Appendix B:

Existing Conditions Support Materials

Final Report



B.0 Existing Conditions Support Materials

B.1 Ownership

Figure B-1 shows the presence of owner-occupied residential dwelling units in the study area. Although overall residential land uses only comprise a small portion of the study area, approximately half of the residential units are owner-occupied. It should be noted, however, that the mobile home parks are counted as being owner-occupied, even though the units a mobile.

Morena Blvd Station Area Planning Study

Final Report



Figure B-1:Owner-Occupied Residential



B.2 Noise Setting

Introduction

The following analysis is based on noise measurements conducted within the study area. It includes a discussion of existing acoustical setting of the area, applicable City of San Diego noise standards for various land zones in the area, and practical noise abatement measures for planning and rezoning purposes.

Existing noise sources of potential significance in the study area include vehicular traffic on the local circulation network, passenger and freight rail traffic, and industrial zones, which may impact properties in their immediate vicinity. Primary noise generators in the local circulation network are Interstate 5 (I-5) and Morena Boulevard.

Definitions

Sound is created upon an alteration in pressure, normally of air. It travels in waves. Its pressure level, energy level, intensity level, etc. can be measured. Sound level refers to Sound Pressure Level (SPL).

Noise is defined as unwanted or excessive sound. It is broadly recognized as a form of environmental degradation. Technically, noise and sound are similar and are often used interchangeably.

Noise abatement refers to the technology of controlling sound impacts to meet acceptable guidelines and regulations, consistent with economic and operational considerations.

Average or **equivalent sound level (Leq)** is the average sound measured during a specific period (e.g., Leqh refers to Hourly Average Sound Level).

Units of sound are expressed as **Decibels (dB)** and the "A"-weighted sound filter is often used in environmental impact analysis because it closely approximates perception of loudness by humans (dB-A).

Community Noise Equivalent Level (CNEL) is the time-weighted annual sound level. Time-weighting technique applies a penalty to hourly sound levels during certain periods of evening and/or nighttime hours. CNEL applies a 5 dB-A penalty to the evening hours of 7 pm to 10 pm, and a 10 dB-A penalty to the nighttime hours of 10 pm to the following 7 am. These time periods and penalties were selected to reflect people's sensitivity to sound as a function of activity.

Day-Night Equivalent Level (Ldn) is similar to CNEL except it does not apply the evening hours' penalty. Ldn and CNEL are often used interchangeably.

Applicable Standards

The Noise Element of the City of San Diego General Plan implements many regulations, plans, and studies adopted by the state, the Airport Land Use Commission, the military, and the City's Noise Ordinance. These guidelines and regulations are presented in Table B-1 below.



Final Report

| Regulation | Description |
|--|--|
| Airport Noise Compatibility Planning (Code of Federal Regulations, Part 150) | Part 150 identifies compatible land uses with various levels of noise exposure to noise by individuals for local jurisdictions to use as guidelines, since the federal government does not have local land use control. |
| California Environmental Quality Act (CEQA) | CEQA considers exposure to excessive noise an environmental impact. Implementation of CEQA ensures that during the decision-making process stage of development, city officials and the public will be informed of any potentially excessive noise levels and available mitigation measures to reduce them to acceptable levels. |
| California Noise Insulation Standards (California Code of Regulations, Title 24) | Title 24 establishes an interior noise standard of 45-dBA for multiple unit and hotel/motel structures. Acoustical studies must be prepared for proposed multiple unit residential and hotel/motel structure within the Community Noise Equivalent (CNEL) noise contours of 60-dBA or greater. The studies must demonstrate that the design of the building will reduce interior noise to 45-dBA CNEL or lower. |
| California Airport Noise Standards (California Code of Regulations, Title 21) | Title 21 establishes that the 65-dBA CNEL is the acceptable level of aircraft noise for persons living near an airport. |
| Air Installations Compatible Use Zones (AICUZ) Study (US Department of Defense) | The AICUZ study establishes land use strategies and noise and safety criteria to prevent encroachment of incompatible land use from degrading the operational capability of military air installations |
| Airport Land Use Compatibility Plans (ALUCP) | The ALCUPs promote compatibility between airports and the land uses that surround them to the extent that these areas are not already devoted to incompatible land uses. The city is required to modify its land use plans and ordinances to be consistent with the ALUCPs or to take steps to overrule the Airport Land Use Commission (ALUC). |
| The City of San Diego Noise Abatement and Control Ordinance (Municipal Code Section 59.5.0101 et seq.) | Provides controls for excessive and annoying noise from sources such as refuse vehicles, parking lot sweepers, watercraft, animals, leaf blowers, alarms, loud music, and construction activities. |

Table B-1: General Plan Noise Regulations



Exterior Noise Limits:

The City of San Diego has established a set of community noise standards which identify compatible outdoor and indoor sound level limits for various types of land uses (Table B-2). As presented in Table B-2, the maximum compatible exterior sound level for residential land uses is 65 dB-A CNEL.

Additionally, the City of San Diego, per State of California Administrative Code (Title 25), requires new attached residential/hotel structures to be located within an exterior noise environment of 60 dB-A CNEL or lower. If the exterior noise level exceeds the maximum compatible levels, measures should be examined to reduce such impacts to below a level of significance at the project site. Acoustical treatment measures for reduction of exterior noise levels are provided later in this section.

Interior Noise Limits:

If exterior noise levels cannot be reduced to acceptable levels by practical means, specific design and construction techniques must be incorporated to reduce the interior noise levels to below 45 dB-A CNEL. Acoustical treatment measures for reduction of interior noise levels are included later in this section

Existing Acoustical Setting

The following analysis is based on short-term and long-term (24-hour) sound surveys conducted within the study area (see Figure B-2 for monitoring locations). As a part of this study, seven short-term sound surveys were conducted at selected locations on February 12 and 13, 2013. Results of measurements are presented in Table B-3 below. Table B-3 also includes results of three surveys (i.e., Surveys 8-10) conducted within the study area as part of Mid-Coast Corridor Transit Project.

