CHAPTER 4.0 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION AND/OR MITIGATION MEASURES

This chapter describes existing conditions and evaluates the potential environmental impacts that would occur with implementation of the No Build and build alternatives. This chapter also includes analyses of the potential impacts of the Hybrid Alternative/Locally Preferred Alternative (LPA) as modified following publication of the Draft EIS/EIR. Section 2.2.7 includes a detailed description of the Hybrid Alternative as modified. Chapter 4 is divided into 17 sections covering different resource topics that could potentially be affected by the project. The typical section format includes a description of the environmental setting as it relates to the specific resource topic; a discussion of the impacts that could result from implementation of the project; and a list of measures that would avoid, minimize, or mitigate/compensate for any adverse effects of the project. A series of technical studies, prepared for the Geary BRT project, informed the environmental analyses presented in several sections of this chapter. Such sections are denoted with an asterisk below. These technical studies are incorporated by reference and are available on SFCTA's website or upon request to SFCTA through the following contact:

Mr. Colin Dentel-Post, Senior Transportation Planner
San Francisco County Transportation Authority
1455 Market Street, 22nd Floor San Francisco, CA 94103
colin.dentel-post@sfcta.org

Topics Addressed in the Draft EIS/EIR

- 4.1 Land Use
- 4.2 Community Impacts
- 4.3 Growth
- 4.4 Visual Resources
- 4.5 Cultural Resources*
- 4.6 Utilities
- 4.7 Geology/Soils/Seismic/ Topography
- 4.8 Hazards and Hazardous Materials*
- 4.9 Hydrology and Water Quality
- 4.10 Air Quality/Greenhouse Gases*
- 4.11 Noise and Vibration*
- 4.12 Energy
- 4.13 Biological Resources*
- 4.14 Environmental Justice
- 4.15 Construction Impacts
- 4.16 Irreversible and Irretrievable Commitment of Resources
- 4.17 Relationship between Local Short-Term Uses of the Environment and Maintenance and Enhancement of Long-Term Productivity

*Separate technical report(s) was/were prepared for these resource topics and are included as appendices to this Final EIS and/or are on file with SFCTA.

How this Chapter is Organized

Sections 4.1 through 4.15 analyze the potential effects of the proposed project on the human environment, physical environment, and natural environment. Information presented in these discussions closely follow the outline listed below.

- **Regulatory Setting**
  - This discussion outlines federal, state, and local policies relevant to the Geary corridor.
- **Affected Environment**
  - This discussion provides background information on the specific resource topic and discusses existing conditions in the Geary corridor.
- **Environmental Consequences**
  - This discussion compares the existing conditions of each resource topic to the No Build and build alternatives. The discussion is divided into *operational* effects and *construction* effects.
- **Avoidance, Minimization, and/or Mitigation Measures**
  - This discussion defines the measures to avoid, minimize, or compensate for potential direct or indirect adverse effects of the project. The discussion is divided into *operational* measures and *construction* measures.

Characterizing Baseline Conditions

According to Section 15125(a) of the CEQA Guidelines, existing conditions are normally the physical environmental conditions in the vicinity of the project at the time the Notice of Preparation (NOP) is published. The NOP for the project was published in November 2008.

Given the amount of time that has passed since the publication of the NOP, some of the descriptions of existing conditions have been updated where new, more relevant information is available (including traffic data) and/or recent site visits identified altered conditions from the date of NOP issuance. However, this does not form a reasonable basis for comparison, since none of the build alternatives would foreseeably be constructed before the year 2020. As noted in Chapter 2, many land development and transportation related projects are expected to be open and operational in or near the Geary corridor by that time and are expected to influence existing conditions in several environmental resource areas (including but not limited to traffic, air quality, noise, and visual conditions). Therefore, unless otherwise noted, this Final EIS uses projected year 2020 conditions for the No Build Alternative as the environmental baseline for many topic areas. This future baseline is intended to better represent anticipated corridor conditions at the time the project may open.

All of the environmental resource areas also evaluate horizon year (2035) effects. The lead agency allows project sponsors, to calculate evaluation criteria using horizon year-based estimates as well as current year estimates. As previously discussed, year 2020 conditions for the No Build Alternative has been selected as the environmental baseline against which to compare the opening and horizon year build alternatives. SFCTA and SFMTA have selected year 2035 as the project's horizon year.

Page Intentionally Left Blank