Noise Analysis for the Uptown, North Park, and Golden Hill Community Plan Updates, City of San Diego Project No. 30330/304032 SCH No. 2004651076

Prepared for

City of San Diego
Planning Department
1222 First Avenue
San Diego, CA 92101

Prepared by

RECON Environmental, Inc.
1927 Fifth Avenue
San Diego, CA 92101-2358
P 619.308.9333 F 619.308.9334
RECON Number 6086
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Jessica Fleming, Acoustical Analyst

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Acronyms

AEOZ	Airport Environs Overlay Zone
ALUCP	Airport Land Use Compatibility Plan
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CNEL	community noise equivalent level
CPU	Community Plan Update
CREATE	Chicago Rail Efficiency and Transportation Efficiency
dB	Decibel
dB(A)	A-weighted decibel level
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HVAC	heating, ventilation, and air conditioning
Hz	Hertz
I-805; I-5; I-15, I-8	Interstate 805; Interstate 5, Interstate 15, Interstate 8
kHz	Kilo-Herz
L_{eq}	average-equivalent noise level
mph	miles per hour
PEIR	Program Environmental Impact Report
PPV	peak particle velocity
SANDAG	San Diego Association of Governments
SDCRAA	San Diego County Regional Airport Authority
SDMTS	San Diego Metropolitan Transit System
SR-94, SR-163	State Route 94, State Route 163
STC	sound transmission class
VdB	vibration decibel

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Executive Summary

This report evaluates potential local and regional noise impacts associated with the proposed Community Plan Updates (CPUs) for the Uptown, North Park, and Golden Hill communities. The CPUs would update the adopted 1988 Uptown Community Plan, 1986 North Park Community Plan, and 1988 Golden Hill Community Plan. The CPUs provide goals and supporting policies for future development within the planning areas, consistent with the 2008 City of San Diego General Plan (General Plan); as well as provide a long-range, comprehensive policy framework for growth and development in the three communities through 2035.

The CPUs encompass a broad range of the land use designations defined in the General Plan and contain a more detailed description and distribution of land uses than the citywide General Plan. Land uses include residential with a variety of density ranges, village centers, commercial, industrial, open space, parks, and institutional. Compared to the existing land uses, the CPUs envision reducing industrial, institutional, recreational, and single-family residential land uses and increasing commercial space and multi-family dwelling units. This would increase the diversity of land uses within the plan area and would be consistent with the General Plan City of Villages Strategy, which directs growth into pedestrian-friendly mixed-use activity centers linked to an improved regional transit system.

As related to the issue of noise, the CPUs would allow for an increase to the existing number of multi-family dwelling units, which are a noise-sensitive land use. New policies within the CPUs are intended to reflect and implement the general noise-reduction recommendations of the General Plan and strategies of other local plans. The CPU policies refine existing General Plan policies with site-specific recommendations applicable to the individual communities.

Sources of noise in the CPU areas include vehicular traffic; rail traffic including the San Diego Metropolitan Transit System (SDMTS) trolley, Amtrak, Coaster, and freight trains; the San Diego International Airport; and stationary sources.

Increase in Ambient Noise

A significant impact would occur if implementation of the proposed CPUs would result in or create a significant increase in the existing ambient noise levels. There are areas that are currently exposed to significant traffic noise levels that are greater than established General Plan guidelines in the CPU areas. The proposed CPUs would not result in a change in that condition, and these areas would continue to be exposed to significant noise levels. If an area is already exposed to noise levels in excess of the land use compatibility guidelines and noise levels were to result in greater than a 3 A-weighted decibels (dB(A)) increase, then the impact would be considered significant. If an area is currently exposed to noise levels that do not exceed the land use compatibility guidelines and noise levels were to result in greater than a 5 dB increase, then the impact would be considered significant. There are areas that are currently

exposed to noise levels that are exactly at or very near the land use compatibility guidelines. For these areas, the increase in ambient noise levels would be considered significant if noise levels resulted in greater than a 5 dB increase or if resulting noise levels were 3 dB(A) more than the compatibility guideline.

A significant increase in ambient noise would occur adjacent to several roadway segments in the CPU areas. The land uses adjacent to these segments were examined and buildout noise levels were compared to the General Plan compatibility guidelines. Existing and/or future residential uses are or could be located adjacent to each of these segments. Therefore, the increase in ambient noise levels due to the CPUs could result in the exposure of existing sensitive receptors to a significant increase in ambient noise levels.

Possible noise-reduction measures would include retrofitting older homes with new window and door components with higher sound transmission class (STC) ratings. The existing residential uses adjacent to Grape Street, 25th Street between Russ Boulevard and A Street and Beech Street between 28th Street and 29th Street are eligible for the Quieter Home Program. While intended to attenuate existing buildings from high aircraft noise, the attenuation would also reduce interior noise levels from exterior motor vehicle noise. Some of the existing residences in the Uptown and Golden Hill CPU areas have already participated in this program and have undergone retrofits to reduce interior noise levels to 45 dB(A) CNEL. However, for existing uses that have not participated in or are not eligible for the Quieter Home Program, at the program level, it cannot be determined whether the existing structures contain adequate attenuation to reduce interior noise to the 45 dB(A) CNEL) standard nor what measures would be required to retrofit these structures. In addition, there is no mechanism in place for implementing such a retrofit program in areas outside the Airport Authority's Quieter Home Program. Because the significant noise impacts are to existing homes in an already urbanized area, there is no feasible mitigation. Thus impacts to existing sensitive land uses would remain significant and unmitigated.

A mitigation framework exists for new development in areas exposed to high levels of ambient noise. Policies in the CPUs and General Plan regulations in the Municipal Code and Title 24 of the California Code of Regulations would reduce traffic noise exposure, because they set standards for the siting of sensitive land uses. Site-specific noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City's General Plan would be required as part of the review process for discretionary projects. With this framework, noise impacts to discretionary projects would be less than significant. However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unmitigated. Interior noise impacts for all projects including ministerial projects would be less than significant because applicants must demonstrate compliance with the current interior noise standards [45 dB(A) CNEL] through submission and approval of a Title 24 Compliance Report.

Land Use Plan Compatibility

A significant impact would occur if implementation of the proposed CPUs would result in an exposure of people to current or future transportation noise levels that exceed guidelines established in the Noise Element of the General Plan.

Vehicle Traffic

In the CPU areas, noise levels for all land uses would be incompatible (i.e., greater than 75 dB(A) CNEL) closest to the freeways. These areas are currently developed and the proposed CPUs would not change the land use or introduce new sensitive land uses in these areas. Thus, while land uses in these areas would be exposed to noise levels that exceed General Plan guidelines, this noise exposure would not be a significant noise impact resulting from implementation of the CPUs.

A mitigation framework exists for new development in areas exposed to high levels of vehicle traffic noise. Policies in the CPUs and General Plan would reduce traffic noise exposure because they set standards for the siting of sensitive land uses. General Plan policy NE-A.4 requires an acoustical study consistent with Acoustical Study Guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the Land Use – Noise Compatibility Guidelines. Site-specific exterior noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City's General Plan would be required as part of future discretionary proposals. Additionally, site-specific interior noise analyses demonstrating compliance with the interior noise compatibility guidelines of the City's General Plan would be required for land uses located in areas where exterior noise levels exceed the City's noise and land use compatibility guidelines as defined in the General Plan, Table N-3, and summarized in Table 3. With this framework, noise impacts to new discretionary development would be less than significant.

However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unmitigated. Interior noise impacts for all projects including ministerial projects would be less than significant because applicants must demonstrate compliance with the current interior noise standards [45 dB(A) CNEL] through submission and approval of a Title 24 Compliance Report.

Rail Traffic

West of the Uptown CPU area, the SDMTS provides trolley service along a railway alignment designated the "Green Line". The Green Line trolley generally parallels Interstate 5 (I-5). Amtrak, Coaster, and freight trains also travel within the rail corridor. Since noise levels at the nearest planning area boundary and the nearest sensitive receptors would not exceed 60 dB(A) CNEL,

noise impacts due to trolley and train operations would be compatible with General Plan guidelines. There are no railway operations in the North Park or Golden Hill CPU areas.

ALUCP Consistency

A significant impact would occur if implementation of the proposed CPUs would result in land uses that are not compatible with aircraft noise levels as defined by an adopted Airport Land Use Compatibility Plan (ALUCP).

Based on the projected airport noise contours for the San Diego International Airport, land uses in the Uptown and Golden Hill planning areas are located where noise levels due to aircraft operations exceed 65 dB(A) CNEL. Both the General Plan Noise Element and the ALUCP conditionally allow residential exterior noise levels above the 65 dB(A) CNEL where community plan allows residential uses.. Future residential development must include noise attenuation consistent with the Noise Element of the General Plan and the ALUCP for the San Diego International Airport. Additionally, interior noise impacts would be regulated by the requirement for residential development within the forecasted ALUCP noise contours to reduce interior noise levels attributable to airport noise to the limits established in the ALUCP. Conditionally compatible land uses must incorporate sound attenuation to achieve indoor noise levels as specified in the ALUCP. Because future development (including constructing, reconstructing, converting, establishing, altering, maintaining, relocating, demolishing, using, or enlarging any building, structure, improvement, lot, or premises as defined in §113.0103 of the Municipal Code) is required to provide noise attenuation consistent with the Noise Element of the General Plan and the ALUCP for the San Diego International Airport, implementation of the CPUs would result in a less than significant impact from aircraft noise.

Municipal Code – Stationary Noise

A significant impact would occur if implementation of the proposed CPU results in the exposure of people to noise levels that exceed property line limits established in the Noise Abatement and Control Ordinance of the Municipal Code.

Mixed-use areas would contain residential and commercial interfaces. Mixed-use sites and areas where residential uses are located in proximity to commercial sites would expose sensitive receptors to noise. Although noise-sensitive residential land uses would be exposed to noise associated with the operation of these commercial uses, City policies and regulations would control noise and reduce noise impacts between various land uses. In addition, enforcement of the local noise regulations by the City would control impacts. With implementation of these policies and enforcement of the Noise Abatement and Control Ordinance of the Municipal Code, impacts would be less than significant, and no mitigation is required at the program level.

Municipal Code – Construction

A significant impact would occur if implementation of the proposed CPUs resulted in the exposure of people to significant temporary construction noise.

Construction activities related to implementation of the proposed CPUs would potentially generate short-term noise levels in excess of 75 A-weighted decibel (dB) average sound level (dB(A) L_{eq}) at adjacent properties, which could therefore be potentially significant. While City regulates noise associated with construction equipment and activities through enforcement of noise ordinance standards (e.g., days of the week and hours of operation) and imposition of conditions of approval for building or grading permits, there is a procedure in place that allows for variance to the noise ordinance. Due to the highly developed nature of the CPU areas with sensitive receivers potentially located in proximity to construction sites, there is a potential for construction of future projects to expose existing and future residences to noise levels in excess of 75 dB(A) L_{eq} at the property line, and impacts would be significant without mitigation. Typically, noise can be reduced to comply with City standards when standard construction noise control measures are enforced at the project site and when the duration of the noise-generating construction period is limited to one construction season (typically one year) or less. Implementation of the mitigation measures outlined in this analysis would reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance. With the implementation of these control measures, and the limited duration of the noise-generating construction period, the substantial temporary increase in ambient noise levels would be mitigated to a level less than significant.

Vibration

Construction

Non-pile driving or foundation work construction phases that have the highest potential of producing vibration (such as jackhammering and other high power tools) would be intermittent and would only occur for short periods of time for any individual project site. By use of administrative controls, such as scheduling construction activities with the highest potential to produce perceptible vibration to hours with least potential to affect nearby properties, perceptible vibration can be kept to a minimum and as such would result in a less than significant impact with respect to perception. However, pile driving within 95 feet of existing structures has the potential to exceed 0.20 inch per second and would be potentially significant. Measures are available to reduce construction-related vibration impacts; however, at the program level there is no means of assuring adequate implementation. Therefore, impacts would be significant and unmitigated.

Operation

The commercial uses that would be constructed under the proposed CPUs would include uses such as retail, restaurants, and small offices that would not require heavy mechanical equipment that would generate groundborne vibration or heavy truck deliveries. Residential and civic uses do not typically generate vibration. Thus, operational vibration impacts associated with CPU implementation would be less than significant.

1.0 Introduction

The project analyzed in this noise report includes the Uptown, North Park and Golden Hill Community Plan Updates (CPUs). The CPUs provide goals and supporting policies for future development within the planning areas consistent with the City of San Diego General Plan (General Plan), as well as provide a long-range, comprehensive policy framework for growth and development in the three communities through 2035.

The purpose of this study is to assess the potential for significant adverse noise impacts resulting from development that could occur with the CPUs. Noise impacts were assessed in accordance with the City of San Diego California Environmental Quality Act (CEQA) Significance Determination Thresholds (City of San Diego 2011).

2.0 Project Description

2.1 Project Overview

The CPUs would update the adopted 1988 Uptown Community Plan, 1986 North Park Community Plan, and 1988 Golden Hill Community Plan. The CPUs provide goals and supporting policies for future development within the planning areas. Approval of the CPUs would establish land use designations and policies to guide future development consistent with the City of San Diego's (City) General Plan (City of San Diego 2008). The CPUs express the General Plan policies through the provision of more site-specific recommendations.

Each CPU includes eight elements based on those promulgated in the City's General Plan, with goals and policies for each. The eight elements are: Land Use; Mobility; Urban Design; Economic Prosperity; Public Facilities, Services, and Safety; Recreation; Conservation; and Noise.

The CPUs encompass a broad range of the land use designations defined in the General Plan and contain a more detailed description and distribution of land uses than the citywide General Plan. Land uses include residential with a variety of density ranges, village centers, commercial, industrial, open space, parks, and institutional. Compared to the existing land uses, the CPUs envision increasing commercial space and multi-family dwelling units. This would increase the

diversity of land uses within the plan area and would be consistent with the General Plan City of Villages Strategy, which directs growth into pedestrian-friendly mixed-use activity centers linked to an improved regional transit system.

As related to the issue of noise, the CPUs would increase the number of multi-family dwelling units above the existing dwelling units, which are a noise-sensitive land use. New policies within the CPUs are intended to reflect and implement the general noise-reduction recommendations of the General Plan, strategies of other local plans, and the California Building Code, Title 24, Section 1207, Sound Transmission, et seq., noise attenuation requirements. The CPU policies refine existing General Plan policies with site-specific recommendations applicable to the individual communities.

Figure 1 shows the regional location of the planning areas, and Figure 2 shows an aerial photograph of the planning areas. The planning areas are bounded by Mission Valley to the north, Normal Heights and City Heights to the east, Southeastern San Diego and Centre City to the south, and Midway Pacific Highway Corridor and Old Town San Diego communities to the west. Additionally, Balboa Park lies in between the three planning areas.

2.2 Development Summary

The CPUs encompass a broad range of the land use designations defined in the General Plan and contain a more detailed description and distribution of land uses than the citywide General Plan. Land uses include residential with a variety of density ranges, village centers, commercial, industrial, open space, parks, and institutional. Land use buildout under the proposed Uptown, North Park, and Golden Hill CPUs are summarized in Table 1. Figures 3, 4, and 5 show the proposed land uses for the Uptown, North Park, and Golden Hill CPUs, respectively.

TABLE 1
LAND USE DISTRIBUTIONS IN 2035 BY COMMUNITY

	Uptown	North Park	Golden Hill
Residential (dwelling units)			
Single-family	5,500	5,117	2,095
Multi-family	27,180	31,453	7,120
SUBTOTAL	32,680	36,570	9,215
Non-residential (square feet)			
Commercial	4,785,200	2,138,210	393,960
Institutional	2,485,700	870,440	213,040
Hotels	174,000	158,900	-
Recreation	31,100	27,450	-
SUBTOTAL	7,476,000	3,195,000	607,000

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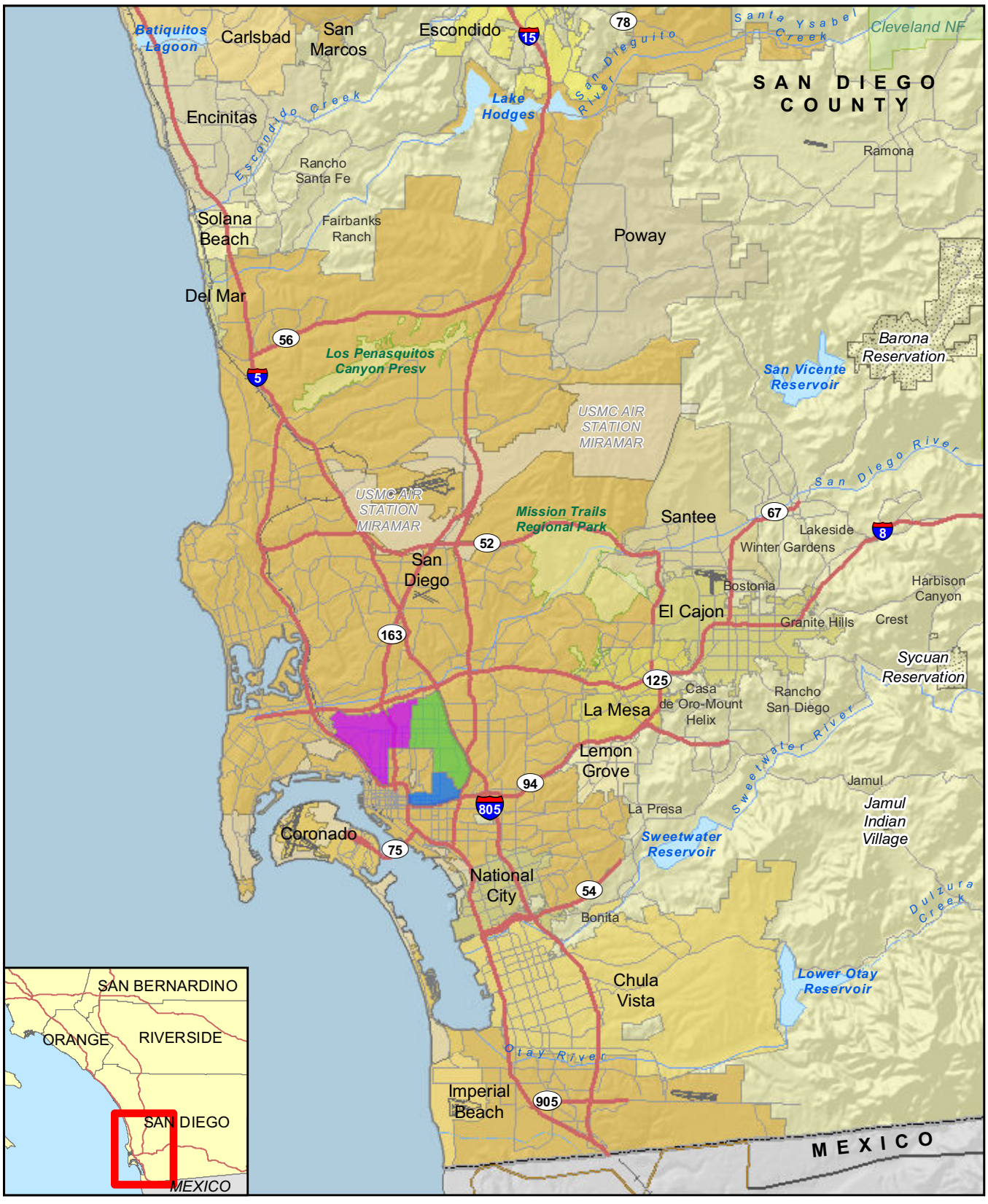

Community Plan Boundaries

- Uptown
- North Park
- Golden Hill

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FIGURE 1

Regional Location

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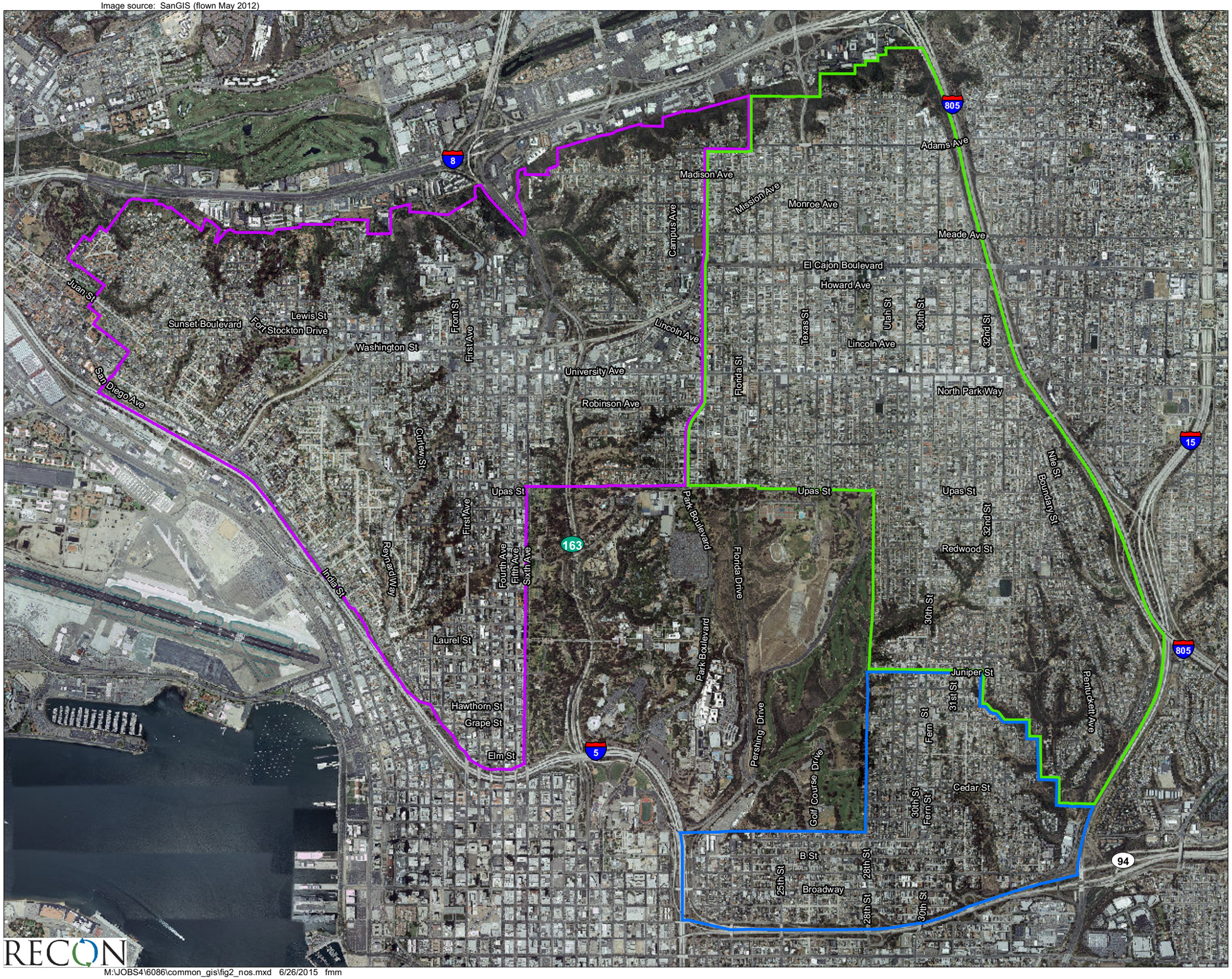
Image source: SanGIS (flown May 2012)



Community Plan Boundaries

- Uptown
- North Park
- Golden Hill

0 Feet 2,200

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FIGURE 2

Aerial Photograph of the Uptown, North Park, and Golden Hill CPU Areas

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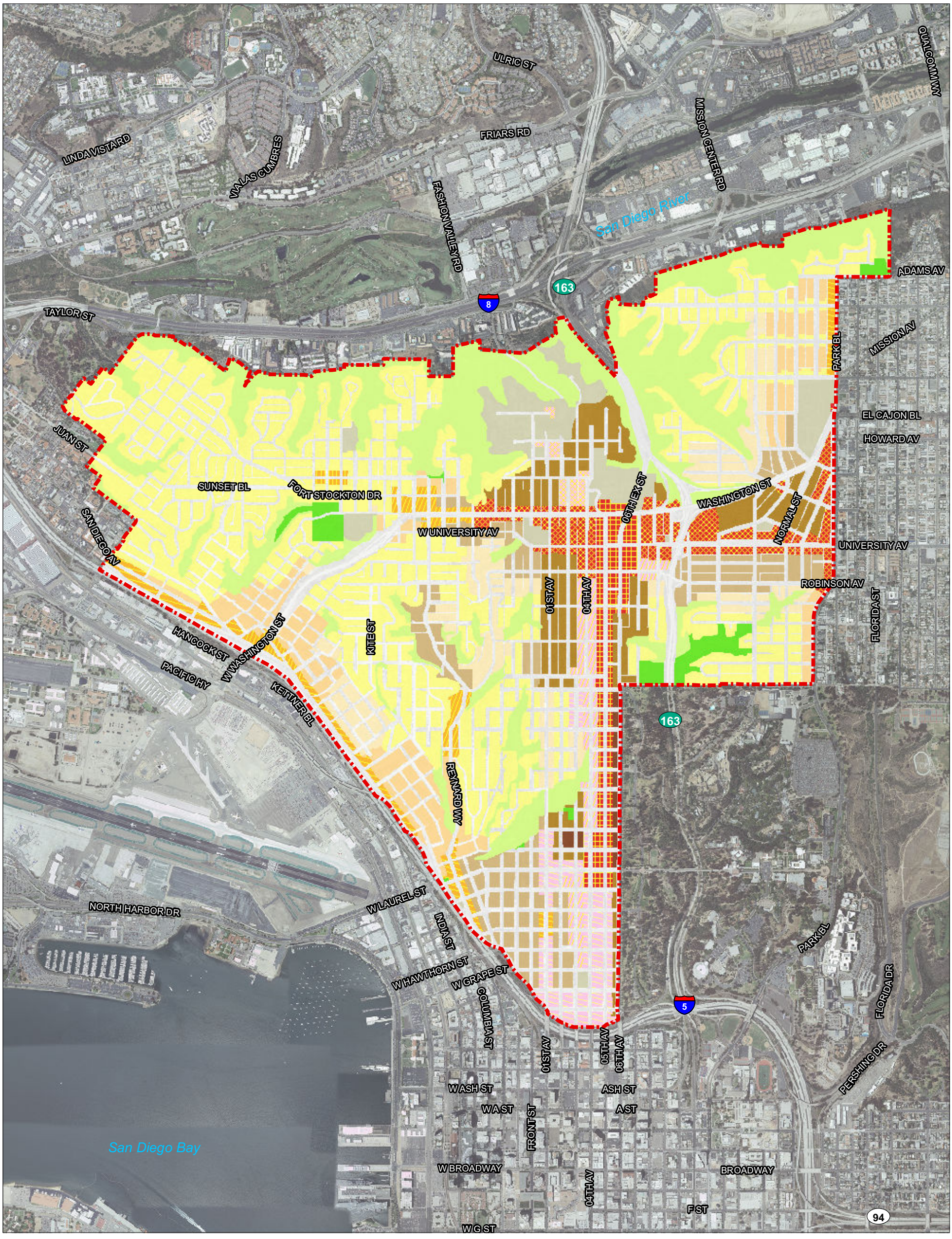
Image source: SanGIS (flown May 2012)



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Uptown Community Plan Boundary

Proposed Land Use (Draft)

Residential

- Residential - Low : 5-9 Du/Ac
- Residential - Low Medium : 10-15 Du/Ac
- Residential - Medium : 16-29 Du/Ac
- Residential - Medium High : 30-44 Du/Ac
- Residential - High : 45-73 Du/Ac
- Residential - Very High : 74-109 Du/Ac

Commercial, Employment, Retail, and Services

- Community Commercial : 0-29 Du/Ac
- Community Commercial : 0-44 Du/Ac
- Community Commercial : 0-73 Du/Ac
- Community Commercial : 0-109 Du/Ac
- Neighborhood Commercial : 0-15 Du/Ac
- Neighborhood Commercial : 0-29 Du/Ac
- Neighborhood Commercial : 0-44 Du/Ac
- Office Commercial : 0-29 Du/Ac
- Office Commercial : 0-44 Du/Ac
- Office Commercial : 0-73 Du/Ac
- Office Commercial : 0-109 Du/Ac

Park, Open Space, and Recreation

- Open Space
- Park

Institutional, and Public/Semi-Public Facilities

- Institutional

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FIGURE 3

Proposed Land Uses for the Uptown CPU

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Image source: SanGIS (flown May 2012)

North Park Community Plan Boundary

Proposed Land Use (Draft)

Residential

- Residential - Low : 5-9 Du/Ac
- Residential - Low Medium : 10-15 Du/Ac
- Residential - Medium : 16-29 Du/Ac
- Residential - Medium High : 30-44 Du/Ac *
- Residential - High : 45-54 Du/Ac
- Residential - Very High : 55-73 Du/Ac

Commercial, Employment, Retail, and Services

- Community Commercial : 0-29 Du/Ac
- Community Commercial : 0-44 Du/Ac
- Community Commercial : 0-54 Du/Ac
- Community Commercial : 0-73 Du/Ac**
- Community Commercial : 0-109 Du/Ac***
- Neighborhood Commercial : 0-29 Du/Ac
- Neighborhood Commercial : 0-73 Du/Ac

Park, Open Space, and Recreation

- Open Space
- Park

Institutional, and Public/Semi-Public Facilities

- Institution

0 Feet 1,400

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FIGURE 4

Proposed Land Uses for the North Park CPU

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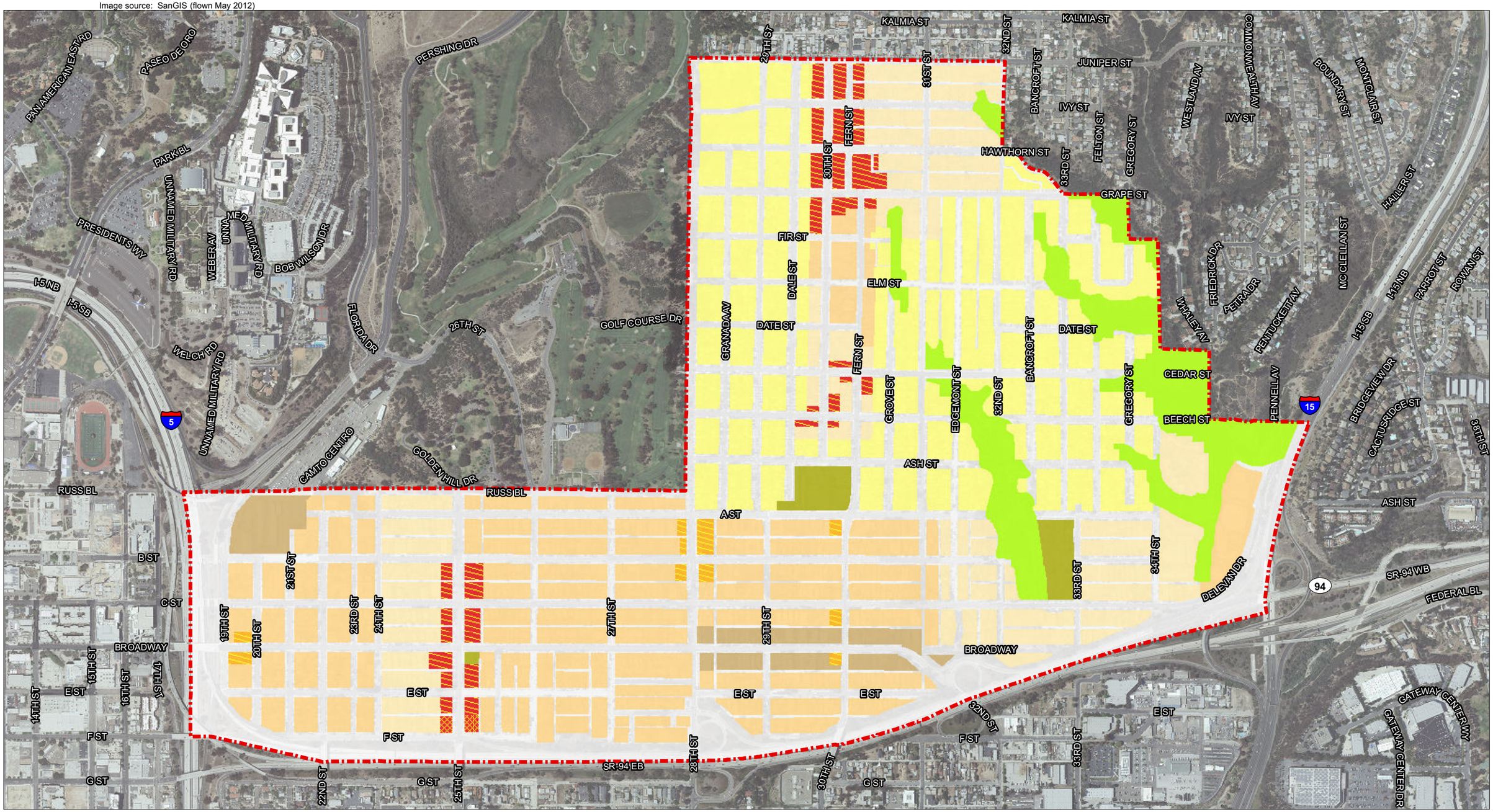
Image source: SanGIS (flown May 2012)



0 Feet 800

Golden Hill Community Plan Boundary

Proposed Land Use (Draft)

Residential

- Residential - Low : 5-9 Du/Ac
- Residential - Low Medium : 10-15 Du/Ac
- Residential - Medium : 16-29 Du/Ac
- Residential - Medium High : 30-44 Du/Ac

Commercial, Employment, Retail, and Services

- Community Commercial - Residential Permitted : 0-29 Du/Ac
- Community Commercial - Residential Permitted : 0-44 Du/Ac
- Neighborhood Commercial - Residential Permitted : 0-29 Du/Ac

Park, Open Space, and Recreation

- Open Space

Institutional, and Public/Semi-Public Facilities

- Institutional

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FIGURE 5

Proposed Land Uses for the Golden Hill CPU

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2.3 CPU Goals and Policies

New policies within the CPUs are intended to reflect, refine, and implement the general noise-reduction recommendations of the General Plan and strategies of other local plans. Specifically, the Noise Element of each CPU provides specific policies to guide compatible land uses and provides for the incorporation of possible attenuation measures for new uses in order to reduce exposure of people living and working in the community from excessive noise. These policies would work in conjunction with the General Plan, which provides policy direction for noise-related issues, and City noise-related ordinances, which limit noise levels and operational hours associated with commercial uses. In addition to the General Plan Noise Element policies, the relevant CPU Noise Elements policies are described in the following sections.

