SR-15 Station Area Planning Study

Final Environmental Existing Conditions Technical Memo

Submitted to City of San Diego City Planning and Community Investment Department

by IBI Group and CH2M HILL

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Introduction and Purpose of Memo

New bus rapid transit (BRT) facilities and services are being planned for SR-15 in Mid-City as part of the region's efforts to enhance the performance and attractiveness of transit. Included in the improvements are new transit stations at El Cajon Boulevard and University Avenue. The Mid-City Station Area Planning Study is being undertaken by the City of San Diego to take advantage of the planned transit facilities and services to spur land use and transportation improvements in the areas near the stations.

Funded by a Smart Growth Incentive Program grant from the San Diego Association of Governments (SANDAG), the study aims to develop a vision and identify implementation actions to foster transit-oriented development in the study area on both sides of SR-15. The study includes a planning analysis of land use, mobility, and economic considerations to develop plans and policies to support development that makes the most of the increased travel options the BRT will bring.

This memo documents environmental existing conditions within the study area. This information will be used to define baseline conditions from which the consultant team will begin to develop planning scenarios for the study area.

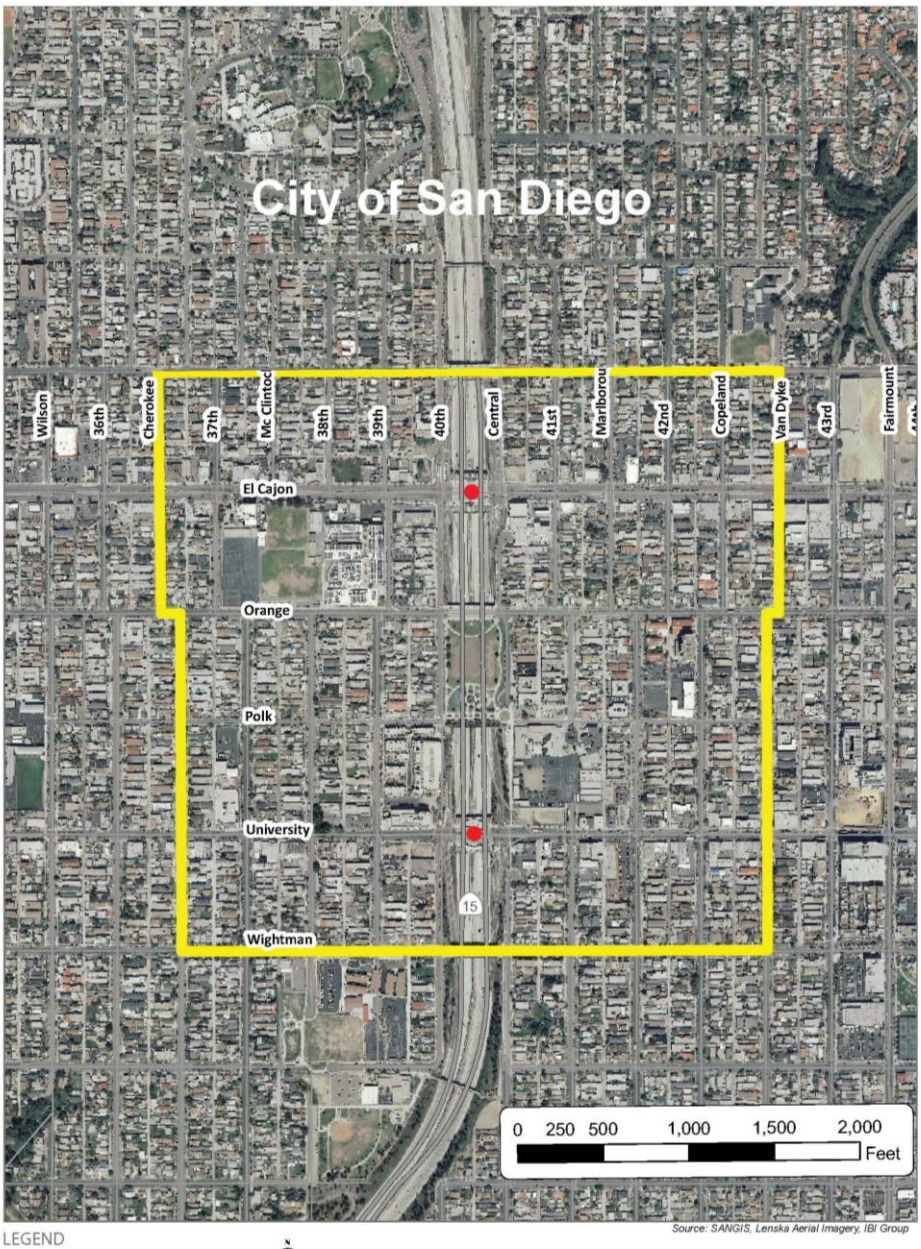
Project Description and Understanding

SANDAG is proposing a new BRT facility for SR-15 in the Mid-City community. As a response to potential land use changes and development around the planned BRT stations, the City of San Diego is conducting a planning study of the areas around these stations and surrounding neighborhood. The study area covers a 273-acre section of the Mid-City community within the City of San Diego. This area is bounded by Meade Avenue to the north, Wightman Street to the south, Cherokee Avenue to the west, and Van Dyke Avenue to the east (Figure 1). The planning study is focused on development scenarios around the BRT stations proposed at El Cajon Boulevard and University Avenue. In addition, land use and transit scenarios will be considered throughout the study area, in the context of connectivity with the rest of San Diego and the region.

Project Purpose and Objectives

This planning study will provide a vision for (1) future transit-oriented land use, (2) a mobility concept plan of non-motorized and (3) multimodal connectivity and an economic analysis of the envisioned future in the Mid-City community. There is an opportunity under the SR-15 Mid-City BRT Station Area Planning Study to develop a visionary approach to integrating land uses with bicycle, pedestrian, and public transit use, and one of the challenges is identifying funding mechanisms for the desired improvement in urban sustainability.

Figure 1 Project Study Area



Description of Work and Environmental Conditions

The following discussion focuses on the existing conditions as related to five issue areas: air quality, ambient noise levels, hazardous materials/hazardous waste, land use, and community cohesion and compatibility. Each issue area generally includes a brief description of the methodology, existing conditions, and recommendations for the next steps.

Air Quality

Methodology

Review of existing documents related to recent projects within the study area was conducted to document existing conditions for air quality resources. This discussion is based on a regional scenario that includes San Diego County. The following discussion summarizes this review.

Climate and Meteorology

The study area is located in the San Diego Air Basin (SDAB), which is coincident with San Diego County. The climate of San Diego County is characterized by warm, dry summers and mild winters. One of the main determinants of the climatology is a semi-permanent high pressure area (the Pacific High) in the eastern Pacific Ocean. In the summer, this pressure center is located well to the north, causing storm tracks to be directed north of California. This high pressure cell maintains clear skies for much of the year. When the Pacific High moves southward during the winter, this pattern changes, and low pressure storms are brought into the region, causing widespread precipitation. In San Diego County, the months of heaviest precipitation are November through April, averaging about 9 to 14 inches annually. The mean temperature is 62.2 degrees Fahrenheit (°F), the mean maximum temperature is 75.7°F and the mean minimum temperature is 48.5°F. The Pacific High also influences the wind patterns of California. The predominant wind directions are westerly and west-southwesterly during all four seasons, and the average annual wind speed is 5.6 miles per hour (mph).

A common atmospheric condition known as a temperature inversion affects air quality in San Diego. During an inversion, air temperatures get warmer rather than cooler with increasing height. Subsidence inversions occur during the warmer months (May through October) as descending air associated with the Pacific High comes into contact with cooler marine air. The boundary between the layers of air represents a temperature inversion that traps pollutants below it. The inversion layer is approximately 2,000 feet above mean sea level (AMSL) during the months of May through October. However, during the remaining months (November through April), the temperature inversion is approximately 3,000 feet AMSL. Inversion layers are important elements of local air quality because they inhibit the dispersion of pollutants, thus resulting in a temporary degradation of air quality.

Regional and Local Air Quality

The Clean Air Act as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), lead (Pb), and sulfur dioxide (SO_2).

The agency responsible for administering state and federal air quality laws and regulating sources of air pollution in the County is the San Diego Air Pollution Control District (SDAPCD). The state of California sets and maintains California Ambient Air Quality Standards (CAAQS) that are equal to or more restrictive than the NAAQS and include pollutants not included in the NAAQS. Areas are classified as either "attainment" or "non attainment" areas for each pollutant based on whether or not the NAAQS and CAAQS have been achieved. The state and federal attainment status for the project region are summarized in Table 1.

Table 1 Federal and State Attainment Status

Pollutants	Federal Classification	State Classification
Ozone (O_3)	Nonattainment[a]	Nonattainment
Particulate Matter (PM_{10})	Unclassified	Nonattainment
Particulate Matter ($PM_{2.5}$)	Unclassified / Attainment	Nonattainment
Carbon Monoxide (CO)	Maintenance	Attainment
Nitrogen Dioxide (NO_2)	Attainment	Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment

Source: CARB, 2010d

[a] The Federal 1-hour ozone standard was revoked in 2005. The area is in nonattainment for the 8-hour standard.

Ambient air pollutant concentrations in the SDAB are measured at 10 air quality monitoring stations operated by the SDAPCD. The SDAPCD air quality monitoring stations that represent the study area, climate, and topography in the SDAB are the El Cajon – Redwood Avenue and the 1100 Beardsley Street monitoring stations (Figure 2). The El Cajon – Redwood Avenue station monitors NO_X, O_3, PM_{10}, and $PM_{2.5}$, and the 1100 Beardsley Street station monitors CO, NO_X, O_3, SO_2, PM_{10}, and $PM_{2.5}$. Tables 2 and 3 summarize the standards and the highest pollutant levels recorded at these stations for the years 2006 to 2009.

