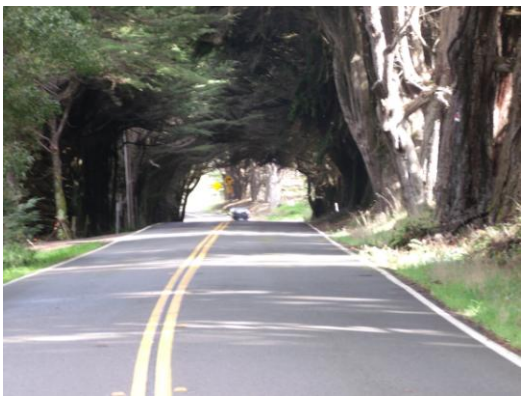
1. Introduction and Summary

1.1. Project Description

The State Route 1 corridor in Mendocino County is the primary north-south route along the coastal portion of the county, extending over 100 miles from Leggett on Route 101 south to the Sonoma County line. State Route 1 is a curving two-lane, conventional highway with narrow to no shoulders. The road traverses sections of forested, mountainous terrain as well as coastal terrace landscapes with agricultural land uses. Development ranges from very low density to rural communities, with a larger community at Fort Bragg. In Mendocino County, State Route 1 is classified as a rural minor arterial. Currently, less than half the length of State Route 1 in Mendocino County meets the concept roadway width (two 12-foot travel lanes with 4-foot shoulders or 32-feet of paved width).

The purpose of this effort is to prepare an Engineered Feasibility Study (Study) to improve the State Route 1 corridor for bicycles along the Pacific Coast Bike Route (PCBR) and for pedestrians where the California Coastal Trail (CCT) is co-located in the right-of-way. The study area is the entire north-south length of the coastal State Route 1 in Mendocino County. This project was funded with State Planning & Research (SP&R) grant funds, provided by Caltrans.



State Route 1 traverses sections of forested, mountainous terrain as well as coastal terrace landscapes with agricultural land uses. Development ranges from very low density to rural communities.

1.2. Objective

The Engineered Feasibility Study objective was to collect planning-level data for the entire 100+ mile study corridor and analyze it to characterize conditions, opportunities and constraints for PCBR and CCT improvements. Based on this data and extensive stakeholder and public input, the Study identifies potential priority areas for improvement. It provides preliminary planning-level cost estimates for design, environmental review and mitigation, permits, and construction. This information will be used to further review and define the potential projects and apply for grant funding for priority improvement segments that are identified in the Study.

This project is a study rather than a plan. The resulting "Potential Improvement Segments" do not define specific improvement designs. They represent general concepts for the type of improvements suitable in these locations. These concepts will need to be resolved and refined through subsequent detailed stages of study and design to be funded by grants based on this preliminary information.

1.3. Study Process

Caltrans District 1 Executive Staff and Transportation Planning, in close coordination with the Mendocino Council of Governments (MCOG), led the study as project managers.

A Technical Advisory Group (TAG) guided the study, meeting at key stages throughout the project. Two series of widely-noticed public workshops in four regions of the coast were held:

- A series early in the Study process sought input on where and why potential improvements were needed, the type of improvements, and the criteria by which improvements should be evaluated and prioritized; and
- A second series reviewed a draft report with initial identification of Potential Improvement Segments.

Public input on the project was gathered at workshops held throughout the region.

The consultant team consisted of Alta Planning + Design, GHD Engineers and Environmental Scientists, and Redwood Community Action Agency (RCAA) on public outreach support. Public outreach and workshop organization and facilitation for the project was provided by VRPA Technologies through a separate contract with Caltrans.

1.4. Methodology

The Study analyzes 100+ miles of highway through a planning-level Geographic Information System (GIS) "model" of the existing highway and the potential improved condition. The analysis used existing digital imagery and publicly available GIS data, augmented by limited field data collection and data provided by Caltrans, MCOG, Land Trust of Mendocino County, and other project participants.

A GIS-based field inventory of the study corridor identified relevant conditions and gaps in the existing bicycle and pedestrian facilities. The field data captured physical conditions such as shoulder widths, adjacent slopes, vegetation, urban improvements, and bridges. **Appendix B** contains a detailed description of the data collected and how it was used to analyze opportunities. Field data were collected by using tablet computers to capture Geographic Positioning System (GPS)/GIS data about relevant conditions for each quarter-mile segment of State Route 1 over the approximately 105-mile study area.

The field data were used to complete a planning-level assessment of physical conditions and constraints, which was correlated to data about bike and pedestrian use, collisions, traffic, and other relevant physical conditions. All the data were considered in the context of input from the public and stakeholders about where and why improvements are needed. This input, along with criteria to identify, evaluate and prioritize potential improvements, was obtained through a series of community workshops and Technical Advisory Group meetings.

Further remote inventory and analysis was completed using Google Earth geographic data and Streetview to check site conditions for shoulder widening and/or trail improvements along State Route 1 to accommodate the PCBR, and where applicable, the CCT.

Community Plan areas that have already undergone study and planning for bike route and CCT improvements at a more detailed level than this assessment, or which have already been improved, were reviewed and referenced in the analysis. Also, bridges and other highway facilities that are already improved or in the planning and design process to be improved to standards for bike and pedestrian access are accounted for on the maps and in the analysis.

1.5. Report Organization

This report is organized as follows:

- Executive Summary. A report of key project findings.
- Chapter 1. Introduction and Summary. Introduction and summary of the project.
- Chapter 2. Identification and Evaluation of Potential Improvements. Presents the potential improvement projects, with policies and standards, improvement design types, evaluation criteria, and a summary of potential improvements.
- Chapter 3. Recommendations. Discusses and maps the segments and provides details, including cost estimates, for potential improvement sections.

Appendices following the main document include:

- Appendix A. Relevant Documents and References
- Appendix B. Study Data and Analysis Methodology
- Appendix C. Cost Estimate Methodology
- Appendix D. Technical Advisory Group and Public Participation Process
- Appendix E. Typical Project Implementation Steps

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