDA program is administered by SANDAG and used exclusively for transit, non-motorized, and regional planning purposes. Other local funding mechanisms include developer impact fees, city/county gas taxes, and general fund revenues. Relevant local funding sources are identified in **Appendix F**, **Table F-3**.

⁶⁴ https://www.grants.ca.gov









NON-TRADITIONAL FUNDING SOURCES

Non-traditional funding sources are another potential funding source for transportation improvements in the San Vicente Corridor. These funding sources are outside the realm of typical funding opportunities aimed at supporting active transportation improvements, community benefit projects, and the maintenance of open space and recreation opportunities. Non-traditional funding sources most applicable to projects and programs within the San Vicente CMCP are outlined in **Appendix F**, **Table F-4**.

CMCP Project Phasing

The project inventory, as defined in **Chapter 4: Project Inventory**, is a comprehensive set of projects and programs planned for implementation in the San Vicente Corridor by 2050. To further define the implementation plan, projects were organized into the following timeframes:

Short-Term: 0 to 5 yearsMid-Term: 5 to 15 years

• Long-Term: 15 years or longer

The short-, mid-, and long-term timeframes were selected in alignment with the existing SANDAG 2021 Regional Plan⁶⁵ and anticipated project delivery processes. The timeframes are designed to roughly match the 2025, 2035, and 2050 implementation years included in the 2021 Regional Plan.

Implementation timelines were identified for each project based on anticipated environmental impacts, right-of-way requirements, and general complexity of implementation.

The project inventory in **Chapter 4: Project Inventory** is provided in **Tables 5-2, 5-4, and 5-6** with the anticipated implementation phasing and preliminary cost estimate for each project. The short-, mid-, and long-term projects and programs can be found in **Figure 5-1**, sorted by anticipated implementation phasing. **It is important to note that specific funding and relevant approvals would still need to be secured before these projects and programs are implemented.**

⁶⁵https://sdforward.com/docs/default-source/final-2021-regional-plan/appendix-a---transportation-projects-programs-and-phasing.pdf?sfvrsn=fcc1fd65_4









About one-quarter (58) of the 241 projects and programs studied in this CMCP are considered feasible for implementation in the short-term. An additional 124 projects are more complex and are anticipated to require more in-depth environmental review and design.

Those projects would be more feasible for implementation in the mid-term. The remaining 59 projects and programs have been identified as part of the long-term implementation timeframe due to the projects and programs' complexity and anticipated funding needs. A breakdown of the project inventory by timeframe is shown below in **Figure 5-1**.

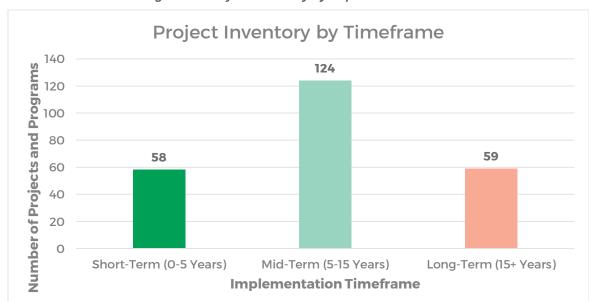


Figure 5-1: Project Inventory by Implementation Timeframe

SHORT-TERM TRANSPORTATION SOLUTIONS

Short-term transportation solutions make up nearly one-quarter of the overall project inventory, as shown in **Figure 5-1**. The goal of these projects is to have an immediate impact on the quality of life for users and residents of the San Vicente Corridor Study Area. Projects that fall into this phase generally include projects that are already in-progress, quick-build solutions, and/or small-scale improvements that do not require extensive environmental, planning, or design processes prior to implementation. Although these projects and programs are feasible to implement in the short-term, specific funding and relevant approvals would still need to be secured.









Short-Term Projects and Programs

Examples of short-term project and program types are shown below in **Table 5-1**. While this table provides a list of multiple project types for short-term implementation, each project was individually assessed for phasing and exceptions were made for certain projects. **Table 5-1**, on the following pages, presents the inventory of short-term projects.