Figure 2 San Diego County APCD Air Quality Monitoring Stations

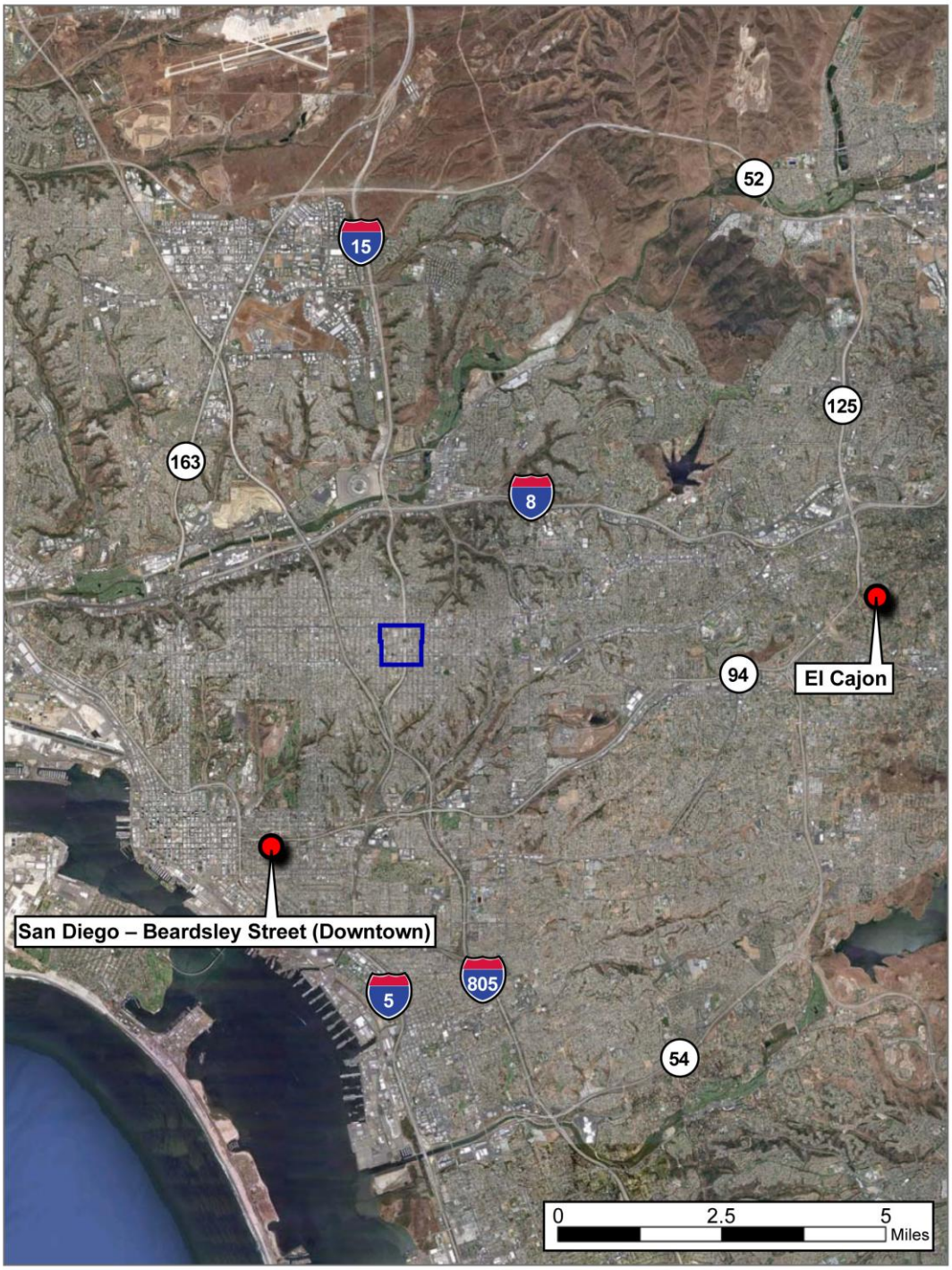


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FIGURE 2
San Diego County APCD Air Quality Monitoring Stations
SR15 Mid-City BRT Station Area Planning Study

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Table 2 Ambient Air Quality Summary – El Cajon – Redwood Avenue Monitoring Station

Pollutant Standards	2006	2007	2008	2009
Carbon Monoxide (CO)				
Maximum 8-hour concentration (ppm)	*	*	*	*
Number of Days Standard Exceeded				
NAAQS 1-hour (≥35 ppm)	*	*	*	*
CAAQS 8-hour (≥20 ppm)	*	*	*	*
NAAQS 8-hour (≥9 ppm)	*	*	*	*
CAAQS 8-hour (≥9.0 ppm)	*	*	*	*
Nitrogen Dioxide (NO_2)				
Maximum 1-hour concentration (ppm)	0.069	0.065	0.063	0.54
Annual Average (ppm)	0.018	0.016	0.016	0.014
Number of Days Standard Exceeded				
CAAQS 1-hour	0	0	0	0
Sulfur Dioxide (SO_2) [a]				
Maximum 24-hour concentration (ppm)	*	*	*	*
National annual average concentration (ppm)	*	*	*	*
Number of Days Standard Exceeded				
NAAQS 24-hour (>0.14 ppm)	*	*	*	*
CAAQS 24-hour (>0.04 ppm)	*	*	*	*
Ozone (O_3)				
Maximum 1-hour concentration (ppm)	0.106	0.110	0.107	0.098
Maximum 8-hour concentration (ppm)	0.091	0.083	0.093	0.083
Number of Days Standard Exceeded				
CAAQS 1-hour (>0.09 ppm)	2	3	3	2
NAAQS 8-hour (>0.075 ppm)	4	3	5	2
CAAQS 8-hour (>0.07 ppm)	9	4	12	5
Particulate Matter (PM_{10}) [b]				
National maximum 24-hour concentration ($\mu g/m^3$)	47.0	61.0	40.2	55.0
National second highest 24-hour concentration ($\mu g/m^3$)	46.0	49.0	40.1	46.0
State maximum 24-hour concentration ($\mu g/m^3$)	49.0	61.0	41.4	57.0
State second highest 24-hour concentration ($\mu g/m^3$)	46.0	49.0	40.2	46.0
National[c] annual average concentration ($\mu g/m^3$)	27.0	26.0	27.0	*
State[d] annual average concentration ($\mu g/m^3$)	27.3	*	27.3	25.3
Number of Days Standard Exceeded				
NAAQS 24-hour (>150 $\mu g/m^3$)	0	0	0	0
CAAQS 24-hour (>50 $\mu g/m^3$)	0	1	0	1
Particulate Matter ($PM_{2.5}$)				
National maximum 24-hour concentration ($\mu g/m^3$)	37.6	42.7	30.7	56.5
National second highest 24-hour concentration ($\mu g/m^3$)	31.5	35.5	30.2	26.6
State maximum 24-hour concentration ($\mu g/m^3$)	37.6	61.0	38.5	56.5
State second highest 24-hour concentration ($\mu g/m^3$)	31.5	59.6	36.3	40.6
National[c] annual average concentration ($\mu g/m^3$)	11.6	*	13.3	12.1
State[d] annual average concentration ($\mu g/m^3$)	11.6	*	14.9	12.2
Number of Days Standard Exceeded				
NAAQS 24-hour (>65 $\mu g/m^3$)	1	2	0	1

Notes:

* Data Unavailable, not monitored
[a] Sulfur dioxide readings taken from the San Diego 12th Avenue Monitoring Station
[b] Measurements usually collected every 6 days.
[c] National annual average based on arithmetic mean.
[d] State annual average based on geometric mean.

Source: CARB, 2010b

Table 3 Ambient Air Quality Summary – 1110 Beardsley Street Monitoring Station

Pollutant Standards	2006	2007	2008	2009
Carbon Monoxide (CO)				
Maximum 8-hour concentration (ppm)	3.27	3.01	2.60	2.77
Number of Days Standard Exceeded				
NAAQS 1-hour (≥35 ppm)	0	0	0	*
CAAQS 1-hour (≥20 ppm)	*	*	*	*
NAAQS 8-hour (≥9 ppm)	0	0	0	0
CAAQS 8-hour (≥9.0 ppm)	0	0	0	0
Nitrogen Dioxide (NO_2)				
Maximum 1-hour concentration (ppm)	0.094	0.098	0.091	0.078
Annual Average (ppm)	0.021	0.018	0.019	0.017
Number of Days Standard Exceeded				
CAAQS 1-hour	0	0	0	0
Sulfur Dioxide (SO_2) [a]				
Maximum 24-hour concentration (ppm)	0.009	0.006	0.007	0.006
National annual average concentration (ppm)	0.004	0.002	0.003	0.001
Number of Days Standard Exceeded				
NAAQS 24-hour (>0.14 ppm)	0	0	0	*
CAAQS 24-hour (>0.04 ppm)	*	0	0	*
Ozone (O_3)				
Maximum 1-hour concentration (ppm)	0.082	0.087	0.087	0.085
Maximum 8-hour concentration (ppm)	0.071	0.073	0.073	0.063
Number of Days Standard Exceeded				
CAAQS 1-hour (>0.09 ppm)	0	0	0	0
NAAQS 8-hour (>0.075 ppm)	0	0	0	0
CAAQS 8-hour (>0.07 ppm)	1	1	1	0
Particulate Matter (PM_{10}) [b]				
National maximum 24-hour concentration ($\mu g/m^3$)	71.0	110.0	58.0	59.0
National second highest 24-hour concentration ($\mu g/m^3$)	69.0	58.0	54.0	53.0
State maximum 24-hour concentration ($\mu g/m^3$)	74.0	111.0	59.0	60.0
State second highest 24-hour concentration ($\mu g/m^3$)	71.0	59.0	56.0	54.0
National[c] annual average concentration ($\mu g/m^3$)	33.6	30.5	28.6	*
State[d] annual average concentration ($\mu g/m^3$)	34.3	31.2	29.3	29.4
Number of Days Standard Exceeded				
NAAQS 24-hour (>150 $\mu g/m^3$)	0	0	0	0
CAAQS 24-hour (>50 $\mu g/m^3$)	11	4	4	3
Particulate Matter ($PM_{2.5}$)				
National maximum 24-hour concentration ($\mu g/m^3$)	63.3	69.6	42.0	52.1
National second highest 24-hour concentration ($\mu g/m^3$)	47.7	52.1	38.7	42.4
State maximum 24-hour concentration ($\mu g/m^3$)	63.3	71.4	42.0	52.1
State second highest 24-hour concentration ($\mu g/m^3$)	47.7	52.1	38.7	42.4
National[c] annual average concentration ($\mu g/m^3$)	13.1	12.7	13.7	11.7
State[d] annual average concentration ($\mu g/m^3$)	13.1	11.7	10.7	11.8
Number of Days Standard Exceeded				
NAAQS 24-HOUR (>65 $\mu G/M^3$)	2	8	3	3

Notes:

* Data Unavailable, not monitored
[a] Sulfur dioxide readings taken from the San Diego 12th Avenue Monitoring Station
[b] Measurements usually collected every 6 days.
[c] National annual average based on arithmetic mean.
[d] State annual average based on geometric mean.

