

3. ENVIRONMENTAL SETTING, IMPACTS AND MITIGATION MEASURES

3.1 INTRODUCTION

This chapter presents information on existing environmental conditions in the area surrounding the proposed project and examines the potential environmental impacts of the proposed project for the following environmental topic areas:

- Geology, Soils and Seismicity
- Water Resources
- Hazardous Materials
- Air Quality
- Transportation (Traffic, Transit, Bicycle, and Pedestrian)
- Noise and Vibration
- Energy
- Biological Resources (Wetlands, Vegetation and Wildlife)
- Parks and Recreation
- Land Use and Planning
- Public Facilities and Safety
- Visual/Aesthetics
- Historic Resources
- Archaeological Resources

The chapter is organized by issue area; each section in the chapter presents the study area (area of potential effect), regulatory setting that pertains to the topical area, the environmental setting (existing conditions and affected environment), significance criteria used to assess the impacts, methodology for assessing impacts within that issue area, summary of impact findings, identification of specific construction-related and long-term impacts of the proposed project on that environment, mitigation measures to avoid or reduce impacts and a discussion of cumulative impacts. In addition, the impact analysis in each section classifies the impacts based on the significance criteria. While Chapter 3 focuses on the impacts of the proposed project, alternatives to the proposed project are discussed in Chapter 4.

3.1.1 Assessment Methodology

Study Area

For each resource listed above, a study area was established based on the “area of potential effect.” The geographical boundaries of this study area vary among the issue areas. In some cases, the study area is broader than the project corridor and station and maintenance facility sites to factor in any direct or indirect impacts that may occur on resources adjacent to, but outside the area of physical disturbance. The study area is described in each section of Chapter 3.

Environmental Setting

The analysis of each issue area begins with an examination of the existing physical setting (baseline conditions) as determined pursuant to Section 15125(a) of the CEQA Guidelines that may be affected by the proposed project. The effects of the proposed project are defined as changes to the environmental setting that are attributable to project components or operation.

Significance Criteria

Appendix G of the CEQA Guidelines provides guidance for determining the significance of project impacts. These guidelines require that physical changes in the environment be evaluated based on factual evidence, reasonable assumptions supported by facts and expert opinion based on facts.

Significance criteria or environmental thresholds are identified for each environmental issue area. The significance criteria serve as a benchmark for determining if a project action would result in a significant adverse environmental impact when evaluated against the baseline. According to CEQA Guidelines, a significant effect on the environment means "...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project..." (14 CCR Section 15382). The significance criteria are based on CEQA Guidelines, professional experience, and review of other similar projects. "Threshold of significance" can be defined as: "A quantitative or qualitative standard, or set of criteria" (Governor's Office Of Planning and Research, 1994).

Impact Analysis

Impacts associated with the proposed project have been identified in accordance with CEQA (Public Resources Code Section 21000-21177). Each short- or long-term impact is numbered and classified. Both direct and indirect impacts are identified, and construction-related impacts are differentiated from long-term effects. Impacts are classified as:

- Significant unavoidable: Substantial adverse impact that exceeds established or defined significance thresholds and remains significant after mitigation. Mitigation may be identified, but the mitigation measure would not reduce the impact to a less than significant level;
- Significant mitigable: Substantial adverse impact that exceeds an established or defined threshold, but can be eliminated or reduced below an issue's significance threshold with implementation of one or more mitigation measures;
- Less than significant: Adverse impact that does not meet or exceed an issue's established or defined significance thresholds; or
- Beneficial: Effect of the proposed project that is an improvement to an environmental issue area in comparison to the baseline conditions.

The focus of the analysis is on potentially significant impacts. Issue areas that were determined during the scoping process to have less than significant impacts are summarized in Chapter 5. The summary of impacts in each individual issue area in Chapter 3 notes specific topics where a finding of "no impact" was made and the topic is not furthered analyzed in the discussion of specific impacts and mitigation measures.

Formulation of Mitigation Measures

When significant impacts are identified, feasible mitigation measures are formulated to eliminate or reduce the intensity of the impacts and focus on the protection of sensitive resources. The effectiveness of a mitigation measure is subsequently determined by evaluating the impact remaining after its application. Those impacts exceeding the impact significance criteria after mitigation are considered residual impacts that remain significant. Implementation of more than one mitigation measure may be needed to reduce an impact to a level that is not of significance. The mitigation measures recommended in this document are identified and numbered in the impact assessment sections and will be included in the Mitigation Monitoring Program.

If any mitigation measures become incorporated as part of the project's design, they are no longer considered mitigation measures under CEQA. If they eliminate or reduce a potentially significant impact to a level below the significance criteria, they eliminate the potential for that significant impact since the "measure" is now a component of the proposed project. Such measures incorporated in the project design have the same status as any "applicant proposed measures." The measures that are part of the proposed project are listed in Section 2.9, Environmental Compliance Measures. Additional mitigation measures are recommended in the individual issue area impact assessments where necessary to reduce or avoid significant adverse impacts.