2.3.1 Uptown CPU

Policies and Recommendations

9.1 Utilize the Community Plan and the Airport Land Use Compatibility Plan noise contours when making land use planning decisions.

9.2 Ensure that future residential use above the 60 dBA CNEL aircraft noise contour include noise attenuation measures to ensure an interior noise level of 45 dBA CNEL and provide an avigation easement to the airport operator for SDIA.

9.3 Establish a train horn “quiet zone” at the Old Town, Washington Street, Noell Street, Vine Street, and Sassafras Street at-grade rail crossings.

2.3.2 North Park CPU

Policies and Recommendations

9.1 Motor Vehicle Noise

9.1-1 Encourage the use of traffic calming measures as a means to enhance safety and reduce noise associated with cars, especially along streets where future mixed-use development will place residents in close proximity to neighborhood commercial corridors like 30th Street.

9.1-2 Raise awareness to changes in vehicle speed on major thoroughfares especially in low density residential areas through the incorporation of neighborhood identity-specific traffic calming measures such as thematic landscaping, community identity signs, and public art along streets such as 30th Street, Upas Street, Texas Street, Florida Drive, and Park Boulevard.

9.1-3 Establish wayfinding signs within the community to facilitate efficient and more immediate vehicle access to community destinations such as parks, schools, business areas, the theater, and the North Park Parking structure for motorists.

9.1-4 Actively pursue funding and grant opportunities for passive parks that could serve as landscape buffer areas along freeway corridors.

9.1-4.a Include a dense planting of trees and shrubs to prevent gaps in landscape buffers.

9.1-4.b Use evergreen trees within landscape buffer areas to provide year-long noise attenuation.

9.2 Mass Transit

9.2-1 Work with SANDAG, MTS, and Caltrans to install and evaluate noise mitigation systems to minimize impacts to existing businesses and residences and maintain compliance for visually impaired access adjacent to new rapid bus and future streetcar mass transit systems.

9.2-2 Incorporate the use of innovative technologies to reduce noise associated with transit vehicles such as tires with noise reducing tread designs and open-graded/rubber asphalt concrete.

9.3 Commercial and Mixed-Use Activity

9.3-1 Implement operational measures in areas where commercial-residential adjacency issues exist that could:

9.3-1.a Institute open/close window hours for eating and drinking establishments that incorporate roll-up style windows;

9.3-1.b Encourage the use of evening security staff to control loitering after hours and crowds;

9.3-1.c Limit alcohol service on patios.

9.3-1.d Allow bars to remain open to serve food after alcohol has stopped being served.

9.3-2 Include acoustical studies to evaluate potential noise impacts as a condition of permit approval and/or during a review for a change in the type of business related to eating and drinking establishments.

9.3-3 Continue the promotion of “quiet-in-residential neighborhoods” signs to bring awareness to evening commercial patrons who walk through residential neighborhoods.

9.3-4 Locate a portion of the residential component of a commercial-residential mixed-use project next to existing residential development, where mixed-use development projects involve the consolidation of adjacent multi-family zoned properties.

9.3-5 Incorporate sound attenuation measures such as sound walls, dense landscaping, and visual-only confirmation order screens where commercial fast food drive-thrus are permitted especially adjacent to residential areas.

9.3-6 Encourage truck deliveries to occur on commercial streets and so that residential streets and neighborhoods are not negatively affected.

2.3.3 Golden Hill CPU

Policies and Recommendations

9.1 Utilize the Community Plan and the Airport Land Use Compatibility Plan noise contours when making land use planning decisions.

9.2 Ensure that future residential use above the 60 dBA CNEL aircraft noise contour include noise attenuation measures to ensure an interior noise level of 45 dBA CNEL and provide an avigation easement to the airport operator for SDIA.

9.3 Reduce the effect from commercial activity noise involves site planning and integrating noise attenuation measures in new buildings that will reduce interior sound levels. Refer to General Plan Policies NE-E-1 through NE-E6.

3.0 Fundamentals of Noise and Vibration

3.1 Sound, Noise, and Acoustics

Sound is a vibratory disturbance created by a moving or vibrating source in a gaseous or liquid medium or the elastic stage of a solid, and is capable of being detected by the hearing organs. Sound may be thought of as the mechanical energy of a vibrating object transmitted by pressure waves through a medium to a hearing organ, such as a human ear. For traffic sound, the medium is air.

Sound is actually a process that consists of three components: the sound source, the sound path, and the sound receiver. All three components must be present for sound to exist. Without a source to produce sound, there is no sound. Likewise, without a medium to transmit sound pressure waves, there is no sound. Finally, sound must be received; a hearing organ, sensor, or object must be present to perceive, register, or be affected by sound or noise. In most situations, there are many different sound sources, paths, and receptors rather than just one of each. Acoustics is the field of science that deals with the production, propagation, reception, effects, and control of sound. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired.

3.1.1 Frequency and Hertz

A continuous sound can be described by its frequency (pitch) and its amplitude (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch, like the low notes on a piano, whereas high-frequency sounds are high in pitch, like the high notes on a piano. Frequency is expressed in terms of oscillations, or cycles, per second. Cycles per second are commonly referred to as Hertz (Hz). High frequencies are sometimes more conveniently expressed in units of kilo-Hertz (kHz) or thousands of Hertz. The extreme range of frequencies that can be heard by the healthiest human ear spans from 16–20 Hz on the low end to about 20,000 Hz (or 20 kHz) on the high end.

3.1.2 Sound Pressure Levels and Decibels

The amplitude of a sound determines its loudness. Loudness of sound increases and decreases with its amplitude. Sound pressure levels are described in units called the decibel (dB). Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB(A); a halving of the energy would result in a 3 dB(A) decrease.

3.1.3 A-weighted Decibels

Sound pressure level alone is not a reliable indicator of loudness. The frequency, or pitch, of a sound also has a substantial effect on how humans will respond. Although the intensity (energy per unit area) of the sound is a purely physical quantity, the loudness or human response is determined by the characteristics of the human ear.

The human ear is not equally sensitive to all frequencies within the sound spectrum. Human hearing is limited not only in the range of audible frequencies but also in the way it perceives the sound in that range. In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, and it perceives a sound within that range as more intense than a sound of higher or lower frequency with the same magnitude. To approximate the frequency response of the human ear, a series of sound level adjustments is usually applied to the sound measured by a sound level meter. The adjustments (referred to as a weighting network) are frequency dependent.

The A-scale weighting network approximates the frequency response of the average healthy ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Other weighting networks have been devised to address high noise levels or other special situations (e.g., B-scale, C-scale, D-scale), but these scales are rarely, if ever, used in conjunction with highway traffic noise. Noise levels for traffic noise reports are typically reported in terms of A-weighted decibels [dB(A)]. All sound levels discussed in this report are A-weighted. Examples of

typical noise levels for common indoor and outdoor activities are depicted in Table 2. The basic terminology and concepts of noise are described below.

Additionally, human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dB(A) or in terms of acoustical energy. Two noise sources do not "sound twice as loud" as one source. Under controlled conditions in an acoustics laboratory, the trained, healthy human ear is able to discern changes in sound levels of 1.5 dB(A) under certain conditions. Outside such controlled conditions, the average healthy ear can barely perceive changes of 3 dB(A), a change of 5 dB(A) is readily perceptible; and an increase (decrease) of 10 dB(A) sounds twice (half) as loud (California Department of Transportation [Caltrans] 2013a).

TABLE 2
TYPICAL SOUND LEVELS IN THE ENVIRONMENT AND INDUSTRY

Common Outdoor Activities	Noise Level (dB[A])	Common Indoor Activities
—	110	Rock band
Jet fly over at 300 m (1000 feet)	100	—
Gas lawn mower at 1 m (3 feet)	90	—
Diesel truck at 15 m (50 feet), at 80 km/hr (50 mph)	80	Food blender at 1 m (3 feet) Garbage disposal at 1 m (3 feet)
Noisy urban area, daytime Gas lawn mower at 30 m (100 feet)	70	Vacuum cleaner at 3 m (10 feet)
Commercial area Heavy traffic at 90 m (300 feet)	60	Normal speech at 1 m (3 feet)
Quiet urban daytime	50	Large business office Dishwasher next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural nighttime	20	Bedroom at night, concert hall (background)
—	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

SOURCE: Caltrans 2013a.

3.1.4. Noise Descriptors

Several rating scales (or noise "metrics") exist to analyze adverse effects of noise on a community. The two scales used in this analysis are the equivalent noise level (L_{eq}) and the CNEL.

L_{eq}: The equivalent sound level (L_{eq}) is also referred to as the time-average sound level. It is the equivalent steady state sound level, which in a stated period of time would contain the same acoustical energy as the time-varying sound level during the same time period. The period of time averaging may be specified; $L_{eq(3)}$ would be a three-hour average. When no period of time is specified, a one-hour average is assumed. The one-hour A-weighted equivalent sound level is the energy average of the A-weighted sound levels occurring during a one-hour period. It is

important to understand that noise of short duration, that is, times substantially less than the averaging period, is averaged into ambient noise during the period of interest. Thus, a loud noise lasting many seconds or a few minutes may have minimal effect on the measured sound level averaged over a one-hour period.

CNEL: People are generally more sensitive and annoyed by noise occurring during the evening and nighttime hours. Thus, another noise descriptor used in community noise assessments termed the CNEL was introduced. The CNEL scale represents a time-weighted 24-hour average noise level based on the A-weighted sound level. CNEL accounts for the increased noise sensitivity during the evening (7:00 P.M. to 10:00 P.M.) and nighttime hours (10:00 P.M. to 7:00 A.M.) by adding 5 and 10 decibels, respectively, to the average sound levels occurring during these hours.

3.1.5 Sound Propagation

Sound propagation (i.e., the passage of sound from a noise source to a receiver) is influenced by several factors. The most obvious is the decrease in noise as the distance from the source increases. Other factors include geometric spreading, ground absorption and atmospheric effects, as well as shielding by natural and/or manmade features, as described below.

Geometric spreading*:* Sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates (or drops off) at a rate of 6 dB(A) for each doubling of distance. Highway noise is not a single, stationary point source of sound. The movement of the vehicles on a highway makes the source of the sound appear to emanate from a line (i.e., a line source) rather than a point. This line source results in cylindrical spreading rather than the spherical spreading that occurs from a point source. The change in sound level from a line source is 3 dB(A) per doubling of distance.

Ground absorption: Most often the noise path between the highway and the observer is very close to the ground. Noise attenuation from ground absorption and reflective wave canceling adds to the attenuation associated with geometric spreading. Acoustically hard sites (i.e., sites with a reflective surface between the source and the receptor, such as parking lots or smooth bodies of water) receive no excess ground attenuation, and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. Acoustically soft sites have an absorptive ground surface, such as soft dirt, grass, or scattered bushes and trees, and receive an excess ground attenuation value of 1.5 dB(A) per doubling of distance.

Atmospheric effects: Wind speed will bend the path of sound to “focus” it on the downwind side and make a “shadow” on the upwind side of the source. At short distances of up to 164 feet, the wind has minor influence on the measured sound level. For longer distances, the wind effect becomes appreciably greater. Temperature gradients create effects similar to those of wind gradients, except that they are uniform in all directions from the source. On a sunny day with no wind, temperature decreases with altitude, giving a shadow effect for sound. On a clear night, temperatures may increase with altitude, focusing sound on the ground surface.

Shielding by natural or human-made features: A large object or barrier in the path between a noise source and a receiver can substantially attenuate noise levels at the receiver. The amount of attenuation provided by this shielding depends on the size of the object and the frequency content of the noise source. Natural terrain features (e.g., hills and dense woods) and human-made features (e.g., buildings and walls) can substantially reduce noise levels. Walls are often constructed between a source and a receiver specifically to reduce noise. A barrier that breaks the line of sight between a source and a receiver will typically result in at least 5 dB(A) of noise reduction. A taller barrier may provide as much as 20 dB(A) of noise reduction.

3.2 Vibration

Groundborne vibration consists of oscillatory waves that propagate from the source through the ground to adjacent structures. The frequency of a vibrating object describes how rapidly it is oscillating. The number of cycles per second of oscillation is the vibration frequency, which is described in terms of hertz. The normal frequency range of most groundborne vibration that can be felt generally ranges from a low frequency of less than 1 Hz to a high of about 200 Hz.

3.2.1 Perception of Vibration at the Receptor

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings caused by construction activities may be perceived as motion of building surfaces or rattling of windows, items on shelves, and pictures hanging on walls. Vibration of building components can also take the form of an audible low-frequency rumbling noise, which is referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when the structure and the construction activity are connected by foundations or utilities, such as sewer and water pipes.

Although groundborne vibration is sometimes noticeable in outdoor environments, groundborne vibration is almost never annoying to people who are outdoors (FTA 2006). The primary concern from vibration is the ability to be intrusive and annoying to local residents and other vibration-sensitive land uses.

3.2.2 Vibration Propagation

Vibration energy spreads out as it travels through the ground, causing the vibration level to diminish with distance away from the source. High-frequency vibrations reduce much more rapidly than low frequencies, so that low frequencies tend to dominate the spectrum at large distances from the source. Discontinuities in the soil strata can also cause diffractions or channeling effects that affect the propagation of vibration over long distances. When vibration encounters a building, a ground-to-foundation coupling loss will usually reduce the overall vibration level. However, under certain circumstances, the ground-to-foundation coupling may also amplify the vibration level due to structural resonances of the floors and walls.

3.2.3 Vibration Descriptors

Vibration levels are usually expressed as single-number measure of vibration magnitude, in terms of velocity or acceleration, which describes the severity of the vibration without the frequency variable. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in inches per second. Since it is related to the stresses that are experienced by buildings, PPV is often used in monitoring of blasting vibration. Although PPV is appropriate for evaluating the potential of building damage, it is not suitable for evaluating human response. It takes some time for the human body to respond to vibrations. In a sense, the human body responds to an average vibration amplitude (FTA 2006). Because vibration waves are oscillatory, the net average of a vibration signal is zero. Thus, the root mean square (rms) amplitude is used to describe the "smoothed" vibration amplitude (FTA 2006). The rms of a signal is the square root of the average of the squared amplitude of the signal, usually measured in inches per second. The average is typically calculated over a 1-second period. The rms amplitude is always less than the PPV and is always positive. Decibel notation is used to compress the range of numbers required to describe vibration. For purposes of this report, the rms vibration velocity level in decibels is defined as:

$$L_v = 20 \times \log_{10}(v/v_{ref})$$

Where: L_v is the velocity level in decibels, v is the rms velocity amplitude, and v_{ref} is the reference velocity amplitude.

A reference must always be specified whenever a quantity is expressed in terms of decibels. The accepted reference quantity for vibration velocity is microinches per second ($1x10^{-6}$). The abbreviation VdB is used in this report for vibration decibels to reduce the potential for confusion with sound decibels.

3.2.4 Vibration-sensitive Receptors

Vibration-sensitive receptors are generally considered humans engaged in activities, or involved with land uses, that may be subject to significant interference from vibration. Activities and land uses often associated with vibration-sensitive receptors are similar to those associated with noise-sensitive receptors. The primary vibration source within the CPU areas would be construction equipment used for development of future projects. Thus, vibration-sensitive receptors are generally limited to sensitive uses located adjacent to construction sites.

4.0 Applicable Standards and Guidelines

Future residents and visitors to the CPU areas would be exposed to noise from vehicle traffic on area roadways, from aircraft operations at the San Diego International Airport, trolley and train operations, construction, and from other local noise sources. Federal noise standards include transportation-related noise sources related to interstate commerce (i.e., aircraft, trains, and

trucks) for which there are not more stringent state standards. State noise standards are set for automobiles, light trucks, and motorcycles. Local noise standards and guidelines are set for industrial, commercial, and construction activities subject to local noise ordinances and General Plan policies. The following is a detailed discussion of the applicable local regulations.

4.1 City of San Diego CEQA Thresholds

According to the City of San Diego's Significance Determination Thresholds (City of San Diego 2011), a significant impact related to noise would occur if the proposed CPUs would:

1. Result in or create a significant increase in the existing ambient noise levels;
2. Result in an exposure of people to current or future transportation noise levels which exceed guidelines established in the Noise Element of the General Plan;
3. Result in land uses which are not compatible with aircraft noise levels as defined by an adopted Airport Land Use Compatibility Plan (ALUCP);
4. Result in the exposure of people to noise levels which exceed property line limits established in the Noise Abatement and Control Ordinance of the Municipal Code; or
5. Result in the exposure of people to significant temporary construction noise.

4.2 California Code of Regulations

4.2.1 Noise Insulation Standards

Title 24, Part 2, Chapter 12, Section 1207 represents the regulatory requirements for interior noise for all new construction in California. Section 1207.1 identifies the applicability of the section. Section 1207.4, which was added as an amendment on July 2015, states that "interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room. The noise metric shall be either the day-night average sound level (L_{dn}) or the community noise equivalent level (CNEL), consistent with the noise element of the local general plan." Thus, for the City of San Diego the limit is 45 dB(A) CNEL. A habitable room in a building is used for living, sleeping, eating or cooking. Bathrooms, closets, hallways, utility spaces, and similar areas are not considered habitable spaces (24 California Code of Regulations 1207 2013).

4.2.2 CalGreen – Environmental Comfort

Part 11 of Title 24 (California Green Building Standards Code [CalGreen]) provides mandatory measures for residential and non-residential buildings. Section 5.507, Environmental Comfort, addresses interior noise control in non-residential buildings. This section provides the minimum Sound Transmission Class (STC) and Outdoor–Indoor Sound Transmission Class (OITC) for wall, roof–ceiling assemblies, and windows for buildings located within the 65 dB(A) CNEL contour of an airport, freeway, expressway, railroad, industrial source, or fixed guideway source as determined by the Noise Element of the General Plan. As indicated, buildings shall be

constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly average equivalent level of 50 dB(A) L_{eq}. Exterior features such as sound walls or earth berms may be utilized as appropriate to the building, addition, or alteration project to mitigate sound migration to the interior. An acoustical analysis documenting complying interior sound levels shall be prepared by personnel approved by the architect or engineer of record.

4.3 City of San Diego General Plan

The City's Noise Element of the General Plan specifies compatibility guidelines for different categories of land use. The land use compatibility guidelines are summarized in Table 3. The City specifies that residential structures shall be designed to prevent the intrusion of exterior noises such that interior noise levels attributable to exterior sources do not exceed 45 dB(A) CNEL in noise-sensitive interior rooms. This conforms to Title 24 of the California Code of Regulations, which requires interior noise levels due to exterior sources not to exceed 45 dB(A) CNEL (see Section 4.2.1). The City also specifies that the interior noise level due to exterior sources is not to exceed 45 dB(A) CNEL for institutional uses and is not to exceed 50 dB(A) CNEL for office buildings and commercial uses. The interior noise level guidelines for residential, institutional, office, and commercial uses are evaluated by the City as a part of discretionary project review. For any residence, applicants for new construction and major renovations must demonstrate compliance with the current interior noise standards [45 dB(A) CNEL] through submission and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission. In the case of ministerial projects, there is no procedure to ensure that noise is adequately attenuated.

The Noise Element also states (Section B, Motor Vehicle Traffic Noise) that although not generally considered compatible, the City conditionally allows multi-family and mixed-use residential uses up to 75 dB(A) CNEL with a requirement to include attenuation measures to ensure an interior noise level of 45 dB(A) CNEL where a community plan allows multi-family and mixed-use.

It should also be noted that in 2015, the City Council approved a General Plan amendment to the Noise Element to change the guidelines for park uses. With this amendment, park uses are compatible in areas up to 70 dB(A) CNEL and conditionally compatible in areas between 70 and 75 dB(A) CNEL.

TABLE 3
CITY OF SAN DIEGO NOISE AND LAND USE COMPATIBILITY GUIDELINES

Land Use Category	Exterior Noise Exposure [dB(A) CNEL] 60	65	70	75
Open Space, Parks, and Recreational[1]				
Community and Neighborhood Parks; Passive Recreation				
Regional Parks; Outdoor Spectator Sports, Golf Courses; Athletic Fields; Water Recreational Facilities; Horse Stables; Park Maintenance Facilities				
Agricultural				
Crop Raising and Farming; Aquaculture, Dairies; Horticulture Nurseries and Greenhouses; Animal Raising, Maintaining and Keeping; Commercial Stables				
Residential				
Single Units; Mobile Homes; Senior Housing	45			
Multiple Units; Mixed-Use Commercial/Residential; Live Work; Group Living Accommodations	45	45		
Institutional				
Hospitals; Nursing Facilities; Intermediate Care Facilities; Kindergarten through Grade 12 Educational Facilities; Libraries; Museums; Places of Worship; Child Care Facilities	45			
Vocational or Professional Educational Facilities; Higher Education Institution Facilities (Community or Junior Colleges, Colleges, or Universities)	45	45		
Cemeteries				
Sales				
Building Supplies/Equipment; Food, Beverage, and Groceries; Pets and Pet Supplies; Sundries, Pharmaceutical, and Convenience Sales; Wearing Apparel and Accessories		50	50	
Commercial Services				
Building Services; Business Support; Eating and Drinking; Financial Institutions; Assembly and Entertainment; Radio and Television Studios; Golf Course Support		50	50	
Visitor Accommodations	45	45	45	
Offices				
Business and Professional; Government; Medical, Dental, and Health Practitioner; Regional and Corporate Headquarters		50	50	
Vehicle and Vehicular Equipment Sales and Services Use				
Commercial or Personal Vehicle Repair and Maintenance; Commercial or Personal Vehicle Sales and Rentals; Vehicle Equipment and Supplies Sales and Rentals; Vehicle Parking				
Wholesale, Distribution, Storage Use Category				
Equipment and Materials Storage Yards; Moving and Storage Facilities; Warehouse; Wholesale Distribution				
Industrial				
Heavy Manufacturing; Light Manufacturing; Marine Industry; Trucking and Transportation Terminals; Mining and Extractive Industries				
Research and Development			50	

	Compatible	Indoor Uses	Standard construction methods should attenuate exterior noise to an acceptable indoor noise level.
		Outdoor Uses	Activities associated with the land use may be carried out.
	Conditionally Compatible	Indoor Uses	Building structure must attenuate exterior noise to the indoor noise level indicated by the number for occupied areas.
		Outdoor Uses	Feasible noise mitigation techniques should be analyzed and incorporated to make the outdoor activities acceptable.
	Incompatible	Indoor Uses	New construction should not be undertaken.
		Outdoor Uses	Severe noise interference makes outdoor activities unacceptable.

SOURCE: City of San Diego 2008.

In addition, the General Plan contains the following policies regarding the preparation of acoustical studies and interior noise guidelines:

NE-A.4. Require an acoustical study consistent with Acoustical Study Guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the Land Use – Noise Compatibility Guidelines (Table NE-3), so that noise mitigation measures can be included in the project design to meet the noise guidelines.

NE-I.1. Require noise attenuation measures to reduce the noise to an acceptable noise level for proposed developments to ensure an acceptable interior noise level, as appropriate, in accordance with California's noise insulation standards (CCR Title 24) and Airport Land Use Compatibly Plans.

NE-I.2. Apply CCR Title 24 noise attenuation measures requirements to reduce the noise to an acceptable noise level for proposed single-family, mobile homes, senior housing, and all other types of residential uses not addressed by CCR Title 24 to ensure an acceptable interior noise level, as appropriate.

NE-E.5. Implement night and daytime on-site noise level limits to address noise generated by commercial uses where it affects abutting residential and other noise-sensitive uses.

4.4 City of San Diego Municipal Code

4.4.1 Stationary Noise

Impacts to sensitive receptors generated by activities at a given location are regulated by the City's Municipal Code. Section 59.5.0401 of the Noise Ordinance specifies maximum one-hour average sound level limits at the boundary of a property. These maximum one-hour sound level limits are the maximum noise levels allowed at any point on or beyond the property boundaries due to activities occurring on the property. Where two or more zones adjoin, the sound level limit is the arithmetic mean of the respective limits for the two zones. Table 4 shows the exterior noise limits specified in the City's Noise Control Ordinance.

TABLE 4
SAN DIEGO PROPERTY LINE NOISE LEVEL LIMITS

	Noise Level [dB(A)]		
Receiving Land Use Category	7:00 A.M. to 7:00 P.M.	7:00 P.M. to 10:00 P.M.	10:00 P.M. to 7:00 A.M.
Single-family Residential	50	45	40
Multi-family Residential (up to a maximum density of 1 dwelling unit/2,000 square feet)	55	50	45
All Other Residential	60	55	50
Commercial	65	60	60
Industrial or Agricultural	75	75	75

SOURCE: City of San Diego, Municipal Code Section 59.5.0401

4.4.2 Construction Noise

Construction noise is regulated by the City's Municipal Code. Section 59.5.0404 of the Municipal Code, the Noise Abatement and Control Ordinance, states that:

A. It shall be unlawful for any person, between the hours of 7:00 P.M. of any day and 7:00 A.M. of the following day, or on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays, to erect, construct, demolish, excavate for, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise.

B. . . . it shall be unlawful for any person, including the City of San Diego, to conduct any construction activity so as to cause, at or beyond the property lines of any property zoned residential, an average sound level greater than 75 decibels during the 12-hour period from 7:00 A.M. to 7:00 P.M.

4.5 San Diego County Regional Airport Authority

The San Diego County Regional Airport Authority (SDCRAA), serving as the Airport Land Use Commission, is responsible for the management and development of the Airport Land Use Compatibility Plan (ALUCP) for each public use and military airport in San Diego County. Each ALUCP identifies land use and noise level compatibility due to operations at airports as well as forecasted noise level contours based on future operations at each airport. These noise level contours and land use compatibility noise levels are used in determining whether a proposed land use is consistent with forecasted noise levels. Table 5 presents the land uses and the compatible noise levels.

TABLE 5
AIRPORT NOISE COMPATIBILITY CRITERIA

Land Use Category[a] *Note: Multiple categories may apply to a project*	Exterior Noise Exposure (dB(A) CNEL)			
	60-65	65-70	70-75	75+
Residential				
Single-family, Multi-family	45	45[1]	45[1,2]	45[1,2]
Single Room Occupancy (SRO) Facility	45	45[1]	45[1,2]	45[1,2]
Group Quarters[b]	45	45[1]	45[1,2]	45[1,2]
Commercial, Office, Service, Transient Lodging				
Hotel, Motel, Resort	45/50	45/50	45/50	45/50
Office – Medical, Financial, Professional Services, Civic			50	50
Retail (e.g., Convenience Market, Drug Store, Pet Store)			50	50
Service – Low Intensity (e.g., Gas Station, Auto Repair, Car Wash)			50	50
Service – Medium Intensity (e.g., Check-cashing, Veterinary Clinics, Kennels, Personal Services)			50	50
Service – High Intensity (e.g., Eating, Drinking Establishment, Funeral Chapel, Mortuary)			50	50
Sport/Fitness Facility			50	50
Theater – Movie/Live Performance/Dinner		45	45	45
Educational, Institutional, Public Services				
Assembly – Adult (Religious, Fraternal, Other)	45	45[1]	45[1]	45[1]
Assembly – Children (Instructional Studios, Cultural Heritage Schools, Religious, other)[3]	45			
Cemetery				
Child Day Care Center/Pre-K	45			
Convention Center				
Fire and Police Stations			50	50
Jail, Prison		45/50	45/50	45/50
Library, Museum, Gallery		45	45	45
Medical Care – Congregate Care Facility, Nursing and Convalescent Home[b]	45			
Medical Care – Hospital	45			
Medical Care – Out-Patient Surgery Centers	45			
School for Adults – College, University, Vocational/Trade School	45	45[1]	45[1]	
School – Kindergarten through Grade 12 (Includes Charter Schools)	45			
Industrial				
Junkyard, Dump, Recycling Center, Construction Yard				
Manufacturing/Processing – General				
Manufacturing/Processing of Biomedical Agents, Biosafety Levels 3 and 4 Only				
Manufacturing/Processing of Hazardous Materials[4]				
Mining/Extractive Industry				
Research and Development – Scientific, Technical				
Sanitary Landfill				
Self-Storage Facility				
Warehousing/Storage – General				
Warehousing/Storage of Biomedical Agents, Biosafety Levels 3 and 4 Only				
Warehousing/Storage of Hazardous Materials[4]				

TABLE 5
AIRPORT NOISE COMPATIBILITY CRITERIA
(cont.)

Land Use Category[a] *Note: Multiple categories may apply to a project*	Exterior Noise Exposure (dB(A) CNEL)			
	60-65	65-70	70-75	75+
Transportation, Communication, Utilities				
Auto Parking				
Electrical Power Generation Plant				
Electrical Substation				
Emergency Communications Facilities				
Marine Cargo Terminal				
Marine Passenger Terminal				
Transit Center, Bus/Rail Station				
Transportation, Communication, Utilities – General				
Truck Terminal				
Water, Wastewater Treatment Plant				
Recreation, Park, Open Space				
Arena, Stadium				
Golf Course				
Golf Course Clubhouse				
Marina				
Park, Open Space, Recreation				
Agriculture				
Aquaculture				
Agriculture				

	Compatible: Use is permitted.
	Conditionally Compatible: Use is permitted subject to stated conditions.
	Incompatible: Use is not permitted under any circumstances
45	Indoor uses: building must be capable of attenuating exterior noise to 45 dB(A) CNEL.
50	Indoor uses: building must be capable of attenuating exterior noise to 50 dB(A) CNEL.
45/50	Sleeping rooms must be attenuated to 45 dB(A) CNEL and any other indoor areas must be attenuated to 50 dB(A) CNEL.
1	Avigation easement must be dedicated to the Airport owner/operator.
2	New residential use is permitted above the 70 dB(A) CNEL contour only if the current General/Community Plan designation allows for residential use. General/Community Plan amendments from a nonresidential designation to a residential designation are not permitted.
3	Refer to Appendix A of the San Diego International Airport Land Use Compatibility Plan for definition of Assembly – Children.
4	Refer to Appendix A of the San Diego International Airport Land Use Compatibility Plan for definitions of manufacturing, processing and storage of hazardous materials..
a	Land uses not specifically listed shall be evaluated, as determined by the ALUC, using the criteria for similar uses. Refer to Appendix A of the San Diego International Airport Land Use Compatibility Plan.
b	If this land use would occur within a single- or multi-family residence, it must be evaluated using the criteria for single- or multi-family residential.

SOURCE: San Diego County Regional Airport Authority 2014.

Additionally, the San Diego International Airport has an Airport Noise Mitigation Office and has implemented a number of programs to reduce the aircraft noise impact on the community. Actions include the enforcement of a curfew on departing aircraft and the Quieter Home Program. The Quieter Home Program provides sound insulation retrofits for residences located within the 65 dB(A) CNEL contour of the Code of Federal Regulations, Title 14 Part 150, Noise Exposure Map, with the goal of reducing interior noise levels by at least 5 dB(A).

4.6 Vibration

Numerous public and private organizations and governing bodies have provided guidelines to assist in the analysis of groundborne noise and vibration. While, the City has not established specific groundborne noise and vibration standards, there are vibration regulations or guidelines directly applicable to the proposed CPUs.

The publications of the Federal Transit Administration (FTA) and Caltrans are two of the most significant works for the analysis of environmental impacts due to groundborne noise and vibration relating to transportation and construction projects. Thus, these guidelines serve as a useful tool to evaluate vibration impacts.