Source: CARB, 2010b

As shown in Table 2, Ambient Air Quality Summary for El Cajon, Redwood Avenue Monitoring Station, CO, NO_2 and SO_2 did not exceed the NAAQS or CAAQS. The 1-hour O_3 levels exceeded the CAAQS during each of the past four years. The 8-hour O_3 levels exceeded both the NAAQS and CAAQS in the four years. The PM_{10} concentrations exceeded the 24-hour CAAQS in two of the past four years. The federal PM_{10} standards, however, were not exceeded. The $PM_{2.5}$ concentrations exceeded the 24-hour and annual NAAQS during each of the past four years.

As shown in Table 3, Ambient Air Quality Summary for 1110 Beardsley Street Monitoring Station, CO, NO_2 and SO_2 did not exceed the NAAQS or CAAQS. The 1-hour O_3 levels exceeded the CAAQS during each of the past four years. The 8-hour O_3 levels exceeded both the NAAQS and CAAQS in the four years. The PM_{10} concentrations exceeded the 24-hour CAAQS in two of the past four years. The federal PM_{10} standards, however, were not exceeded. The $PM_{2.5}$ concentrations exceeded the 24-hour and annual NAAQS during each of the past four years.

Recommendations

Future development associated with Transit Oriented Development (TOD) improvements would need to consider potential project specific air quality impacts to the surrounding development. These impacts would be associated with construction and operation. Construction would typically generate a short-term temporary increase in fugitive dust and exhaust emissions from diesel and gasoline-fueled construction equipment and on-road vehicles. In addition, during construction, traffic flow may be interrupted causing an increase in vehicle braking and an overall decrease in travel speed. This could potentially increase the total amount of fugitive particulate emissions from brake dust and in vehicle exhaust emissions resulting from slower travel speeds; however, emission increases would be short-term and temporary.

Operation of new transit systems could have the potential to intermittently decrease exhaust emissions due to changes in traffic volumes and vehicle fleet mix. Vehicle travel speed correlates with the quantity of air pollutants emitted. Generally, increasing travel speed will increase the exhaust pollutants emitted since fuel is burned at a higher rate. However, when vehicles slow significantly, engines perform outside of the optimum operating range and air pollutant emissions will increase. Long-term intermittent increases in exhaust emissions could occur in congested intersections and along the corridor due to additional bus station locations. In addition, during operations, an increase in carrying capacity could increase vehicle travel speed, which could then increase exhaust emissions. However, an increase in carrying capacity could also decrease particulate emissions associated with vehicle braking and acceleration often found in heavy traffic areas.

Therefore, upon determining a defined project, a detailed traffic study and air quality analysis including carbon monoxide, PM hotspot, mobile source air toxics, and greenhouse gas (GHG) emissions would need to be conducted for the project study area to evaluate the associated level of impacts within this highly developed and well-established urban area.

Ambient Noise Levels

An evaluation of the ambient noise levels was conducted at five key locations to document existing conditions in the study area. The following discussion explains noise metrics,

summarizes a review of applicable regulatory guidelines and standards, and presents the methodology used and results received.

Introduction to Noise Metrics

Noise is defined as unwanted sound. There are several ways to measure noise, depending on the source of the noise, the receiver, and the reason for the noise measurement. The most common noise metric is the overall A-weighted sound-level measurement that has been adopted by regulatory bodies worldwide. The A-weighting network measures sound in the same way that a person perceives or hears sound, thus achieving a strong correlation in terms of how to evaluate acceptable and unacceptable sound levels.

A-weighted sound levels may be measured or presented as the equivalent sound pressure level (L_{eq}), which is defined as the average noise level on an equal energy basis for a stated period of time. It is commonly used to measure steady-state sound or noise that is usually dominant. Statistical methods are used to define the dynamics of a changing acoustical environment. Statistical measurements are typically denoted by L_{xx}, where "xx" represents the percentile of time the sound level is exceeded. Therefore, L_{90} represents the noise level that is exceeded during 90 percent of the measurement period. Similarly, L_{10} represents the noise level exceeded for 10 percent of the measurement period.

Another metric used in determining the impact of environmental noise is the differences in response that people have to daytime and nighttime noise levels. During the evening and still more so at night, exterior background noise levels are generally lower than daytime levels. Most household noise also decreases at night, and exterior noise becomes more noticeable. Furthermore, most people sleep at night and are sensitive to intrusive noises. To account for human sensitivity to evening and nighttime noise levels, the day-night level (L_{dn}) average (also abbreviated as L_{dn}) and the community noise equivalent level (CNEL) were developed. L_{dn} is a noise metric that accounts for the greater annoyance of noise during the nighttime hours (10:00 p.m. to 7:00 a.m.). CNEL is a noise index that accounts for the greater annoyance of noise during the evening hours (7:00 p.m. to 10:00 p.m.) as well as the nighttime hours.

L_{dn} values are calculated by averaging hourly L_{eq} sound levels for a 24-hour period and applying a weighting factor of 10 dBA to the nighttime L_{eq} values. CNEL values are calculated similarly, except that a 5 dBA weighting factor is also added to evening L_{eq} values. The weighting factors, which reflect the increased sensitivity to noise during evening and nighttime hours, are added to each hourly L_{eq} sound level before the 24-hour L_{dn} or CNEL is calculated. For the purposes of assessing noise, the 24-hour day is divided into three time periods, with the following weightings:

- Daytime hours: 7:00 a.m. to 7:00 p.m. (12 hours) – Weighting factor of 0 decibels, A weighted (dBA)
- Evening hours (for CNEL only): 7:00 p.m. to 10:00 p.m. (3 hours) – Weighting factor of 5 dBA
- Nighttime hours (for both CNEL and Ldn): 10:00 p.m. to 7:00 a.m. (9 hours) – Weighting factor of 10 dBA

The hourly adjusted time-period noise levels are then averaged (on an energy basis) to compute the overall L_{dn} or CNEL value. For a continuous noise source, the L_{dn} value can be easily computed by adding 6.4 dBA to the overall 24-hour noise level (L_{eq}). For example, if the expected continuous noise level from a noise source is 60.0 dBA, the resulting L_{dn} from the

source will be 66.4 dBA. Similarly, the CNEL for a continuous noise source is computed by adding 6.7 dBA to the overall 24-hour L_{eq}.

Regulatory Review

Conducting a noise study for a project requires an understanding of the regulatory standards or guidelines enforced by the associated jurisdiction. The standards will dictate the metrics used to measure noise levels.

Within the City of San Diego, the General Plan Noise Element establishes Noise Compatibility Guidelines for evaluating land use noise compatibility when reviewing proposed land use development projects (City of San Diego, 2008). The guidelines are based on the State of California Noise Compatibility Guidelines. A "compatible" land use indicates that standard construction methods will attenuate exterior noise to an acceptable indoor noise level and people can carry out outdoor activities with minimal noise interference. The City recommends acoustical studies for land uses that fall into the "conditionally compatible" noise environment. The acoustical study should provide noise level measurements that describe existing local conditions and the predominant noise sources, and estimate existing and projected noise levels as measured in CNEL and compare them to the Land Use – Noise Compatibility Guidelines. Outdoor activities are unacceptable in cases of severe noise interferences. Extensive mitigation techniques are required to make the indoor environment acceptable in these cases.

Methodology

The study area has a combination of land uses including mixed residential uses, schools, parks and commercial areas. Permission was requested from the City of San Diego to allow placement of noise monitors in representative sites for each of the four land uses (Figure 3).

Continuous unattended one-hour measurements were collected over a 24-hour period at each of the five site locations. Each meter was factory calibrated within the previous 12 months and was field calibrated before and after each measurement series with a Larson Davis CAL200 field calibrator. The sound level meters were housed in waterproof enclosures and the microphones were mounted at an approximate height of 5 feet within a Larson Davis environmental protection shroud.

Results

CH2M HILL conducted the ambient noise surveys at the five locations on June 27 and 28, 2011. Weather conditions during the survey consisted of clear skies, wind speeds between 8 and 10 miles per hour, temperatures between 62 and 78 degrees Fahrenheit and relative humidity between 67 and 81 percent. A summary of the noise survey results is presented in Table 4. Overall, the existing community noise equivalent level (CNEL) (dBA) average is higher than the compatible exterior noise exposure City of San Diego standards for exterior residential noise.

The noise levels for the residential (Location 1 – Northwest corner of Wightman Street/41st Street, Location 2 - Teralta Neighborhood Park, and Location 4 - Southwest corner of Meade Avenue/39th Street) and the school playground (Location 3 – Central Elementary School) noise monitoring locations are representative of the noise levels of that area, given the primary noise sources are neighborhood street traffic and SR 15. The CNEL noise levels for these areas

range from 66 dBA to 72 dBA and is higher than the compatible exterior noise exposure City of San Diego guidelines for exterior residential noise (45 dBA).

The City of San Diego recommends acoustical studies for land uses that fall into the "conditionally compatible" noise environment. The City of San Diego Noise Ordinance prohibits the noise that causes discomfort or annoyance to any reasonable person residing within the limits of the City. A 5 dBA change in sound level is typically necessary to result in a noticeable community response, as a 3 dBA increase is generally considered the threshold of perceptible change outside of a laboratory when comparing similar sources of noise. As noted in Table 4, the existing L_{dn} noise levels are comparable, if not higher than the standards for exterior residential noise.