Table 5-1: Short-Term Typical Project and Program Types

Project Category	Inventory			
Safety	 Call boxes Gateway sign Speed studies Wildlife Crossings Study 			
Evacuation	 Brush Management Emergency signal modifications Evacuation staging Push notification systems Pavement resilience Public Awareness Campaign Smart Intersection Systems (SIS) Warning sirens/signals 			
Active Transportation	 Bicycle parking Bicycle fix-it stations Class II buffered bike lanes (striping changes only) Crossing Enhancements: Mid-block Equestrian intersection enhancements Intersection enhancements: bike and pedestrian Pedestrian-scale lighting Street furniture 			
Traffic Congestion and Goods Movement	 Curbside management Gateway connector concepts (flexible fleets) On-demand microtransit shuttles On-street parking modifications Truck information and routing systems Wayfinding signage 			
Utilities	Expand existing EV charging stationsSmart parking strategies			









MID-TERM TRANSPORTATION SOLUTIONS

The 109 projects and programs defined in the mid-term implementation phase build upon the solutions defined in the short-term inventory. Many of these improvements—intersection geometry modifications, class IV bikeways, and new transit routes, for example—are larger efforts that require several years of planning, design, and construction, along with collaboration and approvals from relevant agencies.

Mid-Term Projects and Programs

Examples of mid-term project and program types are shown below in **Table 5-2**. While this table provides a list of multiple project types for mid-term implementation, each project was individually assessed for phasing and exceptions were made for certain projects. **Table 5-2** presents the inventory of mid-term projects and programs on the following page.

Table 5-2: Mid-Term Project and Program Types

Project Category	Inventory		
Safety	 Curve visibility enhancements Dynamic message signs Falling rock protection Guardrail improvement Intersection reconfiguration/safety enhancements ITS speed safety elements Median barrier Runaway truck ramps Traffic calming Two-way left-turn lane study 		
Evacuation	 CCTV infrastructure Fire access road (existing roadway improvement) Remove on-street parking Tow-truck deployment 		
Active Transportation	 Class I multi-use paths or bike paths (minor widening likely required) Class II buffered bike lanes (minor widening likely required) Class IV bikeways (minor widening likely required) Equestrian trails (minor grading likely required) Sidewalk improvements (no widening required) Trailhead parking improvements 		









Project Category	Inventory		
Traffic Congestion and Goods Movement	 Active Transportation Demand Management (ATDM) Intersection control evaluation Transit route Turnout/viewpoint 		
Utilities	 Dam safety EV charging stations Fiber optic telecommunication Stormwater quality green infrastructure Utility infrastructure enhancements 		

LONG-TERM TRANSPORTATION SOLUTIONS

The 52 projects defined in the long-term timeframe constitute the smallest portion of the overall inventory. These improvements typically involve right-of-way acquisitions, roadway widening, and/or environmental impacts. When implemented, these improvements will build out the complete network of potential improvements defined within this CMCP and continue to enhance safety, increase evacuation capacity, ease traffic congestion, and create more opportunities for people who walk, bike, use other micromobility devices, or ride horses.

Long-Term Projects and Programs

Examples of long-term projects are shown below in **Table 5-3**. While this table provides a list of multiple project types for long-term implementation, each project was individually assessed for phasing and exceptions were made for certain projects. **Table 5-3** presents the inventory of long-term projects and programs on the following page.

Table 5-3: Long-Term Project and Program Types

Project Category	Inventory		
Safety	Frontage roadsWildlife crossings		
Evacuation	Bridge wideningFire access road (new roadway)Shoulder widening		
Active Transportation	 Class I multi-use paths or bike paths (widening required) Class II buffered bike lanes (widening required) Class IV bikeways (widening required) Equestrian trails (significant grading required) Landscaped center medians Sidewalk improvements (widening required) 		









Project Category	Inventory		
Traffic Congestion and Goods Movement	 Frontage roads Intersection control evaluation resulting in roundabout or major intersection reconfigurations New roadways/extensions Truck climbing lane 		

Implementing the Project Inventory

PROJECT BUNDLING

The project team identified groups of projects from the inventory that could be implemented together to streamline the funding and construction processes. For the project bundling process, the team considered each project's geographic location, alignment with Corridor Study Area needs, alignment with state, regional, and local objectives, and level of public support. The bundled projects, described below, focus on increasing access, supporting economic development, improving safety, increasing mobility options, and reducing greenhouse gases.