Caltrans guidelines recommend that a standard of 0.2 inch per second (inch/sec) PPV not be exceeded for the protection of normal residential buildings and that 0.08 inch/sec PPV not be exceeded for the protection of old or historically significant structures (Caltrans 2004). With respect to human response within residential uses (i.e., annoyance, sleep disruption), FTA recommends a maximum acceptable vibration standard of 80 VdB (FTA 2006).

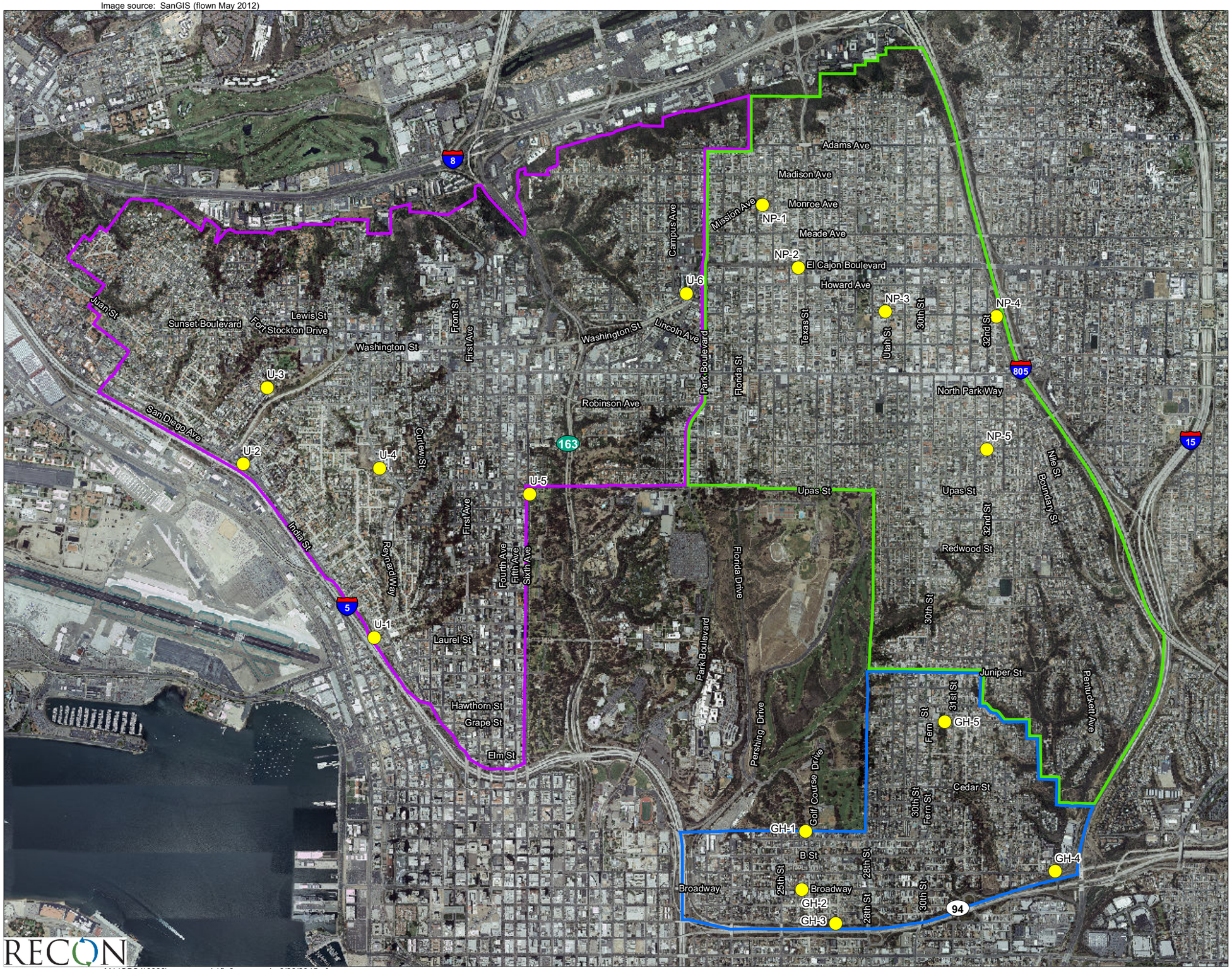
5.0 Existing Conditions

5.1 Noise Measurements

As part of this assessment, ambient noise levels were measured in the planning areas to provide a characterization of the variability of noise throughout the CPU areas and to assist in determining constraints and opportunities for future development. Sixteen 15-minute, daytime noise level measurements were conducted throughout the study area. Noise measurements were taken with two Larson-Davis LxT Type 1 Integrating Sound Level Meters, serial numbers 3827 and 3828. Each measurement location is shown in Figure 6. A summary of the measurements is provided in Table 6.

Based on the measurement data shown in Table 6, daytime noise levels in the CPU areas are typical of an urban environment. Each measurement location and noise source observed during the measurements are discussed under separate headings for each CPU area.

Image source: SanGIS (flown May 2012)



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Community Plan Boundaries

- Uptown
- North Park
- Golden Hill
- Noise Measurements

0 Feet 2,200

FIGURE 6

Noise Measurement Locations

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TABLE 6
NOISE MEASUREMENTS

ID[1]	Location	Date	Time	L_{eq}
Uptown				
U-1	Columbia Street	3/03/2015	10:12 A.M. – 10:27 A.M.	77.6
U-2	San Diego Avenue	3/03/2015	9:25 A.M. – 9:40 A.M.	69.1
U-3	Washington Street	3/03/2015	10:51 A.M. – 11:06 A.M.	64.5
U-4	Reynard Way	3/03/2015	1:30 P.M. – 1:45 P.M.	57.7
U-5	Sixth Avenue	3/03/2015	12:27 P.M. – 12:42 P.M.	63.5
U-6	Normal Street	3/03/2015	11:46 A.M. – 12:01 P.M.	64.4
North Park				
NP-1	Monroe Avenue	3/03/2015	3:29 P.M. – 3:44 P.M.	60.8
NP-2	El Cajon Boulevard	3/03/2015	4:00 P.M. – 4:15 P.M.	65.6
NP-3	Utah Street	3/03/2015	4:35 P.M. – 4:50 P.M.	64.0
NP-4	I-805	3/04/2015	8:46 A.M. – 9:01 A.M.	66.5
NP-5	32nd Street	3/04/2015	9:17 A.M. – 9:32 A.M.	61.4
Golden Hill				
GH-1	26th Street	3/04/2015	10:57 A.M. – 11:12 A.M.	64.0
GH-2	Broadway	3/04/2015	11:30 A.M. – 11:45 A.M.	60.0
GH-3	SR-94	3/04/2015	12:02 P.M. – 12:17 P.M.	74.5
GH-4	SR-94/I-15	3/04/2015	12:42 P.M. – 12:57 P.M.	73.2
GH-5	Grape Street	3/04/2015	1:20 P.M. – 1:35 P.M.	63.4

[1]Measurement locations are shown in Figure 6 and are represented by the ID provided in the table above.

5.1.1 Uptown Planning Area

Measurement U-1 was taken on Columbia Street adjacent to Interstate 5 (I-5). The main sources of noise at the measurement location were vehicle traffic on I-5 and aircraft arriving at and departing from the San Diego International Airport. The average measured noise level was 77.6 dB(A) L_{eq}.

Measurement U-2 was taken adjacent to San Diego Avenue. The measured speed on this portion of San Diego Avenue was 35 miles per hour (mph). The main source of noise at the measurement location was vehicle traffic on I-5, San Diego Avenue, and India Street. The average measured noise level was 69.1 dB(A) L_{eq}.

Measurement U-3 was taken adjacent to Keating Street on top of a slope overlooking Washington Street. The main source of noise at the measurement location was vehicle traffic on Washington Street. The measured speed on this portion of Washington Street was 50 mph. The average measured noise level was 64.5 dB(A) L_{eq}.

Measurement U-4 was taken adjacent to Reynard Way. The main source of noise at the measurement location was vehicle traffic on Reynard Way. The measured speed on this portion of Reynard Way was 30 mph. The average measured noise level was 57.7 dB(A) L_{eq}.

Measurement U-5 was taken adjacent to Sixth Avenue. The main source of noise at the measurement location was vehicle traffic on Sixth Avenue. The measured speed on this portion of Sixth Avenue was 30 mph. The average measured noise level was 63.5 dB(A) L_{eq}.

Measurement U-6 was taken adjacent to Normal Street. The main source of noise at the measurement location was vehicle traffic on Normal Street and Polk Avenue. The measured speed on this portion of Normal Street was 30 mph. The average measured noise level was 64.4 dB(A) L_{eq}.

5.1.2 North Park Planning Area

Measurement NP-1 was taken adjacent to Monroe Avenue. The main source of noise at the measurement location was vehicle traffic on Monroe Avenue and Mission Avenue. The observed speed on this portion of Monroe Avenue was 20 mph. The average measured noise level was 60.8 dB(A) L_{eq}.

Measurement NP-2 was taken adjacent to El Cajon Boulevard. The main source of noise at the measurement location was vehicle traffic on El Cajon Boulevard and Texas Street. The measured speed on this portion of El Cajon Boulevard was 35 mph. The average measured noise level was 65.6 dB(A) L_{eq}.

Measurement NP-3 was taken adjacent to Utah Street. The main source of noise at the measurement location was vehicle traffic on Utah Street and Polk Avenue. The measured speed on this portion of Utah Street was 25 mph. The average measured noise level was 64.0 dB(A) L_{eq}.

Measurement NP-4 was taken at the southeast corner of Polk Avenue and Boundary Street overlooking Interstate 805 (I-805). The main source of noise at the measurement location was vehicle traffic on I-805. The average measured noise level was 66.5 dB(A) L_{eq}.

Measurement NP-5 was taken adjacent to 32nd Street. The main source of noise at the measurement location was vehicle traffic on 32nd Street and Dwight Street. The measured speed on this portion of 32nd Street was 25 mph. The average measured noise level was 61.4 dB(A) L_{eq}.

5.1.3 Golden Hill Planning Area

Measurement GH-1 was taken adjacent to 26th Street. The main source of noise at the measurement location was vehicle traffic on 26th Street, Russ Boulevard, and Gold Course Drive. The measured speed on this portion of 26th Street was 25 mph. The average measured noise level was 64.0 dB(A) L_{eq}.

Measurement GH-2 was taken adjacent to Broadway. The main sources of noise at the measurement location were vehicle traffic on Broadway and 26th Street, and aircraft

approaching the San Diego International Airport. The measured speed on this portion of Broadway was 25 mph. The average measured noise level was 60.0 dB(A) L_{eq}.

Measurement GH-3 was taken at the southern end of 27th Street overlooking State Route 94 (SR-94). The main source of noise at the measurement location was vehicle traffic on SR-94. The average measured noise level was 74.5 dB(A) L_{eq}.

Measurement GH-4 was taken adjacent to C Street overlooking SR-94 and Interstate 15 (I-15). The main sources of noise at the measurement location were vehicle traffic on SR-94 and I-15, and aircraft approaching the San Diego International Airport. The average measured noise level was 73.2 dB(A) L_{eq}.

Measurement GH-5 was taken adjacent to Grape Street. The main sources of noise at the measurement location were vehicle traffic on Grape Street, and aircraft approaching the San Diego International Airport. The measured speed on this portion of 26th Street was 25 mph. The average measured noise level was 63.4 dB(A) L_{eq}.

5.2 Existing Vehicle Traffic Noise Contours

The roads generating the greatest noise level in the CPU areas are I-5, Interstate 8 (I-8), I-15, I-805, SR-94, State Route 163 (SR-163), Sixth Avenue, India Street, Park Boulevard, Robinson Avenue, University Avenue, Washington Street, 30th Street, El Cajon Boulevard, Texas Street, 25th Street, 28th Street, and Broadway. The noise contour distances represent the predicted noise level for each roadway without the attenuating effects of noise barriers, structures, topography, or dense vegetation. As intervening structures, topography, and dense vegetation would affect noise exposure at a particular location, the noise contours should not be considered site-specific but are rather guides to determine when detailed acoustic analysis should be undertaken.

Figures 7, 8, and 9 show the existing vehicle traffic noise contours for the Uptown, North Park, and Golden Hill planning areas, respectively. As shown, existing noise levels in the community exceed 60 dB(A) CNEL. The local freeways are the dominant noise sources in the CPUs and due to the pervasiveness encompass the contours from local roadways. The distances to various traffic dB(A) CNEL noise contours for these major roads are provided in Attachment 2.

6.0 Analysis Methodology

6.1 Vehicle Traffic Noise

Traffic noise occurs adjacent to every roadway and is directly related to the traffic volume, speed, and mix of vehicles. Existing and future traffic volumes and speeds for the roadways were obtained from the traffic study prepared for the CPUs (Kimley-Horn and Associates, Inc. 2014a, 2014b, 2016).

Existing freeway volumes and traffic mixes were obtained from Caltrans traffic and truck counts (Caltrans 2013b). Future freeway volumes for I-5, I-15, I-805, and SR-94 were obtained from a traffic study prepared for the Southeastern San Diego and Encanto Neighborhoods Community Plan Updates (Chen Ryan 2014a, 2014b). Future freeway volumes for I-8 and SR-163 were obtained from the San Diego Association of Governments (SANDAG) Transportation Forecast Information Center (SANDAG 2015).

Truck volumes for I-5, I-8, I-15, I-805, SR-94, and SR-163 were derived from Caltrans truck counts (Caltrans 2013b). For all freeways except for I-805, Caltrans existing truck counts indicate an approximate traffic mix of 96 percent cars, 3 percent medium trucks, and 1 percent heavy trucks. More trucks travel on I-805. Caltrans existing truck counts for I-805 indicate an approximate traffic mix of 94 percent cars, 4 percent medium trucks, and 2 percent heavy trucks. These traffic mixes were used for modeling existing and future freeway noise.

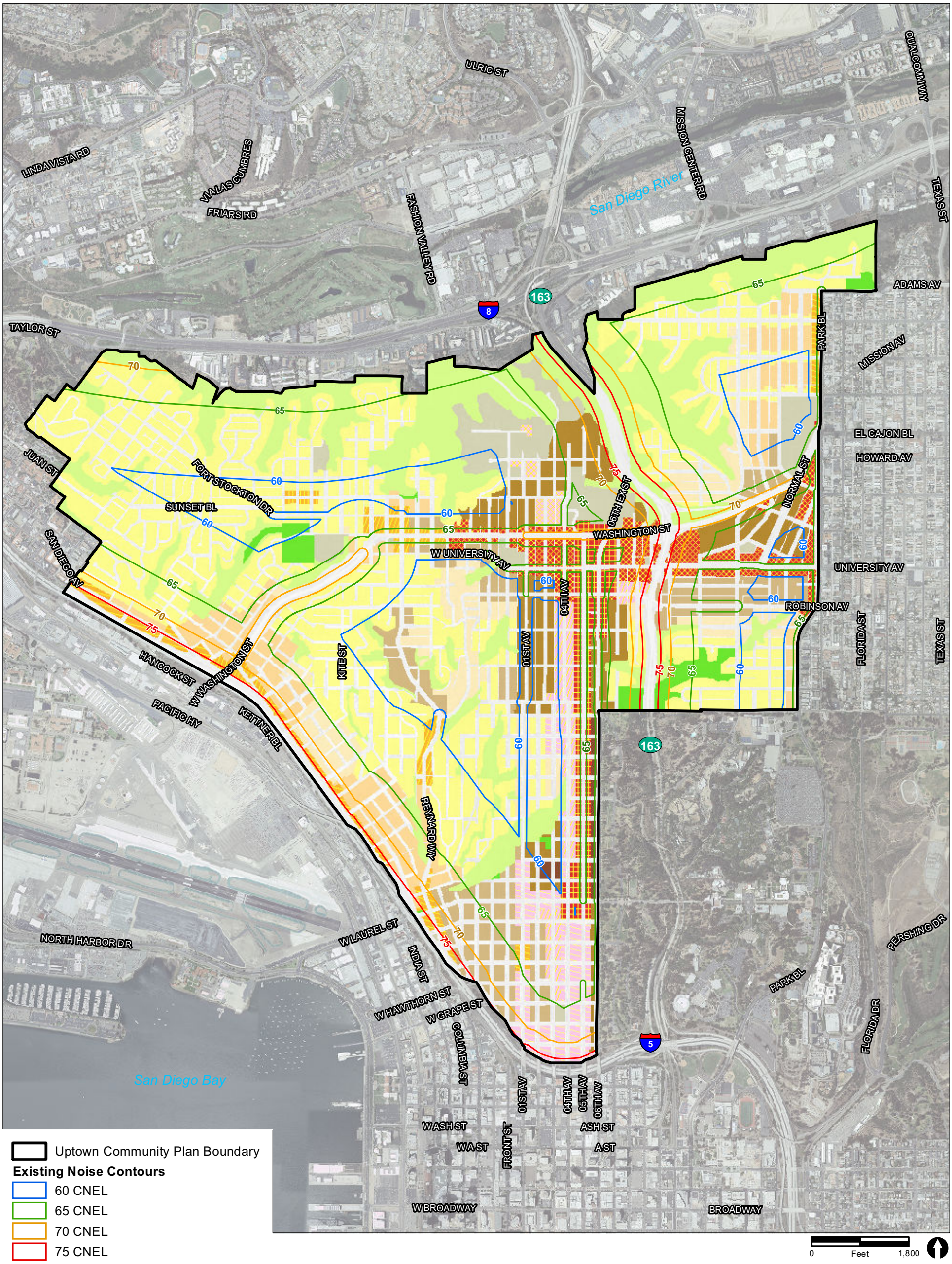
For local roadways in the CPU areas, a traffic mix of 96 percent cars, 3 percent medium trucks, and 1 percent heavy trucks was modeled. This is consistent with traffic counts taken during the existing noise measurements, and the same as Caltrans truck counts for most area freeways.

Table 7 summarizes the vehicle traffic parameters used in this analysis for each roadway segment.

The Federal Highway Administration (FHWA) Traffic Noise Model algorithms were used to calculate distances to noise contours for each roadway. The FHWA model takes into account traffic mix, speed, and volume; roadway gradient; relative distances between sources, barriers, and sensitive receptors; and shielding provided by intervening terrain or structures.

The analysis of the noise environment considered that the topography was flat with no intervening terrain between sensitive land uses and roadways. Because there are no obstructions, predicted noise levels are higher than would actually occur. In actuality buildings and other obstructions along the roadways would shield distant receivers from the traffic noise.

Image source: SanGIS (flown May 2012)



Uptown Community Plan Boundary

Existing Noise Contours

- 60 CNEL
- 65 CNEL
- 70 CNEL
- 75 CNEL

0 Feet 1,800

Proposed Land Use (Draft)

Residential

- Residential - Low : 5-9 Du/Ac
- Residential - Low Medium : 10-15 Du/Ac
- Residential - Medium : 16-29 Du/Ac
- Residential - Medium High : 30-44 Du/Ac
- Residential - High : 45-73 Du/Ac
- Residential - Very High : 74-109 Du/Ac

Commercial, Employment, Retail, and Services

- Community Commercial : 0-29 Du/Ac
- Community Commercial : 0-44 Du/Ac
- Community Commercial : 0-73 Du/Ac
- Community Commercial : 0-109 Du/Ac
- Neighborhood Commercial : 0-15 Du/Ac
- Neighborhood Commercial : 0-29 Du/Ac
- Neighborhood Commercial : 0-44 Du/Ac
- Office Commercial : 0-29 Du/Ac
- Office Commercial : 0-44 Du/Ac
- Office Commercial : 0-73 Du/Ac
- Office Commercial : 0-109 Du/Ac

Park, Open Space, and Recreation

- Open Space
- Park

Institutional, and Public/Semi-Public Facilities

- Institutional

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FIGURE 7

Existing Traffic Noise Contours for the Uptown CPU Area

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Image source: SanGIS (flown May 2012)

North Park Community Plan Boundary

Existing Noise Contours

- 60 CNEL
- 65 CNEL
- 70 CNEL
- 75 CNEL

0 Feet 1,400

Proposed Land Use (Draft)

Residential

- Residential - Low : 5-9 Du/Ac
- Residential - Low Medium : 10-15 Du/Ac
- Residential - Medium : 16-29 Du/Ac
- Residential - Medium High : 30-44 Du/Ac *
- Residential - High : 45-54 Du/Ac
- Residential - Very High : 55-73 Du/Ac

Commercial, Employment, Retail, and Services

- Community Commercial : 0-29 Du/Ac
- Community Commercial : 0-44 Du/Ac
- Community Commercial : 0-54 Du/Ac
- Community Commercial : 0-73 Du/Ac**
- Community Commercial : 0-109 Du/Ac***
- Neighborhood Commercial : 0-29 Du/Ac
- Neighborhood Commercial : 0-73 Du/Ac

Park, Open Space, and Recreation

- Open Space
- Park

Institutional, and Public/Semi-Public Facilities

- Institution

FIGURE 8

Existing Traffic Noise Contours for the North Park CPU Area

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Image source: SanGIS (flown May 2012)

Golden Hill Community Plan Boundary

Existing Noise Contours

- 60 CNEL
- 65 CNEL
- 70 CNEL
- 75 CNEL

Proposed Land Use (Draft)

Residential

- Residential - Low : 5-9 Du/Ac
- Residential - Low Medium : 10-15 Du/Ac
- Residential - Medium : 16-29 Du/Ac
- Residential - Medium High : 30-44 Du/Ac

Commercial, Employment, Retail, and Services

- Community Commercial - Residential Permitted : 0-29 Du/Ac
- Community Commercial - Residential Permitted : 0-44 Du/Ac
- Neighborhood Commercial - Residential Permitted : 0-29 Du/Ac

Park, Open Space, and Recreation

- Open Space

Institutional, and Public/Semi-Public Facilities

- Institutional

0 Feet 800

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FIGURE 9

Existing Traffic Noise Contours for the Golden Hill CPU Area

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TABLE 7
VEHICLE TRAFFIC PARAMETERS

Roadway	From	To	Existing ADT	2035 ADT	Speed (mph)
Uptown CPU Area					
First Avenue	Arbor Drive	Washington Street	5,240	7,500	30
	Washington Street	University Avenue	7,400	9,100	30
	University Avenue	Robinson Avenue	10,100	16,300	30
	Robinson Avenue	Pennsylvania Avenue	7,500	11,500	30
	Pennsylvania Avenue	Walnut Avenue	7,261	12,800	30
	Walnut Avenue	Laurel Street	4,695	11,900	30
	Laurel Street	Hawthorn Street	7,290	8,400	30
	Hawthorn Street	Grape Street	7,330	6,800	30
	Grape Street	Elm Street	3,285	4,500	30
Fourth Avenue	Arbor Drive	Washington Street	12,390	14,900	30
	Washington Street	University Avenue	10,400	10,000	30
	University Avenue	Robinson Avenue	11,800	12,900	30
	Robinson Avenue	Walnut Avenue	6,946	11,400	30
	Walnut Avenue	Laurel Street	8,492	15,100	30
	Laurel Street	Grape Street	7,790	13,700	30
	Grape Street	Elm Street	7,570	9,700	30
Fifth Avenue	Washington Street	University Avenue	11,700	11,800	30
	University Avenue	Robinson Avenue	10,300	14,000	30
	Robinson Avenue	Walnut Avenue	12,209	15,800	30
	Walnut Avenue	Laurel Street	11,400	14,800	30
	Laurel Street	Hawthorn Street	9,260	14,400	30
	Hawthorn Street	Grape Street	10,045	14,300	30
	Grape Street	Elm Street	9,220	10,100	30
Sixth Avenue	Washington Street	University Avenue	16,877	45,100	30
	University Avenue	Robinson Avenue	24,900	32,600	30
	Robinson Avenue	Upas Street	15,000	29,900	30
	Upas Street	Laurel Street	15,128	25,900	30
	Laurel Street	Juniper Street	10,140	16,600	30
	Juniper Street	Grape Street	10,915	18,700	30
	Grape Street	Elm Street	10,650	20,300	30
Ninth Avenue	Washington Street	University Avenue	5,204	8,000	25
Campus Avenue	Madison Avenue	Washington Avenue	3,175	5,800	25
	Washington Avenue	Polk Avenue	5,610	7,400	25
Cleveland Avenue	Tyler Street	Lincoln Street	4,865	7,200	25
	Lincoln Street	Richmond Street	7,775	9,600	25
Curlew Street	Robinson Avenue	Reynard Way	1,720	4,600	25
Elm Street	Second Avenue	Third Avenue	7,889	8,500	25
	Third Avenue	Fifth Avenue	8,179	9,100	25
	Fifth Avenue	Sixth Avenue	8,179	8,100	25
Fort Stockton Drive	Arista Street	Sunset Boulevard	3,290	4,900	25
	Sunset Boulevard	Hawk Street	6,100	7,900	25
	Hawk Street	Goldfinch Street	8,450	8,900	25
	Goldfinch Street	Falcon Street	2,910	3,300	25
Front Street	Dickinson Street	Arbor Drive	3,790	4,600	25
	Arbor Drive	Washington Street	5,510	7,900	25
Grape Street	Albatross Street	First Avenue	2,082	7,300	25
	First Avenue	Third Avenue	4,289	7,300	25
	Third Avenue	Sixth Avenue	2,097	9,000	25
Hawthorn Street	Brant Street	First Avenue	11,558	15,000	30
	First Avenue	Third Avenue	3,634	7,300	30
	Third Avenue	Sixth Avenue	3,577	8,700	30

TABLE 7
VEHICLE TRAFFIC PARAMETERS
(continued)

Roadway	From	To	Existing ADT	2035 ADT	Speed (mph)
India Street	Washington Street	Winder Street	23,355	11,000	35
	Winder Street	Glenwood Drive	23,355	10,700	35
	Glenwood Drive	Sassafras Street	26,178	30,000	35
	Sassafras Street	Redwood Street	18,676	21,300	35
	Redwood Street	Palm Street	16,705	20,300	35
Juan Street	Harney Street	Witherby Street	2,345	4,600	30
Laurel Street	Columbia Street	Union Street	13,691	21,100	25
	Union Street	First Avenue	11,128	17,900	25
	First Avenue	Third Avenue	11,326	16,100	25
	Third Avenue	Sixth Avenue	11,516	20,200	25
Lewis Street	Fort Stockton Drive	Goldfinch Street	3,720	4,100	25
Lincoln Avenue	Washington Street	Park Boulevard	8,155	11,100	25
Madison Avenue	Cleveland Avenue	Park Boulevard	3,750	6,100	25
Meade Avenue	Cleveland Avenue	Park Boulevard	3,290	3,500	25
Normal Street	Park Boulevard	Washington Street	22,296	28,300	30
	Washington Street	University Avenue	4,974	4,900	30
Park Boulevard	Adams Avenue	Mission Avenue	14,839	14,060	30
	Mission Avenue	El Cajon Boulevard	11,806	15,467	30
	El Cajon Boulevard	Polk Avenue	11,524	18,600	30
	Polk Avenue	University Avenue	13,936	22,500	35
	University Avenue	Robinson Avenue	14,400	19,800	35
	Robinson Avenue	Upas Street	12,501	17,200	35
	Upas Street	Zoo Place	13,807	17,700	35
Reynard Way	Torrance Street	Curlew Street	1,955	5,300	30
	Curlew Street	Laurel Street	7,200	8,600	30
Richmond Street	Cleveland Avenue	University Avenue	7,085	9,000	25
	University Avenue	Robinson Avenue	5,345	6,700	25
	Robinson Avenue	Upas Street	5,015	8,100	25
Robinson Avenue	Brant Street	First Avenue	1,995	4,600	25
	First Avenue	Third Avenue	5,800	11,500	25
	Third Avenue	Eighth Avenue	11,022	14,400	25
	Eighth Avenue	Tenth Avenue	21,298	12,300	25
	Tenth Avenue	Richmond Street	21,298	12,300	30
	Richmond Street	Park Boulevard	7,269	9,200	30
San Diego Avenue	Hortensia Street	McKee Street	5,830	10,500	35
	McKee Street	Washington Street	13,920	18,200	35
	Washington Street	India Street	4,920	7,100	35
State Street	Laurel Street	Juniper Street	4,140	8,200	25
Sunset Boulevard	Witherby Street	Fort Stockton Drive	2,595	4,600	25
University Avenue	Ibis Street	Albatross Street	10,527	14,700	25
	Albatross Street	First Avenue	16,851	20,800	25
	First Avenue	Fourth Avenue	20,250	14,100	25
	Fourth Avenue	Fifth Avenue	20,250	21,600	25
	Fifth Avenue	Sixth Avenue	21,184	24,900	25
	Sixth Avenue	Eighth Avenue	24,400	29,300	25
	Eighth Avenue	Vermont Street	24,400	25,600	25
	Vermont Street	Richmond Street	23,938	25,600	25
	Richmond Street	Park Boulevard	16,275	21,200	25
Upas Street	Third Avenue	Sixth Avenue	4,475	8,500	25

TABLE 7
VEHICLE TRAFFIC PARAMETERS
(continued)

Roadway	From	To	Existing ADT	2035 ADT	Speed (mph)
Washington Street	India Street	University Avenue	27,929	34,800	45
	University Avenue	First Avenue	20,477	25,400	35
	First Avenue	Fourth Avenue	32,515	24,300	35
	Fourth Avenue	Fifth Avenue	30,900	37,300	35
	Fifth Avenue	Sixth Avenue	38,428	41,100	35
	Sixth Avenue	Richmond Street	41,778	40,900	35
	Richmond Street	Normal Street	38,725	47,100	35
North Park CPU Area					
30th Street	Adams Avenue	Meade Avenue	6,325	10,400	25
	Meade Avenue	El Cajon Boulevard	10,912	14,400	25
	El Cajon Boulevard	Howard Avenue	12,684	13,445	25
	Howard Avenue	Lincoln Avenue	12,703	18,833	25
	Lincoln Avenue	University Avenue	12,500	14,739	25
	University Avenue	North Park Way	20,407	12,500	25
	North Park Way	Upas Street	12,241	16,500	25
	Upas Street	Redwood Street	8,824	11,900	25
	Redwood Street	Juniper Street	10,013	12,100	25
32nd Street	Howard Avenue	Lincoln Avenue	1,845	4,400	25
	Lincoln Avenue	University Avenue	3,300	2,900	25
	University Avenue	Myrtle Street	5,000	11,200	25
	Myrtle Street	Upas Street	6,985	7,900	25
	Upas Street	Redwood Street	5,200	5,100	25
	Redwood Street	Juniper Street	2,218	2,600	25
Adams Avenue	Park Boulevard	Alabama Street	6,758	7,400	25
	Alabama Street	Texas Street	8,966	8,500	25
	Texas Street	30th Street	10,700	13,800	25
	30th Street	West Mountain View Drive	19,929	19,500	25
Boundary Street	University Avenue	North Park Way	12,620	16,000	25
	North Park Way	Upas Street	2,730	3,300	25
	Upas Street	Redwood Street	4,670	6,000	25
	Redwood Street	Commonwealth Avenue	3,550	3,900	25
Commonwealth Avenue	Boundary Street	Juniper Street	1,480	2,800	25
El Cajon Boulevard	Park Boulevard	Florida Street	19,407	27,100	35
	Florida Street	Texas Street	23,366	34,600	35
	Texas Street	Oregon Street	24,479	37,424	35
	Oregon Street	Utah Street	32,468	45,612	35
	Utah Street	30th Street	32,191	42,978	35
	30th Street	Illinois Street	39,116	52,696	35
	Illinois Street	32nd Street	46,062	63,229	35
Florida Street	El Cajon Boulevard	University Avenue	3,375	7,400	25
	University Avenue	Robinson Avenue	5,450	8,800	25
	Robinson Avenue	Upas Street	5,600	6,800	25
Florida Drive	Upas Street	Morley Field Drive	5,498	6,700	45
Howard Avenue	Park Boulevard	Florida Street	3,000	4,800	25
	Florida Street	Texas Street	3,566	3,900	25
	Texas Street	Utah Street	4,815	11,300	25
	Utah Street	30th Street	6,137	10,200	25
	30th Street	32nd Street	7,187	10,500	25
Juniper Street	30th Street	32nd Street	3,646	6,200	25
	32nd Street	Commonwealth Avenue	2,826	4,400	25
Landis Street	Boundary Street	Nile Street	3,790	4,000	25

TABLE 7
VEHICLE TRAFFIC PARAMETERS
(continued)