Table 4 Noise Survey Results Summary

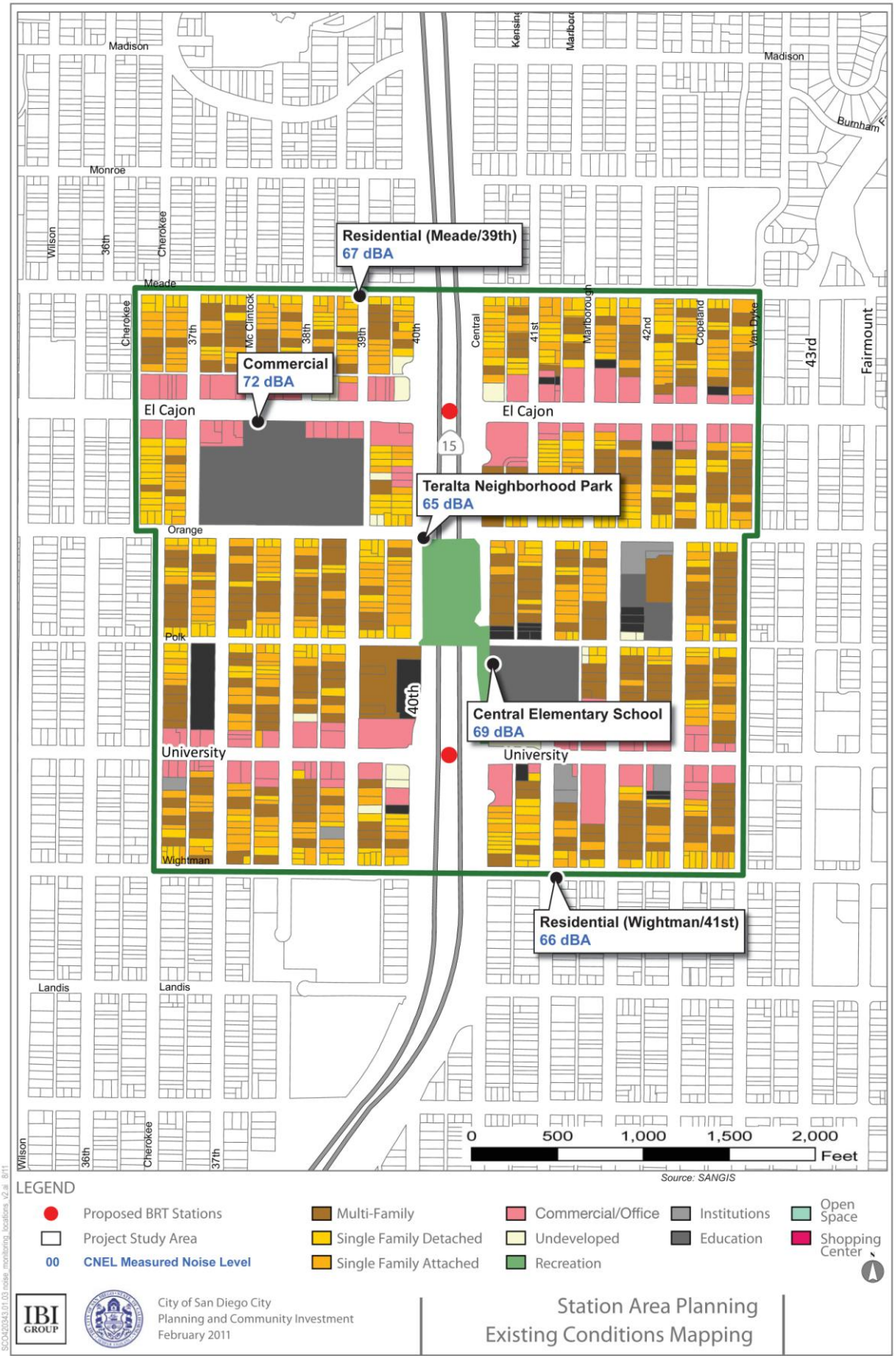
Noise Monitoring Location	Land Use Type	Primary Noise Sources	L_{eq} (24 hr)	L_{dn}	CNEL
1 – Northwest corner of Wightman Street/41st Street	Residential	Neighborhood street traffic	62	65	66
2 – Teralta Neighborhood Park	Residential	Neighborhood street traffic	60	64	65
3 – Central Elementary School	School Playground	SR 15 & school playground	65	68	69
4 – Southwest corner of Meade Avenue/39th Street	Residential	Neighborhood street traffic	65	66	67
5 – El Cajon Boulevard BIA Office	Commercial	El Cajon Boulevard street traffic	69	72	72

Recommendations

Future development associated with TOD improvements would need to consider potential noise impacts. These impacts would be associated with both construction and operation. Construction would typically generate a short-term temporary increase in noise levels from the operation of construction equipment. Operation of new transit systems could have the potential to decrease the amount of traffic noise by displacing vehicle noise. However, this decrease could be offset if vehicle speeds increase, or it could be added to if vehicle speeds decrease. Given that the monitoring results at the residential areas were above the guidelines followed by the City, there could be areas of conflict if noise levels were to increase.

Upon determining a defined project, a detailed traffic study and noise analysis would need to be conducted for the project study area to evaluate the associated level of impacts.

Figure 2 Noise Monitoring Locations



Hazardous Materials/Hazardous Waste

Methodology

Research of recent projects within the study area was conducted to document existing hazardous waste conditions. Past preliminary screening level analysis was conducted for the State Route 15 Mid-City BRT project and potential hazardous waste issues were reviewed and reflected corridor searches. In addition, a cursory review of the State Water Resources Control Board's database (GeoTracker) for managing sites that impact groundwater was conducted for the study area. Historical use information or field reviews were not performed and interviews were not conducted during this review. The following discussion summarizes this review.

Study Setting

Within the study area, there were a total of 21 sites identified through GeoTracker (Figure 4). Of these 21 sites, 16 were leaking underground tanks (LUST) cleanup sites that have been closed and four were other cleanup sites that were also closed. The remaining site is a LUST cleanup site located along El Cajon Boulevard that is listed as open for soil and groundwater investigation and monitoring.

Recommendations

Upon determining a defined project, a Phase I Environmental Site Assessment (ESA) would be conducted for the project study area to obtain a complete environmental database search for the project study area, identify the presence of potential environmental concerns, and evaluate the associated level of impacts.

Land Use

The following discussion identifies adopted land use plans applicable to the planning efforts for the study area. (Additional information is providing in the Land Use Technical Memo.)

Methodology

Relevant planning documents were reviewed to identify plan and program elements pertinent to the development and enhancement of the study area. The documents reviewed included the City of San Diego General Plan, the Mid-City Communities Plan, the 2010 Draft Bicycle Master Plan, and the San Diego Regional Bicycle Plan.

Study Setting

The study area is located entirely within the City of San Diego, and is a part of three defined communities: Normal Heights, Kensington-Talmadge, and City Heights. The profile of these communities reflects a well-developed urbanized environment with a diverse mix of land uses, population, and housing. Figure 5 shows the location of these communities relative to the study area. Existing land uses in the study area consist primarily of single-family and

Figure 4 Known Hazardous Sites Within the Study Area

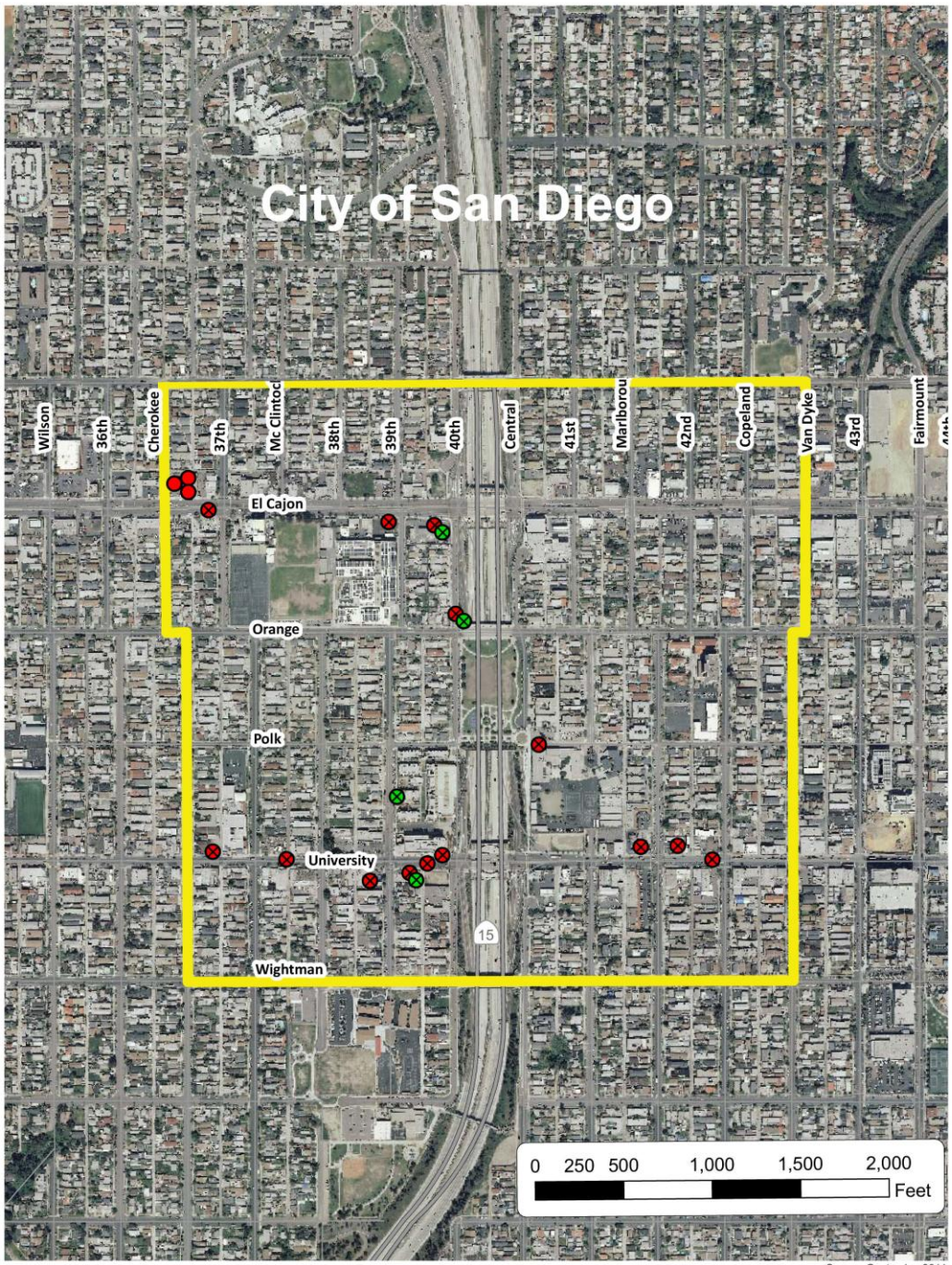


FIGURE 4
Known Hazardous Sites Within the Study Area
SR15 Mid-City BRT Station Area Planning Study

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Figure 5 Community Planning Areas