Existing ambient sound levels within the Morena Boulevard Station study area range from between 55 and 75 dB-A Ldn. Sound levels are highest at land uses abutting Morena Boulevard and lowest along the eastern boundary of the study area.



| CITY OF SAN DIEGO LAND USE – NOISE CONPATIBILITY GUIDELINE | | | | | | | |
|---|-------------------------|--|---------|---------------------------------------|-----------|---------|---------------|
| Land Use Category | | | | Exterior Noise Exposure (dBA CNEL) | | | |
| | | | 6 | i0 (| 65 7 | 70 | 75 |
| Open Space and Parks of | and Recreational | | | | | | |
| Community & Neighbor | rhood Parks; Passive | Recreation | | | | | |
| Regional Parks; Outdoo | r Spectator Sports, G | olf Courses; Athletic Fields; Outdoor | | | | | |
| Spectator Sports, Wate | r Recreational Faciliti | es; Horse Stables; Park Maint. Facilities | | | | | |
| Agricultural | | | | | | | _ |
| Crop Raising & Farming Animal Raising, Maintai | | s; Horticulture Nurseries & Greenhouses; ercial Stables | | | | | |
| Residential | | | | | | | |
| Single Units; Mobile Ho | mes; Senior Housing | | | 45 | | | |
| | | dential; Live Work; Group Living raft noise, refer to Policies NE-D.2. & NE-D.3. | | 45 | 45 | | |
| Institutional | | | | | | | |
| | | are Facilities; Kindergarten through G-12 laces of Worship; Child Care Facilities | | 45 | | | |
| Vocational or Professio (Community or Junior C | | ties; Higher Education Institution Facilities Universities) | | 45 | 45 | | |
| Cemeteries | | | - | | | | |
| Sales | | | | | | | |
| Building Supplies/Equip | ment; Food, Beverag | es & Groceries; Pets & Pet Supplies; | | | 50 | 50 | |
| Sundries, Pharmaceutic | al, & Convenience Sa | les; Wearing Apparel & Accessories | | | | | |
| Commercial Services | | | | | | | |
| - | | & Drinking; Financial Institutions; | | | 50 | 50 | |
| Assembly & Entertainment; Radio & Television Studios; Golf Course Support | | | | | 45 | 4= | |
| Visitor Accommodations | | | | | 45 | 45 | |
| Offices | | | - | | | | _ |
| Business & Professional; Government; Medical, Dental & Health Practitioner; Regional & Corporate Headquarters | | | | | 50 | 50 | |
| Vehicle and Vehicular E | | | | | | | _ |
| | • | aintenance; Commercial or Personal Vehicle | | | | | |
| | | es Sales & Rentals; Vehicle Parking | | | | | |
| Wholesale, Distribution | | | | | _ | | _ |
| Wholesale Distribution | Storage Yards; Wovi | ng & Storage Facilities; Warehouse; | | | | | |
| Industrial | | | | | | | |
| | ight Manufacturing: | Marine Industry; Trucking & Transportation | | | | | |
| Terminals; Mining & Ex | | ,, | | | | | |
| Research & Developme | | | | | | 50 | |
| Compatible | Indoor Uses | Standard construction methods should attenua noise level. Refer to Section I. | te exte | rior no | oise to a | an acce | eptable indoo |
| | Outdoor Uses | Activities associated with the land use may be o | | | | | |
| Conditionally | Indoor Uses | Building Structure must attenuate exterior nois the number for occupied areas. Refer to Section | | e indo | or noise | e level | indicated by |
| Compatible | Outdoor Uses | Feasible noise mitigation techniques should be outdoor activities acceptable. Refer to Section I | - | ed and | incorp | orated | to make the |
| Incompatible | Indoor Uses | New construction should not be undertaken. | | | | | |
| | Outdoor Uses | Severe noise interference makes outdoor activi | ties un | accept | able. | | |

Table B-2: Noise Compatibility Guidelines

Final Report





Figure B-2: Sound Monitoring Locations



| | Site | Location | Start Date | Start Time | Leq (dBA) | | | |
|------|--|--|------------|------------|--------------|--|--|--|
| 1 | L-1 | Station #2, north of Armstrong Nursery | 2/12/13 | 7:06 | 65 | | | |
| 2 | L-2 | Tecolote Rd, East at The Tennis Club | 2/12/13 | 8:15 | 59 | | | |
| 3 | L-3 | Buenos Avenue – west end | 2/12/13 | 16:33 | 63 | | | |
| 4 | L-4 | West of Buenos Avenue, at 60' from tracks 2/12/13 17:37 69 | | | | | | |
| 5 | L-5 | Metro Ct. 2/13/13 7:32 63 | | | | | | |
| 6 | L-6 | Corner of Napa St. & Friars Rd. at The Village | 2/13/13 | 16:30 | 68 | | | |
| 7 | L-7 | Coastal Trailer Villa, at 20' of Morena Blvd 2/13/13 17:46 72 | | | | | | |
| 8 | ST-2 | T-2 Fashion Career College 3/9/11 13:00 73 | | | | | | |
| 9 | LT-3 | Fashion Career College Student Housing 3/9/11 15:00 72 | | | | | | |
| 10 | LT-4 | 2446 Denver Street | 3/7/11 | 14:30 | 57 | | | |
| Note | Notes: | | | | | | | |
| | Refer to Figure B-2 for survey locations. All surveys were short-term except for 9 and 10 which were 24-hour surveys. | | | | | | | |

Table B-3: Ambient Air Sound Measurements

Final Report



Typical Sound Attenuation Methods

Noise impacts can typically be abated by four basic methods:

- 1. Reducing the sound level of the noise generator.
- 2. Interrupting the noise path between the source and receiver.
- 3. Increasing the distance between the source and receiver.
- 4. Insulating the receiver (building material and construction methods).

All of these methods help to reduce interior noise levels, but only the first three help to reduce outside noise levels with the exception of aircraft noise.

Reducing the Source Noise:

Although the City has little direct control over noise produced by vehicles, the most efficient and effective means of abating noise from transportation systems is to reduce the noise at the source. Noise generated by aircraft, motor vehicles, and trains, for example, may be abated through improved engine design. Structure, vehicle, engine design or the use of mufflers may successfully quiet certain noise sources.

Traffic calming and traffic management techniques and the use of low-noise road pavement surfaces can help to reduce traffic noise from motor vehicles.

Noise generated by land uses, such as industrial uses, may be abated through site design, structure design and construction, quieter machinery, and the limiting of noise-producing operations. This method most directly assigns the responsibility to the generator of the noise.

Interrupting the Noise Path:

Strategically placing walls and/or landscaped berms, utilizing natural land and/or built forms or a combination of two or more of these methods between the noise source and the receptor may minimize noise. Generally, effective noise shielding requires a continuous, solid barrier with a mass which is large enough to block the line of sight between source and receiver. Variations may be appropriate in individual cases based on distance, nature, and orientation of buildings behind the barrier, and a number of other factors. Garages or other structures can help to shield residential units and outdoor living areas from non-aircraft noise. The shape and orientation of buildings can also help to avoid reflecting the noise from a building surface to adjacent noise sensitive buildings. Sound walls are the least preferable method due to the aesthetic concerns.