Roadway	From	To	Existing ADT	2035 ADT	Speed (mph)
Lincoln Avenue	Florida Street	Texas Street	990	4,300	25
	Texas Street	Oregon Street	2,400	3,200	25
	Oregon Street	30th Street	4,550	7,500	30
	30th Street	32nd Street	5,563	9,200	30
	32nd Street	Boundary Street	5,473	9,800	30
Madison Avenue	Park Boulevard	Mission Avenue	6,110	8,100	25
	Mission Avenue	Texas Street	8,040	10,300	25
	Texas Street	Boundary Street	5,295	12,200	25
Meade Avenue	Park Boulevard	Texas Street	4,060	8,200	25
	Texas Street	30th Avenue	5,280	9,900	25
	30th Avenue	Illinois Avenue	8,576	11,500	25
	Illinois Avenue	32nd Street	8,651	11,900	25
Mission Avenue	Park Boulevard	Texas Street	1,497	3,700	25
Monroe Avenue	Park Boulevard	Mission Avenue	1,200	3,200	25
	Mission Avenue	Texas Street	1,500	5,500	25
	Texas Street	30th Street	2,158	5,700	25
Nile Street	Landis Street	Thorn Street	4,305	5,000	25
North Park Way	30th Street	32nd Street	6,737	8,500	25
	32nd Street	Boundary Street	6,737	10,600	25
Orange Avenue/ Howard Avenue	Iowa Street	I-805	5,938	8,200	25
Pentuckett Avenue	Juniper Street	Fir Street	2,225	2,300	25
Pershing Drive	Upas Street	Redwood Street	6,439	10,500	25
Redwood Street	28th Street	30th Street	5,988	7,200	25
	30th Street	32nd Street	4,912	4,700	25
	32nd Street	Boundary Street	1,650	4,400	25
Robinson Avenue	Park Boulevard	Florida Street	4,160	5,900	30
Texas Street	Adams Avenue	Mission Avenue	27,532	39,100	40
	Mission Avenue	El Cajon Boulevard	16,563	38,300	40
	El Cajon Boulevard	Howard Avenue	10,404	14,038	25
	Howard Avenue	University Avenue	9,461	15,738	25
	University Avenue	Myrtle Avenue	3,821	5,700	25
	Myrtle Avenue	Upas Street	2,814	4,100	25
University Avenue	Park Boulevard	Florida Street	19,200	23,900	30
	Florida Street	Texas Street	21,611	20,900	30
	Texas Street	Oregon Street	20,058	25,373	30
	Oregon Street	Utah Street	20,361	24,699	30
	Utah Street	30th Street	19,173	22,779	25
	30th Street	Illinois Street	21,100	25,391	25
	Illinois Street	32nd Street	25,857	25,329	25
	32nd Street	Boundary Street	25,568	32,449	25
Upas Street	Alabama Street	Texas Street	7,100	8,600	25
	Texas Street	Pershing Road	7,160	11,500	25
	Pershing Road	30th Street	9,574	16,300	25
	30th Street	32nd Street	4,347	6,100	25
	32nd Street	Boundary Street	2,600	2,700	25
Utah Street	Adams Avenue	Monroe Avenue	992	5,000	25
	Monroe Avenue	Meade Avenue	2,841	5,300	25
	Meade Avenue	El Cajon Boulevard	2,841	5,300	25
	El Cajon Boulevard	Howard Avenue	4,362	6,400	30
	Howard Avenue	Lincoln Avenue	2,535	7,300	30
	Lincoln Avenue	University Avenue	2,900	4,700	30
	University Avenue	North Park Way	4,740	5,100	25
	North Park Way	Upas Street	1,919	7,500	25

TABLE 7
VEHICLE TRAFFIC PARAMETERS
(continued)

Roadway	From	To	Existing ADT	2035 ADT	Speed (mph)
Golden Hill CPU Area					
25th Street	Russ Boulevard	C Street	1,198	7,800	25
	C Street	Broadway	9,409	10,900	25
	Broadway	F Street	12,105	17,400	25
26th Street	Russ Boulevard	B Street	9,152	8,100	25
	B Street	C Street	2,146	5,100	25
28th Street	Russ Boulevard	C Street	4,888	8,800	30
	C Street	Broadway	8,150	10,500	30
	Broadway	SR-94	10,697	19,100	30
30th Street	Grape Street	Beech Street	3,865	6,900	30
	Beech Street	A Street	16,610	19,800	30
	A Street	Broadway	16,610	19,800	30
	Broadway	SR-94	4,210	9,500	30
31st Street	Juniper Street	Grape Street	2,299	4,700	25
B Street	19th Street	20th Street	5,372	6,500	30
	20th Street	25th Street	3,708	5,400	30
	25th Street	26th Street	4,600	7,500	30
	26th Street	28th Street	6,200	7,100	30
	28th Street	30th Street	2,713	5,700	30
Beech Street	28th Street	Fern Street	1,770	6,200	30
Broadway	19th Street	20th Street	5,788	6,000	25
	20th Street	25th Street	4,867	8,000	25
	25th Street	28th Street	4,165	5,500	25
	28th Street	30th Street	3,279	4,900	25
	30th Street	SR-94	15,881	10,600	25
C Street	19th Street	20th Street	3,827	6,100	30
	20th Street	25th Street	3,923	4,500	30
	25th Street	28th Street	3,923	5,500	30
	28th Street	30th Street	2,658	4,100	30
	30th Street	34th Street	4,230	7,900	30
Cedar Street	Fern Street	Felton Street	2,815	3,400	30
Fern Street	Juniper Street	Grape Street	8,350	8,900	25
	Grape Street	A Street	8,082	15,000	25
Grape Street	30th Street	31st Street	2,614	9,000	25
Balboa Park					
Florida Drive	Morley Field Drive	Zoo Place	7,770	9,600	45
Golf Course Drive	26th Street	28th Street	3,249	4,800	25
Park Boulevard	Zoo Place	Space Theater Way	17,200	22,600	40
	Space Theater Way	Presidents Way	16,172	21,100	40
	Presidents Way	SR-163 NB On-Ramp	20,351	27,100	40
Pershing Drive	Redwood Street	Florida Drive	10,663	18,600	50
	Florida Drive	I-5 Ramps	32,826	40,400	50
	I-5 Ramps	B Street	2,299	3,400	50
Freeways					
I-5	Old Town Avenue	Washington Street	187,000	280,500	65
	Washington Street	Sassafras Street	141,000	211,500	65
	Sassafras Street	Pacific Highway	145,000	217,500	65
	Pacific Highway	India Street	186,000	279,000	65
	India Street	Hawthorn Street	192,000	288,000	65
	Hawthorn Street	First Avenue	161,000	241,500	65
	First Avenue	Sixth Avenue	204,000	306,000	65
	Sixth Avenue	SR-163	204,000	306,000	65
	SR-163	Pershing Drive	212,000	318,000	65
	Pershing Drive	SR-94	212,000	318,000	65
	SR-94	Imperial Avenue	165,000	247,500	65

TABLE 7
VEHICLE TRAFFIC PARAMETERS
(continued)

Roadway	From	To	Existing ADT	2035 ADT	Speed (mph)
I-8	Hotel Circle (W)	Hotel Circle (E)	188,000	231,000	65
	Hotel Circle (E)	SR-163	197,000	224,500	65
	SR-163	Mission Center Road	203,000	226,500	65
	Mission Center Road	Qualcomm Way	217,000	274,200	65
	Qualcomm Way	I-805	192,000	231,100	65
	I-805	I-15	234,000	265,300	65
I-15	I-805	SR-94	113,000	141,100	65
I-805	I-8	Adams Avenue	194,000	329,800	65
	Adams Avenue	El Cajon Boulevard	176,000	299,200	65
	El Cajon Boulevard	University Avenue	172,000	292,400	65
	University Avenue	I-15	166,000	282,200	65
SR-94	25th Street	28th Street	127,000	219,000	65
	28th Street	30th Street	133,000	245,800	65
	30th Street	I-15	147,000	253,600	65
SR-163	I-8	Sixth Avenue	161,000	203,300	65
	Sixth Avenue	Washington Street	128,000	163,400	65
	Washington Street	Robinson Avenue	96,000	110,400	65
	Robinson Avenue	Richmond Street	105,000	118,300	65
	Richmond Street	Quince Street	108,000	120,300	65
	Quince Street	I-5	110,000	124,300	65

6.2 Rail Noise

Noise associated with trolley, Amtrak, Coaster, and freight train operations was modeled using the FTA recommended Chicago Rail Efficiency and Transportation Efficiency (CREATE) railroad noise model (Harris Miller Miller & Hanson, Inc. 2006).

The SDMTS provides trolley service along a railway alignment designated the “Green Line”. The Green Line trolley generally parallels I-5 at the western boundary of the Uptown planning area. The trolleys were modeled at 25 miles per hour (mph). This is based on the distances between trolley stations and the average timing between stations obtained from published trolley schedules. Noise contour distances were first calculated assuming flat-site conditions and no intervening buildings that would provide noise attenuation.

Amtrak, Coaster, and freight trains also travel along the tracks parallel to I-5. The number of Amtrak and Coaster trains passing through the City was obtained from existing published schedules. There are approximately 25 Amtrak trains and 22 Coaster trains that travel on the tracks west of the Uptown CPU daily. Amtrak trains have an average of eight cars per train and travel at a speed of 30 mph. This is based on the distances between stations and the average timing between stations obtained from published schedules. The number of cars and speed of the Coaster were assumed to be the same as the Amtrak train.

There are approximately five freight trains that typically pass through the City each day (FHWA 2002). Freight trains have an average of 50 cars per train. Freight trains were modeled at the same speed as Amtrak and Coaster trains. As a conservative analysis, it was assumed that all freight train pass-bys would occur during the nighttime hours.

6.3 Airport Noise

The Airport Environs Overlay Zone (AEOZ) is defined in Chapter 13, Article 2, Division 3 of the San Diego Municipal Code. The purpose of the AEOZ is to provide supplemental regulations, including those related to noise (see Section 4.4), for property surrounding the San Diego International Airport to implement the 2014 ALUCP for the San Diego International Airport.

Airport/aircraft noise is evaluated based on the noise contours developed by the San Diego County Regional Airport Authority (SDCRAA) and provided in the 2014 San Diego International Airport Land Use Compatibility Plan (SDCRAA 2014). These contours are based on year 2030 forecast noise exposure. Noise contours for the San Diego International Airport are shown in Figure 10.

6.4 Stationary Noise

Stationary sources of noise include activities associated with a given land use. Plan implementation would create many instances of residential land uses located adjacent to or sharing a boundary with commercial and mixed-use land uses as well as recreational and institutional uses. Proposed land uses would introduce on-site stationary noise sources, including rooftop heating, ventilation, and air conditioning (HVAC) equipment; mechanical equipment; emergency electrical generators; parking lot activities; loading dock operations; and parks, schools, and recreation activities. Stationary noise is considered a “point source” and attenuates over distance at a rate of 6 dBA for each doubling of distance.

6.5 Construction Noise

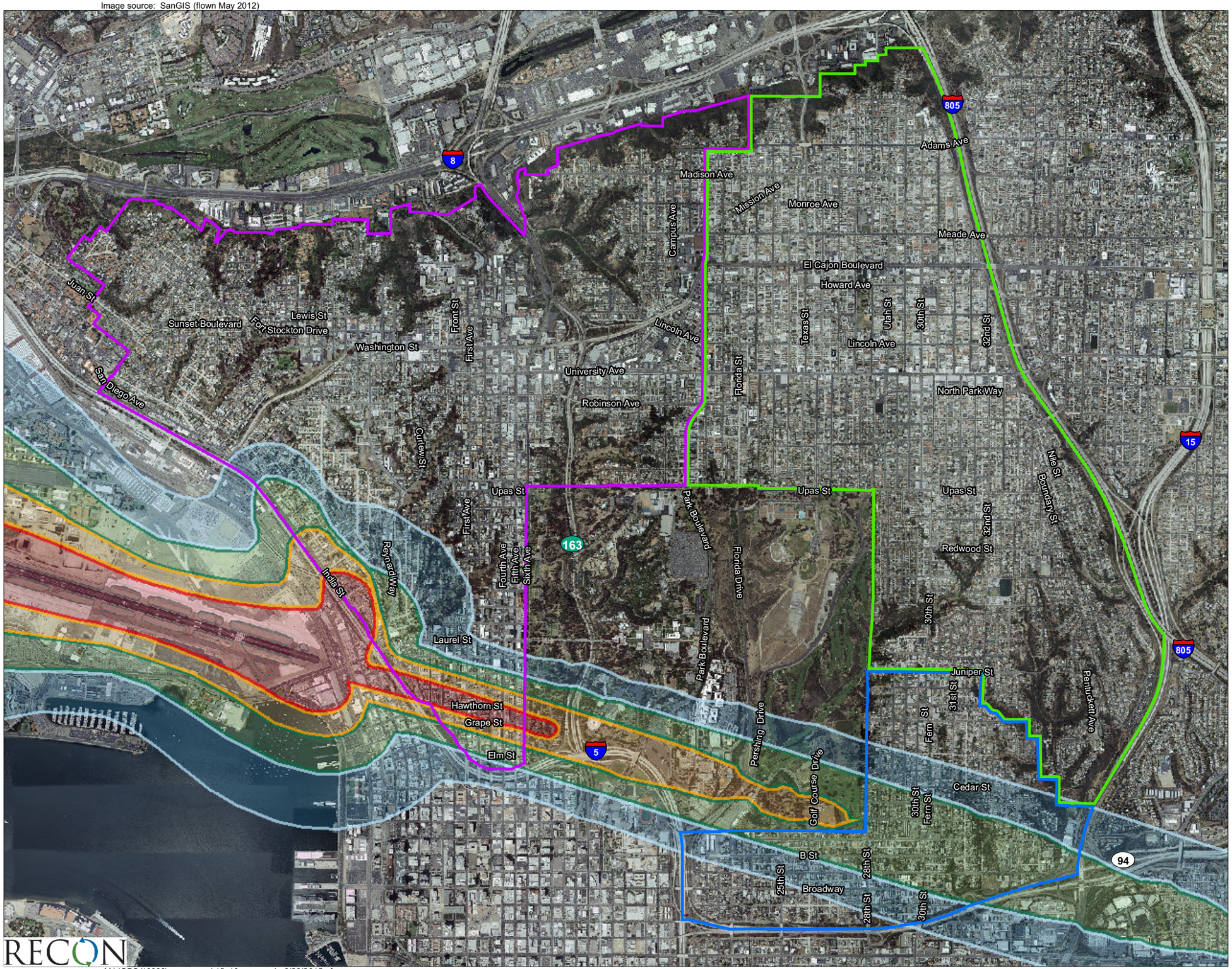
No specific construction or development is proposed under the CPUs at this time but would occur when future development under the CPUs is proposed. Future development as allowed under the proposed CPUs could potentially result in temporary ambient noise increase due to construction activities.

Construction noise would be generated by diesel-powered construction equipment used for site preparation and grading, removal of existing structures and pavement, loading, unloading, and placing materials and paving. Diesel engine-driven trucks also would bring materials to the site and remove the spoils from excavation.

Under load conditions, diesel engine noise levels may be 85 to 90 dB(A) at a distance of 50 feet from the equipment (FHWA 2006). Occasional pavement breaking would be performed, which would generate noise levels of 90 dB(A) at 50 feet from the equipment (FHWA 2006). Construction equipment noise is considered a “point source” and attenuates over distance at a rate of 6 dB(A) for each doubling of distance. Thus, a noise level of 85 dB(A) at 50 feet would be 79 dB(A) at 100 feet and 73 dB(A) at 200 feet from the source.

During excavating, grading, and paving operations, equipment moves to different locations and goes through varying load cycles, and there are breaks for the operators and for non-equipment tasks. Although maximum noise levels may be 85 to 90 dB(A) at a distance of 50 feet during most construction activities, hourly average noise levels would be 82 dB(A) at 50 feet from the center of construction activity when assessing the loudest pieces of equipment working simultaneously.

Image source: SanGIS (flown May 2012)



Community Plan Boundaries

- Uptown
- North Park
- Golden Hill

Aircraft Noise Contours

- 60-65 dB CNEL
- 65-70 dB CNEL
- 70-75 dB CNEL
- >75 dB CNEL

0 Feet 2,200

FIGURE 10

Aircraft Noise Contours

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6.6 Vibration

Potential vibration could result from construction. In addition, post-construction operational vibration impacts could occur as a result of commercial operations. Pile driving has the potential to generate the highest groundborne vibration levels and is the primary concern for structural damage when it occurs within 100 feet of structures. Vibration levels generated by pile driving activities would vary depending on project conditions, such as soil conditions, construction methods, and equipment used. Pile driving activities generate vibrations at various frequencies. The dominant frequency of propagating waves from impact sources ranges mostly between 3 and 60 Hz (Svinkin 1992). Using the middle range for illustration purposes, equipment operating at a frequency range of 30 Hz would exceed the perceptible range at approximately 100 feet.

7.0 Future Acoustical Environment and Impacts

7.1 Uptown CPU

7.1.1 Increase in Ambient Noise

A significant impact would occur if implementation of the proposed CPUs resulted in or created a significant increase in the existing ambient noise levels. Studies have shown that the average human ear can barely perceive a change in sound level of 3 dB(A). A change of at least 5 dB(A) is considered a readily perceivable change in a normal environment. A 10 dB(A) increase is subjectively heard as a doubling in loudness and would cause a community response. The City's 2011 Significance Determination Thresholds state that if a project is currently at or exceeds the significance thresholds for traffic noise and noise levels result in less than a 3 dB(A) increase, the impact would not be considered significant (City of San Diego 2011).

Therefore, based on these concepts of increase and perception, if an area is already exposed to noise levels in excess of the land use compatibility guidelines (see Table 3) and noise levels were to result in greater than a 3 dB(A) increase, then the impact would be considered significant. If an area is currently exposed to noise levels that do not exceed the land use compatibility guidelines and noise levels were to result in greater than a 5 dB(A) increase, then the impact would be considered significant. There are areas that are currently exposed to noise levels that are exactly at or very near the land use compatibility guidelines. For these areas, the increase in ambient noise levels would be considered significant if noise levels resulted in greater than a 5 dB(A) increase or if resulting noise levels were 3 dB(A) more than the compatibility guideline (e.g., if the compatibility guideline is 65 dB(A) CNEL, the existing noise level is currently 63 dB(A) CNEL, and the future noise level is 67 dB(A) CNEL, impacts would be less than significant because the increase in noise would be less than 5 dB(A) and the resulting noise level would not exceed 68 dB(A) CNEL).

The roads generating the greatest noise levels in the Uptown CPU area are I-5, I-8, SR-163, Sixth Avenue, India Street, Park Boulevard, Robinson Avenue, University Avenue, and Washington Street. Increases in traffic noise gradually degrade the ambient noise environment, especially with respect to sensitive receptors. According to the General Plan, noise-sensitive receptors include, but are not necessarily limited to, residential uses, hospitals, nursing facilities, intermediate care facilities, child educational facilities, libraries, museums, places of worship, child care facilities, and certain types of passive recreational parks and open space (City of San Diego 2008).

Vehicular traffic on roadways in the CPU area would increase due to buildout of the CPU. Table 8 summarizes the existing and buildout traffic noise levels along various roadway segments in the Uptown CPU area. Roadway noise is measured in dB(A) CNEL at 50 feet from the roadway centerline.

As discussed previously, there are areas that are currently exposed to significant traffic noise levels greater than established General Plan Noise Element noise – land use comparability guidelines in the Uptown CPU area. The Uptown CPU would not result in a change in that condition, and these areas would continue to be exposed to significant noise levels. Where traffic noise was calculated to be less than 65 dB(A) CNEL but to increase by 5 dB(A) or more, and where traffic noise was calculated to be greater than 65 dB(A) CNEL and to increase by 3 dB(A) or more, the adjacent land uses under the Uptown CPU were examined and buildout noise levels were compared to the General Plan compatibility guidelines.

Existing and/or future residential uses are or could be located adjacent to each of these segments. The compatible noise level for residential uses is 60 dB(A) CNEL before the building must attenuate the exterior noise levels to the 45 dB(A) CNEL interior standard and to 65 dB(A) CNEL for exterior use areas.

The following roadway segment currently generates noise levels greater than 65 dB(A) CNEL, and future noise levels would increase by more than 3 dB(A):

- Sixth Avenue
    - Washington Street to University Avenue

The following roadway segments currently generate noise levels lower than 65 dB(A) CNEL and would generate future noise levels lower than 65 dB(A) CNEL, but future noise levels would increase by more than 5 dB(A) over existing ambient noise levels:

- Grape Street
    - Albatross Street to First Avenue
    - Third Avenue to Sixth Avenue

TABLE 8
INCREASES IN AMBIENT TRAFFIC NOISE FOR THE UPTOWN CPU AREA

Roadway	From	To	Existing Noise Level[1]	2035 Noise Level[1]	Change in dB(A)
Uptown CPU Area					
First Avenue	Arbor Drive	Washington Street	62.1	63.7	1.6
	Washington Street	University Avenue	63.6	64.5	0.9
	University Avenue	Robinson Avenue	65.0	67.1	2.1
	Robinson Avenue	Pennsylvania Avenue	63.7	65.6	1.9
	Pennsylvania Avenue	Walnut Avenue	63.6	66.0	2.4
	Walnut Avenue	Laurel Street	61.7	65.7	4.0
	Laurel Street	Hawthorn Street	63.6	64.2	0.6
	Hawthorn Street	Grape Street	63.6	63.3	-0.3
	Grape Street	Elm Street	60.1	61.5	1.4
Fourth Avenue	Arbor Drive	Washington Street	65.9	66.7	0.8
	Washington Street	University Avenue	65.1	64.9	-0.2
	University Avenue	Robinson Avenue	65.7	66.1	0.4
	Robinson Avenue	Walnut Avenue	63.4	65.5	2.1
	Walnut Avenue	Laurel Street	64.2	66.7	2.5
	Laurel Street	Grape Street	63.9	66.3	2.4
	Grape Street	Elm Street	63.7	64.8	1.1
Fifth Avenue	Washington Street	University Avenue	65.6	65.7	0.1
	University Avenue	Robinson Avenue	65.1	66.4	1.3
	Robinson Avenue	Walnut Avenue	65.8	66.9	1.1
	Walnut Avenue	Laurel Street	65.5	66.6	1.1
	Laurel Street	Hawthorn Street	64.6	66.5	1.9
	Hawthorn Street	Grape Street	65.0	66.5	1.5
	Grape Street	Elm Street	64.6	65.0	0.4
Sixth Avenue	**Washington Street**	**University Avenue**	**67.2**	**71.5**	**4.3**
	University Avenue	Robinson Avenue	68.9	70.1	1.2
	Robinson Avenue	Upas Street	66.7	69.7	3.0
	Upas Street	Laurel Street	66.7	69.1	2.4
	Laurel Street	Juniper Street	65.0	67.1	2.1
	Juniper Street	Grape Street	65.3	67.7	2.4
	Grape Street	Elm Street	65.2	68.0	2.8
Ninth Avenue	Washington Street	University Avenue	60.6	62.4	1.8
Campus Avenue	Madison Avenue	Washington Avenue	58.4	61.0	2.6
	Washington Avenue	Polk Avenue	60.9	62.1	1.2
Cleveland Avenue	Tyler Street	Lincoln Street	60.3	62.0	1.7
	Lincoln Street	Richmond Street	62.3	63.2	0.9
Curlew Street	Robinson Avenue	Reynard Way	55.7	60.0	4.3
Elm Street	Second Avenue	Third Avenue	62.4	62.7	0.3
	Third Avenue	Fifth Avenue	62.5	63.0	0.5
	Fifth Avenue	Sixth Avenue	62.5	62.5	0.0
Fort Stockton Drive	Arista Street	Sunset Boulevard	58.6	60.3	1.7
	Sunset Boulevard	Hawk Street	61.2	62.4	1.2
	Hawk Street	Goldfinch Street	62.7	62.9	0.2
	Goldfinch Street	Falcon Street	58.0	58.6	0.6
Front Street	Dickinson Street	Arbor Drive	59.2	60.0	0.8
	Arbor Drive	Washington Street	60.8	62.4	1.6
Grape Street	**Albatross Street**	**First Avenue**	**56.6**	**62.0**	**5.4**
	First Avenue	Third Avenue	59.7	62.0	2.3
	Third Avenue	**Sixth Avenue**	**56.6**	**62.9**	**6.3**
Hawthorn Street	Brant Street	First Avenue	65.6	66.7	1.1
	First Avenue	Third Avenue	60.5	63.6	3.1
	Third Avenue	Sixth Avenue	60.5	64.3	3.8

TABLE 8
INCREASES IN AMBIENT TRAFFIC NOISE FOR THE UPTOWN CPU AREA
(continued)

Roadway	From	To	Existing Noise Level[1]	2035 Noise Level[1]	Change in dB(A)
India Street	Washington Street	Winder Street	69.7	66.4	-3.3
	Winder Street	Glenwood Drive	69.7	66.3	-3.4
	Glenwood Drive	Sassafras Street	70.2	70.8	0.6
	Sassafras Street	Redwood Street	68.7	69.3	0.6
	Redwood Street	Palm Street	68.2	69.1	0.9
Juan Street	Harney Street	Witherby Street	58.6	61.6	3.0
Laurel Street	Columbia Street	Union Street	64.8	66.6	1.8
	Union Street	First Avenue	63.9	65.9	2.0
	First Avenue	Third Avenue	63.9	65.5	1.6
	Third Avenue	Sixth Avenue	64.0	66.4	2.4
Lewis Street	Fort Stockton Drive	Goldfinch Street	59.1	59.5	0.4
Lincoln Avenue	Washington Street	Park Boulevard	62.5	63.8	1.3
Madison Avenue	Cleveland Avenue	Park Boulevard	59.1	61.2	2.1
Meade Avenue	Cleveland Avenue	Park Boulevard	58.6	58.8	0.2
Normal Street	Park Boulevard	Washington Street	68.4	69.5	1.1
	Washington Street	University Avenue	61.9	61.8	-0.1
Park Boulevard	Adams Avenue	Mission Avenue	66.7	66.4	-0.3
	Mission Avenue	El Cajon Boulevard	65.7	66.8	1.1
	El Cajon Boulevard	Polk Avenue	65.6	67.6	2.0
	Polk Avenue	University Avenue	67.4	69.5	2.1
	University Avenue	Robinson Avenue	67.6	69.0	1.4
	Robinson Avenue	Upas Street	67.0	68.4	1.4
	Upas Street	Zoo Place	67.4	68.5	1.1
Reynard Way	Torrance Street	Curlew Street	57.9	62.2	4.3
	Curlew Street	Laurel Street	63.5	64.3	0.8
Richmond Street	Cleveland Avenue	University Avenue	61.9	62.9	1.0
	University Avenue	Robinson Avenue	60.7	61.7	1.0
	Robinson Avenue	Upas Street	60.4	62.5	2.1
Robinson Avenue	Brant Street	First Avenue	56.4	60.0	3.6
	First Avenue	Third Avenue	61.0	64.0	3.0
	Third Avenue	Eighth Avenue	63.8	65.0	1.2
	Eighth Avenue	Tenth Avenue	66.7	64.3	-2.4
	Tenth Avenue	Richmond Street	68.2	65.8	-2.4
	Richmond Street	Park Boulevard	63.6	64.6	1.0
San Diego Avenue	Hortensia Street	McKee Street	63.7	66.2	2.5
	McKee Street	Washington Street	67.4	68.6	1.2
	Washington Street	India Street	62.9	64.5	1.6
State Street	Laurel Street	Juniper Street	59.6	62.5	2.9
Sunset Boulevard	Witherby Street	Fort Stockton Drive	57.5	60.0	2.5
University Avenue	Ibis Street	Albatross Street	63.6	65.1	1.5
	Albatross Street	First Avenue	65.7	66.6	0.9
	First Avenue	Fourth Avenue	66.5	64.9	-1.6
	Fourth Avenue	Fifth Avenue	66.5	66.7	0.2
	Fifth Avenue	Sixth Avenue	66.7	67.4	0.7
	Sixth Avenue	Eighth Avenue	67.3	68.1	0.8
	Eighth Avenue	Vermont Street	67.3	67.5	0.2
	Vermont Street	Richmond Street	67.2	67.5	0.3
	Richmond Street	Park Boulevard	65.5	66.7	1.2
Upas Street	Third Avenue	Sixth Avenue	59.9	62.7	2.8

TABLE 8
INCREASES IN AMBIENT TRAFFIC NOISE FOR THE UPTOWN CPU AREA
(continued)

Roadway	From	To	Existing Noise Level[1]	2035 Noise Level[1]	Change in dB(A)
Washington Street	India Street	University Avenue	73.0	74.0	1.0
	University Avenue	First Avenue	69.1	70.1	1.0
	First Avenue	Fourth Avenue	71.1	69.9	-1.2
	Fourth Avenue	Fifth Avenue	70.9	71.7	0.8
	Fifth Avenue	Sixth Avenue	71.8	72.1	0.3
	Sixth Avenue	Richmond Street	72.2	72.1	-0.1
	Richmond Street	Normal Street	71.9	72.7	0.8
Freeways					
I-5	Old Town Avenue	Washington Street	85.3	87.0	1.7
	Washington Street	Sassafras Street	84.0	85.8	1.8
	Sassafras Street	Pacific Highway	84.2	85.9	1.7
	Pacific Highway	India Street	85.2	87.0	1.8
	India Street	Hawthorn Street	85.4	87.1	1.7
	Hawthorn Street	First Avenue	84.6	86.4	1.8
	First Avenue	Sixth Avenue	85.6	87.4	1.8
	Sixth Avenue	SR-163	85.8	88.1	2.3
	SR-163	Pershing Drive	85.4	87.7	2.3
	Pershing Drive	SR-94	85.8	87.6	1.8
	SR-94	Imperial Avenue	84.7	86.5	1.8
I-8	Hotel Circle (W)	Hotel Circle (E)	85.3	86.2	0.9
	Hotel Circle (E)	SR-163	85.5	86.1	0.6
	SR-163	Mission Center Road	85.6	86.1	0.5
	Mission Center Road	Qualcomm Way	85.9	86.9	1.0
	Qualcomm Way	I-805	85.4	86.2	0.8
	I-805	I-15	86.2	86.8	0.6
SR-163	I-8	Sixth Avenue	84.6	85.6	1.0
	Sixth Avenue	Washington Street	83.6	84.7	1.1
	Washington Street	Robinson Avenue	82.4	83.0	0.6
	Robinson Avenue	Richmond Street	82.8	83.3	0.5
	Richmond Street	Quince Street	82.9	83.4	0.5
	Quince Street	I-5	83.0	83.5	0.5

[1]Roadway noise is measured in dB(A) CNEL at 50 feet from the roadway centerline.

Bold = Increase in ambient noise levels would be potentially significant per the following criteria:

a) Where exterior noise levels currently exceed the compatibility guidelines, the increase in ambient noise would exceed 3 dB(A).

b) Where exterior noise levels are currently less than the compatibility guidelines and future noise levels would also be less than the compatibility guidelines, the increase in ambient noise would exceed 5 dB(A).

c) Where exterior noise levels that are currently at or very near the compatibility guidelines, the increase in ambient noise would exceed 5 dB(A) or would result in a future noise level that would be 3 dB(A) more than the compatibility guideline.

There are existing sensitive uses located adjacent to these roadway segments, and there could be also future sensitive uses located adjacent to them. The increase in ambient noise levels adjacent to these segments of Sixth Avenue and Grape Street would result in the exposure of existing sensitive receptors to a significant increase in ambient noise levels, and impacts would be significant. Possible noise-reduction measures would include retrofitting older homes with new window and door components with higher STC ratings. The existing residential uses adjacent to Grape Street are within the 65 to 75 dB(A) CNEL airport noise exposure area for the San Diego International Airport, and could be eligible for the Quieter Home Program. This program is discussed in Section 4.5. While intended to attenuate interior noise levels of existing buildings from high aircraft noise, the attenuation would also reduce interior noise levels from exterior motor vehicle noise. Some of the existing residences have already participated in this program and have undergone retrofits to reduce interior noise levels to 45 dB(A) CNEL. However, for existing uses that have not participated in or are not eligible for the Quieter Home Program, it cannot be determined whether the existing structures contain adequate attenuation to reduce interior noise to the 45 dB(A) CNEL standard nor what measures would be required to retrofit these structures. In addition, there is no mechanism in place for implementing such a retrofit program in areas outside the Airport Authority's Quieter Home Program. Because the significant noise impacts are to existing homes in an already urbanized area, there is no feasible mitigation. Thus, impacts to existing sensitive land uses due to the increase in ambient noise levels associated with buildout of the CPU would remain significant and unmitigated.

A mitigation framework exists for new development in areas exposed to high levels of ambient noise. Policies in the CPU and General Plan, procedures in the Municipal Code, and regulations (Title 24) would reduce traffic noise exposure, because they provide guidance and set standards for the siting of sensitive land uses. Site-specific noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City’s General Plan would be required as part of the review process for discretionary projects. With this framework, noise impacts to discretionary projects would be less than significant. However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unmitigated. Interior noise impacts for all projects including ministerial projects would be less than significant because applicants must demonstrate compliance with the current interior noise standards [45 dB(A) CNEL] through submission and approval of a Title 24 Compliance Report.

For all other roadway segments in the Uptown CPU area not included in the above lists, the increase in ambient noise would be less than significant. The Uptown CPU would not significantly worsen the noise exposure (i.e., future noise increase would be less than 3 dB(A) in areas already exposed to noise levels in excess of compatibility guidelines, or future noise increase would be less than 5 dB(A) in areas currently exposed to noise levels lower than compatibility guidelines), and impacts due to the increase in ambient noise would be less than significant.