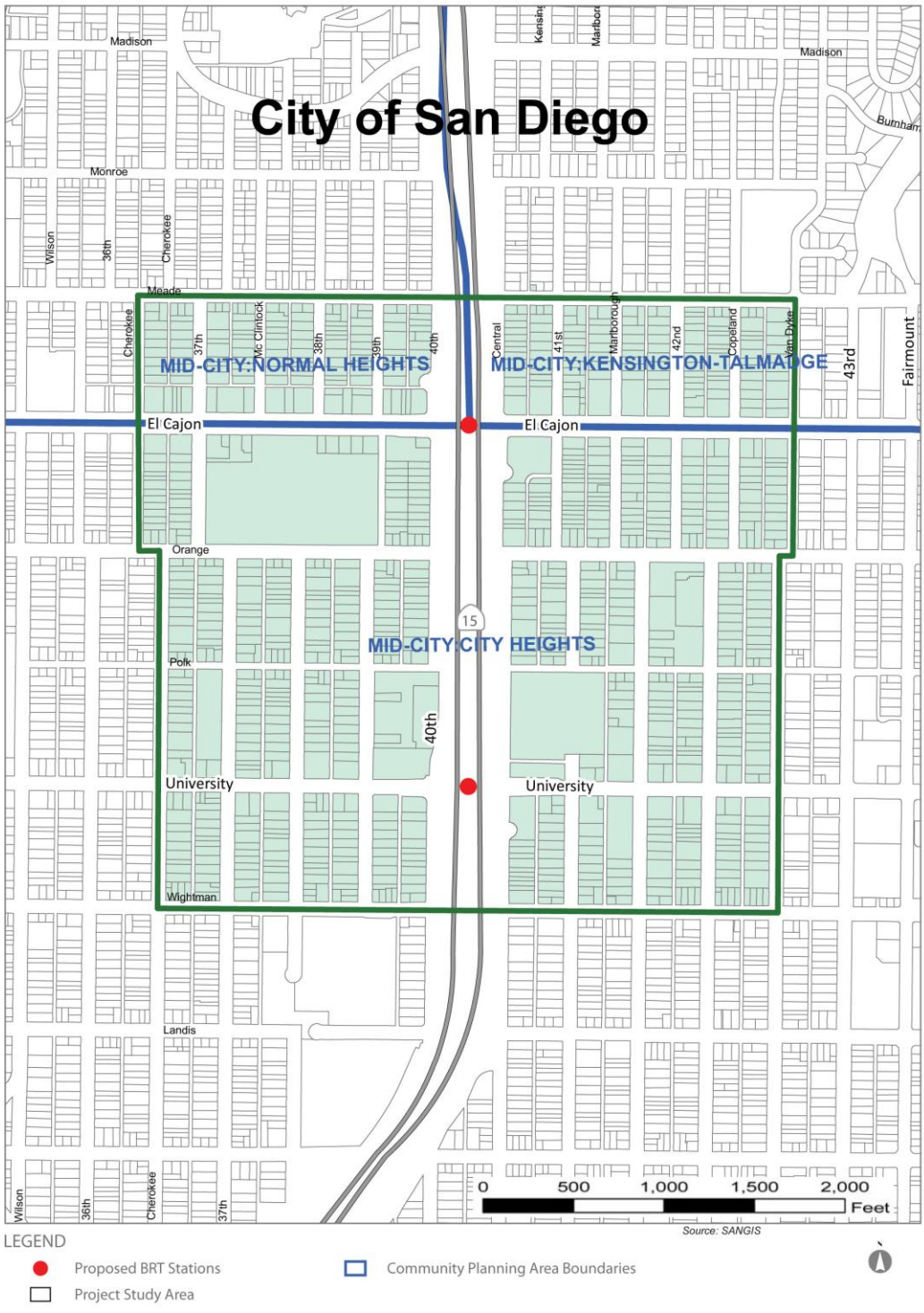

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FIGURE 5
Community Planning Areas
SR15 Mid-City BRT Station Area Planning Study

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multi-family residential uses and commercial uses associated with the major roads within the Mid-City area, El Cajon Boulevard and University Avenue. A number of schools and a park/recreation area with some undeveloped parcels also are also located within the study area. The existing land uses within the study area are shown in Figure 6.

Applicable Plans and Policies

City of San Diego General Plan

The City of San Diego General Plan (General Plan) was originally approved in 1979. It was first updated in 1989, then again in 2002 to include a new Strategic Framework Element, and most recently in March 2008 to provide a comprehensive policy framework for planning projected growth and development over the next 20 to 30 years. The General Plan contains several elements that pertain to the development and enhancement of the project study area.

Land Use & Community Planning Element

The Mid-City area is identified in the General Plan Land Use and Community Planning Element as an area with high propensity for location of a "village site" as described by the City of Villages concept. This means that the area contains elements such as community plan-identified capacity for growth, existing public facilities or an identified funding source for facilities, existing or an identified funding source for transit service, community character, and environmental constraints. Specific General Plan policies (p. LU-10 – LU-39, City, 2008) applicable to the project planning efforts include:

Policy LU-A.4: Locate village sites where they can be served by existing or planned public facilities and services, including transit services.

Policy LU-H.6: Provide linkages among employment sites, housing, and villages via an integrated transit system and a well-defined pedestrian and bicycle network.

Policy LU-I.11: Implement the City of Villages concept for mixed-use, transit-oriented development as a way to minimize the need to drive by increasing opportunities for individuals to live near where they work, offering a convenient mix of local goods and services, and providing access to high quality transit services.

Mobility Element

The proposed project would be consistent with applicable goals and guidelines contained in the Mobility Element of the General Plan. The Mobility Element is a part of a larger body of plans and programs (i.e., 2030 RTP) that guide the development and management of the City's transportation system. One of the listed goals is to provide "a coordinated, multimodal transportation system capable of meeting increasing needs for personal mobility and goods movement at acceptable levels of service."(City, 2008). Consistent with these goals, the proposed BRT project would provide new transit services intended to increase mobility.

Figure 6 Existing Land Use (2009)

IBI GROUP

City of San Diego City
Planning and Community Investment
February 2011

FIGURE 6
Existing Land Use (2009)
SR15 Mid-City BRT Station Area Planning Study

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Additionally, the General Plan provides a strategy to improve transportation options and reduce use of single-occupant vehicle trips by encouraging alternative modes of travel, such as carpooling, vanpooling, transit use, bicycling, and walking. The project is consistent with the General Plan Mobility Element policies because it will provide additional bus stops for planned transit routes between the Mid-City area and highly-frequented destinations including downtown San Diego and Mira Mesa. The BRT project will locate transit stops to provide convenient access to the high-density Mid-City area, while maintaining community character and providing comfortable walk and wait environments by incorporating design features consistent with the area. Applicable Mobility Element policies (p. ME-18 - ME-19, City, 2008) include the following:

Policy ME-B.1: b) Provide transit routes that offer efficient connections between highly frequented origins and destinations; and c) Enhance overall transit customer experience through attention to safety, station areas, vehicles, seating, and other factors.

Policy ME-B.3: Design and locate transit stops/stations to provide convenient access to high activity/density areas, respect neighborhood and activity center character, implement community plan recommendations, enhance the users' personal experience of each neighborhood/center, and contain comfortable walk and wait environments for customers.

Policy ME-B.9: b) Plan for transit-supportive villages, transit corridors, and other higher-intensity uses in areas that are served by existing or planned higher-quality transit services, in accordance with Land Use and Community Planning Element, Sections A and C.

Urban Design Element

The Urban Design Element of the General Plan calls for incorporation of transit stops and stations into project design in a way that is attractive, recognizable to the public, and adjacent to active uses. Applicable Urban Design Element policies (p. UD-12, City, 2008) include the following:

Policy UD-A.9: a) Provide attractively designed transit stops and stations that are adjacent to active uses, recognizable by the public, and reflect desired neighborhood character; b) Design safe, attractive, accessible, lighted, and convenient pedestrian connections from transit stops and stations to building entrances and street network.

Noise Element

The General Plan Noise Element calls for minimal excessive motor vehicle traffic noise on residential and other noise-sensitive land uses, including along arterial roads.

Mid-City Communities Plan

The Mid-City Communities Planning Area encompasses four communities: Normal Heights, Kensington-Talmadge, City Heights, and Eastern. As noted, the project study area is located in three of the four Mid-City Communities (Normal Heights, Kensington-Talmadge, and City Heights). Normal Heights is located south of I-8 between I-805 and SR-15 and extends south to El Cajon Boulevard. The Kensington-Talmadge Community lies south of I-8, east of SR-15, west of Collwood Boulevard and north of El Cajon Boulevard. City Heights is located south of Mission Valley, north of SR 94, between SR-15 and I-805 on the west and 54th Street on the east. The Mid-City Communities Plan was adopted by the City Council in 1998, and last amended in 2003. The Neighborhoods Element within this plan gives an overview of each of 27

identified neighborhoods within the planning area, summarizes the major issues of concern that resulted in the Plan's recommendations, and shows the land use recommendations for the four communities of Mid-City.

The following summarizes the relevant goals, policies, and objectives within the Mid-City Communities Plan.

- Provide accessible public transit service for all residents, employees, shoppers, and visitors to Mid-City.
- Provide a high level of public transit service along major corridors.
- Provide direct public transit access to major regional employment centers.
- Enhance existing urban level bus service to the extent possible by increasing the frequency of service, adding express service, reducing headway between buses, allowing buses to preempt traffic signals, and improving transit stops and surfacing of streets along bus routes.

2010 Draft Bicycle Master Plan

The San Diego Bicycle Master Plan is an update to the City's previous 2002 plan, presenting a renewed vision for bicycle transportation, recreation and quality of life in San Diego. This vision is closely aligned with the City's 2008 San Diego General Plan mobility, sustainability, health, economic, and social goals. The bicycle network, projects, policies, and programs included in this document provide the City with a strong framework for improving bicycling through 2030 and beyond.

The goals and objectives of the Bicycle Master Plan are derived from the 2008 San Diego General Plan and are strengthened with additional policies intended to help bicycling become a more viable transportation mode for short trips, to connect to transit, and for recreation. The goals of the plan are to promote:

- A city where bicycling is a viable travel choice, particularly for trips of less than 5 miles
- A safe and comprehensive local and regional bikeway network
- Environmental quality, public health, recreation, and mobility benefits through increased bicycling

The Bicycle Master Plan includes an assessment of current bicycling demand and barriers in San Diego and estimates potential future demand and benefits that could be realized through implementation of the plan. The recommended bicycle network consists primarily of on-street facilities, including approximately 826 miles of proposed bike lane and bike route, 40 miles of bicycle boulevard, and 8 miles of cycle track. The plan also recommends 170 miles of paved multi-use paths. These totals include existing facilities and proposed facilities. Among the bicycle projects identified in the plan are Class I and Class III bicycle facilities proposed along SR-15, adjacent to the project corridor.