Separating the Noise Source:

Spatial separation or isolation of the noise source from the potential receiver may minimize the effects of noise. Site planning techniques that incorporate spatial buffers along freeways, for example, may reduce the noise level affecting adjacent noise-sensitive land uses. Developing noise-compatible commercial or industrial uses in these buffer areas may also help to interrupt the noise path.

Insulating the Noise Receiver:

Acoustical structures, enclosures, or construction techniques can help to abate the noise problem by insulating the receiver. The proper design and construction of buildings can help to reduce interior noise levels. Nearby noise sources should be recognized in



determining the location of doors, windows, and vent openings. Sound-rated windows (extra thick or multi-paned), doors, wall construction materials, and insulation are also effective as specified in CCR Title 24 in reducing interior noise levels. The difference in sound (noise) levels from the exterior to the interior of a structure indicates the sound transmitted loss through the window, door, or wall.

A Sound Transmission Class (STC) rating specifies the noise level reduction that windows, doors, wall construction materials, and insulation provide. For example, if the exterior of a structure is exposed to 75 dBA and 45 dBA is measured on the interior of the structure, then a reduction of 30 dBA is achieved. Typically, higher STC ratings indicate greater interior noise reductions.

The use of proper construction methods should make certain that doors and windows are fitted properly, openings sealed, joints caulked, and plumbing constructed to ensure adequate insulation from structural members. Sound-rated doors and windows will have little effect if left open. This may require installation of air conditioning for adequate ventilation. Table 3-2 indicates the acceptable interior noise level for land use types.

B.3 Air Quality Setting Overview

Definitions/Air Quality Background

 \mathbf{PM}_{10} (particulate matter less than 10 microns) is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. \mathbf{PM}_{10} also causes visibility reduction and is a criteria air pollutant.

 $PM_{2.5}$ (particulate matter less than 2.5 microns) is a similar air pollutant to PM_{10} , consisting of tiny solid or liquid particles which are 2.5 microns or smaller (often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from sulfur dioxide (SO₂) release from power plants and industrial facilities and nitrates formed from nitric oxide/nitrogen dioxide (NO_x) release from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. PM_{2.5} is a criteria air pollutant.

A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks, and number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life span, and increased mortality from lung cancer.

Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show

Final Report



lung function growth in children is reduced with long-term exposure to particulate matter.

The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$.

Ozone (O_3) , or smog, is a highly reactive and unstable gas formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_X), both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

San Diego Air Quality Setting

The climate in the San Diego Air Basin (SDAB) is controlled by the strength and position of the subtropical high-pressure cell over the Pacific Ocean. Areas within 30 miles of the coast experience moderate temperatures and comfortable humidity. Precipitation is limited to a few storms during the winter season and the overall climate is characterized by hot, dry summers and mild winters.

Because of the atmospheric conditions present in and around the study area, general air quality is considered acceptable. Primary air emission sources of concern within the study area include the I-5 freeway and congested intersections. Freeway emissions are largely dissipated by atmospheric elements and congested intersections (as defined as Level of Service (LOS) E or F) only occur once within the study area based on existing peak hour approach volumes (See Section 5, Mobility for full traffic analysis). A mitigating factor in the LOS E intersection is the relatively low throughput of vehicles, indicating the issue is likely a street design/signal timing issue rather than a surplus of polluting vehicles. A tertiary air emission concern is stationary sources, although none have been identified in or near the study area.

In all, the following resources were reviewed for guidelines related to air quality and identification of potential emission sources:

- 1. City of San Diego General Plan: City of Villages, 2008.
- 2. General Plan Program EIR, SCH 2006091032, September 28, 2007.
- 3. Clairemont Mesa Community Plan, Adopted April 1989, last updated April 2011.
- 4. Linda Vista Community Plan and Local Coastal Program Land Use Program,: "A Community of Neighbors...", Adopted September 1998, last updated April 2011.
- 5. Air Quality and Land Use Handbook: A Community Health Perspective: April 2005, California Air Resources Board.
- 6. California Environmental Quality Act: Significance Determination Thresholds, City of San Diego Development Services Department, 2011.
- 7. City of San Diego Land Development Manual.
- 8. 2011 Air Toxics "Hot Spots", Program Report for San Diego County, December 5, 2012, San Diego County Air Pollution Control District.



- **Final Report**
- 9. San Diego International Airport Land Use Compatibility Plan, Steering Committee Report 5, Safety Compatibility Factor, September, 2011.

The SDAB is currently considered to be a basic non-attainment area for the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for O₃, with three exceedances of the 8-hour federal standard and one exceedance of the 1-hour state standard in 2007; three exceedances of the 8-hour federal standard and two exceedances of the 1-hour state standard in 2008; and one exceedance of both the 8-hour federal standard and 1-hour state standard in 2009. The SDAB is also classified as a nonattainment area for the CAAQS for PM _{2.5}, and PM ₁₀; no exceedances of the state or federal standards were recorded between 2007 and 2009. The SDAB is classified as an attainment or unclassified area for all other pollutants. Table B-4 displays the air quality standards and measurements for the SDAB for years 2008-2011.

Final Report



| Dellatent | Otan dand | | Year | | |
|---|------------|-------|-------|-------|--|
| Pollutant | Standard | 2008 | 2009 | 2010 | |
| Ozone (O ₃) | | | | | |
| Maximum 1-Hour Concentration (ppm) | _ | 0.11 | 0.10 | 0.10 | |
| Maximum 8-Hour Concentration (ppm) | - | 0.09 | 0.08 | 0.08 | |
| Number of Days Exceeding State 1-Hour Standard | >0.09 ppm | 3 | 2 | 1 | |
| Number of Days Exceeding State 8-Hour Standard | >0.07 ppm | 10 | 4 | 6 | |
| Number of Days Exceeding Federal 8- Hour Standard | >0.075 ppm | 5 | 2 | 3 | |
| Number of Days Exceeding Health Advisory | ≥0.15 ppm | 0 | 0 | 0 | |
| Carbon Monoxide (CO) | | | | | |
| Maximum 1-Hour Concentration (ppm) | - | 5.6 | 4.4 | 3.9 | |
| Maximum 8-Hour Concentration (ppm) | - | 2.8 | 3.4 | 2.5 | |
| Number of Days Exceeding Federal / State 8-Hour Standard | >9.0 ppm | 0 | 0 | 0 | |
| Number of Days Exceeding State 1-Hour Standard | >20 ppm | 0 | 0 | 0 | |
| Number of Days Exceeding State 1-Hour Standard | >35 ppm | 0 | 0 | 0 | |
| Nitrogen Dioxide (NO ₂) | | | | | |
| Maximum 1-Hour Concentration (ppm) | _ | 0.063 | 0.054 | 0.058 | |
| Annual Arithmetic Mean Concentration (ppm) | - | 0.016 | 0.014 | 0.013 | |
| Number of Days Exceeding State 1-Hour Standard | >0.18 ppm | 0 | 0 | 0 | |
| Respirable Particulate Matter (PM10) | | | | | |
| Maximum 24-Hour Concentration (µg/m ³) | _ | 158 | 126 | 108 | |
| Annual Arithmetic Mean (µg/m³) | _ | 26.8 | 25.1 | 21.1 | |
| Fine Particulate Matter (PM _{2.5}) | | • | • | | |
| Maximum 24-Hour Concentration (µg/m ³) | - | 30 | 56 | 27 | |
| Annual Arithmetic Mean (µg/m³) | - | 13.3 | 12.1 | 10.8 | |
| | | • | • | | |