7.1.2 Land Use Plan Compatibility

A significant impact would occur if implementation of the proposed CPU resulted in an exposure of people to current or future transportation noise levels that exceed guidelines established in the Noise Element of the General Plan.

7.1.2.1 Vehicle Traffic Noise

The City of San Diego noise and land use compatibility guidelines are presented in Table 3. The Uptown CPU proposes single-family residential, multi-family residential, commercial, institutional, hotel, and park and open space land uses, which are compatible with the following noise levels.

- Single-family residential is compatible up to 60 dB(A) CNEL and conditionally compatible up to 65 dB(A) CNEL.
- Multi-family residential and mixed uses are compatible up to 60 dB(A) CNEL and conditionally compatible up to 70 dB(A) CNEL. Additionally, as stated in Section B of the City's Noise Element, although not generally considered compatible, the City conditionally allows multi-family and mixed-use residential uses up to 75 dB(A) CNEL in areas affected by motor vehicle traffic noise with existing residential uses. Any future residential use exposed to noise levels up to 75 dB(A) CNEL must include attenuation measures to ensure an interior noise level of 45 dB(A) CNEL and be located in an area where a community plan allows multi-family and mixed-use residential uses.
- Sales, commercial services, and office uses are compatible up to 65 dB(A) CNEL and conditionally compatible up to 75 dB(A) CNEL.
- Institutional uses are compatible up to 60 dB(A) CNEL and conditionally compatible up to 65 dB(A) CNEL.
- Hotel uses are compatible up to 60 dB(A) CNEL and conditionally compatible up to 75 dB(A) CNEL.
- Neighborhood parks are compatible up to 70 dB(A) CNEL and conditionally compatible up to 75 dB(A) CNEL (see footnote to Table 3).

The local freeways are the dominant noise sources in the CPU area. The roads generating the greatest noise level in the Uptown CPU are I-5, I-8, SR-163, Sixth Avenue, India Street, Park Boulevard, Robinson Avenue, University Avenue, and Washington Street.

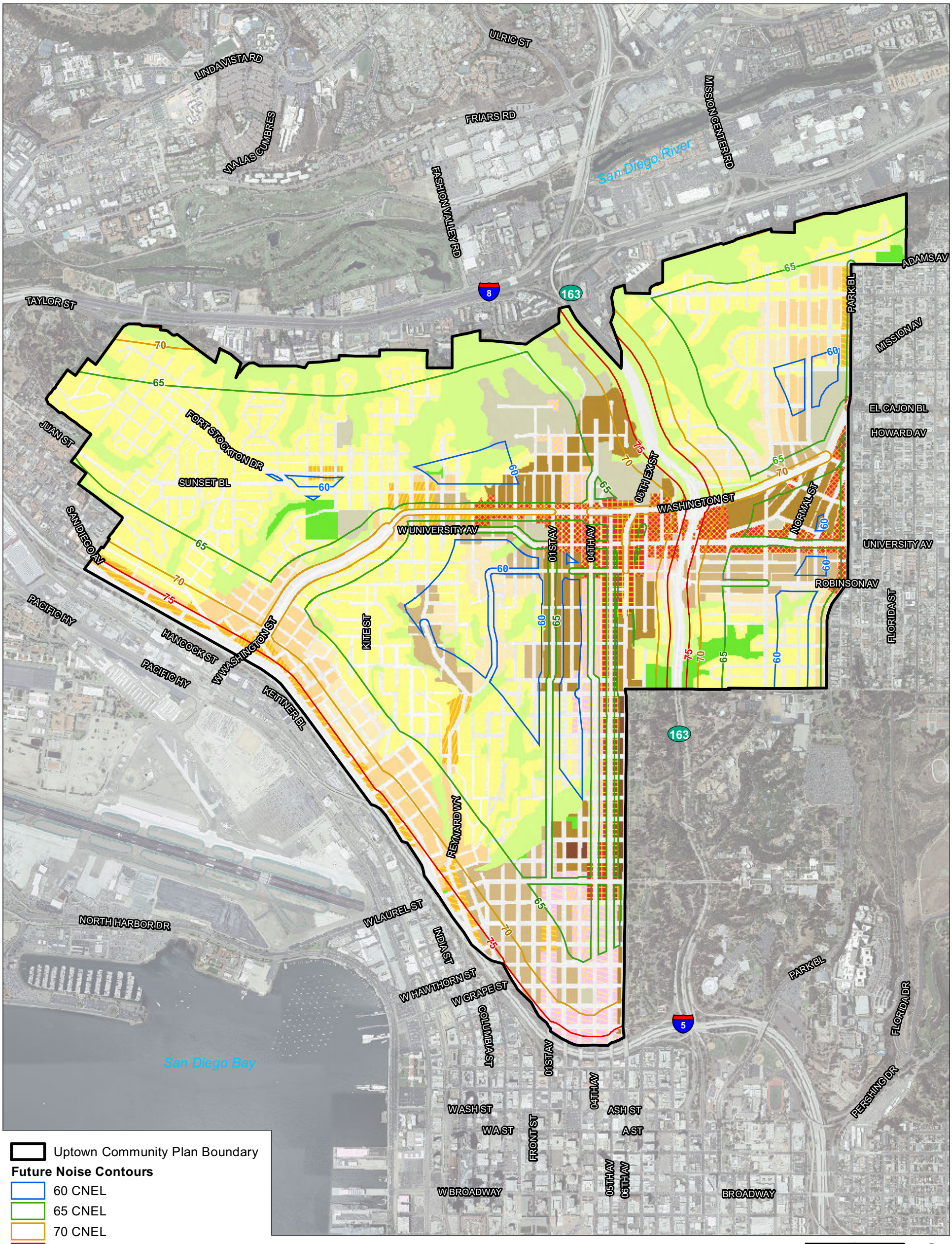
Noise contours for existing and future conditions were modeled using existing and projected traffic volumes on freeways and major roadways within the Uptown planning area and are expressed in contour lines showing the anticipated noise levels as measured by the dB(A) CNEL. The distances to the 60, 65, 70, and 75 dB(A) CNEL noise contours for freeways and

major roadways in the Uptown planning area are shown in Table 9. A complete list of distances to the 60, 65, 70, and 75 dB(A) CNEL noise contours for all roadway segments for buildout of the Uptown planning area are included in Attachment 3. Distances to the roadway noise contours are based on a hard, flat site with no intervening barriers or obstructions (worst-case analysis). Future horizon year (2035) noise contours for the Uptown planning area are shown in Figure 11.

It should be noted that at any specific location the actual existing noise would depend upon not only the source noise level but also the nature of the path from the source to the sensitive receptor. Buildings, walls, dense vegetation, and other barriers would block the direct line of sight and reduce noise levels at the receptor. As an example, a first row of buildings would reduce traffic noise levels at receptors by 3 to 5 dB(A) behind those structures depending on the building-to-gap ratio. Large continuous structures can provide substantially greater attenuation of traffic noise.

While the City has a compatibility level of 60 dB(A) CNEL or less for residential uses, noise levels up to 65 dB(A) CNEL for single-family residential and up to 70 dB(A) CNEL for multi-family residential are considered conditionally compatible, since interior noise levels can be reduced to 45 dB(A) CNEL through simple means, such as closing/sealing windows and providing mechanical ventilation. Additionally, as stated in Section B of the City's Noise Element, although not generally considered compatible, the City conditionally allows multi-family and mixed-use residential uses up to 75 dB(A) CNEL in areas affected by motor vehicle traffic noise with existing residential uses. Any future residential use exposed to noise levels up to 75 dB(A) CNEL must include attenuation measures to ensure an interior noise level of 45 dB(A) CNEL and be located in an area where a community plan allows multi-family and mixed-use residential uses. Passive mitigation such as noise walls adjacent to freeways and roadways can usually reduce exterior noise levels to comply with City guidelines. The majority of CPU residential land uses would be located within the conditionally compatible range. Multi-family residential uses located where exterior noise levels range from 65 to 70 dB(A) CNEL are considered conditionally compatible and can generally provide the required structural attenuation to reduce noise levels at interior locations. Multi-family and mixed-use residential uses that meet the requirements of Section B of the Noise Element would be conditionally compatible up to 75 dB(A) CNEL and would also be required to provide structural attenuation to reduce noise levels at interior locations. Additionally, due to the provision of common exterior use areas, multi-family residential land uses can generally provide greater shielding to these areas, thus providing exterior use areas that comply with City Noise Element guidelines. Likewise, backyards of single-family residential uses can be shielded from roadway noise by the residential structure, providing exterior use areas that are compatible with City guidelines.

Image source: SanGIS (flown May 2012)



Uptown Community Plan Boundary

Future Noise Contours

- 60 CNEL
- 65 CNEL
- 70 CNEL
- 75 CNEL

0 Feet 1,800

Proposed Land Use (Draft)

Residential

- Residential - Low : 5-9 Du/Ac
- Residential - Low Medium : 10-15 Du/Ac
- Residential - Medium : 16-29 Du/Ac
- Residential - Medium High : 30-44 Du/Ac
- Residential - High : 45-73 Du/Ac
- Residential - Very High : 74-109 Du/Ac

Commercial, Employment, Retail, and Services

- Community Commercial : 0-29 Du/Ac
- Community Commercial : 0-44 Du/Ac
- Community Commercial : 0-73 Du/Ac
- Community Commercial : 0-109 Du/Ac
- Neighborhood Commercial : 0-15 Du/Ac
- Neighborhood Commercial : 0-29 Du/Ac
- Neighborhood Commercial : 0-44 Du/Ac
- Office Commercial : 0-29 Du/Ac
- Office Commercial : 0-44 Du/Ac
- Office Commercial : 0-73 Du/Ac
- Office Commercial : 0-109 Du/Ac

Park, Open Space, and Recreation

- Open Space
- Park

Institutional, and Public/Semi-Public Facilities

- Institutional

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FIGURE 11

Future (2035) Traffic Noise Contours for the Uptown CPU Area

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TABLE 9
FUTURE VEHICLE TRAFFIC CONTOUR DISTANCES FOR THE UPTOWN CPU AREA

Roadway	From	To	Distance To (feet)[1]			
			75 dB(A) CNEL	70 dB(A) CNEL	65 dB(A) CNEL	60 dB(A) CNEL
Uptown CPU Area						
First Avenue	Arbor Drive	Washington Street	4	12	37	117
	Washington Street	University Avenue	4	14	45	141
	University Avenue	Robinson Avenue	8	26	81	256
	Robinson Avenue	Pennsylvania Avenue	6	18	57	182
	Pennsylvania Avenue	Walnut Avenue	6	20	63	199
	Walnut Avenue	Laurel Street	6	19	59	186
	Laurel Street	Hawthorn Street	4	13	42	132
	Hawthorn Street	Grape Street	3	11	34	107
	Grape Street	Elm Street	2	7	22	71
Fourth Avenue	Arbor Drive	Washington Street	7	23	74	234
	Washington Street	University Avenue	5	15	49	155
	University Avenue	Robinson Avenue	6	20	64	204
	Robinson Avenue	Walnut Avenue	6	18	56	177
	Walnut Avenue	Laurel Street	7	23	74	234
	Laurel Street	Grape Street	7	21	67	213
	Grape Street	Elm Street	5	15	48	151
Fifth Avenue	Washington Street	University Avenue	6	19	59	186
	University Avenue	Robinson Avenue	7	22	69	218
	Robinson Avenue	Walnut Avenue	8	24	77	245
	Walnut Avenue	Laurel Street	7	23	72	229
	Laurel Street	Hawthorn Street	7	22	71	223
	Hawthorn Street	Grape Street	7	22	71	223
	Grape Street	Elm Street	5	16	50	158
Sixth Avenue	Washington Street	University Avenue	22	71	223	706
	University Avenue	Robinson Avenue	16	51	162	512
	Robinson Avenue	Upas Street	15	47	148	467
	Upas Street	Laurel Street	13	41	129	406
	Laurel Street	Juniper Street	8	26	81	256
	Juniper Street	Grape Street	9	29	93	294
	Grape Street	Elm Street	10	32	100	315
Ninth Avenue	Washington Street	University Avenue	3	9	27	87
Campus Avenue	Madison Avenue	Washington Avenue	2	6	20	63
	Washington Avenue	Polk Avenue	3	8	26	81
Cleveland Avenue	Tyler Street	Lincoln Street	3	8	25	79
	Lincoln Street	Richmond Street	3	10	33	104
Curlew Street	Robinson Avenue	Reynard Way	2	5	16	50
Elm Street	Second Avenue	Third Avenue	3	9	29	93
	Third Avenue	Fifth Avenue	3	10	32	100
	Fifth Avenue	Sixth Avenue	3	9	28	89
Fort Stockton Drive	Arista Street	Sunset Boulevard	2	5	17	54
	Sunset Boulevard	Hawk Street	3	9	27	87
	Hawk Street	Goldfinch Street	3	10	31	97
	Goldfinch Street	Falcon Street	1	4	11	36
Front Street	Dickinson Street	Arbor Drive	2	5	16	50
	Arbor Drive	Washington Street	3	9	27	87
Grape Street	Albatross Street	First Avenue	3	8	25	79
	First Avenue	Third Avenue	3	8	25	79
	Third Avenue	Sixth Avenue	3	10	31	97
Hawthorn Street	Brant Street	First Avenue	7	23	74	234
	First Avenue	Third Avenue	4	11	36	115
	Third Avenue	Sixth Avenue	4	13	43	135

TABLE 9
FUTURE VEHICLE TRAFFIC CONTOUR DISTANCES FOR THE UPTOWN CPU AREA
(continued)

Roadway	From	To	Distance To (feet)[1] 75 dB(A) CNEL	70 dB(A) CNEL	65 dB(A) CNEL	60 dB(A) CNEL
India Street	Washington Street	Winder Street	7	22	69	218
	Winder Street	Glenwood Drive	7	21	67	213
	Glenwood Drive	Sassafras Street	19	60	190	601
	Sassafras Street	Redwood Street	13	43	135	426
	Redwood Street	Palm Street	13	41	129	406
Juan Street	Harney Street	Witherby Street	2	7	23	72
Laurel Street	Columbia Street	Union Street	7	23	72	229
	Union Street	First Avenue	6	19	62	195
	First Avenue	Third Avenue	6	18	56	177
	Third Avenue	Sixth Avenue	7	22	69	218
Lewis Street	Fort Stockton Drive	Goldfinch Street	1	4	14	45
Lincoln Avenue	Washington Street	Park Boulevard	4	12	38	120
Madison Avenue	Cleveland Avenue	Park Boulevard	2	7	21	66
Meade Avenue	Cleveland Avenue	Park Boulevard	1	4	12	38
Normal Street	Park Boulevard	Washington Street	14	45	141	446
	Washington Street	University Avenue	2	8	24	76
Park Boulevard	Adams Avenue	Mission Avenue	7	22	69	218
	Mission Avenue	El Cajon Boulevard	8	24	76	239
	El Cajon Boulevard	Polk Avenue	9	29	91	288
	Polk Avenue	University Avenue	14	45	141	446
	University Avenue	Robinson Avenue	13	40	126	397
	Robinson Avenue	Upas Street	11	35	109	346
	Upas Street	Zoo Place	11	35	112	354
Reynard Way	Torrance Street	Curlew Street	3	8	26	83
	Curlew Street	Laurel Street	4	13	43	135
Richmond Street	Cleveland Avenue	University Avenue	3	10	31	97
	University Avenue	Robinson Avenue	2	7	23	74
	Robinson Avenue	Upas Street	3	9	28	89
Robinson Avenue	Brant Street	First Avenue	2	5	16	50
	First Avenue	Third Avenue	4	13	40	126
	Third Avenue	Eighth Avenue	5	16	50	158
	Eighth Avenue	Tenth Avenue	4	13	43	135
	Tenth Avenue	Richmond Street	6	19	60	190
	Richmond Street	Park Boulevard	5	14	46	144
San Diego Avenue	Hortensia Street	McKee Street	7	21	66	208
	McKee Street	Washington Street	11	36	115	362
	Washington Street	India Street	4	14	45	141
State Street	Laurel Street	Juniper Street	3	9	28	89
Sunset Boulevard	Witherby Street	Fort Stockton Drive	2	5	16	50
University Avenue	Ibis Street	Albatross Street	5	16	51	162
	Albatross Street	First Avenue	7	23	72	229
	First Avenue	Fourth Avenue	5	15	49	155
	Fourth Avenue	Fifth Avenue	7	23	74	234
	Fifth Avenue	Sixth Avenue	9	27	87	275
	Sixth Avenue	Eighth Avenue	10	32	102	323
	Eighth Avenue	Vermont Street	9	28	89	281
	Vermont Street	Richmond Street	9	28	89	281
	Richmond Street	Park Boulevard	7	23	74	234
Upas Street	Third Avenue	Sixth Avenue	3	9	29	93
Washington Street	India Street	University Avenue	40	126	397	1,256
	University Avenue	First Avenue	16	51	162	512
	First Avenue	Fourth Avenue	15	49	155	489
	Fourth Avenue	Fifth Avenue	23	74	234	740
	Fifth Avenue	Sixth Avenue	26	81	256	811
	Sixth Avenue	Richmond Street	26	81	256	811
	Richmond Street	Normal Street	29	93	294	931

TABLE 9
FUTURE VEHICLE TRAFFIC CONTOUR DISTANCES FOR THE UPTOWN CPU AREA
(continued)

Roadway	From	To	Distance To (feet)[1] 75 dB(A) CNEL	70 dB(A) CNEL	65 dB(A) CNEL	60 dB(A) CNEL
Freeways						
I-5	Old Town Avenue	Washington Street	315	680	1,464	3,155
	Washington Street	Sassafras Street	262	565	1,218	2,624
	Sassafras Street	Pacific Highway	266	574	1,237	2,665
	Pacific Highway	India Street	315	680	1,464	3,155
	India Street	Hawthorn Street	320	690	1,487	3,204
	Hawthorn Street	First Avenue	288	620	1,335	2,877
	First Avenue	Sixth Avenue	335	723	1,557	3,355
	Sixth Avenue	SR-163	374	805	1,734	3,735
	SR-163	Pershing Drive	351	757	1,630	3,513
	Pershing Drive	SR-94	346	745	1,606	3,459
	SR-94	Imperial Avenue	292	629	1,356	2,922
I-8	Hotel Circle (W)	Hotel Circle (E)	279	601	1,295	2,790
	Hotel Circle (E)	SR-163	275	592	1,275	2,748
	SR-163	Mission Center Road	275	592	1,275	2,748
	Mission Center Road	Qualcomm Way	311	669	1,442	3,107
	Qualcomm Way	I-805	279	601	1,295	2,790
	I-805	I-15	306	659	1,420	3,059
SR-163	I-8	Sixth Avenue	254	548	1,181	2,545
	Sixth Avenue	Washington Street	222	477	1,029	2,216
	Washington Street	Robinson Avenue	171	368	792	1,707
	Robinson Avenue	Richmond Street	179	385	830	1,788
	Richmond Street	Quince Street	182	391	843	1,815
	Quince Street	I-5	184	397	856	1,843

[1]Roadway noise is measured from the roadway centerline.

As shown in Figure 11, traffic noise levels at existing and proposed residential use areas closest to the freeways and heavily traveled roadways would exceed the City's conditionally compatible thresholds for residential land uses (65 dB(A) CNEL for single-family and conditionally up to 75 dB(A) CNEL for multi-family and mixed-use developments that meet the requirements of Section B of the Noise Element).

Noise levels greater than 75 dB(A) CNEL are considered incompatible for all land use types. Uses located adjacent to I-5 and SR-163 in the Uptown CPU area have the potential to be exposed to noise levels greater than 75 dB(A) CNEL. However, the Uptown CPU would not locate new sensitive land uses in areas that are exposed to 75 dB(A) CNEL or greater.

In the Uptown CPU area, noise levels for all land uses would be incompatible (i.e., greater than 75 dB(A) CNEL) at areas located approximately 262 to 374 feet from I-5 and 171 to 254 feet from SR-163. Noise levels for sensitive land uses would be incompatible (i.e., greater than 70 dB(A) CNEL) at areas located approximately 565 to 805 feet from I-5 and 368 to 548 feet from SR-163 (see Figure 11). These areas are currently developed, and the proposed Uptown CPU would not change the land use in these areas or introduce new sensitive land uses in these areas. Thus, while land uses in these areas would be exposed to noise levels that exceed General Plan guidelines, this noise exposure would not be a significant noise impact resulting from implementation of the CPU. Additionally, per Section B of the Noise Element, any future multi-family and mixed-use residential use exposed to noise levels up to 75 dB(A) CNEL must include attenuation measures to ensure an interior noise level of 45 dB(A) CNEL and be located in an area where a community plan allows multi-family and mixed-use residential uses.

Furthermore, policies in the Uptown CPU and General Plan, procedures in the Municipal Code, and regulations (Title 24) would reduce traffic noise exposure, because they set standards for the siting of sensitive land uses. General Plan policy NE-A.4 requires an acoustical study consistent with Acoustical Study Guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the Land Use – Noise Compatibility Guidelines. Site-specific exterior noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City's General Plan would be required as part of future discretionary proposals. Additionally, site-specific interior noise analyses demonstrating compliance with the interior noise compatibility guidelines of the City's General Plan would be required for land uses located in areas where exterior noise levels exceed the City's noise and land use compatibility thresholds as defined in the General Plan, Table N-3, and summarized in Table 3. With this framework, noise impacts to new discretionary development would be less than significant.

However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unmitigated. Interior noise impacts for all projects including ministerial projects would be less

than significant because applicants must demonstrate compliance with the current interior noise standards [45 dB(A) CNEL] through submission and approval of a Title 24 Compliance Report.

7.1.2.2 Rail Noise

West of the Uptown planning area, the SDMTS provides trolley service along a railway alignment designated the "Green Line". The Green Line trolley generally parallels I-5. Amtrak, Coaster, and freight trains also travel along the tracks parallel to I-5. At the at-grade crossings there are warning signals operating while the trains and trolleys are in the vicinity of the crossing. There are five at-grade crossings within the vicinity of the Uptown planning area: Old Town, Washington Street, Noell Street, Vine Street, and Sassafras Street. These crossings are outside of the Uptown planning area.

Railway noise consists of noise from the trolleys, locomotives, rail cars, and emergency signaling devices. Trolleys and trains are equipped with horns for use in emergency situations and as a general audible warning to track workers and trespassers within the right-of-way as well as pedestrians and motor vehicles at road grade crossings.

The majority of the trolleys and commuter trains run between the hours of 7:00 A.M. and 10:00 P.M. The Green Line trolley operations consist of 152 scheduled trolleys each weekday with fewer trolleys on weekends (SDMTS 2015). Of this total, 118 trolleys occur during the daytime hours (i.e., 7 A.M.–10 P.M.), and 34 occur during the nighttime hours (i.e., 10 P.M.–7 A.M.). Amtrak operations consist of approximately 25 scheduled weekday trains, and the Coaster operations consist of approximately 22 schedule weekday trains. Of this total, 19 Amtrak and 19 Coaster pass-bys occur during the daytime, and 6 Amtrak and 3 Coaster pass-bys occur during the nighttime. There are approximately five freight trains that typically pass through the City each day, and as a conservative analysis, it was assumed that all freight train pass-bys would occur during the nighttime hours.

The western Uptown planning area boundary is located more than 400 feet from the railway. Noise associated with trolley, Amtrak, Coaster, and freight train operations was modeled using the FTA-recommended CREATE railroad noise model (Harris Miller Miller & Hanson, Inc. 2006). Calculations are contained in Attachment 4 and the results are shown in Table 10.

TABLE 10
RAILWAY NOISE LEVELS

Source	Noise Level at Nearest Uptown CPU Boundary
Trolley	47
Commuter Train (Amtrak and Coaster)	54
Freight Train	56
TOTAL	59

As shown, noise levels at the nearest Uptown planning area boundary 400 feet from the railway would not exceed 60 dB(A) CNEL. The nearest sensitive land uses are located on the northeast side of India Street, and a row of commercial uses is located between the residential receivers and the railway and I-5. Trolley and train noise levels at these uses would therefore be less than the noise levels summarized in Table 10. Additionally, it should be noted that trolley and train noise would not result in a significant increase in noise over vehicle traffic noise from I-5. Therefore, noise levels due to trolley and train operations would be consistent with the General Plan noise guidelines.

7.1.3 ALUCP Consistency

A significant impact would occur if implementation of the proposed CPU resulted in land uses which are not compatible with aircraft noise levels as defined by an adopted ALUCP.

The San Diego International Airport is located west of the Uptown planning area. As shown in Figure 10, the southwest portion of the Uptown planning area would be exposed to aircraft noise levels exceeding 60 dB(A) CNEL, and would be up to 75 dB(A) CNEL for those uses located directly under the approaching flight path. Land uses are located where noise levels due to aircraft operations exceed the ALUCP compatibility guidelines. There are existing residential and commercial land uses located where aircraft noise levels would exceed 60 dB(A) CNEL. The proposed Uptown CPU would not result in a change to these existing uses or a change in San Diego International Airport operations.

Per the City Significance Determination Thresholds, if a future project implemented under the Uptown CPU is proposed within the AEOZ as defined in Chapter 13, Article 2, Division 3 of the San Diego Municipal Code (see Section 6.3 of this report), the potential exterior noise impacts from aircraft noise would not constitute a significant environmental impact. Interior noise impacts would be regulated by the requirement for development within the AEOZ to reduce interior noise levels attributable to airport noise to the interior noise standards specified in Table 5 of this report. Interior noise levels for new construction are addressed through implementation of Title 24 of the California Code of Regulations (see also General Plan policies NE-I.1 and NE-I.2 in Section 4.2 of this report). Additional insulation and upgraded building materials would be required so that interior noise levels do not exceed the interior noise standards specified in Table 5. Requirements for noise studies are found in the Municipal Code at Chapter 13, Article 2, Division 3, §132.0308. This section of the Municipal Code applies to development as defined in §113.0103 to include constructing, reconstructing, converting, establishing, altering, maintaining, relocating, demolishing, using, or enlarging any building, structure, improvement, lot, or premises. Site-specific interior noise analyses demonstrating compliance with the interior noise compatibility criteria would be required for land uses located in areas where exterior noise levels exceed the ALUCP noise and land use compatibility criteria presented in Table 5. With this framework, noise impacts to new development would be less than significant.

Additionally, the San Diego International Airport has an Airport Noise Mitigation Office and has implemented a number of programs to reduce the aircraft noise impact on the community.

Actions include the enforcement of a curfew on departing aircraft and the Quieter Home Program. The Quieter Home Program provides sound insulation retrofits for residences located within the 65 dB(A) CNEL contour with the goal of reducing interior noise levels by at least 5 dB(A). Existing residences located within the 65 dB(A) CNEL contour for the San Diego International Airport in the Uptown CPU area are eligible for this program (Note that eligibility to participate in the program is based on the noise exposure maps prepared under 14 CFR Part 150, which are different than the ALUCP contour maps). Figure 12 shows a map of the parcels that have participated in the program as of January 2015.

The proposed Uptown CPU would not result in impacts to existing uses because the CPU would not result in a change to these existing uses or a change in San Diego International Airport operations. Because future development is required to provide noise attenuation consistent with the Noise Element of the General Plan and the ALUCP for the San Diego International Airport and follow procedures in the Municipal Code, implementation of the Uptown CPU would result in a less than significant exposure to noise from aircraft.

7.1.4 Municipal Code – Stationary Noise

A significant impact would occur if implementation of the proposed CPU resulted in the exposure of people to noise levels that exceed property line limits established in the Noise Abatement and Control Ordinance of the Municipal Code.

Stationary sources of noise include activities associated with a given land use. For example, noise sources in commercial uses would include car washes, fast food restaurants, auto repair facilities, parking lots, and a variety of other uses. Additionally, due to the number of eating and drinking establishments in the CPU area, Uptown experiences elevated noise levels associated with these uses.

Mixed-use areas would contain residential and commercial interfaces. Mixed-use sites and areas where residential uses are located in proximity to commercial sites would result in an exposure of sensitive receptors to noise. The interface between commercial and residential uses would be exposed to noise due to traffic, loading docks, mechanical equipment (such as generators and heating, ventilation, and air conditioning [HVAC] units), deliveries, trash-hauling activities, and customer and employee use of commercial facilities. Limiting truck idling time and enclosing external equipment (generators, HVAC units, etc.) that are adjacent to residential uses would reduce stationary noise levels.

Although noise-sensitive residential land uses would be exposed to noise associated with the operation of these commercial uses, City policies in the General Plan and regulations in the Noise Ordinance are in place to control noise and reduce noise impacts between various land uses. These include the requirement for noise studies, limits on hours of operation for various noise-generating activities, and standards for the compatibility of various land uses with the existing and future noise environment. In addition, enforcement of the federal, state, and local noise regulations would control impacts. Given implementation of these policies and

enforcement of the Noise Abatement and Control Ordinance of the Municipal Code, impacts would be less than significant.

7.1.5 Municipal Code – Construction Noise

A significant impact would occur if implementation of the proposed CPU resulted in the exposure of people to significant temporary construction noise.

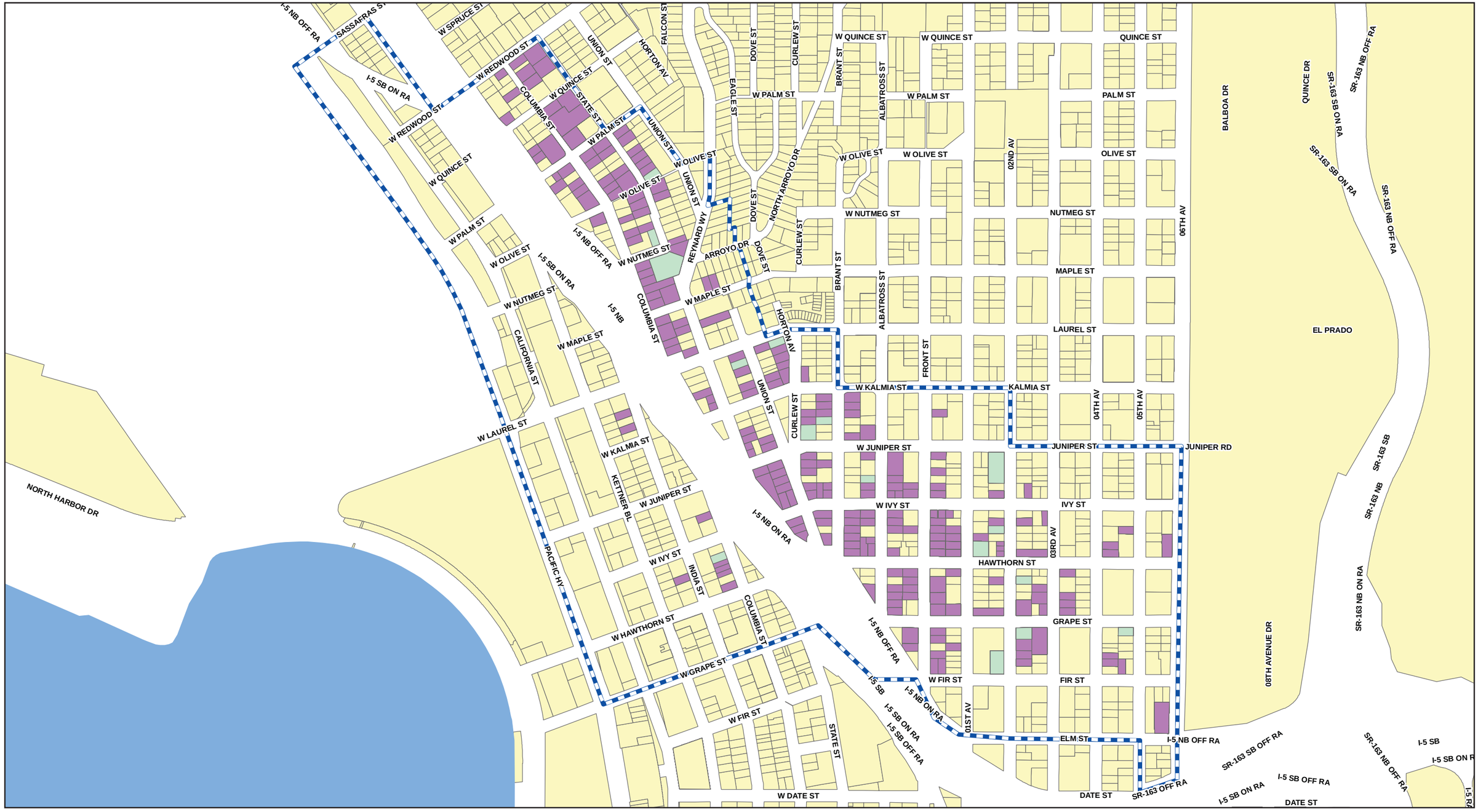
Future development as allowed under the Uptown CPU could potentially result in temporary ambient noise increase due to construction activities. Due to the developed nature of the Uptown CPU area, there is a high likelihood that construction activities would take place adjacent to existing structures. Construction activities may include demolition of existing structures, site preparation work, excavation of parking and subfloors, foundation work, and building construction. Demolition for an individual site may last weeks to months and may produce substantial vibration. Excavation for underground levels could also occur on some project sites, and vibratory pile driving could be used to stabilize the walls of excavated areas. Piles or drilled caissons may also be used to support building foundations.