Prioritizing Evacuation: Short- and Long-Term Solutions

Partner agency feedback and initial findings from the ongoing PA&ED phase of the SR 67 Highway Improvements Project have stressed the importance of prioritizing evacuation solutions for the San Vicente Corridor Study Area. This implementation strategy prioritizes these projects with a two-part bundle: priority solutions that can be implemented as short-term projects, and long-term projects that will likely require more significant design and construction processes.

The San Vicente Corridor Study Area is positioned to serve as a demonstration site for short-term solutions through intelligent transportation system (ITS) elements and technologies. By 2023, the installation of fiber optic cables along the Corridor as part of the SR 67 Pavement Rehabilitation / Fiber Communications Project will support the deployment of immediate, near-term technological improvements that facilitate major evacuations and other critical safety events. These elements include:

- Closed-circuit television cameras (CCTV)
- Energy redundancy and battery backup for traffic signal operations
- Emergency signal timing
- Warning sirens / signals
- Dynamic message signs









The installation of fiber optic cables along SR 67 will also provide necessary connections to SDG&E weather and wind monitoring stations to aid in wildfire prevention and emergency evacuations throughout the Corridor. Technology solutions will provide better real-time information and communications, rapid deployment of emergency services, and the ability to quickly deploy special traffic control strategies during evacuations and emergencies. These investments will also better prepare the corridor for emerging technologies like connected and autonomous vehicles.

Long-term projects in this bundle will build on the short-term projects and create capacity for evacuation roadway operations. In addition to addressing evacuation and safety concerns, long-term improvements concentrate on increasing reliability for travel and the overall operational efficiency of the Corridor. These strategies will consider potential impacts on community quality of life and are to be developed and implemented through equitable public engagement. These projects include:

- Shoulder-widening along SR 67
- Bridge-widening along SR 67
- New fire access roads
- Installing a Class I bikeway along SR 67 that can be used as an emergency lane for evacuation

Main Street Revitalization

The Main Street section of SR 67 has one of the highest concentrations of collisions within the Study Area. The community has a desire for Main Street to become a more pedestrian- and bicycle-friendly place and to attract more visitors to the local businesses. The existing, wide street encourages high speeds that are not conducive to a downtown atmosphere. In order to implement comfortable facilities for people walking, biking, or using other micromobility devices, a number of traffic calming elements are proposed. The following projects are proposed to be included in the Main Street Revitalization bundle:

- Traffic calming strategies
- Class II bike lanes
- Gateway signing
- Street furniture
- Bike parking
- Landscaping
- Intersection enhancements for people walking, biking, and using other micromobility devices
- Intersection operational and safety improvements at Main Street and 10th Street
- Conduit infrastructure









Mapleview Complete Streets

Mapleview Street is the main east-west connection for residents in the Lakeside community to access all major destinations east and west of SR 67. East of SR 67, Mapleview Street is very wide, with a 40-mph posted speed limit and a 25-mph posted speed limit zone. The sidewalks and bike lanes are intermittent and uncomfortable for people walking, biking, or using other micromobility devices.

The Mapleview Complete Streets project bundle will create a more comfortable space for these vulnerable users, providing more connectivity to key destinations in the community including the San Diego River Trail and the proposed bike facilities on Channel Road, Maine Avenue, Ashwood Street, and Julian Avenue. The complete streets bundle will include:

- Class IV bikeway
- Sidewalk enhancements closing sidewalk gaps and increasing sidewalk width where necessary and feasible
- EV charging stations at the park-and-ride lot on the northeast corner of Mapleview
 Street and SR 67 intersection
- Bike parking stations at key destinations along Mapleview Street
- Intersection operation and safety improvements at the following intersections:
 - Mapleview Street and SR 67
 - Mapleview Street and Ashwood Street
 - Mapleview Street and Pino Drive
 - o Mapleview Street and El Monte Road
 - Mapleview Street and Channel Road

Curve Visibility Improvements

Dynamic and/or radar-enforced curve warning systems and in-pavement lighting can be used to improve visibility of roadway geometry. Dynamic curve warning systems consist of wirelessly connected light-emitting diodes (LEDs) to illuminate static signage and can be programmed to flash sequentially or simultaneously to keep drivers from running off the road. Radar-detection can also be used to illuminate the signage only when a speeding vehicle is detected. Such systems have been shown to reduce crashes along horizontal curves by 58 percent. In-pavement lighting systems can similarly be used to improve lane guidance in low-visibility conditions and can complement dynamic curve warning. Lastly, surface friction treatments at sharp curves can supplement the visibility enhancements by providing advanced warning to drivers. With advances in technology, future strategies for enhancing safety at curves should be considered for implementation on the San Vicente Corridor.