Table B-4: Air Pollution Standards and Measurements 2008-2010



Sensitive Receptors

"The San Diego Air Pollution Control District (APCD) identifies sensitive receptors as populations that are more susceptible to the effects of air pollution than the general population. Sensitive receptors located in or near the vicinity of known air emission sources, including freeways and congested intersections, are of particular concern. Sensitive receptors are located throughout the study area and include, but are not limited to, the following: hospitals, libraries, child care centers, adult assisted care facilities, and schools. Land use compatibility issues relative to siting of pollution-emitting uses or siting of sensitive receptors must be considered." (General Plan EIR)

Some of the sensitive receptors are mapped, however, because many change location, a determination of proximity may be necessary for projects that are anticipated to generate significant $PM_{2.5}$ or PM_{10} (Adult Day Care, State Licensed Child Care, State Licensed Group Homes). The determination of sensitive receptors is a part of any health risk assessment or air quality report conducted for new development of any significant size.

Relevant General and Community Plan Air Quality Policies

Air quality is regulated through a variety of permits and oversight by local and state agencies. The City has development standards that mandate best management practices (BMP) for construction. The BMPs are updated as state and federal regulations change. Often BMPs applied to address one environmental issue, e.g. protection to reduce erosion and runoff during construction to preserve water quality and address air quality by reducing the potential for wind erosion.

The following policies are referenced in the General Plan EIR as directly reducing the air quality impact of the General Plan.

General Plan

- CE-F.1 Develop and adopt a fuel efficiency policy to reduce fossil fuel use by City departments, and support community outreach efforts to achieve similar goals in the community.
- CE-F.2 Continue to upgrade energy conservation in City buildings and support community outreach efforts to achieve similar goals in the community.
- CE-F.3 Continue to use methane as an energy source from inactive and closed landfills.
- CE-F.4 Preserve and plant trees, and vegetation that are consistent with habitat and water conservation policies and that absorb carbon dioxide and pollutants.
- CE-F.5 Promote technological innovations to help reduce automobile, truck and other motorized equipment emissions.
- CE-F.6 Encourage and provide incentives for the use of alternatives to single-occupancy vehicle use, including using public transit, carpooling, vanpooling, teleworking, bicycling and walking. Continue to implement programs to provide City employees with incentives for the use of alternatives to single-occupancy vehicles.
- CE-F.7 Influence the development of state, federal, and local actions to increase the use of alternative fuels.
- CE-F.8 Influence the development of state, federal and local efforts to increase fuel efficiency and reduce greenhouse gas emissions.

Final Report



CE-F.9 Prohibit the idling of motive equipment (vehicles and equipment using fossil fuels) that is owned or leased by the City and operated by City employees unless mission necessary.

Clairemont Mesa Community Plan None

Linda Vista Community Plan None

Design Considerations from Other Sources

In 2005, the California Air Resources Board provided guidance on the placement of new uses near sources of diesel particulates. The recommendations in the *Air Quality and Land Use Handbook*, are based on health risk assessment calculations for sensitive receptors near PM generating uses. The following are design recommendations from the *Handbook*.

California Air Resources Board:

- Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day.
- New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;
- Projects affecting intersections that are at LOS D, E, or F with a significant number of diesel vehicles, or those that would change to LOS D, E, or F, because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- New or expanded bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location; or
- Projects in or affecting locations, areas, or categories of sites that are identified in the PM2.5 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.
- Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50 foot separation is recommended for typical gas dispensing facilities.

Summary

The study area, and the San Diego region in general, is fortunate in that is has a geographical setting and atmospheric conditions that foster good air quality. Further, the study area currently lacks either stationary or vehicular sources of concern which would impact sensitive receptors, allowing for great flexibility in the siting of all land uses/types of facilities. In the future, it is unlikely that new stationary sources of emissions would be allowed to develop in the study area, and ideally, roadway traffic volume increases would be minimized through the development of alternative modes of transportation (such as the proposed extension of LRT service). Even if future traffic causes additional intersections to reach a failing LOS, the standard approach of increasing distance between the intersection and sensitive receptor sites will have to be weighed against the benefits of mixed land uses and accessibility through close proximity to transit services (including intersection bus stops).



B.3.1 Hazardous Material Setting

Introduction and Methodology

Environmental reconnaissance was conducted for the study area in order to identify environmental conditions that might impact land use decisions as well as conditions that might be encountered during construction. The basis of information for this report was produced by Environmental Data Resources (EDR). This basis includes a database radius map report, a city directory search, historical topographical maps, a Sanborn map search, and historical aerial photos. The full hazardous material report is provided as an appendix to this report.

Summary of Results

Database Radius Map Report

Overall, the radius map report generated over 2,200 environmental records within a 3-mile radius. However, a majority of these results are not relevant because they are located in areas that pose no impact on the study area. Sites identified south of the San Diego River, in Mission Bay to the west, and Mission Beach to the northwest were removed from consideration for this report. The general groundwater flow direction is anticipated to be from east to west, so properties to the east of the study area up to one mile were included for initial review.

After applying the above limitations, the database contained 352 records within the study area to be reviewed, and only 34 of these were deemed to be records of concern. These 34 records pertained to 20 different properties within the study area. In addition, another 91 records were found for properties in the vicinity of the study area. Depending on available information about groundwater flow directions as well as the potential for fate and transport of contaminants, these nearby sites may be a concern. See the hazardous materials appendix for full information on sites and site information.

Figure B-3 displays the location of the sites of concern, those of potential concern, and those analyzed, but determined to not be of concern. The sites of concern are fairly evenly distributed throughout the study area. Of the three LRT station sites, the highest number of sites of concern occur near the existing Morena/Linda Vista station, followed by the proposed Clairemont Station, and lastly, the proposed Tecolote/Sea World Drive station has almost no sites of concern in its immediate vicinity.