Construction noise typically occurs intermittently and varies depending upon the nature or phase of construction (e.g., demolition/land clearing, grading and excavation, erection). Construction noise in any one particular area would be short-term and would include noise from activities such as site preparation, truck hauling of material, pouring of concrete, and use of power tools. Noise would also be generated by construction equipment, including earthmovers, material handlers, and portable generators, and could reach high levels for brief periods. Typical construction noise levels are discussed in Section 6.5.

The exact location of construction activities are not known at this time. Due to the highly developed nature of the Uptown CPU area, it is likely that sensitive receptors would be located in proximity to construction activities. The City of San Diego regulates noise associated with construction equipment and activities through its Noise Abatement and Control Ordinance.

As noted above, construction equipment would generate maximum noise levels between 85 and 90 dB at 50 feet from the source when in operation. Hourly average noise levels would be 82 dB(A) at 50 feet from the center of construction activity when assessing the loudest pieces of equipment working simultaneously. Noise levels would vary depending on the nature of the construction including the duration of specific activities, nature of the equipment involved, location of the particular receiver, and nature of intervening barriers. Construction noise levels of 82 dB(A) L_{eq} at 50 feet would attenuate to 75 dB(A) L_{eq} at 110 feet. Therefore, significant impacts would occur if sensitive land uses are located closer than 110 feet of construction activities.

Map Source: Psomas



Completed Parcels
Completed Parcels 2014
Ocean/Bay
Program Boundary

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FIGURE 12

Quieter Home Program Participation for the Uptown CPU Area

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Therefore, construction activities related to implementation of the Uptown CPU would potentially generate short-term noise levels in excess of 75 dB(A) L_{eq} at adjacent properties. While the City regulates noise associated with construction equipment and activities through enforcement of noise ordinance standards (e.g., days of the week and hours of operation) and imposition of conditions of approval for building or grading permits, there is a procedure in place that allows for variance to the noise ordinance. Due to the highly developed nature of the Uptown CPU area with sensitive receivers potentially located in proximity to construction sites, there is a potential for future project construction noise to exceed the City standard of 75 dB(A) L_{eq} at the property line. This would be regarded as a significant impact. Implementation of the measures outlined in Section 8.5 would reduce noise levels to comply with City standards.

7.1.6 Vibration

7.1.6.1 Construction

Construction of projects implemented under the Uptown CPU would likely be located adjacent to existing structures. Construction activities may include demolition of existing structures, site preparation work, excavation of parking and subfloors, foundation work, and building construction. Demolition for an individual site may last several weeks to months and may produce substantial vibration. Excavation for underground levels could also occur on some project sites, and vibratory pile driving could be used to stabilize the walls of excavated areas. Piles or drilled caissons may also be used to support building foundations.

As with any type of construction, vibration levels during any phase may at times be perceptible. However, non-pile driving or foundation work construction phases that have the highest potential of producing vibration (such as jackhammering and other high power tools) would be intermittent and would only occur for short periods of time for any individual project site. By use of administrative controls, such as scheduling construction activities with the highest potential to produce perceptible vibration to hours with least potential to affect nearby properties, perceptible vibration can be kept to a minimum and as such would result in a less than significant impact with respect to perception.

Pile driving has the potential to generate the highest groundborne vibration levels and is the primary concern for structural damage when it occurs within 95 feet of structures. However, vibration levels generated by pile-driving activities would vary depending on project conditions, such as soil conditions, construction methods, and equipment used; the use of 95 feet is considered conservative.

Past studies have established a peak vertical particle velocity of 0.20 inch per second as the limit where vibration would begin to annoy people in buildings and at which there is a risk of cosmetic damage to normal dwellings (Caltrans 2013a). Maximum vibration levels from pile driving would exceed this level at approximately 95 feet. Thus pile driving within 95 feet of existing structures would be a potentially significant impact.

7.1.6.2 Operation

Commercial operations have, on occasion, been known to utilize equipment or processes that have a potential to generate groundborne vibration. However, vibrations found to be excessive for human exposure that are the result of commercial machinery are generally addressed from an occupational health and safety perspective as indicated above. The residual vibrations are typically of such low amplitude that they quickly dissipate into the surrounding soil and are rarely perceivable at the surrounding land uses. Additionally, the commercial uses that would be constructed under the proposed CPU would include uses such as retail, restaurants, and small offices that would not require heavy mechanical equipment that would generate groundborne vibration or heavy truck deliveries. Residential and civic uses do not typically generate vibration. Thus, operational vibration impacts associated with CPU implementation would be less than significant.

7.2 North Park CPU

7.2.1 Increase in Ambient Noise

A significant impact would occur if implementation of the proposed CPU resulted in or created a significant increase in the existing ambient noise levels. Studies have shown that the average human ear can barely perceive a change in sound level of 3 dB(A). A change of at least 5 dB(A) is considered a readily perceivable change in a normal environment. A 10 dB(A) increase is subjectively heard as a doubling in loudness and would cause a community response. The City's 2011 Significance Determination Thresholds also state that if a project is currently at or exceeds the significance thresholds for traffic noise and noise levels result in less than a 3 dB(A) increase, the impact would not be considered significant (City of San Diego 2011).

As discussed previously, if an area is already exposed to noise levels in excess of the land use compatibility guidelines (see Table 3) and noise levels were to result in greater than a 3 dB(A) increase, then the impact would be considered significant. If an area is currently exposed to noise levels that do not exceed the land use compatibility guidelines and noise levels were to result in greater than a 5 dB(A) increase, then the impact would be considered significant. There are areas that are currently exposed to noise levels that are exactly at or very near the land use compatibility guidelines. For these areas, the increase in ambient noise levels would be considered significant if noise levels resulted in greater than a 5 dB(A) increase or if resulting noise levels were 3 dB(A) more than the compatibility guideline (e.g., if the compatibility guideline is 65 dB(A) CNEL, the existing noise level is currently 63 dB(A) CNEL, and the future noise level is 67 dB(A) CNEL, impacts would be less than significant because the increase in noise would be less than 5 dB(A) and the resulting noise level would not exceed 68 dB(A) CNEL).

The roads generating the greatest noise level in the North Park CPU area are I-8, I-15, I-805, 30th Street, El Cajon Boulevard, Texas Street, and University Avenue. As discussed, increases

in traffic noise gradually degrade the ambient noise environment, especially with respect to sensitive receptors.

Vehicular traffic on roadways in the CPU area would increase due to buildout of the CPU. Table 11 summarizes the existing and buildout traffic noise levels along various roadway segments in the North Park CPU area. Roadway noise is measured in dB(A) CNEL at 50 feet from the roadway centerline.

The following roadway segment currently generates noise levels greater than 65 dB(A) CNEL, and future noise levels would increase by more than 3 dB(A):

- Texas Street
    - Mission Avenue to El Cajon Boulevard

The following roadway segments currently generate noise levels lower than 65 dB(A) CNEL and would generate future noise levels lower than 65 dB(A) CNEL, but future noise levels would increase by more than 5 dB(A) over existing ambient noise levels:

- Lincoln Avenue
    - Florida Street to Texas Street
- Monroe Avenue
    - Mission Avenue to Texas Street
- Utah Street
    - Adams Avenue to Monroe Avenue
    - North Park Way to Upas Street

There are existing sensitive uses located adjacent to these roadway segments and there could be also future sensitive uses located adjacent to them. The increase in ambient noise levels adjacent to these segments of Texas Street, Lincoln Avenue, Monroe Avenue, and Utah Street would result in the exposure of existing sensitive receptors to a significant increase in ambient noise levels, and impacts would be significant. Possible noise-reduction measures would include retrofitting older homes with new window and door components with higher STC ratings. At the program level, it cannot be determined whether the existing structures contain adequate attenuation to reduce interior noise to the 45 dB(A) CNEL standard nor what measures would be required to retrofit these structures. In addition, there is no mechanism in place for implementing such a retrofit program. Because the significant noise impacts are to existing homes in an already urbanized area, there is no feasible mitigation. Thus, impacts to existing sensitive land uses due to the increase in ambient noise levels associated with buildout of the CPU would remain significant and unmitigated.

TABLE 11
INCREASE IN AMBIENT TRAFFIC NOISE FOR THE NORTH PARK CPU AREA

Roadway	From	To	Existing Noise Level[1]	2035 Noise Level[1]	Change in dB(A)
North Park CPU Area					
30th Street	Adams Avenue	Meade Avenue	61.4	63.6	2.2
	Meade Avenue	El Cajon Boulevard	63.8	65.0	1.2
	El Cajon Boulevard	Howard Avenue	64.4	64.7	0.3
	Howard Avenue	Lincoln Avenue	64.4	66.1	1.7
	Lincoln Avenue	University Avenue	64.4	65.1	0.7
	University Avenue	North Park Way	66.5	64.4	-2.1
	North Park Way	Upas Street	64.3	65.6	1.3
	Upas Street	Redwood Street	62.9	64.1	1.2
	Redwood Street	Juniper Street	63.4	64.2	0.8
32nd Street	Howard Avenue	Lincoln Avenue	56.1	59.8	3.7
	Lincoln Avenue	University Avenue	58.6	58.0	-0.6
	University Avenue	Myrtle Street	60.4	63.9	3.5
	Myrtle Street	Upas Street	61.8	62.4	0.6
	Upas Street	Redwood Street	60.6	60.5	-0.1
	Redwood Street	Juniper Street	56.9	57.5	0.6
Adams Avenue	Park Boulevard	Alabama Street	61.7	62.1	0.4
	Alabama Street	Texas Street	62.9	62.7	-0.2
	Texas Street	30th Street	63.7	64.8	1.1
	30th Street	West Mountain View Drive	66.4	66.3	-0.1
Boundary Street	University Avenue	North Park Way	64.4	65.4	1.0
	North Park Way	Upas Street	57.8	58.6	0.8
	Upas Street	Redwood Street	60.1	61.2	1.1
	Redwood Street	Commonwealth Avenue	58.9	59.3	0.4
Commonwealth Avenue	Boundary Street	Juniper Street	55.1	57.9	2.8
El Cajon Boulevard	Park Boulevard	Florida Street	68.9	70.3	1.4
	Florida Street	Texas Street	69.7	71.4	1.7
	Texas Street	Oregon Street	69.9	71.7	1.8
	Oregon Street	Utah Street	71.1	72.6	1.5
	Utah Street	30th Street	71.1	72.3	1.2
	30th Street	Illinois Street	71.9	73.2	1.3
	Illinois Street	32nd Street	72.6	74.0	1.4
Florida Street	El Cajon Boulevard	University Avenue	58.7	62.1	3.4
	University Avenue	Robinson Avenue	60.8	62.8	2.0
	Robinson Avenue	Upas Street	60.9	61.7	0.8
Florida Drive	Upas Street	Morley Field Drive	66.0	66.8	0.8
Howard Avenue	Park Boulevard	Florida Street	58.2	60.2	2.0
	Florida Street	Texas Street	58.9	59.3	0.4
	Texas Street	Utah Street	60.2	63.9	3.7
	Utah Street	30th Street	61.3	63.5	2.2
	30th Street	32nd Street	62.0	63.6	1.6
Juniper Street	30th Street	32nd Street	59.0	61.3	2.3
	32nd Street	Commonwealth Avenue	57.9	59.8	1.9
Landis Street	Boundary Street	Nile Street	59.2	59.4	0.2
Lincoln Avenue	**Florida Street**	**Texas Street**	**53.4**	**59.7**	**6.3**
	Texas Street	Oregon Street	57.2	58.4	1.2
	Oregon Street	30th Street	61.5	63.7	2.2
	30th Street	32nd Street	62.4	64.6	2.2
	32nd Street	Boundary Street	62.3	64.9	2.6
Madison Avenue	Park Boulevard	Mission Avenue	61.3	62.5	1.2
	Mission Avenue	Texas Street	62.4	63.5	1.1
	Texas Street	Boundary Street	60.6	64.3	3.7
Meade Avenue	Park Boulevard	Texas Street	59.5	62.5	3.0
	Texas Street	30th Avenue	60.6	63.4	2.8
	30th Avenue	Illinois Avenue	62.7	64.0	1.3
	Illinois Avenue	32nd Street	62.8	64.1	1.3
Mission Avenue	Park Boulevard	Texas Street	55.1	59.1	4.0
Monroe Avenue	Park Boulevard	Mission Avenue	54.2	58.4	4.2
	Mission Avenue	**Texas Street**	**55.2**	**60.8**	**5.6**
	Texas Street	30th Street	56.7	61.0	4.3

TABLE 11
INCREASE IN AMBIENT TRAFFIC NOISE FOR THE NORTH PARK CPU AREA
(continued)

Roadway	From	To	Existing Noise Level[1]	2035 Noise Level[1]	Change in dB(A)
Nile Street	Landis Street	Thorn Street	59.7	60.4	0.7
North Park Way	30th Street	32nd Street	61.7	62.7	1.0
	32nd Street	Boundary Street	61.7	63.6	1.9
Orange Avenue/ Howard Avenue	Iowa Street	I-805	61.1	62.5	1.4
Pentuckett Avenue	Juniper Street	Fir Street	56.9	57.0	0.1
Pershing Drive	Upas Street	Redwood Street	61.5	63.6	2.1
Redwood Street	28th Street	30th Street	61.2	62.0	0.8
	30th Street	32nd Street	60.3	60.1	-0.2
	32nd Street	Boundary Street	55.6	59.8	4.2
Robinson Avenue	Park Boulevard	Florida Street	61.1	62.7	1.6
Texas Street	Adams Avenue	Mission Avenue	71.7	73.3	1.6
	Mission Avenue	**El Cajon Boulevard**	**69.5**	**73.2**	**3.7**
	El Cajon Boulevard	Howard Avenue	63.6	64.9	1.3
	Howard Avenue	University Avenue	63.2	65.4	2.2
	University Avenue	Myrtle Avenue	59.2	61.0	1.8
	Myrtle Avenue	Upas Street	57.9	59.5	1.6
University Avenue	Park Boulevard	Florida Street	67.8	68.7	0.9
	Florida Street	Texas Street	68.3	68.1	-0.2
	Texas Street	Oregon Street	68.0	69.0	1.0
	Oregon Street	Utah Street	68.0	68.9	0.9
	Utah Street	30th Street	66.2	67.0	0.8
	30th Street	Illinois Street	66.6	67.4	0.8
	Illinois Street	32nd Street	67.5	67.4	-0.1
	32nd Street	Boundary Street	67.5	68.5	1.0
Upas Street	Alabama Street	Texas Street	61.9	62.7	0.8
	Texas Street	Pershing Road	61.9	64.0	2.1
	Pershing Road	30th Street	63.2	65.5	2.3
	30th Street	32nd Street	59.8	61.2	1.4
	32nd Street	Boundary Street	57.5	57.7	0.2
Utah Street	**Adams Avenue**	**Monroe Avenue**	**53.4**	**60.4**	**7.0**
	Monroe Avenue	Meade Avenue	57.9	60.6	2.7
	Meade Avenue	El Cajon Boulevard	57.9	60.6	2.7
	El Cajon Boulevard	Howard Avenue	61.3	63.0	1.7
	Howard Avenue	Lincoln Avenue	59.0	63.6	4.6
	Lincoln Avenue	University Avenue	59.6	61.7	2.1
	University Avenue	North Park Way	60.2	60.5	0.3
	North Park Way	**Upas Street**	**56.2**	**62.1**	**5.9**
Freeways					
I-8	Hotel Circle (W)	Hotel Circle (E)	85.3	86.2	0.9
	Hotel Circle (E)	SR-163	85.5	86.1	0.6
	SR-163	Mission Center Road	85.6	86.1	0.5
	Mission Center Road	Qualcomm Way	85.9	86.9	1.0
	Qualcomm Way	I-805	85.4	86.2	0.8
	I-805	I-15	86.2	86.8	0.6
I-15	I-805	SR-94	83.1	84.0	0.9
I-805	I-8	Adams Avenue	85.8	88.1	2.3
	Adams Avenue	El Cajon Boulevard	85.4	87.7	2.3
	El Cajon Boulevard	University Avenue	85.3	87.6	2.3
	University Avenue	I-15	85.1	87.5	2.4

[1]Roadway noise is measured in dB(A) CNEL at 50 feet from the roadway centerline.

Bold = Increase in ambient noise levels would be potentially significant per the following criteria:

a) Where exterior noise levels currently exceed the compatibility guidelines, the increase in ambient noise would exceed 3 dB(A).

b) Where exterior noise levels are currently less than the compatibility guidelines and future noise levels would also be less than the compatibility guidelines, the increase in ambient noise would exceed 5 dB(A).

c) Where exterior noise levels that are currently at or very near the compatibility guidelines, the increase in ambient noise would exceed 5 dB(A) or would result in a future noise level that would be 3 dB(A) more than the compatibility guideline.

A mitigation framework exists for new development in areas exposed to high levels of ambient noise. Policies in the CPU and General Plan, procedures in the Municipal Code, and regulations (Title 24) would reduce traffic noise exposure, because they set standards for the siting of sensitive land uses. Site-specific noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City's General Plan would be required as part of the review process for discretionary projects. With this framework, noise impacts to discretionary projects would be less than significant. However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unmitigated. Interior noise impacts for all projects including ministerial projects would be less than significant because applicants must demonstrate compliance with the current interior noise standards [45 dB(A) CNEL] through submission and approval of a Title 24 Compliance Report.

For all other roadway segments in the North Park CPU area not included in the above lists, the increase in ambient noise would be less than significant. The North Park CPU would not significantly worsen the noise exposure (i.e., future noise increase would be less than 3 dB(A) in areas already exposed to noise levels in excess of compatibility guidelines, or future noise increase would be less than 5 dB(A) in areas currently exposed to noise levels less than compatibility guidelines), and impacts due to the increase in ambient noise would be less than significant.

7.2.2 Land Use Plan Compatibility

A significant impact would occur if implementation of the proposed CPU resulted in an exposure of people to current or future transportation noise levels that exceed guidelines established in the Noise Element of the General Plan.

7.2.2.1 Vehicle Traffic Noise

The City of San Diego noise and land use compatibility guidelines are presented in Table 3. The North Park CPU proposes single-family residential, multi-family residential, commercial, institutional, hotel, and park and open space land uses. The land use compatibility guidelines for these uses are summarized in Section 7.1.2.1.

The local freeways are the dominant noise sources in the CPU area. The roads generating the greatest noise level in the North Park planning area are I-8, I-15, I-805, 30th Street, El Cajon Boulevard, Texas Street, and University Avenue. The distances to the 60, 65, 70, and 75 dB(A) CNEL noise contours for freeways and major roadways in the North Park planning area are shown in Table 12. A complete list of distances to the 60, 65, 70, and 75 dB(A) CNEL noise contours for all roadway segments for buildout of the North Park planning area are included in Attachment 3. Distances to the roadway noise contours are based on a hard, flat site with no intervening barriers or obstructions (worst-case analysis). Future noise contours for the North

Park planning area are shown in Figure 13. It should also be noted that elevations of I-8 and I-805 undulate, and where elevations are lower than the surrounding land uses, noise levels would be less than those shown in Table 12 and Figure 13.

While the City has a compatibility level of 60 dB(A) CNEL or less for residential uses, noise levels up to 65 dB(A) CNEL for single-family residential and up to 70 dB(A) CNEL for multi-family residential are considered conditionally compatible, since interior noise levels can be reduced to 45 dB(A) CNEL through simple means, such as closing/sealing windows and providing mechanical ventilation. Additionally, as stated in Section B of the City's Noise Element, although not generally considered compatible, the City conditionally allows multi-family and mixed-use residential uses up to 75 dB(A) CNEL in areas affected by motor vehicle traffic noise with existing residential uses. Any future residential use exposed to noise levels up to 75 dB(A) CNEL must include attenuation measures to ensure an interior noise level of 45 dB(A) CNEL and be located in an area where a community plan allows multi-family and mixed-use residential uses. Passive mitigation such as noise walls can usually reduce exterior noise levels to comply with City guidelines. The majority of CPU residential land uses would be located within the conditionally compatible range. Multi-family residential uses located where exterior noise levels range from 65 to 70 dB(A) CNEL are considered conditionally compatible and can generally provide the required structural attenuation to reduce noise levels at interior locations. Multi-family and mixed-use residential uses that meet the requirements of Section B of the Noise Element would be conditionally compatible up to 75 dB(A) CNEL and would also be required to provide structural attenuation to reduce noise levels at interior locations.

Additionally, due to the provision of common exterior use areas, multi-family residential land uses can generally provide greater shielding to these areas, thus providing exterior use areas that comply with City guidelines. Likewise, backyards of single-family residential uses can be shielded from roadway noise by the residential structure, providing exterior use areas that are compatible with City guidelines.

As shown in Figure 13, traffic noise levels at existing and proposed residential use areas closest to the freeways and heavily traveled roadways would exceed the City's conditionally compatible thresholds for residential land uses (65 dB(A) CNEL for single-family and conditionally up to75 dB(A) CNEL for multi-family and mixed-use developments that meet the requirements of Section B of the Noise Element).

TABLE 12
FUTURE VEHICLE TRAFFIC CONTOUR DISTANCES FOR THE NORTH PARK CPU AREA

Roadway	From	To	Distance To (feet)[1] 75 dB(A) CNEL	70 dB(A) CNEL	65 dB(A) CNEL	60 dB(A) CNEL
North Park CPU Area						
30th Street	Adams Avenue	Meade Avenue	4	11	36	115
	Meade Avenue	El Cajon Boulevard	5	16	50	158
	El Cajon Boulevard	Howard Avenue	5	15	47	148
	Howard Avenue	Lincoln Avenue	6	20	64	204
	Lincoln Avenue	University Avenue	5	16	51	162
	University Avenue	North Park Way	4	14	44	138
	North Park Way	Upas Street	6	18	57	182
	Upas Street	Redwood Street	4	13	41	129
	Redwood Street	Juniper Street	4	13	42	132
32nd Street	Howard Avenue	Lincoln Avenue	2	5	15	48
	Lincoln Avenue	University Avenue	1	3	10	32
	University Avenue	Myrtle Street	4	12	39	123
	Myrtle Street	Upas Street	3	9	27	87
	Upas Street	Redwood Street	2	6	18	56
	Redwood Street	Juniper Street	1	3	9	28
Adams Avenue	Park Boulevard	Alabama Street	3	8	26	81
	Alabama Street	Texas Street	3	9	29	93
	Texas Street	30th Street	5	15	48	151
	30th Street	West Mountain View Drive	7	21	67	213
Boundary Street	University Avenue	North Park Way	5	17	55	173
	North Park Way	Upas Street	1	4	11	36
	Upas Street	Redwood Street	2	7	21	66
	Redwood Street	Commonwealth Avenue	1	4	13	43
Commonwealth Avenue	Boundary Street	Juniper Street	1	3	10	31
El Cajon Boulevard	Park Boulevard	Florida Street	17	54	169	536
	Florida Street	Texas Street	22	69	218	690
	Texas Street	Oregon Street	23	74	234	740
	Oregon Street	Utah Street	29	91	288	910
	Utah Street	30th Street	27	85	269	849
	30th Street	Illinois Street	33	104	330	1,045
	Illinois Street	32nd Street	40	126	397	1,256
Florida Street	El Cajon Boulevard	University Avenue	3	8	26	81
	University Avenue	Robinson Avenue	3	10	30	95
	Robinson Avenue	Upas Street	2	7	23	74
Florida Drive	Upas Street	Morley Field Drive	8	24	76	239
Howard Avenue	Park Boulevard	Florida Street	2	5	17	52
	Florida Street	Texas Street	1	4	13	43
	Texas Street	Utah Street	4	12	39	123
	Utah Street	30th Street	4	11	35	112
	30th Street	32nd Street	4	11	36	115
Juniper Street	30th Street	32nd Street	2	7	21	67
	32nd Street	Commonwealth Avenue	2	5	15	48
Landis Street	Boundary Street	Nile Street	1	4	14	44
Lincoln Avenue	Florida Street	Texas Street	1	5	15	47
	Texas Street	Oregon Street	1	3	11	35
	Oregon Street	30th Street	4	12	37	117
	30th Street	32nd Street	5	14	46	144
	32nd Street	Boundary Street	5	15	49	155
Madison Avenue	Park Boulevard	Mission Avenue	3	9	28	89
	Mission Avenue	Texas Street	4	11	35	112
	Texas Street	Boundary Street	4	13	43	135
Meade Avenue	Park Boulevard	Texas Street	3	9	28	89
	Texas Street	30th Avenue	3	11	35	109
	30th Avenue	Illinois Avenue	4	13	40	126
	Illinois Avenue	32nd Street	4	13	41	129
Mission Avenue	Park Boulevard	Texas Street	1	4	13	41

TABLE 12
FUTURE VEHICLE TRAFFIC CONTOUR DISTANCES FOR THE NORTH PARK CPU AREA
(continued)

Roadway	From	To	Distance To (feet)[1] 75 dB(A) CNEL	70 dB(A) CNEL	65 dB(A) CNEL	60 dB(A) CNEL
Monroe Avenue	Park Boulevard	Mission Avenue	1	3	11	35
	Mission Avenue	Texas Street	2	6	19	60
	Texas Street	30th Street	2	6	20	63
Nile Street	Landis Street	Thorn Street	2	5	17	55
North Park Way	30th Street	32nd Street	3	9	29	93
	32nd Street	Boundary Street	4	11	36	115
Orange Avenue/Howard Avenue	Iowa Street	I-805	3	9	28	89
Pentuckett Avenue	Juniper Street	Fir Street	1	3	8	25
Pershing Drive	Upas Street	Redwood Street	4	11	36	115
Redwood Street	28th Street	30th Street	3	8	25	79
	30th Street	32nd Street	2	5	16	51
	32nd Street	Boundary Street	2	5	15	48
Robinson Avenue	Park Boulevard	Florida Street	3	9	29	93
Texas Street	Adams Avenue	Mission Avenue	34	107	338	1,069
	Mission Avenue	El Cajon Boulevard	33	104	330	1,045
	El Cajon Boulevard	Howard Avenue	5	15	49	155
	Howard Avenue	University Avenue	5	17	55	173
	University Avenue	Myrtle Avenue	2	6	20	63
	Myrtle Avenue	Upas Street	1	4	14	45
University Avenue	Park Boulevard	Florida Street	12	37	117	371
	Florida Street	Texas Street	10	32	102	323
	Texas Street	Oregon Street	13	40	126	397
	Oregon Street	Utah Street	12	39	123	388
	Utah Street	30th Street	8	25	79	251
	30th Street	Illinois Street	9	27	87	275
	Illinois Street	32nd Street	9	27	87	275
	32nd Street	Boundary Street	11	35	112	354
Upas Street	Alabama Street	Texas Street	3	9	29	93
	Texas Street	Pershing Road	4	13	40	126
	Pershing Road	30th Street	6	18	56	177
	30th Street	32nd Street	2	7	21	66
	32nd Street	Boundary Street	1	3	9	29
Utah Street	Adams Avenue	Monroe Avenue	2	5	17	55
	Monroe Avenue	Meade Avenue	2	6	18	57
	Meade Avenue	El Cajon Boulevard	2	6	18	57
	El Cajon Boulevard	Howard Avenue	3	10	32	100
	Howard Avenue	Lincoln Avenue	4	11	36	115
	Lincoln Avenue	University Avenue	2	7	23	74
	University Avenue	North Park Way	2	6	18	56
	North Park Way	Upas Street	3	8	26	81
Freeways						
I-8	Hotel Circle (W)	Hotel Circle (E)	279	601	1,295	2,790
	Hotel Circle (E)	SR-163	275	592	1,275	2,748
	SR-163	Mission Center Road	275	592	1,275	2,748
	Mission Center Road	Qualcomm Way	311	669	1,442	3,107
	Qualcomm Way	I-805	279	601	1,295	2,790
	I-805	I-15	306	659	1,420	3,059
I-15	I-805	SR-94	199	429	924	1,991
I-805	I-8	Adams Avenue	374	805	1,734	3,735
	Adams Avenue	El Cajon Boulevard	351	757	1,630	3,513
	El Cajon Boulevard	University Avenue	346	745	1,606	3,459
	University Avenue	I-15	341	734	1,581	3,406

[1]Roadway noise is measured from the roadway centerline.

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Image source: SanGIS (flown May 2012)

North Park Community Plan Boundary

Future Noise Contours

- 60 CNEL
- 65 CNEL
- 70 CNEL
- 75 CNEL

0 Feet 1,400

Proposed Land Use (Draft)

Residential

- Residential - Low : 5-9 Du/Ac
- Residential - Low Medium : 10-15 Du/Ac
- Residential - Medium : 16-29 Du/Ac
- Residential - Medium High : 30-44 Du/Ac *
- Residential - High : 45-54 Du/Ac
- Residential - Very High : 55-73 Du/Ac

Commercial, Employment, Retail, and Services

- Community Commercial : 0-29 Du/Ac
- Community Commercial : 0-44 Du/Ac
- Community Commercial : 0-54 Du/Ac
- Community Commercial : 0-73 Du/Ac**
- Community Commercial : 0-109 Du/Ac***
- Neighborhood Commercial : 0-29 Du/Ac
- Neighborhood Commercial : 0-73 Du/Ac

Park, Open Space, and Recreation

- Open Space
- Park

Institutional, and Public/Semi-Public Facilities

- Institution

FIGURE 13

Future (2035) Traffic Noise Contours for the North Park CPU Area

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Noise levels greater than 75 dB(A) CNEL are considered incompatible for all land use types. Uses located adjacent to I-8, I-15, and I-805 in the North Park CPU area have the potential to be exposed to noise levels greater than 75 dB(A) CNEL. However, the North Park CPU would not locate new sensitive land uses in areas that are exposed to 75 dB(A) CNEL or greater. Additionally, as noted previously, elevations of I-8 and I-805 undulate, and where elevations are lower than the surrounding land uses, noise levels would be less than those shown in Table 12 and Figure 13. This analysis represents a worst-case scenario.

In the North Park CPU area, noise levels for all land uses would be incompatible (i.e., greater than 75 dB(A) CNEL) at areas located approximately 262 to 374 feet from I-5, 199 feet from I-15, and 341 to 374 feet from I-805. Noise levels for sensitive land uses would be incompatible (i.e., greater than 70 CNEL) at areas located approximately 565 to 805 feet from I-5, 429 feet from I-15, and 734 to 805 feet from I-805 (see Figure 13). These areas are currently developed and the proposed North Park CPU would not change the land use in these areas or introduce new sensitive land uses in these areas. Thus, while land uses in these areas would be exposed to noise levels that exceed General Plan guidelines, this noise exposure would not be a significant noise impact resulting from implementation of the CPU. Additionally, per Section B of the Noise Element, any future multi-family and mixed-use residential use exposed to noise levels up to 75 dB(A) CNEL must include attenuation measures to ensure an interior noise level of 45 dB(A) CNEL and be located in an area where a community plan allows multi-family and mixed-use residential uses.

Furthermore, policies in the North Park CPU and General Plan, procedures in the Municipal Code, and regulations (Title 24) would reduce traffic noise exposure, because they set standards for the siting of sensitive land uses. General Plan policy NE-A.4 requires an acoustical study consistent with Acoustical Study Guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the Land Use – Noise Compatibility Guidelines. Site-specific exterior noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City's General Plan would be required as part of future discretionary proposals. Additionally, site-specific interior noise analyses demonstrating compliance with the interior noise compatibility guidelines of the City's General Plan would be required for land uses located in areas where exterior noise levels exceed the City's noise and land use compatibility thresholds as defined in the General Plan, Table N-3, and summarized in Table 3. With this framework, noise impacts to new discretionary development would be less than significant.

However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unmitigated. Interior noise impacts for all projects including ministerial projects would be less

than significant because applicants must demonstrate compliance with the current interior noise standards [45 dB(A) CNEL] through submission and approval of a Title 24 Compliance Report.

7.2.2.2 Rail Noise

There are no trolley, commuter train, or freight train operations within the North Park planning area. Therefore, there would be no noise impacts due to railway operations.

7.2.3 ALUCP Consistency

A significant impact would occur if implementation of the proposed CPU resulted in land uses which are not compatible with aircraft noise levels as defined by an adopted ALUCP.

The San Diego International Airport is located approximately two miles west of the North Park planning area. As shown in Figure 10, the North Park planning area is located entirely outside of the 60 dB(A) CNEL noise contour for San Diego International Airport. Thus, impacts due to aircraft noise would be less than significant.

7.2.4 Municipal Code – Stationary Noise

A significant impact would occur if implementation of the proposed CPU resulted in the exposure of people to noise levels that exceed property line limits established in the Noise Abatement and Control Ordinance of the Municipal Code.

Stationary noise generated in the North Park planning area would be similar to the stationary noise generated in the Uptown CPU area. Additionally, due to the number of eating and drinking establishments in the planning area, North Park experiences elevated noise levels associated with these uses.