Relationship of Impact Analysis to Technical Reports

Technical reports were prepared for the Sonoma-Marín Area Rail Transit (SMART) passenger rail project in advance of this DEIR. These reports document conditions within the project study area and assess the impacts of the proposed project and alternatives. Data and information from these reports were used to prepare this DEIR. Most of the reports were prepared in 2004. Additional or updated data may have been required to complete the DEIR. In most situations this updated information was not incorporated into the technical reports. As a result, discrepancies between the DEIR and the technical reports may be found. In such cases, the information in the DEIR should be considered the most up-to-date and accurate. The impact assessment in the DEIR may differ from assessments in these technical reports due to the fact that the technical report analyses were based on preliminary project description information. Since completion of the technical reports, the project description has been refined, and many measures identified as “mitigation” in the technical reports have been incorporated into the proposed project either as part of the project design or as environmental compliance measures (see Section 2.9).

Technical reports have been prepared for the following subject areas and are incorporated by reference into this DEIR:

- Geology, Soils and Seismicity
- Hydrology and Water Quality
- Hazardous Materials
- Air Quality
- Travel Demand Forecasting (Appendix I)
- Noise and Vibration
- Biological Resources
- Community Impacts and Land Use
- Visual Quality
- Historic Resources

Supporting technical information regarding the transportation calculations is available in the reference document - *Transportation Technical Data* (Parsons Brinckerhoff, 2005).

Cumulative Projects

CEQA requires a project to analyze cumulative impacts in addition to direct and indirect impacts. According to CEQA Guidelines Section 15355, cumulative impacts refers to “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” Section 15130 of the CEQA Guidelines requires that an EIR discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable, as defined in 14 CCR Section 15065(c).

In order to analyze a proposed project’s contribution to cumulative impacts, CEQA requires that the lead agency identify reasonably foreseeable projects in the vicinity of the proposed project, summarize their effects, identify the contribution of the proposed project to cumulative impacts in the project region, and recommend feasible options for mitigating or avoiding the project’s contribution to any significant cumulative effects (CEQA Guidelines Section 15130 [b][3]).

The cumulative impacts analysis for this EIR considers the impacts on the community generated by the proposed project in combination with other projects in and around the project corridor which have been completed over the past four years, are currently under construction or have been approved for future development. The list of projects below was compiled based on discussions with various local planning agencies, non-profit housing agencies, developers, and commercial real estate brokers.

The cumulative project list for this Draft EIR includes the following projects that are either reasonably foreseeable or are expected to be constructed or operated in the vicinity of the proposed project:

- Town Green Village Phase I, Windsor
- Town Green Village Phase II, Windsor
- Town Green Village Phase III, Windsor
- Bridge Housing, Santa Rosa

- Burbank Housing, Santa Rosa
- Proposed Food and Wine Center, Santa Rosa
- Santa Rosa Railroad Square Station TOD
- Mountain Shadow Apartments, Rohnert Park
- Federated Indians of Graton Rancheria Hotel and Casino Resort Project, Rohnert Park
- Cotati Station Townhomes, Cotati/Rohnert Park
- Turnbridge Homes, Petaluma
- Basin Street Landing, Petaluma
- Petaluma Depot Station TOD
- Marin Business Center, Novato
- Atherton Oaks, Novato
- Woodside Office Center, Novato
- Pointe Marin Phase I, Novato
- Pointe Marin Phase II, Novato
- Pointe Marin Phase III, Novato
- Albertsons Grocery Store, Novato
- Newport and Sunny Cove, Novato
- Hamilton Landing Office Park, Novato
- Meadow Park, Novato
- Vista Marin, San Rafael
- Redwood Village, San Rafael
- San Rafael Corporate Center
- The Lofts at Albert Park, San Rafael
- Monahan/EAH Development, Larkspur
- Campus Properties Development, Larkspur

For more detailed information on the list of cumulative projects please see Appendix D.

In addition to this list of development projects, potential future freight train operations on the project corridor north of Highway 37 are considered in the cumulative analysis. There is no adopted service plan or schedule for start-up; however, preliminary operations planning calls for four northbound and four southbound trains per day running five to six days a week.

For air, energy and transportation the cumulative analysis is based on regional growth projections for the year 2025, rather than individual projects listed above.

3.1.2 Key Assumptions

In order to assess the effects of the proposed project, it is necessary to make assumptions about future environmental conditions at the time the project would be fully implemented.

- The base year or existing conditions for the transportation analysis is 2000, as that is the year for which SMART has the most current validated travel demand model for the transportation network.
- Implementation of the proposed project would require passage of a sales tax measure in the two-county SMART District to fund capital and operating costs. Assuming passage of the measure in November 2006, construction of the project would occur over two years (2007 through 2008). However, the horizon year for evaluating impacts in the issue areas of transportation, air quality and energy is 2025. Following this approach, the physical components of the proposed project can be compared to future baseline conditions in 2025 with regard to population and economic growth, future transportation improvements and future land uses. The transportation analysis also includes an analysis of interim conditions in the year 2010. Further details on the methodology for utilizing the 2025 horizon year are provided in the transportation analysis in Section 3.6.

- ABAG's adopted Projections 2002 forms the basis for developing future baseline population and employment scenarios for the proposed project. See Section 5.3 (Growth-inducing Impacts) for further details on growth projections.
- The transportation analysis uses regional projections to determine future cumulative development and growth. These regional projections, rather than specific projects, are incorporated into the transportation modeling analysis (see Section 3.6 for additional details on methodology). Both the air quality and energy analyses use transportation modeling results to evaluate the effects of the proposed project assuming the projected population and employment growth in the region and its effect on generating increased travel. Thus, for transportation, air quality and energy, the travel demand and associated air emissions and energy consumption for the proposed project conditions is considered the same as the cumulative condition for CEQA purposes.