Wildcat Canyon

Wildcat Canyon Road is the only road that provides access to and from the Barona Resort & Casino. The Wildcat Canyon project bundle includes intersection improvements for people









who walk, bike, or use other micromobility devices, and increases overall safety on Ashwood Street and Wildcat Canyon Road within the San Vicente CMCP Study Area. Specifically, the following projects on Ashwood Street and Wildcat Canyon Road are included in this bundle:

- Falling rock protection
- Class II bike lanes
- Willow and Ashwood intersection improvements overall safety improvements and pedestrian and bicycle intersection enhancements
- Wildlife crossings

Recreational Access Improvements

Access to recreation opportunities has become increasingly important for the San Vicente Corridor Study Area, and to the San Diego region as a whole, both from a public health and an economic development perspective. Project partners and members of the public indicated a desire for several projects to improve recreational access along SR 67. This bundle includes wayfinding improvements to reduce driver confusion and distraction from the road, parking enhancements to increase information accessibility and parking capacity, and on-street parking removal to increase evacuation capacity. Specifically, the following projects are included in this bundle:

- Advanced wayfinding signs for recreational destinations
- Bike parking at trailhead parking lots
- Bike fix-it stations at:
 - o SR 67 and Scripps Poway Parkway
 - Iron Mountain trailhead parking lot
 - o CAL FIRE Station by Mt. Woodson trailhead
- Smart parking system at major trailheads
- Trailhead improvements
 - Iron Mountain Trailhead: expand off-street parking capacity, pave the existing parking lot, add "clean" parking spaces, add lighting, and add solar-powered pedestrian canopies
 - Ellie Lane Trailhead: expand off-street parking capacity, pave the existing parking lot, add "clean" parking spaces, add lighting, and add solar-powered pedestrian canopies
 - Mt. Woodson Trailhead: create off-street parking alternative with "clean" parking, add lighting, and add solar-powered pedestrian canopies
- Removal of on-street parking on SR 67 near Iron Mountain and Mt. Woodson trailheads upon expansion of existing off-street parking capacity
- Iron Mountain trailhead evacuation staging area designation









Wine Country Segment Improvements

The community has expressed concerns with moving safely through the Wine Country segment of the San Vicente Corridor, with a specific focus near the Mussey Grade Road intersection. The short- and mid-term improvements on this segment have been bundled to address the needs expressed by the community.

The longer-term improvement of a frontage road along the north side of SR 67 and a Class I multi-use path will require significant right-of-way acquisition and environmental processes and are therefore separated from this bundle.

The following projects are included in this bundle:

- Speed study along SR 67
- Mussey Grade Road intersection safety enhancements and intersection control evaluation
- On-demand microtransit shuttle service
- Sidewalk construction on Mussey Grade Road near SR 67

SHORT-TERM IMPLEMENTATION STRATEGIES

The San Vicente CMCP recognizes that short-term implementation of projects and programs can be challenging and is only possible under the right conditions. The following are key strategies that can be used to implement short-term transportation solutions in the San Vicente Corridor Study Area:

- Target Caltrans State Highway Operation and Protection Program (SHOPP) funds
 - SHOPP is the state's "fix-it-first" program, which funds short-term emergency repairs, preservation, safety improvements, and some operational improvements on the State Highway System (SHS).
 - An example of a SHOPP-funded project is the SR 67 Pavement Rehabilitation /
 Fiber Communications Project, as referenced in Chapter 2: Corridor Context.
- Prioritize other quick-build solutions and funding programs
 - Caltrans and the Ramona community obtained a Clean California Local Grant Funding to implement community improvements in Downtown Ramona, including enhanced crosswalks, traffic striping, and radar speed signs to support shops and local businesses in the heart of the downtown district. These improvements were cited by community members at the Ramona Community Planning Group meeting as strong examples of government agencies quickly implementing improvements to address community needs.

SANDAG, Caltrans, and local corridor partners will continue to pursue new sources for short-term implementation funding as they become available and will continually assess opportunities for alternative project and program delivery.