San Diego Regional Bicycle Plan

The San Diego Regional Bicycle Plan supports implementation of both the Regional Comprehensive Plan (RCP) and Regional Transportation Plan (RTP). The RCP calls for more transportation options and a balanced regional transportation system to support smart growth

and a more sustainable region. A policy objective of the RCP is to "create more walkable and bicycle-friendly communities consistent with good urban design concepts." The RTP calls for a multimodal regional transportation network that includes a regional bicycle network. According to the RTP, "steps to reduce peak-period travel or change when and how people travel will become increasingly important in the future." To achieve these objectives the Plan sets forth a vision for a regional bicycle system comprised of interconnected bicycle corridors, support facilities, and programs to make bicycling more practical and desirable to a greater number of the region's residents and visitors. This vision is intended to guide the future development of the regional bicycle system through the year 2050, congruent with the forthcoming 2050 RTP.

The plan outlines a range of recommendations to facilitate accomplishing regional goals, including bicycle infrastructure improvements, bicycle related programs, implementation strategies, and policy and design guidelines. The proposed regional bicycle network consists of a combination of standard bicycle facilities, including Class I bike paths, Class II bike lanes, and Class III bike routes. It also proposes two facility types that are not defined as bikeways by the California Department of Transportation (Caltrans): bicycle boulevards and cycle tracks. These two facility types are intended to serve as demonstration projects to study their potential to provide greater safety and comfort to bicyclists. Among the bicycle projects identified in the plan are Class I and Class II bicycle facilities, proposed along SR-15 within the Mid-City area. Bicycle boulevards also are proposed along roadways in the project vicinity.

Recommendations

The study area is a highly developed and well-established urban area. Currently, the applicable planning documents support transit-oriented development, bicycle networks and programs, high-quality and integrated transit systems, pedestrian movement and safety, and overall community and regional connections. As the project effort progresses and the dialogue continues, it should be determined if land use changes would need to occur within the project study area to help achieve the community desires while bringing about positive change and growth and if policy decisions should be made regarding development within the project study area.

Community Cohesion and Compatibility

In addition to the unity and function of physical attributes and complementary land uses within a community, community cohesion and compatibility is also achieved through a common vision and representation.

Methodology

Research of recent projects within the study area and the Mid-City Communities Plan was conducted to document existing land use conditions. The following discussion summarizes this research as well as the first meeting of stakeholders with the City of San Diego and the project team held on March 29, 2011.

Study Setting

The study area is located in an urbanized area of the City of San Diego and as previously noted, encompasses three different planning communities within the Mid-City Communities Plan which include City Heights, Normal Heights and Kensington-Talmadge. The

neighborhoods along the study area include Cherokee Park to the west of SR-15 in the Normal Heights planning community, the Kensington neighborhood to the east of SR-15 in the Kensington-Talmadge planning community, and the neighborhoods of Corridor, Cherokee Point, Teralta West, and Castle to the east and west of SR-15 within the City Heights planning community. The following provides a description of the neighborhoods located within the study area.

Normal Heights

Normal Heights is generally bounded by the commercial development of Adams Avenue on the north, El Cajon Boulevard on the south, I-805 on the west, and SR-15 on the east. The eastern portion of Normal Heights, formerly known as Cherokee Park, is included in the study area. This neighborhood has a mixture of single family, older apartment courts, with larger apartment development scattered throughout the area. Ward Canyon Neighborhood Park, between 39th Street and 40th Street at Adams Avenue to the west of SR-15, was planned and constructed as part of the SR-15 freeway construction.

Kensington

Kensington is a unique neighborhood due to its geography and the nonstandard layout designed by its developers. Because it is a narrow peninsula isolated on three sides by steep slopes, much of which is dedicated open space, it has the ambience of a small town. Its winding streets contain mostly owner occupied, custom single-family homes. Kensington extends north, along tree-lined streets to the southern rim of Mission Valley. Kensington has a small business district consisting of five blocks on Adams Avenue. Named for a borough in London, England, Kensington is a pioneering subdivision dating to 1910. With its stone gateways, ornamental lighting, and curving streets, the neighborhood is a strong candidate for designation as a historic district.

Corridor and Teralta West

Corridor and Teralta West are linear neighborhoods located in the middle section of the Mid-City plateau. They were originally developed with single-family housing as the suburban addition to San Diego, and located along the east trolley corridor and the original Highway 80 (El Cajon Boulevard) route. The area has been developing since World War II with higher-density apartments and condominium development. These neighborhoods now contain the highest population density in the Mid-City area. Much of the housing is multifamily combined with older single-family development and some older apartment courts. Commercial needs are served by The Boulevard and University Avenue commercial corridors. All residences are within a walking radius of commercial services and potential employment areas.

Cherokee Point

Cherokee Point is primarily a single-family home residential neighborhood, with the exception of the University Avenue commercial frontage. Park de La Cruz, which borders SR-15 on the west side, was developed as part of the freeway construction. Remnant canyons extend into the neighborhood along the borders of SR-15 and I-805.

Castle

Castle is primarily a single-family home residential neighborhood with the exception of the University Avenue commercial frontage and a few older stores scattered along Fairmount Avenue.

Key Issues and Opportunities

Based upon the feedback received during the first working group meeting on March 29, 2011, key issues and opportunities for future TOD development were identified by the group. Current density within the community seemed to be viewed as favorable amongst the group members. Concerns identified by the group included parking availability and location, vacancies in the commercial areas which reflects upon the lack of thriving businesses and the need to improve retail, and poor building conditions. It was also noted that redevelopment may not be the best answer for the community and that the current character along the El Cajon Boulevard may be considered as outdated and not appealing.

A number of desires were discussed and the group wanted to bring people to their neighborhood and create a positive impact within the community. Education and employment needed to be improved. The group would like to have a successful commercial area along both major east-west corridors (El Cajon Boulevard and University Avenue). Stable businesses and high-quality jobs with office centers were aspirations identified by the group. The desire to create a neighborhood center with a formal gathering space was acknowledged. The group also anticipated a change in real estate would occur with the growth of transit and solid housing options and opportunities were currently lacking. Pleasant and high-quality designs for bicycle paths and routes were recognized as an important community feature. The two major transit plazas on El Cajon Boulevard and University Avenue above SR-15 were viewed as key anchor points to establish connectivity with other transportation systems (i.e., bus, trolley). Ideally, the Mid-City area would also serve as a destination and support overflow from hotels and events in downtown San Diego and the Mission Valley area.

Recommendations

The working group, City of San Diego, and the project team should continue to meet to discuss the planning efforts for the project study area. A walk audit was completed on April 16, 2011 with members of the stakeholder group and the community, City of San Diego, and project team members. Feedback received from the stakeholder meetings and the walk audit should be documented, discussed, and incorporated into the planning efforts.

Community outreach and collaboration with the working group should continue to identify key issues and concerns, benefits and deficiencies within the neighborhood, and preferred features of transit-oriented development and transportation modes. As previously mentioned, it should be determined if land use changes should need to occur within the project study area to help achieve the community desires while bringing about positive change and growth and if policy decisions would be made regarding development within the project study area.

Summary of Recommendations and Future Analysis

Upon determining a defined project, a detailed air quality analysis including carbon monoxide, PM hotspot, mobile source air toxics, and GHG emissions would need to be conducted for the project study area to evaluate project specific air quality impacts to the surround development.

Future development associated with TOD improvements would need to consider potential noise impacts. Given that the monitoring results at the residential areas were above the guidelines followed by the City, there could be areas of conflict if noise levels were to increase. Upon determining a defined project, a detailed traffic study and noise analysis would need to be conducted for the project study area to evaluate the associated level of impacts. A Phase I ESA would be conducted for the project study area to obtain a complete environmental database search for the project study area, identify the presence of potential environmental concerns, and evaluate the associated level of impacts.

Applicable planning documents support transit-oriented development, bicycle networks and programs, high-quality and integrated transit systems, pedestrian movement and safety, and overall community and regional connections. As the project effort progresses and the dialogue continues, it should be determined if land use changes would need to occur within the project study area to help achieve the community desires while bringing about positive change and growth and if policy decisions should be made regarding development within the project study area. Community outreach and collaboration with the working group should continue to identify key issues and concerns, benefits and deficiencies within the neighborhood, and preferred features of transit-oriented development and transportation modes. As previously mentioned, it should be determined if land use changes should need to occur within the project study area to help achieve the community desires while bringing about positive change and growth and if policy decisions would be made regarding development within the project study area.

Future development associated with TOD improvements would need to consider potential noise impacts associated with both construction and operation. Construction would typically generate a short-term temporary increase in noise levels from the operation of construction equipment. Operation of new transit systems could have the potential to decrease the amount of traffic noise by displacing vehicle noise. However, this decrease could be offset if vehicle speeds increase, or it could be added to if vehicle speeds decrease. Upon determining a defined project, a detailed traffic study and noise analysis would need to be conducted for the project study area to evaluate the associated level of impacts.

As the project planning efforts progress and design details are developed, future analysis to be conducted would include additional environmental issue areas including, but not limited to aesthetics/visual resources, cultural resources/historical resources, water quality/urban runoff, pedestrian circulation and safety, and traffic and bicycle circulation within the community and region.