Topographical Maps

For the study area, one of the most significant changes observed on these maps is the development of the Cudahy Slough. This feature is identified in the 1953 map at the southeast corner of the study area, but it is shown as developed in 1967. These maps also show a significant progression of development of Mission Bay, just west of the study area.



Final Report



Figure B-3: Environmental Sites of Concern



B.4 Planning Analysis

The regulatory environment of the study area includes the City of San Diego's currently adopted plans, including the General Plan, community plans, and zoning ordinance/municipal code. These documents not only affect current growth and development, but future development as well.

B.4.1 Adopted Plans

The following discussion provides information from the City's General Plan, Clairemont Mesa Community Plan, Linda Vista Community Plan, and the City's Zoning Ordinance.

B.4.2 San Diego General Plan

The General Plan is the document which provides a vision for the next 20-30 years of growth within the City. It develops goals for both the entire City and communities within the City through establishing goals, objectives, and policies. Below is information on the items which influence development of TOD and other planning scenarios similar to those present in the study area.

General Plan Guiding Strategy: "City of Villages"

The General Plan has adopted a "City of Villages" guiding strategy with the goal of locating mixed-use villages throughout the City and connecting them by high quality transit. These villages will be pedestrian-friendly activity centers at the heart of each community. Villages are characterized by accessible and attractive streets and public spaces. The design of each village will be unique to the community in which it is located. Three of the village prototypes are applicable to the study area and are discussed below. Table B-5 describes and provides information on the land uses utilized in the General Plan and Community Plans.

Neighborhood Village Center

The Clairemont station area, and areas along Tecolote Rd and West Morena, north of the Tecolote Station are identified as a Neighborhood Village Center village type:

"...neighborhood-oriented areas with local commercial, office, and multifamily residential uses, including some structures with office or residential space above commercial space. Village Centers will contain public gathering spaces and/or civic uses. Uses will be integrated to the maximum extent possible in order to encourage a pedestrian-oriented design and encourage transit ridership. Neighborhood Village Centers range in size from just a few acres to more than 100 acres."

Final Report



Transit Corridor

The Morena Blvd corridor between the Clairemont and Tecolote stations is identified as a Transit Corridor village type:

"The City contains commercial corridors that are lively and vital; pedestrianfriendly; home to a rich variety of small businesses, restaurants, and homes; and served by higher frequency transit service. Transit corridors provide valuable new housing opportunities with fewer impacts to the regional freeway system because of their available transit service. Some corridors would benefit from revitalization."

Urban Village Center

A large area surrounding Morena station and to the north, is identified as an Urban Village Center village type:

"Urban Village Centers are higher-density/intensity areas located in sub-regional employment districts. They are characterized by a cluster of more intensive employment, residential, regional and sub-regional commercial uses that maximize walkability and support transit."



| General Plan Land Use | Community Plan Land Use | Description | General Plan Intensity/Density Range |
|---|----------------------------|--|--|
| Residential | Residential - Low | Provides for single-family housing within the lowest- density range. | 5 - 9 du/acre |
| | Residential - Medium | Provides for both single and multifamily housing within a medium- density range. | 15 - 29 du/ac |
| Commercial, Employment, Retail and Services | Neighborhood Commercial | Provides local convenience shopping, civic uses, and services serving an approximate three mile radius. | 0 - 44 du/ac (if residential permitted) |
| | Community Commercial | Provides for shopping areas with retail, service, civic, and office uses for the community at large within three to six miles. It can also be applied to Transit Corridors where multifamily residential uses could be added to enhance the viability of existing commercial uses. | 0 - 74 du/ac (if residential permitted) |
| Industrial Employment | Light Industrial | Allows a wider variety of industrial uses by permitting a full range of light manufacturing and research and development uses and adding other industrial uses such as warehousing, storage, wholesale distribution and transportation terminals. Multi- tenant industrial uses and corporate headquarters office uses are permitted. | N/A |

Table B-5: General Plan andCommunity Plan Land Uses

Final Report



Summary of Supporting General Plan Policies

General Plan policies support the revitalization of transit corridors to allow higher intensity mixed-use development. Transit corridors support a mix of employment, commercial and higher density residential uses, and will provide public gathering spaces. Policies support building design and streetscape improvements that enhance or maintain a "Main Street" character along transit corridors. Policies support the General Plan "City of Villages" concept and allow for flexibility of each village to serve the functions and preferences of the community it serves. The mix of uses at each village will be determined at the community plan level based on the needs of that community and the role the village plays in the region and city. See summaries of relevant community plans below.

B.4.3 Community Plans

Clairemont Mesa Community Plan (Adopted 1989)

Project Area Existing Conditions Overview

- Commercial strip development
- Uses in this area include offices, mini-markets, restaurants, car sales and residential development
- Poor connectivity
- In need of beautification: more landscaping, new signage

Project Area Vision

- Retail and commercial corridor with professional offices
- Enhanced pedestrian linkages and streetscape environment: wider sidewalks, new landscaping, attractive signage, minimize curb cuts
- Create unifying theme
- Improve mobility and linkages for all transportation modes throughout the project area
- Amenities at the LRT station, such as shelters, benches, bike racks, route maps, schedules and landscaping
- Intensification of vacant site adjacent to the LRT station (West Clairemont Plaza)
- Direct access from Morena Blvd to I-5
- Undergrounded utilities along major transportation corridors

Relevant Objectives for Commercial Development

- Require commercial areas to incorporate landscaping which will help to integrate the commercial development into the surrounding neighborhood.
- Design commercial areas to best utilize the existing transportation system and provide pedestrian linkages to and within commercial development as well as connections to adjacent uses.
- Maintain commercial uses in neighborhood commercial centers.
- Revitalize the commercial area along the southern portion of Morena Boulevard and improve both vehicular and pedestrian access along the Boulevard.



 Design signs as an integral part of a development project which are informative, compatible with the scale of surrounding development and architecturally compatible with the project and surrounding area.

Recommendations for the West Clairemont Plaza Site (Vacant site adjacent the proposed LRT station at the southeast intersection of Clairemont Dr. and Morena Blvd.)

- 1. Use
 - Retail and commercial services should be encouraged on the site. Professional offices are also permitted. Residential uses may be permitted on the eastern and southern portions of the lot and above the ground floor throughout the site.