Future Conditions Analysis and Performance Measures

The Future Conditions Analysis and Performance Measures section quantifies the impacts of the network of transportation solutions identified in the San Vicente CMCP. As discussed in previous chapters, the project team assessed baseline conditions (2016 Existing Conditions and 2050 No-Build Conditions) prior to the development of the project inventory and the assessment of needs. The Baseline Conditions Analysis was based on a series of performance measures which helped inform the development of needs and, in turn, the project inventory.

After the development of the project inventory, the project team analyzed a 2050 San Vicente CMCP Build (SV CMCP Build) condition using the SANDAG Activity Based Model 2+(ABM2+)⁶⁶ including the applicable transportation solutions. This model run included short-, mid-, and long-term projects from the CMCP inventory, as well as the full buildout of the 2021 Regional Plan⁶⁷, including the Sustainable Communities Strategy⁶⁸. The model run results are detailed further in the **Performance-Based Assessment of Future Conditions** section of this report and **Appendix G: Performance Assessment.**

As part of the assessment, an equity analysis was performed to understand the level of investment for social equity focus communities throughout the Corridor. The result indicated that 7% of the projects that were able to be modeled will be located in social equity focus communities. This does not consider the projects that were unable to be modeled due to the model limitations.

To supplement the model results, this chapter provides an additional assessment of future conditions using a mix of qualitative and quantitative analyses in the **Future Conditions Analysis** section. Additional tools used to evaluate corridor performance included:

- Teralytics⁶⁹
- Traffic Accident Surveillance and Analysis System (TASAS)⁷⁰
- Geographic Information Systems (GIS)

⁷⁰https://dot.ca.gov/-/media/dot-media/programs/research-innovation-system information/documents/research-results/task2906-rrs-11-19-a11y.pdf





⁶⁶ https://www.sandag.org/index.asp?subclassid=120&fuseaction=home.subclasshome

⁶⁷ https://sdforward.com/mobility-planning/2021-regional-plan

⁶⁸ https://www.sandag.org/index.asp?projectid=360&fuseaction=projects.detail

⁶⁹ https://www.teralytics.net/





The project team did not evaluate a mid-term (2035) scenario. Out of the 232 total projects in the original project inventory, just 75 were able to be coded into the ABM2+ since many of the projects are soft improvements that will not impact the performance measures included in the ABM2+. Examples of projects that were not able to be modeled include: sidewalk improvements, intersection control evaluations, and evacuation warning sirens. While these projects will not impact the quantitative performance measure outputs, they will provide noted benefits to corridor users and help advance the need categories identified in **Chapter 3: Needs Assessment**. Additionally, due to the more limited number of projects that were able to be modeled in the 2050 Build scenario, and the limited population and geographic area of the corridor, the ABM2+ performance measure results were not anticipated to show significant differences between the No-Build and Build conditions. Therefore, the project team evaluated the cumulative impacts of all short-, mid-, and long-term projects under 2050 Build conditions.

FUTURE CONDITIONS ANALYSIS

The project inventory generates many impacts that are not able to be modeled by the ABM2+ program and are therefore not measured by the performance measures (**Appendix G**: **Performance Assessment**). This is because individual transportation solutions can have unique characteristics that cannot be incorporated into the program, and thus the program cannot quantify the impacts of these elements. Nevertheless, the solutions provide:

- Increased evacuation capacity
- Improved incident management and travel time reliability
- Increased mobility opportunities for people who walk, bike, use other micromobility devices, or ride horses
- Enhancements to strengthen economic development

Some of these additional impacts are presented below.

Safety

As has been emphasized throughout the San Vicente CMCP, safety for all users is the highest priority. While the individual safety-related projects in this CMCP (detailed in **Chapter 4: Project Inventory**) are designed to address specific safety issues, the majority have a direct bearing on reducing vehicle collisions in the Corridor Study Area.

Based on Collision Reduction Factors (CRFs) established by Caltrans⁷¹, certain reductions in collisions can be anticipated due to the implementation of proven countermeasures. **Table 5-4** below shows the CRFs for selected safety-related improvements along the Corridor.