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Appendix – Detailed Noise Measurement Information

Figure 1
SR15 - Site 1
Wightman St & 41st St

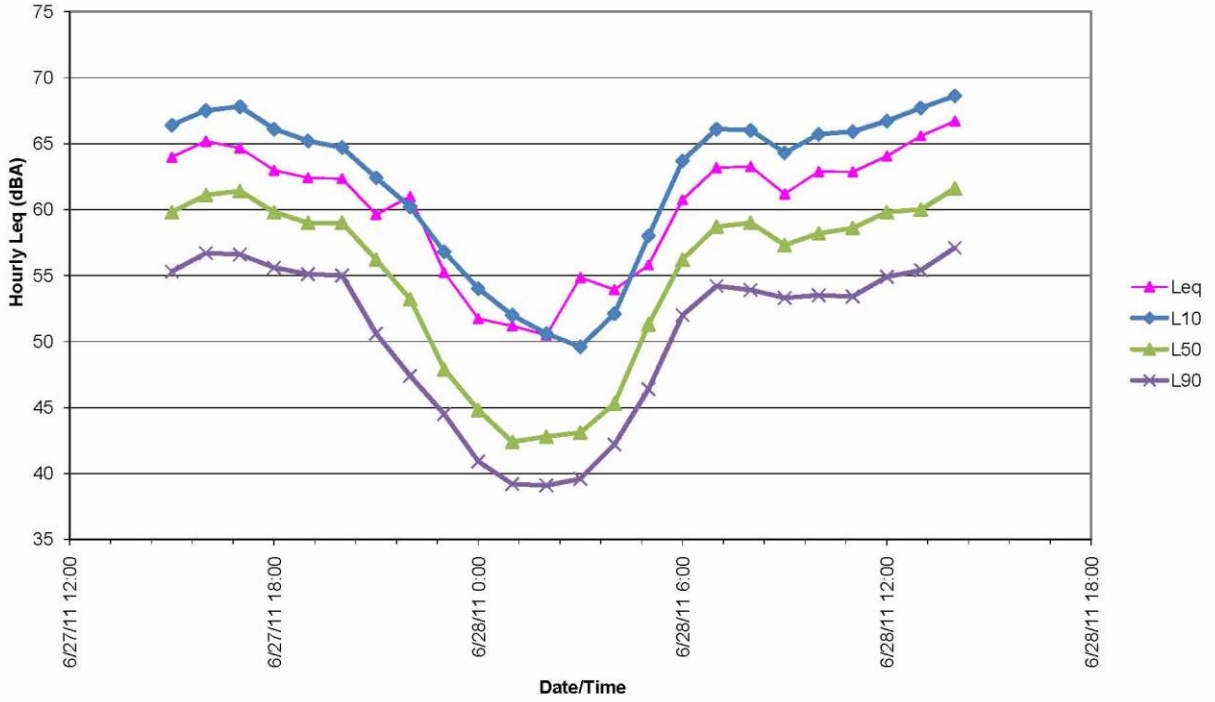

Figure 2
SR15 - Site 2
Teralta Park

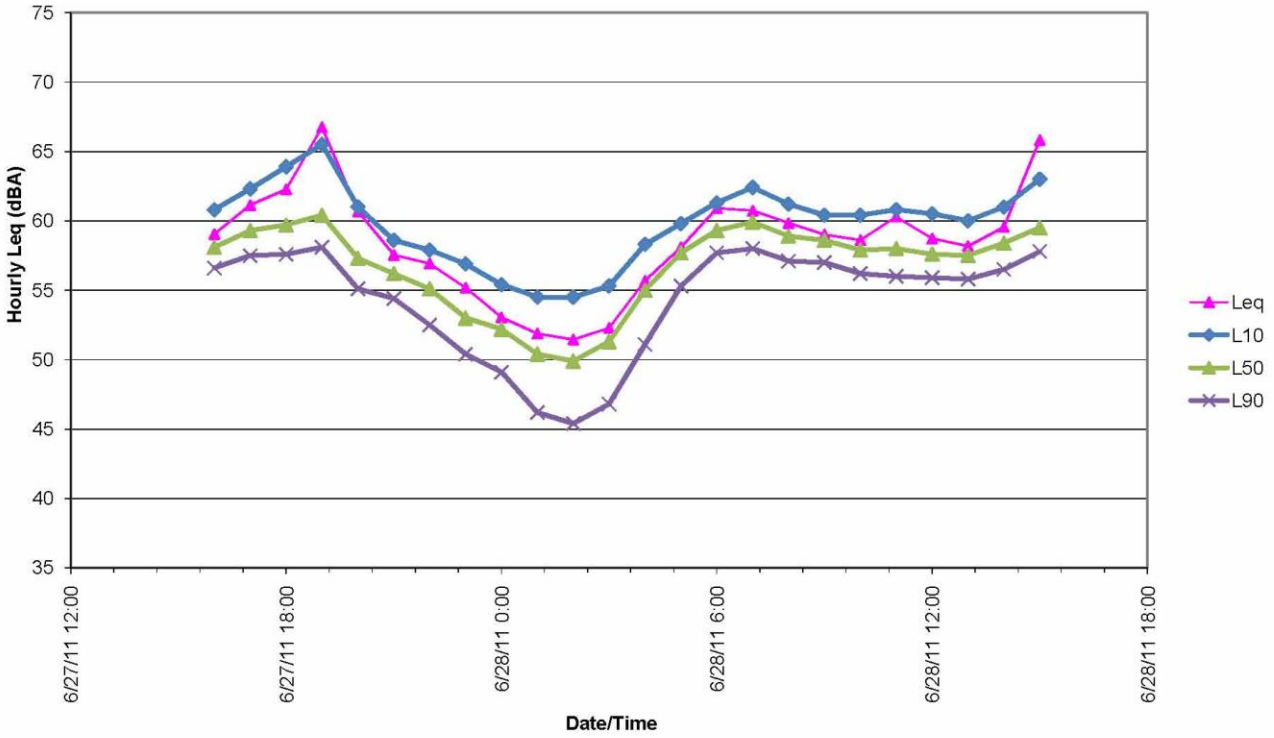

Figure 3
SR15 - Site 3
Central Elementary School

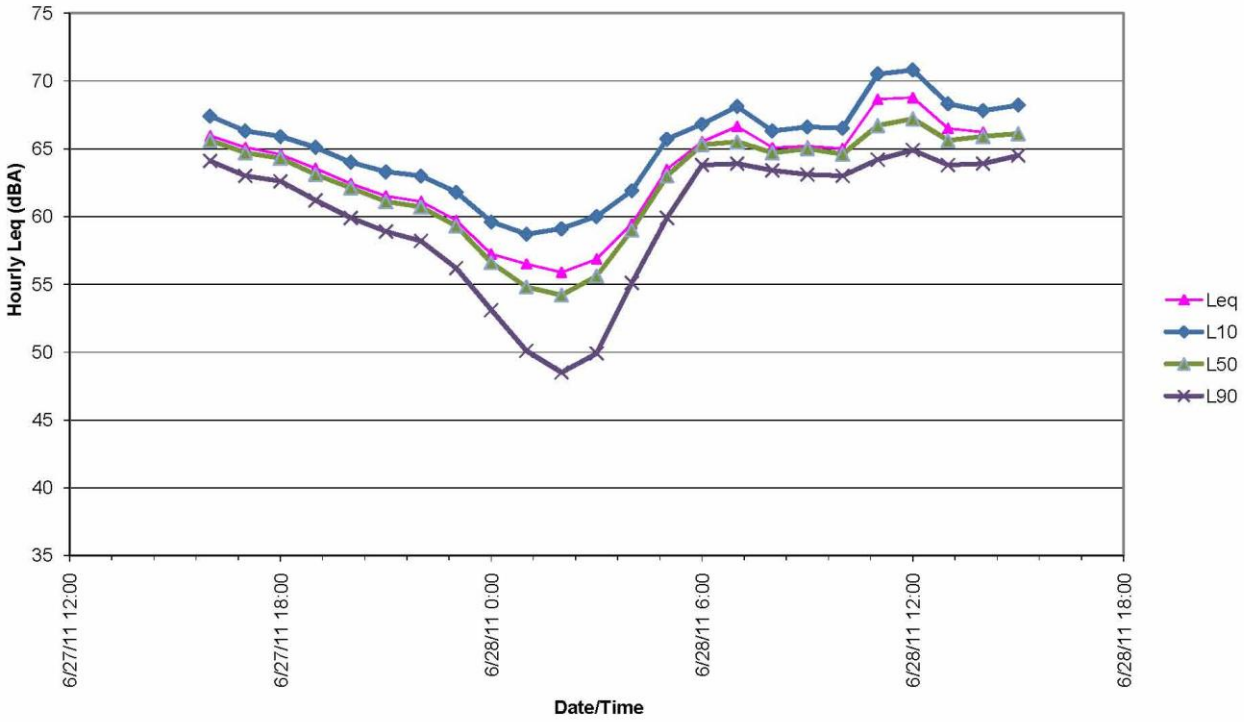

Figure 4
SR15 - Site 4
Meade Ave & 39th St

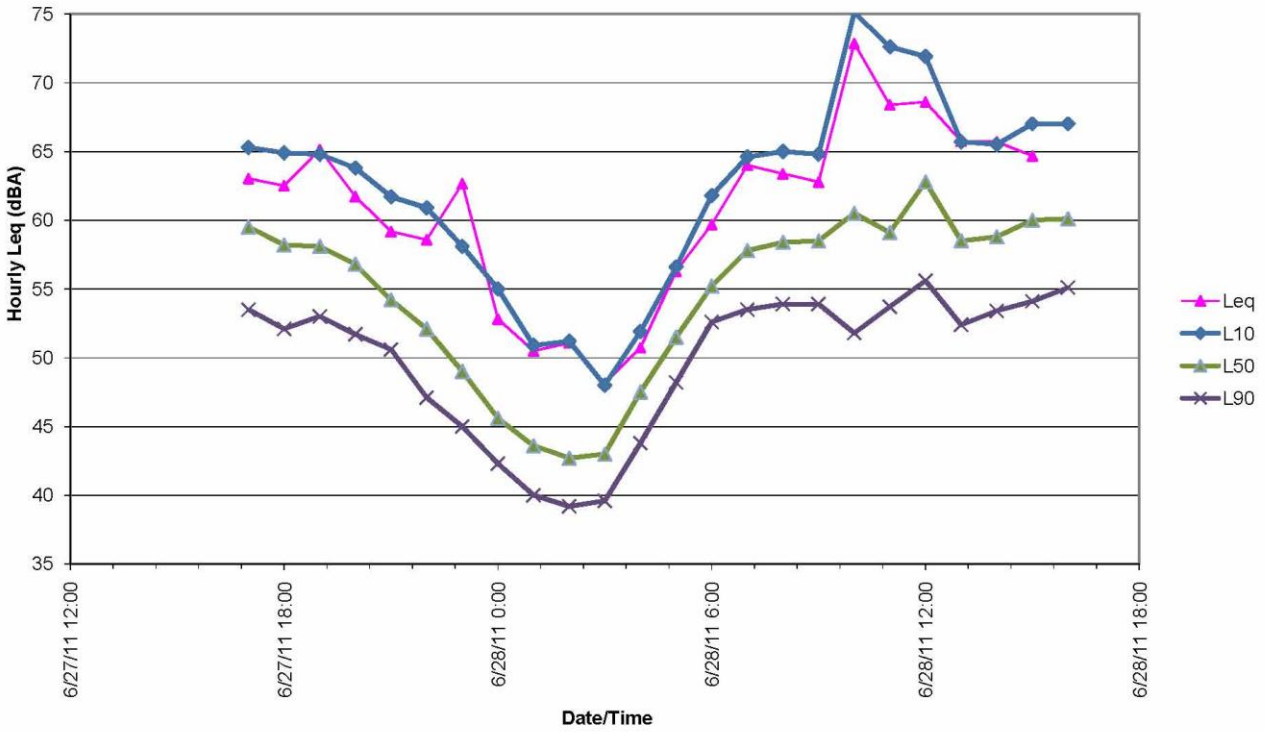

Figure 5
SR15 - Site 5
El Cajon Blvd BIA Office

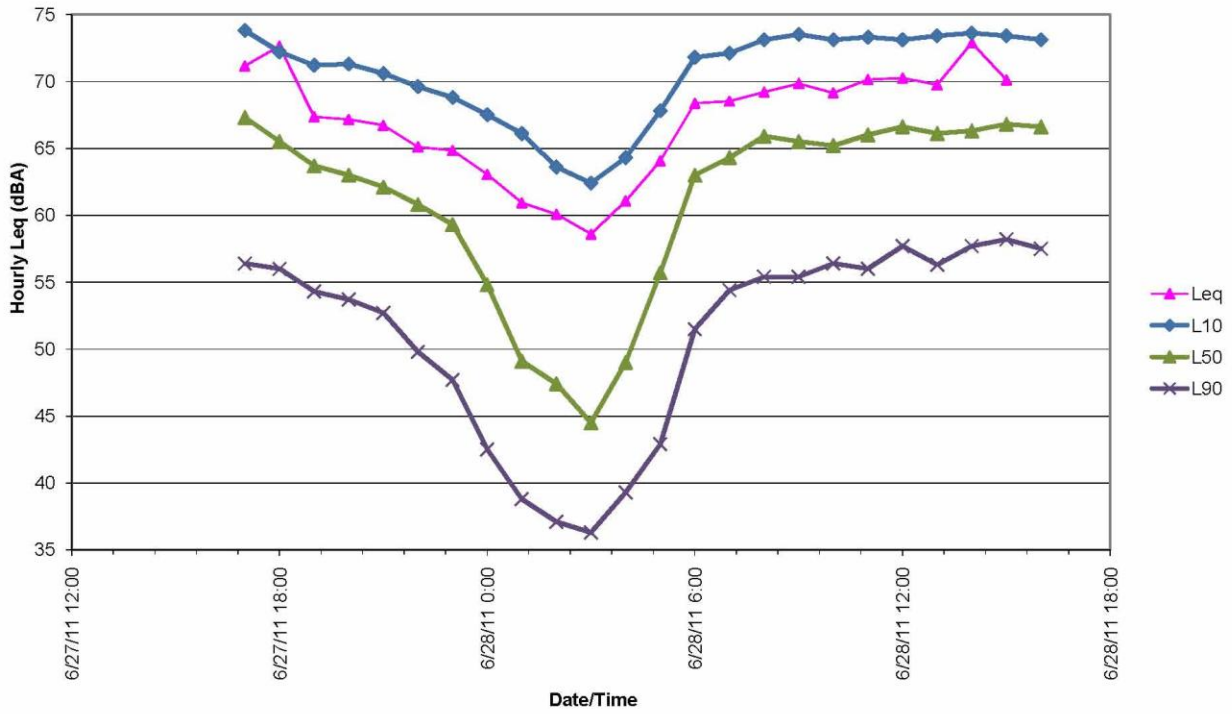

TABLE 1
Site 1 Hourly Averages Wightman St & 41st St
SR-15

Date/Time	Leq	L10	L50	L90
6/27/11 3:00 PM	64	66	60	55
6/27/11 4:00 PM	65	68	61	57
6/27/11 5:00 PM	65	68	61	57
6/27/11 6:00 PM	63	66	60	56
6/27/11 7:00 PM	62	65	59	55
6/27/11 8:00 PM	62	65	59	55
6/27/11 9:00 PM	60	62	56	51
6/27/11 10:00 PM	61	60	53	47
6/27/11 11:00 PM	55	57	48	45
6/28/11 12:00 AM	52	54	45	41
6/28/11 1:00 AM	51	52	42	39
6/28/11 2:00 AM	50	51	43	39
6/28/11 3:00 AM	55	50	43	40
6/28/11 4:00 AM	54	52	45	42
6/28/11 5:00 AM	56	58	51	46
6/28/11 6:00 AM	61	64	56	52
6/28/11 7:00 AM	63	66	59	54
6/28/11 8:00 AM	63	66	59	54
6/28/11 9:00 AM	61	64	57	53
6/28/11 10:00 AM	63	66	58	54
6/28/11 11:00 AM	63	66	59	53
6/28/11 12:00 PM	64	67	60	55
6/28/11 1:00 PM	66	68	60	55
6/28/11 2:00 PM	67	69	62	57
Ldn	**65**			

Table 2
Site 2 Hourly Averages Teralta Park
SR-15

Date/Time	Leq	L10	L50	L90
6/27/11 4:00 PM	59	61	58	57
6/27/11 5:00 PM	61	62	59	58
6/27/11 6:00 PM	62	64	60	58
6/27/11 7:00 PM	67	66	60	58
6/27/11 8:00 PM	61	61	57	55
6/27/11 9:00 PM	58	59	56	54
6/27/11 10:00 PM	57	58	55	53
6/27/11 11:00 PM	55	57	53	50
6/28/11 12:00 AM	53	55	52	49
6/28/11 1:00 AM	52	55	50	46
6/28/11 2:00 AM	51	55	50	45
6/28/11 3:00 AM	52	55	51	47
6/28/11 4:00 AM	56	58	55	51
6/28/11 5:00 AM	58	60	58	55
6/28/11 6:00 AM	61	61	59	58
6/28/11 7:00 AM	61	62	60	58
6/28/11 8:00 AM	60	61	59	57
6/28/11 9:00 AM	59	60	59	57
6/28/11 10:00 AM	59	60	58	56
6/28/11 11:00 AM	60	61	58	56
6/28/11 12:00 PM	59	61	58	56
6/28/11 1:00 PM	58	60	58	56
6/28/11 2:00 PM	60	61	58	57
6/28/11 3:00 PM	66	63	60	58
Ldn	**64**			

Table 3
Site 3 Hourly Averages Central Elementary School
SR-15

Date/Time	Leq	L10	L50	L90
June 27, 2011 4:00 PM	66	67	66	64
June 27, 2011 5:00 PM	65	66	65	63
June 27, 2011 6:00 PM	65	66	64	63
June 27, 2011 7:00 PM	64	65	63	61
June 27, 2011 8:00 PM	62	64	62	60
June 27, 2011 9:00 PM	62	63	61	59
June 27, 2011 10:00 PM	61	63	61	58