2. Architecture and Site Design

- Ensure compatibility with adjacent residential development
- Support use of the Mid-Coast transit line,
- Enhances the community image
- Development should occur with a unifying architectural, signage and landscaping theme and comprehensive pedestrian and bicycle pathways.
- Development should capitalize on the site's topography
- Pedestrian amenities such as landscaping and wide sidewalks (eight to ten feet wide) should be provided along the Clairemont Drive edge. This street segment should link the Clairemont Community to Mission Bay Park through improved pedestrian access and a landscaping theme that visually relates to Mission Bay Park.
- Development along the Morena Boulevard frontage should be pedestrianfriendly, with building entrances and windows oriented to the street. A direct pedestrian connection should be made to the future trolley station. Landscaping should link the shopping center with the transit station.
- The Ingulf Street side shall be developed with sensitivity to the residential areas to the south, minimizing noise impacts and street parking conflicts. Any vehicular entrance on this side should be located between Morena Boulevard and Chicago Street.

3. Transportation Improvements

- Provide clear access points to the shopping center. The primary vehicular access should be from Clairemont Drive. Consolidate curb cuts.
- Pedestrian pathways should occur throughout the site. The pathways should be landscaped and protected from vehicular interference.
- Redevelop the commercial areas on Morena Boulevard with off-street parking regulations



Recommendations for Streets

Morena Boulevard

- Morena Boulevard should be restriped to three lanes (two through lanes and a center, two-way turn lane) between West Morena Boulevard (north intersection) and Tecolote Road.
- Direct freeway access from Morena Boulevard to I-5 should be provided. A direct ramp from Morena Boulevard to Clairemont Drive should be developed to provide direct access to I-5. This would reduce the through traffic on adjacent residential streets attempting to access the freeway.
- Morena Boulevard should have wider sidewalks to enhance pedestrian circulation.
- Signalize the intersection of Morena Boulevard and West Morena Boulevard (northern intersection)

Knoxville Street

 Knoxville Street should be a through street connecting Morena Boulevard to West Morena Boulevard. This connection will improve circulation by providing a connection between the community and a major street while bypassing the Morena Boulevard-Tecolote Road intersection. The Knoxville connection will also require the widening of Morena Boulevard from Knoxville Street to Tecolote Road, including the bridge over Tecolote Creek, to provide two northbound turn lanes, one southbound left-turn lane, one southbound through/right-turn lane, and an exclusive southbound right-turn lane.



Recommendations for LRT Stations

The proposed transit station at the intersection of Clairemont Drive and Morena Boulevard should be two to three acres to accommodate parking. An intensification of multifamily development and commercial and industrial uses, adjacent to the transit station, just south of Tecolote Road on Morena Boulevard, is recommended (see Land Use Elements):

- Shelters with benches should be provided for passenger waiting areas.
- LRT stops should include graphics identifying LRT routes and schedules.
- Bicycle racks and lockers should be provided at each LRT stop.
- Landscaping should be consistent with citywide landscaping guidelines.

Recommendations for Utilities

All utility wires and transmission lines in Clairemont Mesa should be placed underground where technically and economically feasible. Priority areas for the undergrounding of overhead utility wires should include the community's major transportation corridors in order to visually improve the community character. These areas include:

- West Morena Boulevard from Tecolote Road to Morena Boulevard
- Morena Boulevard from West Morena Boulevard to Balboa Avenue
- Clairemont Drive from Morena Boulevard to Balboa Avenue

Final Report



Linda Vista Community Plan (Adopted 1998)

Existing Conditions Overview

- Morena serves a regional as well as local market, and has a concentration of businesses related to home furnishings and home improvement. There are also numerous warehouse and distribution facilities, as well as some light manufacturing
- Lacking a major grocery store
- Morena area suffers from a disorganized appearance and confusing traffic flow
- Landscaping is not cohesive
- Lacking a community-wide design character and cohesive image
- Existing trolley station at Morena Blvd and Napa Street
- Low-medium residential community with sense of community spirit and cooperation (outside our project area)
- Presence of University of San Diego (USD) (adjacent our project area, to the east)

Project Area Vision

- Moderate growth and increases in residential density
- Bus and private shuttle transportation will link into the new LRT lines
- Enhanced pedestrian travel, with improved sidewalks and landscaping
- Morena industrial area will continue to be an important job center
- Morena commercial will continue to provide regional shopping and will expand local services, particularly restaurants and a local supermarket
- Conversion of industrial land east of Napa Street to residential uses

Project Area Proposed Land Use

Relevant Recommendations for Land Use:

- Attract new restaurants and a local supermarket
- Designate area around the trolley station for mixed-use w/ ground floor retail
- Designate Morena Blvd for general commercial uses
- Promote the concentration of home furnishing and home improvement businesses along Morena Blvd
- Designate area between Hwy 5 and Morena Blvd for light industrial
- Ensure development regulations support rather than discourage needed redevelopment
- Maintain Morena industrial job center, and ensure development regulations encourage business expansion and business attraction







Figure B-4: Linda Vista Community Plan Proposed Land Uses



Figure B-5: Trolley station area



Figure B-6: Proposed general commercial designation along Morena Blvd



Figure B-7: Proposed industrial designation



Figure B-8: Proposed public art locations

Final Report



Relevant Recommendations for Urban Design

- Promote beautification and a cohesive image through
 - o a façade rebate program
 - undergrounding utilities
 - Coordinated signage, lighting, street furnishings and landscaping design program (see Table 1 and 2 Street Tree Plan in the Linda Vista Community Plan document)
 - public art (figure 4)
- Present positive visual image from I-5, Interstate 8, Pacific Highway and Mission Bay Park
- Pedestrian and transit-oriented features around the light rail and trolley stations
- Landmark development at the trolley station to help establish an architectural image for the community Commercial Design Standards for the Community Plan Implementation Overlay Zone (CPIOZ)

| Development Feature | CPIOZ Development Standard |
|---------------------------|---|
| Building Height | Max 30' in coastal zone, otherwise max 45' |
| Sidewalk width | Min 7' in commercial areas, min 5' in industrial areas |
| Off-street parking ratios | Medical and dental office: 1 space per 250 SF Professional business office: 1 space per 300 SF Retail and commercial service 1 space per 400 SF Wholesale, distribution, and manufacturing 1 space per 1500 SF Hotel: 1 space per room |



Figure B-9: Area Subject to CPIOZ regulations

Table B-6: CPIOZ Standards

Relevant Recommendations for Circulation

- Improve pedestrian environment: widen sidewalks, install lighting and benches
- Provide walkways between parking and stores
- Minimize curb cuts
- Encourage use of shuttles from transit stations
- Improve signage leading to I-5 from the Morena area
- Enhance street medians and excess right-of-way with landscaping, public art and other amenities (e.g. at juncture of Morena and West Morena Blvds.)
- Widen Napa Street to 4-lane collector between Linda Vista Rd and Morena Blvd
- Widen Morena Blvd north of Tecolote Rd
- Connect Knoxville Street to West Morena Blvd
- Improve ped and bus connections from Tecolote LRT station to Mission Bay and Morena Shopping Quarter