⁷¹ Caltrans, Local Roadway Safety, Version 1.5, April 2020









Table 5-4: Collision Reduction Factors (CRFs) for Selected Improvements

Improvement	Location	Caltrans Collision Reduction Factors ⁷² (Proximate to Improvements)
Dynamic Message Signs	Entire corridor	30%
Enhanced Delineation, Advanced Warnings, and Friction Treatments	Entire corridor	15% to 55%
Guardrail Improvements	Entire corridor	25%
Intelligent Transportation System (ITS) Elements	Entire corridor	30%
Intersection Safety Improvements	9 Intersections	20%
Speed Studies/Traffic Calming	5 locations	15% to 30%
Wildlife Crossings	17 locations	80% ⁷³

Some of the safety-related improvements shown in **Figure 5-4** will be incorporated along the entire Corridor Study Area in the areas of identified need, including dynamic message signs; enhanced delineation, advanced warnings, and friction treatments; guardrail improvements; and ITS elements. This collective set of projects can reduce collisions by 15 percent to 55 percent, depending on the improvement type. Other safety-related improvements are more localized, including intersection safety improvements, speed studies/traffic calming projects, and enhanced wildlife crossings, with these specific locations seeing collision reductions of 15 percent to 80 percent. Together, these projects represent a robust set of approaches to help mitigate the safety hazards identified along the Corridor.

⁷³ CRF for animal fencing projects





⁷² Caltrans, Local Roadway Safety, Version 1.5, April 2020.





Multimodal Accessibility

Accessibility is another priority for the San Vicente CMCP. The set of active transportation projects identified in the CMCP will measurably strengthen and expand the network of active transportation facilities throughout the Corridor, enhancing access for users of all modes to and through the Corridor. Implementation of the San Vicente CMCP will result in 17 Class I Multi-Use Path or Bike Path projects, 36 Class II Buffered Bike Lane projects, and 20 Class IV Bikeway projects. These projects add up to 106 miles of new, protected bike facilities within the Study Area. These are supplemented with six bicycle rest stops and/or fix-it stations, primarily along the Poway segment (a popular area for recreational cyclists in the Study Area), and four bicycle parking facilities. These improvements help to address concerns raised by the community and historical collision data showing that 20 of the collisions in the Corridor Study Area involved bicyclists. The lack of dedicated and protected facilities for bicyclists hinders greater use of this mode in the San Vicente Corridor Study Area.

In addition to the expanded network of multi-use paths, the CMCP adds nearly 18 miles of sidewalk improvements throughout the Corridor as well as bicycle and pedestrian safety enhancements to 16 intersections, mostly in Lakeside and Ramona. These projects will help expand the sidewalk network in these communities and add elements such as crosswalk markings and signal enhancements that, together, increase safety for people who walk, bike, and use micromobility devices.

The CMCP also adds approximately 45 miles of equestrian trails along the Corridor in Lakeside, the Poway segment, and Wine Country segment. These improvements address the identified needs for equestrian facilities including separated, soft-surface trails with dedicated roadway crossings and modified push-button crossings for safe transportation and recreation.

Evacuation

As discussed in **Chapter 4: Project Inventory**, this CMCP supports the selected alternative of the PA&ED phase of the SR 67 Highway Improvements Project—which is projected to conclude in Summer 2025—as the primary recommendation to increase evacuation capacity. This alternative is intended to create the necessary temporary evacuation lanes, as will be determined by the final study. There are currently three alternatives undergoing analysis and all three are being considered as potential improvements for the SR 67 Highway Improvements Project.

Alternative 1 proposes two lanes in each direction along SR 67 between Highland Valley Road/Dye Road and Mapleview Street. In addition to the 4-lane facility, this alternative includes a 14-foot paved median with channelizers on either side, one 8'-wide shoulder in each direction, and one 8-foot soft shoulder in the southbound direction.





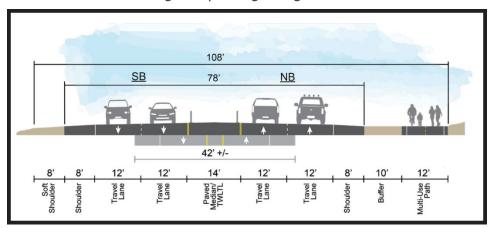




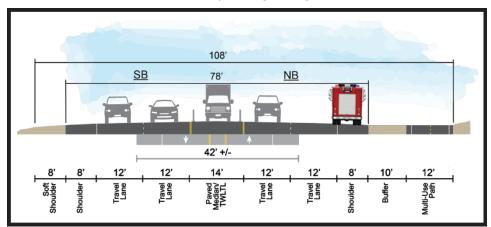
This alternative also includes a 12'-wide Multi-Use Path along the northbound side of the route, with a 10'-wide buffer between the path and the shoulder to provide the standard 20'-wide clear recovery zone between the SR 67 traveled way and the multi-use path traveled way. **Figure 5-2** shows the regular operation cross section and the emergency evacuation cross section for this alternative.