Although noise-sensitive residential land uses would be exposed to noise associated with the operation of commercial uses, City policies in place are intended to control noise and reduce noise impacts between various land uses. The City's noise policies, as contained in the General Plan and Noise Ordinance, include policies and regulations that require noise studies for land uses proposed for potentially incompatible locations, limits on hours of operation for various noise-generating activities, and standards for the compatibility of various land uses with the existing and future noise environment. In addition, enforcement of the federal, state, and local noise regulations would control impacts.

Moreover, the North Park CPU includes policies to reduce noise impacts (see Section 2.3.2). Such policies include requiring acoustical studies for eating and drinking establishments, promoting "quiet-in-residential neighborhoods" signs to bring awareness to evening commercial patrons who walk through residential neighborhoods, incorporating sound-attenuation measures for commercial fast food 'drive-thru' properties, and encouraging truck deliveries on commercial streets. These criteria would be applied as future development is proposed to implement the North Park CPU. Given implementation of these policies and enforcement of the Noise

Abatement and Control Ordinance of the Municipal Code, impacts would be less than significant.

7.2.5 Municipal Code – Construction Noise

A significant impact would occur if implementation of the proposed CPU resulted in the exposure of people to significant temporary construction noise.

Future development as allowed under the North Park CPU could potentially result in temporary ambient noise increase due to construction activities.

Construction noise associated with future development in the North Park CPU area would be similar to construction noise in the Uptown CPU area. Construction activities related to implementation of the North Park CPU would potentially generate short-term noise levels in excess of 75 dB(A) L_{eq} at adjacent properties and would therefore be potentially significant. While the City regulates noise associated with construction equipment and activities through enforcement of noise ordinance standards (e.g., days of the week and hours of operation) and imposition of conditions of approval for building or grading permits, there is a procedure in place that allows for variance of the noise ordinance. Due to the highly developed nature of the North Park CPU area with sensitive receivers potentially located in proximity to construction sites, there is potential for future project construction noise to exceed the City standard of 75 dB(A) L_{eq} at the property line. This would be regarded as a significant impact. Implementation of the measures outlined in Section 8.5 would reduce noise levels to comply with City standards.

7.2.6 Vibration

7.2.6.1 Construction

Due to the developed nature of the North Park CPU area, there is a high likelihood that construction activities would take place adjacent to existing structures. Construction vibration impacts in the North Park CPU area would be similar to those associated with the Uptown CPU area.

As discussed in Section 7.1.6, non-pile driving or foundation work construction phases that have the highest potential of producing vibration (such as jackhammering and other high power tools) would be intermittent and would only occur for short periods of time for any individual project site. By use of administrative controls, such as scheduling construction activities with the highest potential to produce perceptible vibration to hours with least potential to affect nearby properties, perceptible vibration can be kept to a minimum and as such would result in a less than significant impact with respect to perception. However, pile driving within 95 feet of existing structures has the potential to exceed 0.20 inch per second, and would be potentially significant.

7.2.6.2 Operation

As discussed in Section 7.1.6.2, based on the operational characteristics of commercial land uses, commercial operations would not result in groundborne vibration levels that approach or exceed vibration-level limits. Impacts would be less than significant.

7.3 Golden Hill CPU

7.3.1 Increase in Ambient Noise

A significant impact would occur if implementation of the proposed CPU resulted in or created a significant increase in the existing ambient noise levels. Studies have shown that the average human ear can barely perceive a change in sound level of 3 dB(A). A change of at least 5 dB(A) is considered a readily perceivable change in a normal environment. A 10 dB(A) increase is subjectively heard as a doubling in loudness and would cause a community response. The City's 2011 Significance Determination Thresholds also state that if a project is currently at or exceeds the significance thresholds for traffic noise and noise levels result in less than a 3 dB(A) increase, the impact would not be considered significant (City of San Diego 2011).

As discussed previously, if an area is already exposed to noise levels in excess of the land use compatibility guidelines (see Table 3) and noise levels were to result in greater than a 3 dB(A) increase, then the impact would be considered significant. If an area is currently exposed to noise levels that do not exceed the land use compatibility guidelines and noise levels were to result in greater than a 5 dB(A) increase, then the impact would be considered significant. There are areas that are currently exposed to noise levels that are exactly at or very near the land use compatibility guidelines. For these areas, the increase in ambient noise levels would be considered significant if noise levels resulted in greater than a 5 dB(A) increase or if resulting noise levels were 3 dB(A) more than the compatibility guideline (e.g., if the compatibility guideline is 65 dB(A) CNEL, the existing noise level is currently 63 dB(A) CNEL, and the future noise level is 67 dB(A) CNEL, impacts would be less than significant because the increase in noise would be less than 5 dB(A) and the resulting noise level would not exceed 68 dB(A) CNEL).

The roads generating the greatest noise level in the Golden Hill CPU area I-5, I-15, SR-94, 25th Street, 28th Street, 30th Street, and Broadway. As discussed, increases in traffic noise gradually degrade the ambient noise environment, especially with respect to sensitive receptors.

Vehicular traffic on roadways in the CPU area would increase due to buildout of the CPU. Table 13 summarizes the existing and buildout traffic noise levels along various roadway segments in the Golden Hill CPU area. Roadway noise is measured in dB(A) CNEL at 50 feet from the roadway centerline.

TABLE 13
INCREASE IN AMBIENT TRAFFIC NOISE FOR THE GOLDEN HILL CPU AREA

Roadway	From	To	Existing Noise Level[1]	2035 Noise Level[1]	Change in dB(A)
Golden Hill CPU Area					
25th Street	**Russ Boulevard**	**C Street**	**54.2**	**62.3**	**8.1**
	C Street	Broadway	63.1	63.8	0.7
	Broadway	F Street	64.2	65.8	1.6
26th Street	Russ Boulevard	B Street	63.0	62.5	-0.5
	B Street	C Street	56.7	60.5	3.8
28th Street	Russ Boulevard	C Street	61.8	64.4	2.6
	C Street	Broadway	64.1	65.2	1.1
	Broadway	SR-94	65.2	67.8	2.6
30th Street	Grape Street	Beech Street	60.8	63.3	2.5
	Beech Street	A Street	67.1	67.9	0.8
	A Street	Broadway	67.1	67.9	0.8
	Broadway	SR-94	61.2	64.7	3.5
31st Street	Juniper Street	Grape Street	57.0	60.1	3.1
B Street	19th Street	20th Street	62.2	63.1	0.9
	20th Street	25th Street	60.6	62.3	1.7
	25th Street	26th Street	61.6	63.7	2.1
	26th Street	28th Street	62.9	63.5	0.6
	28th Street	30th Street	59.3	62.5	3.2
Beech Street	**28th Street**	**Fern Street**	**57.4**	**62.9**	**5.5**
Broadway	19th Street	20th Street	61.0	61.2	0.2
	20th Street	25th Street	60.3	62.4	2.1
	25th Street	28th Street	59.6	60.8	1.2
	28th Street	30th Street	58.6	60.3	1.7
	30th Street	SR-94	65.4	63.6	-1.8
C Street	19th Street	20th Street	60.8	62.8	2.0
	20th Street	25th Street	60.9	61.5	0.6
	25th Street	28th Street	60.9	62.3	1.4
	28th Street	30th Street	59.2	61.1	1.9
	30th Street	34th Street	61.2	63.9	2.7
Cedar Street	Fern Street	Felton Street	59.4	60.3	0.9
Fern Street	Juniper Street	Grape Street	62.6	62.9	0.3
	Grape Street	A Street	62.5	65.2	2.7
Grape Street	**30th Street**	**31st Street**	**57.6**	**62.9**	**5.3**
Balboa Park					
Florida Drive	Morley Field Drive	Zoo Place	67.5	68.4	0.9
Golf Course Drive	26th Street	28th Street	58.5	60.2	1.7
Park Boulevard	Zoo Place	Space Theater Way	69.7	70.9	1.2
	Space Theater Way	Presidents Way	69.4	70.6	1.2
	Presidents Way	SR-163 NB On-Ramp	70.4	71.7	1.3
Pershing Drive	Redwood Street	Florida Drive	69.9	72.4	2.5
	Florida Drive	I-5 Ramps	74.8	75.7	0.9
	I-5 Ramps	B Street	63.3	65.0	1.7
Freeways					
I-5	SR-163	Pershing Drive	85.4	87.7	2.3
	Pershing Drive	SR-94	85.8	87.6	1.8
	SR-94	Imperial Avenue	84.7	86.5	1.8
I-15	I-805	SR-94	83.1	84.0	0.9
SR-94	25th Street	28th Street	83.6	86.0	2.4
	28th Street	30th Street	83.8	86.5	2.7
	30th Street	I-15	84.2	86.6	2.4

[1]Roadway noise is measured in dB(A) CNEL at 50 feet from the roadway centerline.

Bold = Increase in ambient noise levels would be potentially significant per the following criteria:

a) Where exterior noise levels currently exceed the compatibility guidelines, the increase in ambient noise would exceed 3 dB(A).

b) Where exterior noise levels are currently less than the compatibility guidelines and future noise levels would also be less than the compatibility guidelines, the increase in ambient noise would exceed 5 dB(A).

c) Where exterior noise levels that are currently at or very near the compatibility guidelines, the increase in ambient noise would exceed 5 dB(A) or would result in a future noise level that would be 3 dB(A) more than the compatibility guideline.

The following roadway segments currently generate noise levels lower than 65 dB(A) CNEL and would generate future noise levels lower than 65 dB(A) CNEL, but future noise levels would increase by more than 5 dB(A) over existing ambient noise levels:

- 25th Street
    - Russ Boulevard to C Street
- Beech Street
    - 28th Street to Fern Street
- Grape Street
    - 30th Street to 31st Street

There are existing sensitive uses located adjacent to these roadway segments and there could also be future sensitive uses located adjacent to them. The increase in ambient noise levels adjacent to these segments of 25th Street, Beech Street, and Grape Street would result in the exposure of existing sensitive receptors to a significant increase in ambient noise levels, and impacts would be significant. Possible noise-reduction measures would include retrofitting older homes with new window and door components with higher STC ratings. The existing residential uses adjacent to 25th Street between Russ Boulevard and A Street and Beech Street between 28th Street and 29th Street are eligible for the Quieter Home Program. This program is discussed in Section 4.5. While intended to attenuate interior noise levels of existing buildings from high aircraft noise, the attenuation would also reduce interior noise levels from exterior motor vehicle noise. Some of the existing residences in the Golden Hill CPU area have already participated in this program and have undergone retrofits to reduce interior noise levels to 45 dB(A) CNEL. However, for existing uses that have not participated in or are not eligible for the Quieter Home Program, at the program level, it cannot be determined whether the existing structures contain adequate attenuation to reduce interior noise to the 45 dB(A) CNEL standard nor what measures would be required to retrofit these structures. In addition, there is no mechanism in place for implementing such a retrofit program. Because the significant noise impacts are to existing homes in an already urbanized area, there is no feasible mitigation. Thus impacts to existing sensitive land uses due to the increase in ambient noise levels associated with buildout of the CPU would remain significant and unmitigated.

A mitigation framework exists for new development in areas exposed to high levels of ambient noise. Policies in the CPU and General Plan, procedures in the Municipal Code and regulations (Title 24) would reduce traffic noise exposure, because they set standards for the siting of sensitive land uses. Site-specific noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City's General Plan would be required as part of the review process for discretionary projects. With this framework, noise impacts to discretionary projects would be less than significant. However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unmitigated. Interior noise impacts for

all projects including ministerial projects would be less than significant because applicants must demonstrate compliance with the current interior noise standards [45 dB(A) CNEL] through submission and approval of a Title 24 Compliance Report.

For all other roadway segments in the Golden Hill CPU area not included in the above list, the increase in ambient noise would be less than significant. The Golden Hill CPU would not significantly worsen the noise exposure (i.e., future noise increase would be less than 3 dB(A) in areas already exposed to noise levels in excess of compatibility guidelines, or future noise increase would be less than 5 dB(A) in areas currently exposed to noise levels under compatibility guidelines), and impacts due to the increase in ambient noise would be less than significant.

7.3.2 Land Use Plan Compatibility

A significant impact would occur if implementation of the proposed CPU resulted in an exposure of people to current or future transportation noise levels that exceed guidelines established in the Noise Element of the General Plan.

7.3.2.1 Vehicle Traffic Noise

The City of San Diego noise and land use compatibility guidelines are presented in Table 3. The Golden Hill CPU proposes single-family residential, multi-family residential, commercial, institutional, industrial, and open space land uses. The land use compatibility standards for these uses are summarized in Section 7.1.2.1.

The local freeways are the dominant noise sources in the CPU area. The roads generating the greatest noise level in the Golden Hill planning area are I-5, I-15, SR-94, 25th Street, 28th Street, 30th Street, and Broadway. The distances to the 60, 65, 70, and 75 dB(A) CNEL noise contours for freeways and major roadways in the Golden Hill planning area are shown in Table 14. A complete list of distances to the 60, 65, 70, and 75 dB(A) CNEL noise contours for all roadway segments for buildout of the Golden Hill planning area are included in Attachment 3. Distances to the roadway noise contours are based on a hard, flat site with no intervening barriers or obstructions (worst-case analysis). Future noise contours for the Golden Hill planning area are shown in Figure 14.

TABLE 14
FUTURE VEHICLE TRAFFIC CONTOUR DISTANCES FOR THE GOLDEN HILL CPU AREA

Roadway	From	To	Distance To (feet)[1] 75 dB(A) CNEL	70 dB(A) CNEL	65 dB(A) CNEL	60 dB(A) CNEL
Golden Hill CPU Area						
25th Street	Russ Boulevard	C Street	3	8	27	85
	C Street	Broadway	4	12	38	120
	Broadway	F Street	6	19	60	190
26th Street	Russ Boulevard	B Street	3	9	28	89
	B Street	C Street	2	6	18	56
28th Street	Russ Boulevard	C Street	4	14	44	138
	C Street	Broadway	5	17	52	166
	Broadway	SR-94	10	30	95	301
30th Street	Grape Street	Beech Street	3	11	34	107
	Beech Street	A Street	10	31	97	308
	A Street	Broadway	10	31	97	308
	Broadway	SR-94	5	15	47	148
31st Street	Juniper Street	Grape Street	2	5	16	51
B Street	19th Street	20th Street	3	10	32	102
	20th Street	25th Street	3	8	27	85
	25th Street	26th Street	4	12	37	117
	26th Street	28th Street	4	11	35	112
	28th Street	30th Street	3	9	28	89
Beech Street	28th Street	Fern Street	3	10	31	97
Broadway	19th Street	20th Street	2	7	21	66
	20th Street	25th Street	3	9	27	87
	25th Street	28th Street	2	6	19	60
	28th Street	30th Street	2	5	17	54
	30th Street	SR-94	4	11	36	115
C Street	19th Street	20th Street	3	10	30	95
	20th Street	25th Street	2	7	22	71
	25th Street	28th Street	3	8	27	85
	28th Street	30th Street	2	6	20	64
	30th Street	34th Street	4	12	39	123
Cedar Street	Fern Street	Felton Street	2	5	17	54
Fern Street	Juniper Street	Grape Street	3	10	31	97
	Grape Street	A Street	5	17	52	166
Grape Street	30th Street	31st Street	3	10	31	97
Balboa Park						
Florida Drive	Morley Field Drive	Zoo Place	11	35	109	346
Golf Course Drive	26th Street	28th Street	2	5	17	52
Park Boulevard	Zoo Place	Space Theater Way	19	62	195	615
	Space Theater Way	Presidents Way	18	57	182	574
	Presidents Way	SR-163 NB On-Ramp	23	74	234	740
Pershing Drive	Redwood Street	Florida Drive	27	87	275	869
	Florida Drive	I-5 Ramps	59	186	587	1,858
	I-5 Ramps	B Street	5	16	50	158
Freeways						
I-5	Old Town Avenue	Washington Street	315	680	1,464	3,155
	Washington Street	Sassafras Street	262	565	1,218	2,624
	Sassafras Street	Pacific Highway	266	574	1,237	2,665
	Pacific Highway	India Street	315	680	1,464	3,155
	India Street	Hawthorn Street	320	690	1,487	3,204
	Hawthorn Street	First Avenue	288	620	1,335	2,877
	First Avenue	Sixth Avenue	335	723	1,557	3,355
	Sixth Avenue	SR-163	374	805	1,734	3,735
	SR-163	Pershing Drive	351	757	1,630	3,513
	Pershing Drive	SR-94	346	745	1,606	3,459
	SR-94	Imperial Avenue	292	629	1,356	2,922
I-15	I-805	SR-94	199	429	924	1,991
SR-94	25th Street	28th Street	271	583	1,256	2,706
	28th Street	30th Street	292	629	1,356	2,922
	30th Street	I-15	297	639	1,377	2,967

[1]Roadway noise is measured from the roadway centerline.

Image source: SanGIS (flown May 2012)

Golden Hill Community Plan Boundary

Future Noise Contours

- 60 CNEL
- 65 CNEL
- 70 CNEL
- 75 CNEL

Proposed Land Use (Draft)

Residential

- Residential - Low : 5-9 Du/Ac
- Residential - Low Medium : 10-15 Du/Ac
- Residential - Medium : 16-29 Du/Ac
- Residential - Medium High : 30-44 Du/Ac

Commercial, Employment, Retail, and Services

- Community Commercial - Residential Permitted : 0-29 Du/Ac
- Community Commercial - Residential Permitted : 0-44 Du/Ac
- Neighborhood Commercial - Residential Permitted : 0-29 Du/Ac

Park, Open Space, and Recreation

- Open Space

Institutional, and Public/Semi-Public Facilities

- Institutional

0 Feet 800

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FIGURE 14

Future (2035) Traffic Noise Contours for the Golden Hill CPU Area

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While the City has a compatibility level of 60 dB(A) CNEL or less for residential uses, noise levels up to 65 dB(A) CNEL for single-family residential and up to 70 dB(A) CNEL for multi-family residential are considered conditionally compatible, since interior noise levels can be reduced to 45 dB(A) CNEL through simple means, such as closing/sealing windows and providing mechanical ventilation. Additionally, as stated in Section B of the City's Noise Element, although not generally considered compatible, the City conditionally allows multi-family and mixed-use residential uses up to 75 dB(A) CNEL in areas affected by motor vehicle traffic noise with existing residential uses. Any future residential use exposed to noise levels above 70 dB(A) CNEL must include attenuation measures to ensure an interior noise level of 45 dB(A) CNEL and be located in an area where a community plan allows multi-family and mixed-use residential uses. Additionally, passive mitigation such as noise walls adjacent to freeways can usually reduce exterior noise levels to comply with City standards. The majority of CPU residential land uses would be located within the conditionally compatible zone. Multi-family residential uses located where exterior noise levels range from 65 to 70 dB(A) CNEL are considered conditionally compatible and can generally provide the required structural attenuation to reduce noise levels at interior locations. Multi-family and mixed-use residential uses that meet the requirements of Section B of the Noise Element would be conditionally compatible up to 75 dB(A) CNEL and would also be required to provide structural attenuation to reduce noise levels at interior locations. Additionally, due to the provision of common exterior use areas, multi-family residential land uses can generally provide greater shielding to these areas, thus providing exterior use areas that comply with City standards. Likewise, backyards of single family residential uses can be shielded from roadway noise by the residential structure, providing exterior use areas that are compatible with City standards.

As shown in Figure 14, traffic noise levels at existing and proposed residential use areas closest to the freeways and heavily traveled roadways would exceed the City's compatibility thresholds for residential land uses (65 dB(A) CNEL for single-family and conditionally up to 75 dB(A) CNEL for multi-family and mixed-use developments that meet the requirements of Section B of the Noise Element).

Noise levels greater than 75 dB(A) CNEL are considered incompatible for all land use types. Uses located adjacent to I-5, I-15, and I-805 in the North Park CPU area have the potential to be exposed to noise levels greater than 75 dB(A) CNEL. However, the Golden Hill CPU would not locate new sensitive land uses in areas that are exposed to 75 dB(A) CNEL or greater.

In the Golden Hill CPU area, noise levels for all land uses would be incompatible (i.e., greater than 75 dB(A) CNEL) at areas located approximately 262 to 374 feet from I-5, 199 feet from I-15, and 271 to 297 feet from SR-94. Noise levels for sensitive land uses would be incompatible (i.e., greater than 70 CNEL) at areas located approximately 565 to 805 feet from I-5, 429 feet from I-15, and 583 to 639 feet from SR-94 (see Figure 14). However, these areas are currently developed and the proposed Golden Hill CPU would not result in a change in land use in these areas or introduce new sensitive land uses in these areas. Thus, while land uses in these areas would be exposed to noise levels that exceed General Plan guidelines, this noise exposure

would not be a significant noise impact resulting from implementation of the CPU. Additionally, per Section B of the Noise Element, any future multi-family and mixed-use residential use exposed to noise levels up to 75 dB(A) CNEL must include attenuation measures to ensure an interior noise level of 45 dB(A) CNEL and be located in an area where a community plan allows multi-family and mixed-use residential uses.

Furthermore, as with the Uptown and North Park planning areas, policies in the Golden Hill CPU and General Plan, procedures in the Municipal Code, and regulations (Title 24) would reduce traffic noise exposure because they set standards for the siting of sensitive land uses. General Plan policy NE-A.4 requires an acoustical study consistent with Acoustical Study Guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would exceed the "compatible" noise level thresholds as indicated on the Land Use – Noise Compatibility Guidelines. Site-specific exterior noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City's General Plan would be required as part of future discretionary development proposals. Additionally, site-specific interior noise analyses demonstrating compliance with the interior noise compatibility guidelines of the City's General Plan would be required for land uses located in areas where exterior noise levels exceed the City's noise and land use compatibility thresholds as defined in the General Plan, Table N-3, and summarized in Table 3. With this framework, noise impacts to new discretionary development would be less than significant.

However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unmitigated. Interior noise impacts for all projects including ministerial projects would be less than significant because applicants must demonstrate compliance with the current interior noise standards [45 dB(A) CNEL] through submission and approval of a Title 24 Compliance Report.

7.3.2.2 Rail Noise

There are no trolley, commuter train, or freight train operations within the Golden Hill planning area. Noise impacts due to railway operations would be less than significant.

7.3.3 ALUCP Consistency

A significant impact would occur if implementation of the proposed CPU resulted in land uses which are not compatible with aircraft noise levels as defined by an adopted ALUCP.

The San Diego International Airport is located approximately 2.5 miles west of the Golden Hill planning area. As shown in Figure 10, the central portion of the Golden Hill planning area would be exposed to aircraft noise levels exceeding 60 dB(A) CNEL and up to 70 dB(A) CNEL for those uses located directly under the approaching flight path. Land uses are located where noise levels due to aircraft operations exceed the ALUCP compatibility guidelines. Residential

uses located where noise levels due to aircraft operations at the San Diego International Airport exceed 60 dB(A) CNEL would be exposed to potentially significant aircraft noise.

There are existing residential and commercial land uses located where aircraft noise levels would exceed 60 dB(A) CNEL. However, the proposed Golden Hill CPU would not result in a change to these existing uses or a change in San Diego International Airport operations.

Per the City Significance Determination Thresholds, if a future project implemented under the Uptown CPU is proposed within the AEOZ as defined in Chapter 13, Article 2, Division 3 of the San Diego Municipal Code (see Section 6.3 of this report), the potential exterior noise impacts from aircraft noise would not constitute a significant environmental impact.

However, interior noise impacts would be regulated by the requirement for residential development within the AEOZ to reduce interior noise levels attributable to airport noise to 45 dB(A) CNEL. Interior noise levels for new construction are addressed through implementation of Title 24 of the California Code of Regulations (see also General Plan policies NE-I.1 and NE-I.2 in Section 4.2). Additional insulation and upgraded building materials would be required so that interior noise levels do not exceed the interior noise standards specified in Table 5 of this report. Requirements for noise studies are found in the Municipal Code at Chapter 13, Article 2, Division 3, §132.0308. This section of the Municipal Code applies to development as defined in §113.0103 to include constructing, reconstructing, converting, establishing, altering, maintaining, relocating, demolishing, using, or enlarging any building, structure, improvement, lot, or premises. Site-specific interior noise analyses demonstrating compliance with the interior noise compatibility standards would be required for land uses located in areas where exterior noise levels exceed the ALUCP noise and land use compatibility criteria presented in Table 5. With this framework, noise impacts to new development would be less than significant.

Additionally, the San Diego International Airport has an Airport Noise Mitigation Office and has implemented a number of programs to reduce the aircraft noise impact on the community. Actions include the enforcement of a curfew on departing aircraft and the Quieter Home Program. The Quieter Home Program provides sound insulation retrofits for residences located within the 65 dB(A) CNEL contour with the goal of reducing interior noise levels by at least 5 dB(A). Existing residences located in the Golden Hill CPU area where exterior noise levels due to the San Diego International Airport exceed 65 dB(A) CNEL are eligible for this program (note that eligibility to participate in the program is based on the noise exposure maps prepared under 14 CFR Part 150, which are different than the ALUCP contour maps). Figure 15 shows a map of the parcels that have participated in the program as of January 2015.

The proposed Golden Hill CPU would not result in impacts to existing uses because the CPU would not result in a change to these existing uses or a change in San Diego International Airport operations. Because future development is required to provide noise attenuation consistent with the Noise Element of the General Plan and the ALUCP for the San Diego International Airport, implementation of the Golden Hill CPU would result in a less than significant impact from aircraft noise.

7.3.4 Municipal Code – Stationary Noise

A significant impact would occur if implementation of the proposed CPU resulted in the exposure of people to noise levels that exceed property line limits established in the Noise Abatement and Control Ordinance of the Municipal Code.

Stationary noise generated in the Golden Hill CPU area would be similar to the stationary noise generated in the Uptown and North Park CPU areas. Although noise-sensitive residential land uses would be exposed to noise associated with the operation of commercial uses, City policies in place are intended to control noise and reduce noise impacts between various land uses. The City's noise policies, as contained in the General Plan and Noise Ordinance, include policies and regulations that require noise studies for land uses proposed for potentially incompatible locations, limits on hours of operation for various noise-generating activities, and standards for the compatibility of various land uses with the existing and future noise environment. In addition, enforcement of the federal, state, and local noise regulations would control impacts. Given implementation of these policies and enforcement of the Noise Abatement and Control Ordinance of the Municipal Code, impacts would be less than significant.

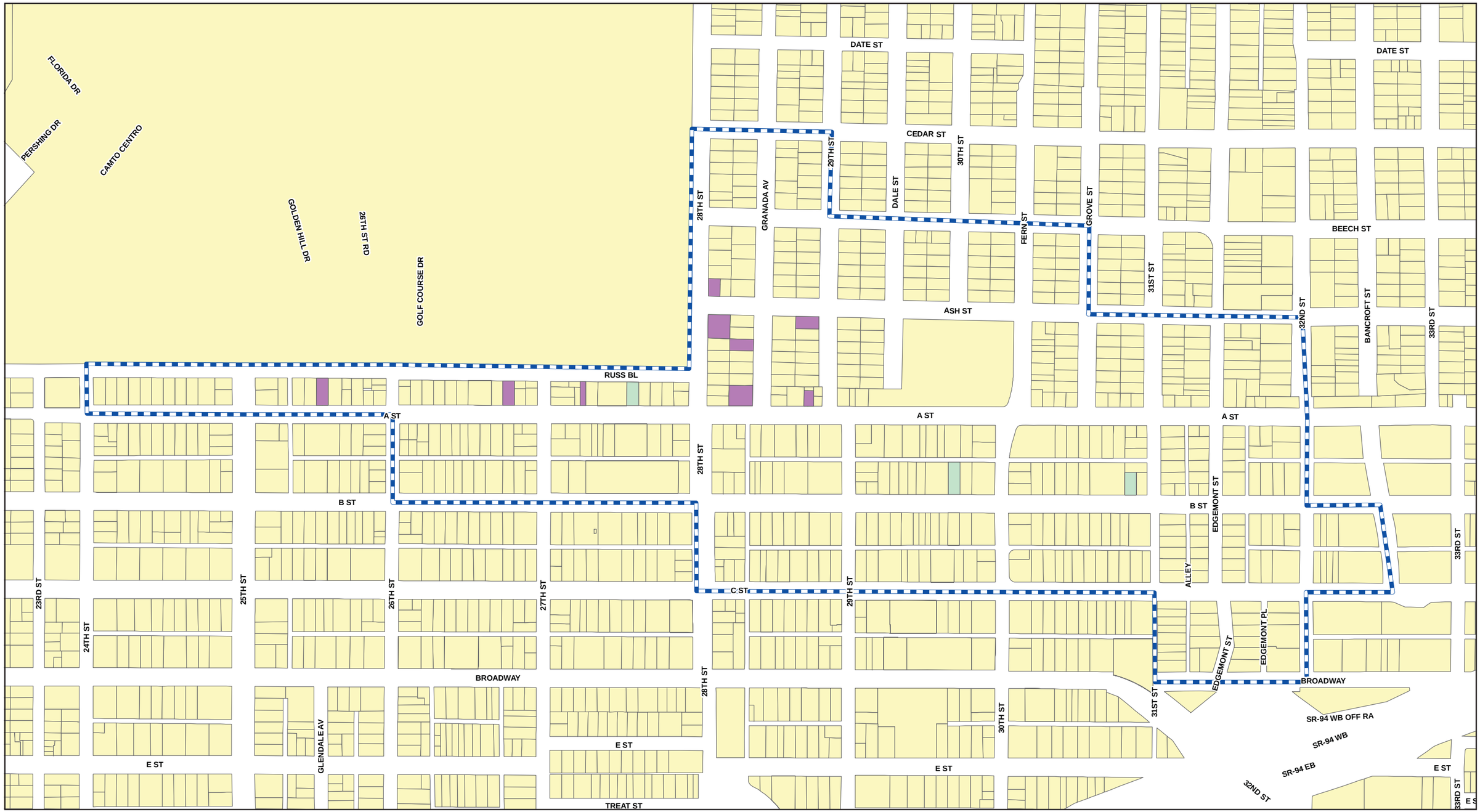
7.3.5 Municipal Code – Construction Noise

A significant impact would occur if implementation of the proposed CPU resulted in the exposure of people to significant temporary construction noise.

Future development as allowed under the Golden Hill CPU could potentially result in temporary ambient noise increase due to construction activities.

Construction noise associated with future development in the Golden Hill planning area would be similar to construction noise in the Uptown and North Park planning areas. Construction activities related to implementation of the Golden Hill CPU would potentially generate short-term noise levels in excess of 75 dB(A) L_{eq} at adjacent properties and would therefore be potentially significant. While the City regulates noise associated with construction equipment and activities through enforcement of noise ordinance standards (e.g., days of the week and hours of operation) and imposition of conditions of approval for building or grading permits, there is a procedure in place that allows for variance of the noise ordinance. Due to the highly developed nature of the Golden Hill CPU area with sensitive receivers potentially located in proximity to construction sites, there is potential for future project

Map Source: Psomas



Completed Parcels
Completed Parcels 2014
Ocean/Bay
Program Boundary

RECON

M:\JOBS4\6086\nos\graphics\fig15.ai 05/20/15

FIGURE 15

Quieter Home Program Participation for the Golden Hill CPU Area

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construction noise to exceed the City standard of 75 dB(A) L_{eq} at the property line. This would be regarded as a significant impact. Implementation of the measures outlined in Section 8.5 would reduce noise levels to comply with City standards.

7.3.6 Vibration

7.3.6.1 Construction

Due to the developed nature of the Golden Hill CPU area, there is a high likelihood that construction activities would take place adjacent to existing structures. Construction vibration impacts in the Golden Hill planning area would be similar to those associated with the Uptown and North Park CPUs.

As discussed in Section 7.1.6, non-pile driving or foundation work construction phases that have the highest potential of producing vibration (such as jackhammering, and other high power tools) would be intermittent and would only occur for short periods of time for any individual project site. By use of administrative controls, such as scheduling construction activities with the highest potential to produce perceptible vibration to hours with least potential to affect nearby properties, perceptible vibration can be kept to a minimum and as such would result in a less than significant impact with respect to perception. However, pile driving within 95 feet of existing structures has the potential to exceed 0.20 inch per second, and would be potentially significant.

7.3.6.2 Operation

As discussed in Section 7.1.6.2, based on the operational characteristics of commercial land uses, commercial operations would not result in groundborne vibration levels that approach or exceed vibration-level limits. Impacts would be less than significant.

8.0 Summary of Impacts and Mitigation

The following is a summary of impacts for each threshold addressed above. For significant impacts, program-level mitigation is identified where feasible. In addition, a mitigation framework identifies measures to be applied to future development projects within the Uptown, North Park, and Golden Hill CPU areas to reduce noise impacts.