June 27, 2011 11:00 PM	60	62	59	56
June 28, 2011 12:00 AM	57	60	57	53
June 28, 2011 1:00 AM	56	59	55	50
June 28, 2011 2:00 AM	56	59	54	49
June 28, 2011 3:00 AM	57	60	56	50
June 28, 2011 4:00 AM	59	62	59	55
June 28, 2011 5:00 AM	63	66	63	60
June 28, 2011 6:00 AM	66	67	65	64
June 28, 2011 7:00 AM	67	68	66	64
June 28, 2011 8:00 AM	65	66	65	63
June 28, 2011 9:00 AM	65	67	65	63
June 28, 2011 10:00 AM	65	67	65	63
June 28, 2011 11:00 AM	69	71	67	64
June 28, 2011 12:00 PM	69	71	67	65
June 28, 2011 1:00 PM	66	68	66	64
June 28, 2011 2:00 PM	66	68	66	64
June 28, 2011 3:00 PM	67	68	66	65
Ldn	**65**			

Table 4
Site 4 Hourly Averages Meade Ave & 39th St
SR-15

Date/Time	Leq	L10	L50	L90
June 27, 2011 5:00 PM	63	65	60	54
June 27, 2011 6:00 PM	63	65	58	52
June 27, 2011 7:00 PM	65	65	58	53
June 27, 2011 8:00 PM	62	64	57	52
June 27, 2011 9:00 PM	59	62	54	51
June 27, 2011 10:00 PM	59	61	52	47
June 27, 2011 11:00 PM	63	58	49	45
June 28, 2011 12:00 AM	53	55	46	42
June 28, 2011 1:00 AM	50	51	44	40
June 28, 2011 2:00 AM	51	51	43	39
June 28, 2011 3:00 AM	48	48	43	40
June 28, 2011 4:00 AM	51	52	48	44
June 28, 2011 5:00 AM	56	57	52	48
June 28, 2011 6:00 AM	60	62	55	53
June 28, 2011 7:00 AM	64	65	58	54
June 28, 2011 8:00 AM	63	65	58	54
June 28, 2011 9:00 AM	63	65	59	54
June 28, 2011 10:00 AM	73	75	61	52
June 28, 2011 11:00 AM	68	73	59	54
June 28, 2011 12:00 PM	69	72	63	56
June 28, 2011 1:00 PM	66	66	59	52
June 28, 2011 2:00 PM	66	66	59	53
June 28, 2011 3:00 PM	65	67	60	54
June 28, 2011 4:00 PM	66	67	60	55
Ldn	**65**			

Table 5
Site 5 Hourly Averages El Cajon Blvd BIA Office
SR-15

Date/Time	Leq	L10	L50	L90
June 27, 2011 5:00 PM	71	74	67	56
June 27, 2011 6:00 PM	73	72	66	56
June 27, 2011 7:00 PM	67	71	64	54
June 27, 2011 8:00 PM	67	71	63	54
June 27, 2011 9:00 PM	67	71	62	53
June 27, 2011 10:00 PM	65	70	61	50
June 27, 2011 11:00 PM	65	69	59	48
June 28, 2011 12:00 AM	63	68	55	43
June 28, 2011 1:00 AM	61	66	49	39
June 28, 2011 2:00 AM	60	64	47	37
June 28, 2011 3:00 AM	59	62	45	36
June 28, 2011 4:00 AM	61	64	49	39
June 28, 2011 5:00 AM	64	68	56	43
June 28, 2011 6:00 AM	68	72	63	52
June 28, 2011 7:00 AM	69	72	64	54
June 28, 2011 8:00 AM	69	73	66	55
June 28, 2011 9:00 AM	70	74	66	55
June 28, 2011 10:00 AM	69	73	65	56
June 28, 2011 11:00 AM	70	73	66	56
June 28, 2011 12:00 PM	70	73	67	58
June 28, 2011 1:00 PM	70	73	66	56
June 28, 2011 2:00 PM	73	74	66	58
June 28, 2011 3:00 PM	70	73	67	58
June 28, 2011 4:00 PM	70	73	67	58
Ldn	**69**			