Figure 5-2: SR 67 Highway Improvements Project - Alternative 1

Regular Operating Configuration



Evacuation Operating Configuration



Alternative 2 proposes to maintain the existing traveled-way configurations and widen shoulders to 8 or 11 feet as needed to improve evacuation capacity. North of Poway Road, Alternative 2 also includes a 12'-wide multi-use path along the northbound side, with a 10'-wide buffer between the path and the shoulder to provide the standard 20'-wide clear recovery zone between the SR 67 traveled way and the multi-use path. **Figure 5-3** shows the regular operation cross section and the emergency evacuation cross section for Alternative 2.



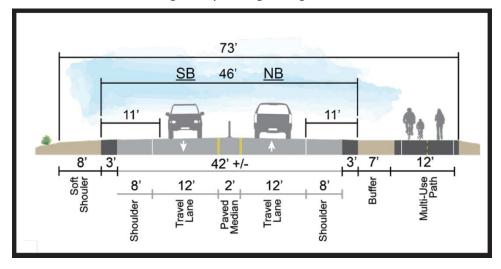




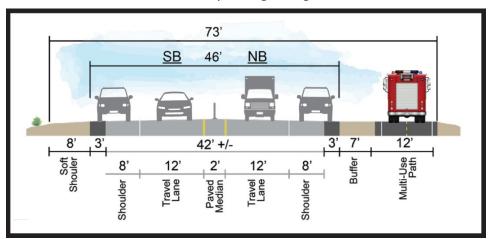


Figure 5-3: SR 67 Highway Improvements Project - Alternative 2

Regular Operating Configuration



Evacuation Operating Configuration



Alternative 3 focuses on minimizing the cross-section footprint of the SR 67 improvements while meeting evacuation needs. Between Mapleview Street and Poway Road, this alternative includes a 12-foot multi-use path with a 20-foot clear recovery zone between the SR 67 traveled way and the multi-use path. **Figure 5-4** shows the regular operation cross section and the emergency evacuation cross section for Alternative 3.



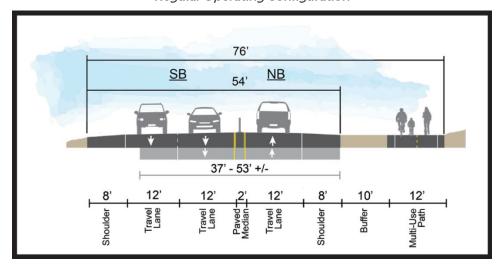




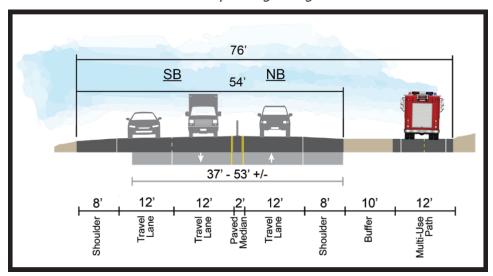


Figure 5-4: SR 67 Highway Improvements Project - Alternative 3

Regular Operating Configuration



Evacuation Operating Configuration



Because roadway shoulders and appropriately sized multi-use paths can be used as evacuation lanes, the previously mentioned Class I Multi-Use Path or Bike Path projects in the CMCP directly impact evacuation capacity. Namely, the CMCP includes these facilities along four specific areas that will help alleviate physical obstructions to evacuation operations: Mapleview Street to Willow Road, Willow Road to Vigilante Road, Poway Road to Archie Moore Road, and Archie Moore Road to Highland Valley Road/Dye Road.









As the San Vicente CMCP supports the recommended improvements determined to sufficiently increase evacuation capacity at the conclusion of the PA&ED phase of the SR 67 Highway Improvements Project, evacuation capacity will be increased as part of the full buildout of the project inventory.

Traffic Congestion

The San Vicente CMCP identified traffic congestion as a key area of concern for the San Vicente Corridor. While the CMCP includes a set of projects that are specifically designed to decrease vehicular traffic congestion (described in **Chapter 4: Project Inventory**), the ABM2+ model analysis did not find a significant change for improvement.