Final Report

- Require commercial development to provide landscaping and waiting areas at transit stops
- Require commercial development to provide bike racks
- Encourage shared parking
- Rename Morena or West Morena Blvd to avoid confusion

Recommendations for the Trolley Station Site (appropriate for future LRT stations)

- Buildings should be oriented to the streets
- Provide convenient pedestrian circulation
- Develop as a landmark project
- Include amenities for transit riders and that help support transit usage
- Provide commercial uses to support local residents and students
- Provide semi-public uses, i.e. day care, plazas, outdoor seating areas, and public art
- Locate identification kiosks or displays directing passengers to adjacent attractions

Trolley Station Site



Figure B-10: Morena Blvd LRT Station Site Recommendations

Final Report



B.4.4 Zoning

Zoning represents the land uses allowed and the development standards applied to the land use that each property must abide by in order to be in legal conformance with the City's regulations. While many properties are non-conforming, future development must adhere to these guidelines and zoning is the best indicator on what will be built on a particular property.

The following discussion provides details about the zoning districts comprising the study area:

Zoning Districts in the Project Area

Table B-7 identifies the current zoning districts within the project area, along with the allowed density, intensity and building heights. Table B-8 provides additional detail on types of uses allowed in each of the commercial zoning districts. Figure B-11 graphically displays the extents of the zoning districts. Zoning Districts are found in Chapter 13 Zones of the Municipal Code.

Purpose of Zoning Districts

The purpose of the RM zones is to provide for *multiple dwelling unit development* at varying densities. The RM zones individually accommodate *developments* with similar densities and characteristics. Each of the RM zones is intended to establish *development* criteria that consolidates common development regulations, accommodates specific dwelling types, and responds to locational issues regarding adjacent land uses.

The purpose of the RS zones is to provide appropriate regulations for the *development* of *single dwelling units* that accommodate a variety of *lot* sizes and residential dwelling types and which promote neighborhood quality, character, and livability. It is intended that these zones provide for flexibility in development regulations that allow reasonable use of property while minimizing adverse impacts to adjacent properties.

The purpose of the CN zones is to provide residential areas with access to a limited number of convenient retail and personal service uses. The CN zones are intended to provide areas for smaller scale, lower intensity developments that are consistent with the character of the surrounding residential areas. The zones in this category may include residential development. Property within the CN zones will be primarily located along local and selected collector streets.

The purpose of the CC zones is to accommodate community-serving commercial services, retail uses, and limited industrial uses of moderate intensity and small to medium scale. The CC zones are intended to provide for a range of development patterns from pedestrian-friendly commercial streets to shopping centers and auto-oriented strip commercial streets. Some of the CC zones may include residential development. Property within the CC zones will be primarily located along collector streets, major streets, and public transportation lines.

The purpose of the CP zone is to provide off-street parking areas for passenger automobiles. The CP zone is intended to be applied in conjunction with established commercial areas to provide needed or required off-street parking.



Morena Blvd Station Area Planning Study



Figure B-11: Zoning



| Zoning District Code | Zoning District Name | Allowed Uses (broadly) | Density | Intensity | Building Heights |
|----------------------------|---|--|--|---|--------------------------------------|
| Residential Districts | | | | | |
| RM-2-5 | Residential - Multiple Unit | Medium Density Residential | maximum density of 1 du for each 1,500 square feet of lot area | Maximum 1.35 FAR | 40' |
| RM-3-7 | Residential - Multiple Unit | Medium Density Residential with limited commercial | maximum density of 1 du for each 1,000 square feet of lot area | Maximum 1.8 FAR | 40' |
| RS-1-7 | Residential – Single Unit | Single Dwelling Units | Maximum density of 1 du per lot. Requires minimum 5,000- square-foot lots | Determined by lot size. FAR ranges from 0.70 for 3,000 SF lots to 0.45 for 19,000+ SF lots. | 24/30' See Section 131.0444(b) |
| Commercial Districts | | | | | |
| CN-1-2 | Commercial – neighborhood (development with an auto orientation) | Convenient retail and personal service uses | n/a | Maximum FAR: 1.0 | 30' |
| CC-1-1 | Community-serving Commercial (strip commercial characteristics) | mix of community- serving commercial uses and residential uses | maximum density of 1 du for each 1,500 square feet of lot area | Maximum FAR: 0.75 0.75 FAR bonus with mixed-use (75% of bonus must be residential) | 30' |
| CC-1-3 | Community-serving Commercial (<i>development</i> with an auto Orientation) | mix of community- serving commercial uses and residential uses | maximum density of 1 du for each minimum 1,500 square feet of lot area | Maximum FAR: 0.75 0.75 FAR bonus with mixed-use (75% of bonus must be residential) | 45' |
| CC-3-4 | Community-serving Commercial (development with a pedestrian orientation) | mix of pedestrian- oriented, community- serving commercial uses and residential uses | maximum density of 1 du for each minimum 1,500 square | Maximum FAR: 1.0 0.5 FAR bonus with mixed-use | 30' |

Table B-7: Zoning Regulations



Final Report

| Zoning District Code | Zoning District Name | Allowed Uses (broadly) | Density | Intensity | Building Heights |
|----------------------------|---|--|--|---|---------------------|
| | | | feet of lot area | (50% of bonus must be residential) | |
| CC-4-2 | Community-serving Commercial (high intensity, strip commercial characteristics) | heavy commercial uses and residential uses | maximum density of 1 du for each minimum 1,500 square feet of lot area | Maximum FAR: 2.0 | 60' |
| CC-4-5 | Community-serving Commercial (high Intensity, pedestrian orientation) | Heavy commercial uses and residential uses | maximum density of 1 du for each minimum 1,500 square feet of lot area | Maximum FAR: 2.0 2.0 FAR bonus with mixed-use (50% of bonus must be residential) | 100' |
| CC-5-1 | Community-serving Commercial (strip commercial characteristics) | mix of heavy commercial and limited industrial uses and residential uses | maximum density of 1 du for each minimum 1,500 square feet of lot area | Maximum FAR: 0.75 0.75 FAR bonus with mixed-use (75% of bonus must be residential) | 30' |
| CP-1-1 | Commercial - Parking | Off-street parking | n/a | Maximum FAR: 1.0 | 30' |
| Industrial Districts | | | | | |
| IL-3-1 | Industrial Light | mix of light industrial, office, and commercial uses | n/a | Maximum FAR: 2.0 | No limit |

 Table B-7: Zoning Regulations (continued)

| Commercial Zone | Types of Uses Allowed |
|-----------------|---|
| CN zones | Retail Sales, Commercial Services, Offices, |
| CC zones | Retail Sales, Commercial Services, Offices, |
| | Research & Development, Vehicle & |
| | Vehicular Equipment Sales & Service |
| CP zone | Parking Facilities |

Table B-8: Commercial Zone Allowed Uses

Final Report



The purpose of the IL zones is to provide for a wide range of manufacturing and distribution activities. The development standards of this zone are intended to encourage sound industrial development by providing an attractive environment free from adverse impacts associated with some heavy industrial uses. The IL zones are intended to permit a range of uses, including nonindustrial uses in some instances.