The San Vicente CMCP sought to enhance opportunities for transit use after the initial existing conditions review of the Corridor found that no households are located within one-half mile of a transit station that provides frequent service. As a result, a new transit route and increased frequency of the existing bus route is planned as part of this CMCP. Furthermore, the San Vicente CMCP supports multimodal travel through the creation of dedicated and protected pathways with comfortable connections for people who walk, bike, or use other micromobility devices.

Economic Development

The San Vicente CMCP also identified economic development as an important focus. The community expressed a desire to enhance tourism and support for small businesses in the Study Area by creating a walkable environment ("main-street feel") in Ramona and additional community connections in Lakeside.

The CMCP supports economic development along the Corridor in multiple ways. As previously discussed, the active transportation projects listed above increases the Corridor's multi-modal network capacity, especially in Ramona and Lakeside but also in the Wine Country segment. These pedestrian-friendly and bike-friendly projects help to create a welcoming atmosphere in these communities. The projects are augmented by others in the CMCP that help to cement the notion of Ramona and Lakeside as "destinations," including:

- Landscaped center medians on Main Street in Ramona
- Pedestrian-scale lighting projects in Ramona and Lakeside
- Outdoor benches and seating area in Ramona
- Destination signs for visitors
 - o Gateway sign for Lakeside
 - 'Welcome to Downtown Ramona' archway
- Three traffic calming safety projects in Ramona









Other projects in the CMCP will make the Corridor more attractive to recreational users from outside the Study Area. Visitors to Recreation Ridge and the Poway segments will benefit from a number of facilities and amenities, including:

- Improved trailhead parking at three locations
- Improved lighting at the Recreation Ridge trailhead parking
- Wayfinding signage at Recreation Ridge
- Shuttle service to trailheads

An increase of recreational visitors to the Corridor means that more people will be inclined to shop or dine along the Corridor as a part of their visit.

In addition to increasing bike and pedestrian activity, the ability for businesses and organizations to rely on efficient freight and labor logistics within the Study Area is crucial to the economic development of the Corridor. The proposed smart intersection systems at multiple intersections will allow for increased and more reliable freight efficiencies within the corridor as it continues to grow. Additionally, new and improved bus and active transportation routes will provide workers with cheaper and more efficient transportation alternatives to get to job centers within and around the Study Area.

EVALUATION FRAMEWORK

The evaluation framework was established with input from the Performance Measures Subject Matter Expert group. The framework consists of performance measures to assess the differences between baseline and build conditions as planned by this CMCP. The development of the framework was completed prior to the development of the project inventory.

PERFORMANCE-BASED ASSESSMENT OF FUTURE CONDITIONS

A performance-based assessment was conducted to evaluate benefits of the implementation of the 2021 Regional Plan and the CMCP project inventory. This assessment was developed utilizing the latest SANDAG model, ABM2+74. Additional information on the methodology and performance measure results are detailed in **Appendix G: Performance Assessment**.

⁷⁴ https://www.sandag.org/index.asp?subclassid=120&fuseaction=home.subclasshome









Of the scenarios analyzed, the comparison between the 2016 baseline conditions and the build out of the 2021 Regional Plan and San Vicente CMCP by 2050 showed the most significant change. Transit, protected bike facilities, and roadway configuration projects were able to be modeled (75 of the approximately 241 transportation solutions). The benefits of projects like emergency shoulder lane operations, sidewalk improvements, equestrian facilities, changeable message signs and other technology solutions, and utility enhancements are not reflected in the modeled performance analysis. Given the limited capabilities to evaluate the project inventory within the travel demand model, the performance measure results show more limited differences between the scenarios.

Implementation of the project inventory is anticipated to have the following results*:



Increase evacuation capacity



- Decrease overall vehicle miles traveled per resident and per employee
- Improve incident management and reliability



- Increase combined bicycle and pedestrian miles traveled by more than 10%
- Increase multimodal access via:
 - 105 miles of new, protected bike facilities with rest stop and parking amenities
 - 45 miles of new equestrian trails



Increase transit access to all social equity groups



Reduce the number and severity of collisions



Enhance local economic development

*2050 San Vicente CMCP scenario compared to 2016 baseline scenario



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