Parking and the Transit Overlay Zone

Parking ratios are provided in Municipal Code Chapter 14, Article 2, Division 5, sections 142.0525 and 142.0530.

There is a Transit Overlay Zone transit-serving development, see Chapter 13 Article 2: Overlay Zones Division 10: Transit Area Overlay Zone. The purpose of the Transit Area Overlay Zone is to provide supplemental parking regulations for areas receiving a high level of transit service. The intent of this overlay zone is to identify areas with reduced parking demand and to lower off-street parking requirements accordingly. Parking regulations are in sections 142.0525 and 142.0530, see column titled "transit area."

The Transit Overlay Zone applies to the area immediately surrounding the LRT station at Clairemont Drive, but could be applied around the LRT station at Tecolote as well.

Clairemont Mesa Height Limit Overlay Zone

The majority of the study area is subject to the Clairemont Mesa Height Limit Overlay Zone (Article 2-Division 13) The purpose of the Clairemont Mesa Height Limit Overlay Zone is to provide supplemental height regulations for western Clairemont Mesa. The intent of these regulations is to ensure that the existing low profile development in Clairemont Mesa will be maintained and that public views from western Clairemont Mesa to Mission Bay and the Pacific Ocean are protected.

This overlay zone applies to the portion of the plan area that is bounded by Clairemont Drive to the north and Tecolote Road to the south. The overlay imposes a maximum structure height of 30 feet. For all of the below listed base zones, this overlay zone will take precedent and override the allowed height established by the base zone, restricting the majority of the plan area to 30'. This may impact the ability to achieve higher densities in the plan area.





B.4.5 Related Efforts

Other efforts that are independent of the MBAP, but related to the goals and objectives of the study include the Mid-Coast LRT Extension Project, the San Diego Pedestrian Master Plan and the San Diego Bicycle Master Plan.

B.4.6 Mid-Coast Station Planning

The Mid-Coast LRT Extension project is a SANDAG-led project examining the extension of the region's LRT system north from Old Town San Diego to the University of California, San Diego (UCSD). The proposed alignment parallels the existing railroad tracks on the west side of the MBAP study area and two new stations are planned within the study area at Tecolote Road/Sea World Drive and at Clairemont Drive.

The Mid-Coast study examines the planning and siting of LRT-related facilities, including stations. The Mid-Coast study analyzes the dynamics of the area surrounding the proposed LRT facilities and makes recommendations both for MTS property and public ROW in the vicinity of the proposed facilities.

B.4.7 San Diego Pedestrian Master Plan

The San Diego Pedestrian Master Plan provides a comprehensive framework for identifying, prioritizing, and implementing pedestrian projects within each community plan area, with the goal of enhancing neighborhood quality and mobility options. The Plan's framework also discusses existing pedestrian conditions, pedestrian-related City policies, and potential project funding sources.

The Pedestrian Master Plan has been, and will be, implemented per individual community plan areas. Incorporating the methods established in the Plan's framework, the City and the community work together to identify and prioritize potential projects to improve the pedestrian environment.

Phase I, which provided the implementation framework, was completed in December 2006. Phases II, III, and IV, which include the communities of Greater North Park, Southeastern San Diego, Greater Golden Hill, Uptown, Normal Heights, Barrio Logan, City Heights, College, Kensington/Talmadge, Midway/Pacific Highway, Old San Diego, Ocean Beach, Pacific Beach, and San Ysidro are either completed or on-going.

B.4.8 San Diego Bicycle Master Plan

The City of San Diego Bicycle Master Plan Update seeks to produce a renewed bicycle plan for the City and provides a framework for making cycling a more practical and convenient transportation option for a wide variety of San Diegans with different riding purposes and skill levels. The plan update evaluates and builds on the 2002 Bicycle Master Plan so that it reflects changes in bicycle user needs and changes to the City's bicycle network and overall infrastructure.

The final report was submitted in June 2011.



B.5 Regulatory Setting

The implications of the land use planning documents and zoning discussed in previous sections include a range of development intensities for properties within the study area. Analysis of this range is key to understanding which properties are already poised to meet future needs and which will be constrained.

B.5.1 Allowable Range of Land Uses

As described above, the IL, CC, and CN zoning designations provide for flexibility in uses, including some non-industrial uses in the IL zone, and commercial and residential uses in the CC and CN zones. RM zones are exclusively residential, but allow for a range of intensity of development.

B.5.2 Allowable Range of Densities

The maximum allowable density for each zoning category was determined for zones which allowed residential dwelling units (du). Figure B-12 shows that almost all of the study area has a maximum residential du standard of 1 du/1,500 square feet. This equates to approximately 29 du/acre. The multi-family zones near Clairemont Drive have a higher density limit, at 1 du/1,000 square feet, or almost 44 du/acre.

B.5.3 Allowable Range of Building Heights

Figure B-13 displays the current height limits of properties within the study area. The range of height limits is dramatic, ranging from 24/30 feet to no limit. The no limit portion of the study area is tied to the industrial properties to the south/southwestern. Much of the commercial properties along Morena/W Morena have a height limit of 60 feet, and the other properties between Friars and Ingulf Street have a limit between 30-40 feet. The Properties surrounding the Clairemont Drive/Morena Boulevard intersection have height limits of 40-45 feet. Although not in the study area, it should be noted that the single family neighborhoods to the east of the study area have the lowest height limit at 24/30 feet, approximately 30 feet less than the commercial areas that line much of Morena Boulevard.

B.5.4 Allowable Range of Floor Area Ratios

The variety of FAR permitted within the study area ranges fairly dramatically, from 0.75 to 2.0. The properties with a 2.0 FAR cover most of the study area – the only areas that have lesser FARs occur south of the southern Morena/W Morena split, near Asher Street, between Ashton and Napier Streets, and north of Ingulf Street (see Figure B-14).

The areas to the east of the study area have a variety of FARs, or their zoning does not directly correspond to a specific FAR. The properties to the south of Linda Vista Road (east of the study area) generally have a 1.8 FAR.



Final Report



Figure B-12: Maximum Residential Density



Final Report



Figure B-13: Maximum Building Heights