8.1 Increase in Ambient Noise

An increase in ambient vehicular traffic noise in the CPU areas would result from buildout of the CPUs and increases in traffic. A significant impact would occur if implementation of the proposed CPUs would result in or create a significant increase in the existing ambient noise levels. There are areas that are currently exposed to significant traffic noise levels greater than established General Plan Noise Element noise – land use comparability guidelines in the CPU areas. The proposed CPUs would not result in a change in that condition, and these areas

would continue to be exposed to significant noise levels. If an area is already exposed to noise levels in excess of the land use compatibility guidelines (see Table 3) and noise levels were to result in greater than a 3 dB(A) increase, then the impact would be considered significant. If an area is currently exposed to noise levels that do not exceed the land use compatibility guidelines and noise levels were to result in greater than a 5 dB(A) increase, then the impact would be considered significant. There are areas that are currently exposed to noise levels that are exactly at or very near the land use compatibility guidelines. For these areas, the increase in ambient noise levels would be considered significant if noise levels resulted in greater than a 5 dB(A) increase or if resulting noise levels were 3 dB(A) more than the compatibility guideline.

A significant increase in ambient noise would occur adjacent to several roadway segments in the CPU areas. The land uses adjacent to these segments were examined and buildout noise levels were compared to the General Plan compatibility guidelines. Existing and/or future residential uses are or could be located adjacent to each of these segments. Therefore, the increase in ambient noise levels due to the CPUs could result in the exposure of existing sensitive receptors to a significant increase in ambient noise levels.

Possible noise-reduction measures would include retrofitting older homes with new window and door components with higher STC ratings. The existing residential uses adjacent to Grape Street, 25th Street between Russ Boulevard and A Street and Beech Street between 28th Street and 29th Street are eligible for the Quieter Home Program. While intended to attenuate existing interior noise levels of buildings from high aircraft noise, the attenuation would also reduce interior noise levels from exterior motor vehicle noise. Some of the existing residences in the Uptown and Golden Hill CPU areas have already participated in this program and have undergone retrofits to reduce interior noise levels to 45 dB(A) CNEL. However, for existing uses that have not participated in or are not eligible for the Quieter Home Program, at the program level, it cannot be determined whether the existing structures contain adequate attenuation to reduce interior noise to the 45 dB(A) CNEL standard nor what measures would be required to retrofit these structures. In addition, there is no mechanism in place for implementing such a retrofit program in areas outside the Airport Authority's Quieter Home Program. Because the significant noise impacts are to existing homes in an already urbanized area, there is no feasible mitigation. Thus impacts to existing sensitive land uses would remain significant and unmitigated.

For new development, the General Plan, CPU and state regulations require that interior noise levels must be attenuated to 45 dB(A) CNEL or less in all residential and visitor accommodation structures, and 50 dB(A) CNEL or less in commercial and office structures (see Table 3). Attenuation may take the form of a variety of techniques such as double-pane windows and high-efficiency insulation. This must be demonstrated prior to issuance of a building permit. Thus, potential noise impacts to new development would be less than significant.

A mitigation framework exists for new development in areas exposed to high levels of ambient noise. Policies in the CPUs and General Plan, procedures in the Municipal Code, and regulations (Title 24) would reduce traffic noise exposure, because they set standards for the

siting of sensitive land uses. Site-specific noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City's General Plan would be required as part of the review process for discretionary projects. With this framework, noise impacts to new discretionary projects would be less than significant. However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unmitigated. Interior noise impacts for all projects including ministerial projects would be less than significant because applicants must demonstrate compliance with the current interior noise standards [45 dB(A) CNEL] through submission and approval of a Title 24 Compliance Report.

For all other roadway segments in the CPU areas not identified in Sections 7.1.1, 7.1.2, and 7.1.3, the increase in ambient noise would be less than significant. The CPUs would not significantly worsen the noise exposure (i.e., future noise increase would be less than 3 dB(A) in areas already exposed to noise levels in excess of compatibility guidelines, or future noise increase would be less than 5 dB(A) in areas currently exposed to noise levels less than compatibility guidelines), and impacts due to the increase in ambient noise would be less than significant.

8.2 Land Use Plan Compatibility

A significant impact would occur if implementation of the proposed CPU would result in an exposure of people to current or future transportation noise levels that exceed standards established in the Noise Element of the General Plan.

8.2.1 Vehicle Traffic Noise Exposure

In the CPU areas, noise levels for all land uses would be incompatible (i.e., greater than 75 dB(A) CNEL) closest to the freeways. These areas are currently developed and the proposed CPUs would not change the land use or introduce new sensitive land uses in these areas. Thus, while land uses in these areas would be exposed to noise levels that exceed General Plan guidelines, this noise exposure would not be a significant noise impact resulting from implementation of the CPUs. Additionally, per Section B of the Noise Element, any future multi-family and mixed-use residential use exposed to noise levels up to 75 dB(A) CNEL must include attenuation measures to ensure an interior noise level of 45 dB(A) CNEL and be located in an area where a community plan allows multi-family and mixed-use residential uses.

A mitigation framework exists for new development in areas exposed to high levels of vehicle traffic noise (see Section 8.1). Policies in the CPUs and General Plan would reduce traffic noise exposure, because they set standards for the siting of sensitive land uses. General Plan policy NE-A.4 requires an acoustical study consistent with Acoustical Study Guidelines (Table NE-4) for proposed developments in areas where the existing or future noise level exceeds or would

exceed the “compatible” noise level thresholds as indicated on the Land Use – Noise Compatibility Guidelines. Site-specific exterior noise analyses that demonstrate that the project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the noise compatibility guidelines of the City’s General Plan would be required as part of future discretionary proposals. Additionally, site-specific interior noise analyses demonstrating compliance with the interior noise compatibility guidelines of the City’s General Plan would be required for land uses located in areas where exterior noise levels exceed the City’s noise and land use compatibility guidelines as defined in the General Plan, Table N-3, and summarized in Table 3. With this framework, noise impacts to new discretionary development would be less than significant.

However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unmitigated. Interior noise impacts for all projects including ministerial projects would be less than significant because applicants must demonstrate compliance with the current interior noise standards [45 dB(A) CNEL] through submission and approval of a Title 24 Compliance Report.

8.2.2 Rail Noise

Trolley, Amtrak, Coaster, and freight train noise levels at the nearest planning area boundary and the nearest sensitive receptors would not exceed 60 dB(A) CNEL. Noise impacts due to trolley and train operations would be compatible with General Plan guidelines. Impacts would be less than significant, and no mitigation is required.

8.3 ALUCP Consistency

A significant impact would occur if implementation of the proposed CPU resulted in land uses that are not compatible with aircraft noise levels as defined by an adopted ALUCP.

Based on the projected airport noise contours for the San Diego International Airport, there are sensitive receptors in the Uptown and Golden Hill CPU areas that are located where noise levels due to aircraft operations exceed 60 dB(A) CNEL. The proposed CPUs would not result in impacts to existing uses, because the CPU would not result in a change to these existing uses or a change in San Diego International Airport operations. Because future development (including constructing, reconstructing, converting, establishing, altering, maintaining, relocating, demolishing, using, or enlarging any building, structure, improvement, lot, or premises as defined in§113.0103 of the Municipal Code) is required to provide noise attenuation consistent with the Noise Element of the General Plan and the ALUCP for the San Diego International Airport, implementation of the CPUs would result in a less than significant impact from aircraft noise.

At the project-level, future development must include noise attenuation consistent with the Noise Element of the General Plan and the Airport Land Use Compatibility Plan for the San Diego

International Airport. Additionally, interior noise impacts would be regulated by the requirement for development within the AEOZ to reduce interior noise levels attributable to airport noise to the interior noise standards specified in Table 5 of this report. Site-specific interior noise analyses demonstrating compliance with the interior noise compatibility standards would be required for land uses located in areas where exterior noise levels exceed the ALUCP noise and land use compatibility criteria presented in Table 5. With this framework, noise impacts to new development would be less than significant.

8.4 Municipal Code – Stationary Noise

A significant impact would occur if implementation of the proposed CPU resulted in the exposure of people to noise levels that exceed property line limits established in the Noise Abatement and Control Ordinance of the Municipal Code.

Mixed-use areas would contain residential and commercial interfaces. Mixed-use sites and areas where residential uses are located in proximity to commercial sites would expose sensitive receptors to noise. Although noise-sensitive residential land uses would be exposed to noise associated with the operation of these commercial uses, City policies and regulations would control noise and reduce noise impacts between various land uses. In addition, enforcement of the federal, state, and local noise regulations would control impacts. With implementation of these policies and enforcement of the Noise Abatement and Control Ordinance of the Municipal Code, impacts would be less than significant and no mitigation is required at the program level.

At the project level commercial development proposed adjacent to residential or other noise-sensitive uses is required to implement the City's nighttime and daytime property line noise level limits per General Plan policy NE-E.5 and the Municipal Code. .

8.5 Municipal Code – Construction

A significant impact would occur if implementation of the proposed CPU resulted in the exposure of people to significant temporary construction noise.

Construction activities related to implementation of the CPUs would potentially generate short-term noise levels in excess of 75 dB(A) L_{eq} at adjacent properties. While the City regulates noise associated with construction equipment and activities through enforcement of noise ordinance standards (e.g., days of the week and hours of operation) and imposition of conditions of approval for building or grading permits, there is a procedure in place that allows for variance to the noise ordinance Due to the highly developed nature of the CPU areas with sensitive receivers potentially located in proximity to construction sites, there is a potential for construction of future projects to expose existing sensitive land use to significant noise levels.

At the project level, future development projects will be required to incorporate feasible mitigation measures. Typically, noise can be reduced to comply with City standards when standard construction noise control measures are enforced at the project site and when the duration of the noise-generating construction period is limited to one construction season (typically one year) or less.

- Construction activities shall be limited to the hours between 7:00 A.M. and 7:00 P.M. Construction is not allowed on legal holidays as specified in Section 21.04 of the San Diego Municipal Code, with exception of Columbus Day and Washington's Birthday, or on Sundays. (Consistent with Section 59.5.0404 of the San Diego Municipal Code).

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.

- Locate stationary noise-generating equipment (e.g., compressors) as far as possible from adjacent residential receivers.

- Acoustically shield stationary equipment located near residential receivers with temporary noise barriers.

- Utilize "quiet" air compressors and other stationary noise sources where technology exists.

- The contractor shall prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with adjacent residential land uses so that construction activities can be scheduled to minimize noise disturbance.

- Designate a "disturbance coordinator" who would be responsible for responding to any complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., bad muffler, etc.) and will require that reasonable measures be implemented to correct the problem.

Implementation of the standard controls outlined in the above measures would reduce construction noise levels emanating from the site, limit construction hours, and minimize disruption and annoyance. With the implementation of these controls, and the limited duration of the noise-generating construction period, the substantial temporary increase in ambient noise levels would be less than significant.

8.6 Vibration

8.6.1 Construction

Non-pile driving or foundation work construction phases, which have the highest potential of producing vibration (such as jackhammering and other high-power tools), would be intermittent and would only occur for short periods of time for any individual project site. By use of administrative controls, such as scheduling construction activities with the highest potential to produce perceptible vibration to hours with least potential to affect nearby properties, perceptible vibration can be kept to a minimum and as such would result in a less than significant impact with respect to perception. However, pile driving within 95 feet of existing structures has the potential to exceed 0.20 inch per second, and would be potentially significant. Measures are available to reduce construction-related vibration impacts, however, at the program-level there is no means of assuring adequate implementation; therefore impacts would be significant and unmitigated.

At the project level, for projects where construction would include vibration-generating activities, such as pile driving, within 95 feet of existing structures, site-specific vibration studies shall be conducted to determine the area of impact and to present appropriate mitigation measures that may include the following:

- Identify sites that would include vibration compaction activities such as pile driving and have the potential to generate groundborne vibration and the sensitivity of nearby structures to groundborne vibration. This task should be conducted by a qualified structural engineer.

- Develop a vibration monitoring and construction contingency plan to identify structures where monitoring would be conducted; set up a vibration monitoring schedule; define structure-specific vibration limits; and address the need to conduct photo, elevation, and crack surveys to document before and after construction conditions. Construction contingencies would be identified for when vibration levels approach the limits.

- At a minimum, monitor vibration during initial demolition activities and during pile-driving activities. Monitoring results may indicate the need for more or less intensive measurements.

- When vibration levels approach limits, suspend construction and implement contingencies to either lower vibration levels or secure the affected structures.

- Conduct post-survey on structures where either monitoring has indicated high levels or complaints of damage have been made. Make appropriate repairs or compensation where damage has occurred as a result of construction activities.

Implementation of these measures would reduce construction-related vibration impacts at the project level to a level less than significant. However, at the program-level there is no means of assuring adequate implementation; therefore impacts would be significant and unmitigated.

8.6.2 Operation

The commercial uses that would be constructed under the proposed CPUs would include uses such as retail, restaurants, and small offices that would not require heavy mechanical equipment that would generate groundborne vibration or heavy truck deliveries. Residential and civic uses do not typically generate vibration. Thus, operational vibration impacts associated with CPU implementation would be less than significant.

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ATTACHMENTS

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ATTACHMENT 1

Noise Measurement Data

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6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location U-1

Summary								
Filename	LxT_Data.008							
Serial Number	3827							
Model	SoundExpert™ LxT							
Firmware Version	2.206							
User								
Location	U-1							
Job Description	6086.0							
Note								
Measurement Description								
Start	2015/03/03 10:11:45							
Stop	2015/03/03 10:26:53							
Duration	0:15:08.0							
Run Time	0:15:06.6							
Pause	0:00:01.4							
Pre Calibration	2015/03/03 10:10:50							
Post Calibration	None							
Calibration Deviation	---							
Overall Settings								
RMS Weight	A Weighting							
Peak Weight	A Weighting							
Detector	Slow							
Preamp	PRMLxT1							
Microphone Correction	Off							
Integration Method	Linear							
OBA Range	Normal							
OBA Bandwidth	None							
OBA Freq. Weighting	Z Weighting							
OBA Max Spectrum	Bin Max							
Overload	144.6 dB							
	A		**C**		**Z**			
Under Range Peak	**100.9**		97.9		102.9 dB			
Under Range Limit	**37.5**		35.5		43.5 dB			
Noise Floor	24.6		25.2		32.6 dB			
Results								
LAeq	77.6 dB							
LAE	107.2 dB							
EA	5.809 mPa²h							
LApeak (max)	2015/03/03 10:12:42		100.8 dB					
LASmax	2015/03/03 10:19:28		81.5 dB					
LASmin	2015/03/03 10:11:45		71.7 dB					
SEA	-99.9 dB							
LAS > 60.0 dB (Exceedence Counts / Duration)	1		906.5 s					
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0 s					

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening**	**LNight 23:00-07:00**
	77.6	77.6	-99.9	77.6	77.6	-99.9	-99.9
LCeq	82.7 dB						
LAeq	77.6 dB						
LCeq - LAeq	5.1 dB						
LAleq	78.4 dB						
LAeq	77.6 dB						
LAleq - LAeq	0.8 dB						
# Overloads	0						
Overload Duration	0.0 s						

Statistics	
LAS5.00	79.6 dB
LAS10.00	79.1 dB
LAS33.30	78.1 dB
LAS50.00	77.5 dB
LAS66.60	76.9 dB
LAS90.00	75.4 dB

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location U-2

Summary					
Filename	LxT_Data.007				
Serial Number	3827				
Model	SoundExpert™ LxT				
Firmware Version	2.206				
User					
Location	U-2				
Job Description	6086.0				
Note					
Measurement Description					
Start	2015/03/03 9:25:16				
Stop	2015/03/03 9:40:24				
Duration	0:15:08.0				
Run Time	0:15:06.6				
Pause	0:00:01.4				
Pre Calibration	2015/03/03 9:23:51				
Post Calibration	None				
Calibration Deviation	---				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	A Weighting				
Detector	Slow				
Preamp	PRMLxT1				
Microphone Correction	Off				
Integration Method	Linear				
OBA Range	Normal				
OBA Bandwidth	None				
OBA Freq. Weighting	Z Weighting				
OBA Max Spectrum	Bin Max				
Overload	144.5 dB				

	A	C	Z
Under Range Peak	**100.8**	97.8	102.8 dB
Under Range Limit	**37.4**	35.4	43.4 dB
Noise Floor	24.6	25.1	32.6 dB

Results			
LAeq	69.1 dB		
LAE	98.7 dB		
EA	822.146 µPa²h		
LApeak (max)	2015/03/03 9:29:46	100.5	dB
LASmax	2015/03/03 9:34:48	75.2	dB
LASmin	2015/03/03 9:28:47	64.6	dB
SEA	-99.9 dB		
LAS > 60.0 dB (Exceedence Counts / Duration)	1	906.5	s
LAS > 115.0 dB (Exceedence Counts / Duration)	0	0.0	s
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0	s
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0	s
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0	s

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	69.1	69.1	-99.9	69.1	69.1	-99.9	-99.9
LCeq	76.4 dB						
LAeq	69.1 dB						
LCeq - LAeq	7.3 dB						
LAleq	70.1 dB						
LAeq	69.1 dB						
LAleq - LAeq	1.0 dB						
# Overloads	0						
Overload Duration	0.0 s						

Statistics	
LAS5.00	71.7 dB
LAS10.00	70.9 dB
LAS33.30	69.5 dB
LAS50.00	68.8 dB
LAS66.60	68.0 dB
LAS90.00	66.5 dB

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location U-3

Summary								
Filename	LxT_Data.009							
Serial Number	3827							
Model	SoundExpert™ LxT							
Firmware Version	2.206							
User								
Location	U-3							
Job Description	6086.0							
Note								
Measurement Description								
Start	2015/03/03 10:51:22							
Stop	2015/03/03 11:06:29							
Duration	0:15:07.2							
Run Time	0:14:38.7							
Pause	0:00:28.5							
Pre Calibration	2015/03/03 10:48:31							
Post Calibration	None							
Calibration Deviation	---							
Overall Settings								
RMS Weight	A Weighting							
Peak Weight	A Weighting							
Detector	Slow							
Preamp	PRMLxT1							
Microphone Correction	Off							
Integration Method	Linear							
OBA Range	Normal							
OBA Bandwidth	None							
OBA Freq. Weighting	Z Weighting							
OBA Max Spectrum	Bin Max							
Overload	144.5 dB							
	A		**C**		**Z**			
Under Range Peak	**100.8**		97.8		102.8 dB			
Under Range Limit	**37.4**		35.4		43.4 dB			
Noise Floor	24.6		25.1		32.6 dB			
Results								
LAeq	64.6 dB							
LAE	94.0 dB							
EA	280.345 µPa²h							
LApeak (max)	2015/03/03 10:53:19		85.9 dB					
LASmax	2015/03/03 11:06:19		69.6 dB					
LASmin	2015/03/03 10:56:40		51.0 dB					
SEA	-99.9 dB							
LAS > 60.0 dB (Exceedence Counts / Duration)	8		840.2 s					
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0 s					

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	64.6	64.6	-99.9	64.6	64.6	-99.9	-99.9
LCeq	68.3 dB						
LAeq	64.6 dB						
LCeq - LAeq	3.7 dB						
LAleq	66.3 dB						
LAeq	64.6 dB						
LAleq - LAeq	1.7 dB						
# Overloads	0						
Overload Duration	0.0 s						
Statistics							
LAS5.00	67.7 dB						
LAS10.00	67.1 dB						
LAS33.30	65.2 dB						
LAS50.00	64.2 dB						
LAS66.60	63.0 dB						
LAS90.00	60.2 dB						

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location U-4

Summary					
Filename	LxT_Data.012				
Serial Number	3827				
Model	SoundExpert™ LxT				
Firmware Version	2.206				
User					
Location	U-4				
Job Description	6086.0				
Note					
Measurement Description					
Start	2015/03/03 13:29:57				
Stop	2015/03/03 13:45:02				
Duration	0:15:05.2				
Run Time	0:15:04.0				
Pause	0:00:01.2				
Pre Calibration	2015/03/03 13:28:14				
Post Calibration	None				
Calibration Deviation	---				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	A Weighting				
Detector	Slow				
Preamp	PRMLxT1				
Microphone Correction	Off				
Integration Method	Linear				
OBA Range	Normal				
OBA Bandwidth	None				
OBA Freq. Weighting	Z Weighting				
OBA Max Spectrum	Bin Max				
Overload	144.3 dB				

	A	C	Z	
Under Range Peak	**100.6**	97.6	102.6	dB
Under Range Limit	**37.3**	35.3	43.3	dB
Noise Floor	24.5	25.0	32.5	dB

Results				
LAeq	57.7	dB		
LAE	87.2	dB		
EA	58.969	µPa²h		
LApeak (max)	2015/03/03 13:34:41	85.9	dB	
LASmax	2015/03/03 13:36:31	69.6	dB	
LASmin	2015/03/03 13:33:42	41.4	dB	
SEA	-99.9	dB		
LAS > 60.0 dB (Exceedence Counts / Duration)	37	203.0	s	
LAS > 115.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0	s	

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	57.7	57.7	-99.9	57.7	57.7	-99.9	-99.9

LCeq	65.7	dB
LAeq	57.7	dB
LCeq - LAeq	8.0	dB
LAleq	59.0	dB
LAeq	57.7	dB
LAleq - LAeq	1.3	dB
# Overloads	0	
Overload Duration	0.0	s

Statistics		
LAS5.00	64.4	dB
LAS10.00	62.6	dB
LAS33.30	55.7	dB
LAS50.00	51.2	dB
LAS66.60	48.4	dB
LAS90.00	44.4	dB

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location U-5

Summary								
Filename	LxT_Data.011							
Serial Number	3827							
Model	SoundExpert™ LxT							
Firmware Version	2.206							
User								
Location	U-5							
Job Description	6086.0							
Note								
Measurement Description								
Start	2015/03/03 12:27:25							
Stop	2015/03/03 12:42:55							
Duration	0:15:29.4							
Run Time	0:15:28.2							
Pause	0:00:01.2							
Pre Calibration	2015/03/03 12:25:43							
Post Calibration	None							
Calibration Deviation	---							
Overall Settings								
RMS Weight	A Weighting							
Peak Weight	A Weighting							
Detector	Slow							
Preamp	PRMLxT1							
Microphone Correction	Off							
Integration Method	Linear							
OBA Range	Normal							
OBA Bandwidth	None							
OBA Freq. Weighting	Z Weighting							
OBA Max Spectrum	Bin Max							
Overload	144.6 dB							
	A		**C**		**Z**			
Under Range Peak	**100.8**		97.8		102.8 dB			
Under Range Limit	**37.4**		35.4		43.4 dB			
Noise Floor	24.6		25.1		32.6 dB			
Results								
LAeq	63.4 dB							
LAE	93.1 dB							
EA	227.335 µPa²h							
LApeak (max)	2015/03/03 12:34:57		95.9 dB					
LASmax	2015/03/03 12:37:44		73.0 dB					
LASmin	2015/03/03 12:42:28		51.9 dB					
SEA	-99.9 dB							
LAS > 60.0 dB (Exceedence Counts / Duration)	20		593.4 s					
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0 s					
Community Noise	**Ldn**	**LDay 07:00-23:00**		**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	63.4	63.4		-99.9	63.4	63.4	-99.9	-99.9
LCeq	72.3 dB							
LAeq	63.4 dB							
LCeq - LAeq	8.9 dB							
LAleq	64.8 dB							
LAeq	63.4 dB							
LAleq - LAeq	1.4 dB							
# Overloads	0							
Overload Duration	0.0 s							
Statistics								
LAS5.00	68.0 dB							
LAS10.00	67.2 dB							
LAS33.30	64.1 dB							
LAS50.00	61.3 dB							
LAS66.60	58.6 dB							
LAS90.00	55.4 dB							

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location U-6

Summary					
Filename	LxT_Data.010				
Serial Number	3827				
Model	SoundExpert™ LxT				
Firmware Version	2.206				
User					
Location	U-6				
Job Description	6086.0				
Note					
Measurement Description					
Start	2015/03/03 11:45:47				
Stop	2015/03/03 12:01:02				
Duration	0:15:15.3				
Run Time	0:15:13.9				
Pause	0:00:01.4				
Pre Calibration	2015/03/03 11:42:15				
Post Calibration	None				
Calibration Deviation	---				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	A Weighting				
Detector	Slow				
Preamp	PRMLxT1				
Microphone Correction	Off				
Integration Method	Linear				
OBA Range	Normal				
OBA Bandwidth	None				
OBA Freq. Weighting	Z Weighting				
OBA Max Spectrum	Bin Max				
Overload	144.4 dB				

	A	C	Z	
Under Range Peak	**100.7**	97.7	102.7	dB
Under Range Limit	**37.3**	35.3	43.3	dB
Noise Floor	24.5	25.1	32.5	dB

Results				
LAeq	64.4	dB		
LAE	94.0	dB		
EA	277.319	µPa²h		
LApeak (max)	2015/03/03 11:58:21	97.5	dB	
LASmax	2015/03/03 11:58:22	79.5	dB	
LASmin	2015/03/03 11:51:09	50.7	dB	
SEA	-99.9	dB		
LAS > 60.0 dB (Exceedence Counts / Duration)	26	633.5	s	
LAS > 115.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0	s	

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	64.4	64.4	-99.9	64.4	64.4	-99.9	-99.9
LCeq	74.1 dB						
LAeq	64.4 dB						
LCeq - LAeq	9.7 dB						
LAleq	66.6 dB						
LAeq	64.4 dB						
LAleq - LAeq	2.2 dB						
# Overloads	0						
Overload Duration	0.0 s						

Statistics		
LAS5.00	69.1	dB
LAS10.00	67.3	dB
LAS33.30	63.8	dB
LAS50.00	61.8	dB
LAS66.60	59.4	dB
LAS90.00	55.0	dB

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location NP-1

Summary					
Filename	LxT_Data.009				
Serial Number	3828				
Model	SoundExpert™ LxT				
Firmware Version	2.206				
User					
Location	NP-1				
Job Description	6086.0				
Note					
Measurement Description					
Start	2015/03/03 15:29:16				
Stop	2015/03/03 15:44:25				
Duration	0:15:09.0				
Run Time	0:15:05.3				
Pause	0:00:03.7				
Pre Calibration	2015/03/03 15:28:06				
Post Calibration	None				
Calibration Deviation	---				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	A Weighting				
Detector	Slow				
Preamp	PRMLxT1L				
Microphone Correction	Off				
Integration Method	Linear				
OBA Range	Low				
OBA Bandwidth	None				
OBA Freq. Weighting	Z Weighting				
OBA Max Spectrum	Bin Max				
Overload	121.6 dB				

	A	C	Z	
Under Range Peak	**77.8**	74.8	79.8	dB
Under Range Limit	**25.0**	25.2	30.0	dB
Noise Floor	15.9	16.0	20.9	dB

Results				
LAeq	60.8	dB		
LAE	90.4	dB		
EA	121.945	µPa²h		
LApeak (max)	2015/03/03 15:36:14	94.2	dB	
LASmax	2015/03/03 15:36:14	80.5	dB	
LASmin	2015/03/03 15:37:10	45.7	dB	
SEA	-99.9	dB		
LAS > 60.0 dB (Exceedence Counts / Duration)	20	149.2	s	
LAS > 115.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0	s	

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	60.8	60.8	-99.9	60.8	60.8	-99.9	-99.9
LCeq	67.5 dB						
LAeq	60.8 dB						
LCeq - LAeq	6.7 dB						
LAleq	64.6 dB						
LAeq	60.8 dB						
LAleq - LAeq	3.8 dB						
# Overloads	0						
Overload Duration	0.0 s						

Statistics		
LAS5.00	65.0	dB
LAS10.00	61.3	dB
LAS33.30	53.7	dB
LAS50.00	50.9	dB
LAS66.60	49.3	dB
LAS90.00	47.6	dB

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location NP-2

Summary								
Filename	LxT_Data.010							
Serial Number	3828							
Model	SoundExpert™ LxT							
Firmware Version	2.206							
User								
Location	NP-2							
Job Description	6086.0							
Note								
Measurement Description								
Start	2015/03/03 16:00:03							
Stop	2015/03/03 16:15:20							
Duration	0:15:17.6							
Run Time	0:15:16.2							
Pause	0:00:01.4							
Pre Calibration	2015/03/03 15:58:13							
Post Calibration	None							
Calibration Deviation	---							
Overall Settings								
RMS Weight	A Weighting							
Peak Weight	A Weighting							
Detector	Slow							
Preamp	PRMLxT1L							
Microphone Correction	Off							
Integration Method	Linear							
OBA Range	Low							
OBA Bandwidth	None							
OBA Freq. Weighting	Z Weighting							
OBA Max Spectrum	Bin Max							
Overload	121.7 dB							
	A		**C**		**Z**			
Under Range Peak	**77.8**		74.8		79.8 dB			
Under Range Limit	**25.1**		25.2		30.0 dB			
Noise Floor	15.9		16.0		20.9 dB			
Results								
LAeq	65.6 dB							
LAE	95.2 dB							
EA	367.446 µPa²h							
LApeak (max)	2015/03/03 16:11:18		102.0 dB					
LASmax	2015/03/03 16:11:18		81.2 dB					
LASmin	2015/03/03 16:04:07		52.9 dB					
SEA	-99.9 dB							
LAS > 60.0 dB (Exceedence Counts / Duration)	15		721.9 s					
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0 s					
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0 s					
Community Noise	**Ldn**	**LDay 07:00-23:00**		**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	65.6	65.6		-99.9	65.6	65.6	-99.9	-99.9
LCeq	77.7 dB							
LAeq	65.6 dB							
LCeq - LAeq	12.1 dB							
LAleq	68.1 dB							
LAeq	65.6 dB							
LAleq - LAeq	2.5 dB							
# Overloads	0							
Overload Duration	0.0 s							
Statistics								
LAS5.00	70.7 dB							
LAS10.00	69.4 dB							
LAS33.30	64.5 dB							
LAS50.00	61.2 dB							
LAS66.60	59.5 dB							
LAS90.00	57.4 dB							

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location NP-3

Summary					
Filename	LxT_Data.011				
Serial Number	3828				
Model	SoundExpert™ LxT				
Firmware Version	2.206				
User					
Location	NP-3				
Job Description	6086.0				
Note					
Measurement Description					
Start	2015/03/03 16:34:42				
Stop	2015/03/03 16:50:06				
Duration	0:15:24.5				
Run Time	0:15:23.1				
Pause	0:00:01.4				
Pre Calibration	2015/03/03 16:33:49				
Post Calibration	None				
Calibration Deviation	---				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	A Weighting				
Detector	Slow				
Preamp	PRMLxT1L				
Microphone Correction	Off				
Integration Method	Linear				
OBA Range	Low				
OBA Bandwidth	None				
OBA Freq. Weighting	Z Weighting				
OBA Max Spectrum	Bin Max				
Overload	121.7 dB				

	A	C	Z	
Under Range Peak	**77.8**	74.8	79.8	dB
Under Range Limit	**25.1**	25.2	30.0	dB
Noise Floor	15.9	16.0	20.9	dB

Results					
LAeq	63.9	dB			
LAE	93.6	dB			
EA	253.955	µPa²h			
LApeak (max)	2015/03/03 16:37:25		105.1	dB	
LASmax	2015/03/03 16:37:25		90.1	dB	
LASmin	2015/03/03 16:46:08		44.5	dB	
SEA	-99.9	dB			
LAS > 60.0 dB (Exceedence Counts / Duration)	37		262.5	s	
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0	s	
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0	s	
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0	s	
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0	s	

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	63.9	63.9	-99.9	63.9	63.9	-99.9	-99.9

LCeq	67.3	dB
LAeq	63.9	dB
LCeq - LAeq	3.3	dB
LAleq	69.9	dB
LAeq	63.9	dB
LAleq - LAeq	6.0	dB
# Overloads	0	
Overload Duration	0.0	s

Statistics		
LAS5.00	66.4	dB
LAS10.00	64.3	dB
LAS33.30	57.3	dB
LAS50.00	53.1	dB
LAS66.60	50.1	dB
LAS90.00	46.6	dB

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location NP-4

Summary					
Filename	LxT_Data.012				
Serial Number	3828				
Model	SoundExpert™ LxT				
Firmware Version	2.206				
User					
Location	NP-4				
Job Description	6086.0				
Note					
Measurement Description					
Start	2015/03/04 8:46:25				
Stop	2015/03/04 9:01:38				
Duration	0:15:13.2				
Run Time	0:15:11.5				
Pause	0:00:01.7				
Pre Calibration	2015/03/04 8:44:32				
Post Calibration	None				
Calibration Deviation	---				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	A Weighting				
Detector	Slow				
Preamp	PRMLxT1L				
Microphone Correction	Off				
Integration Method	Linear				
OBA Range	Low				
OBA Bandwidth	None				
OBA Freq. Weighting	Z Weighting				
OBA Max Spectrum	Bin Max				
Overload	121.6 dB				

	A	C	Z
Under Range Peak	**77.8**	74.8	79.8 dB
Under Range Limit	**25.0**	25.2	30.0 dB
Noise Floor	15.9	16.0	20.9 dB

Results				
LAeq	66.5 dB			
LAE	96.1 dB			
EA	451.645 µPa²h			
LApeak (max)	2015/03/04 9:01:08	92.2 dB		
LASmax	2015/03/04 9:01:04	72.3 dB		
LASmin	2015/03/04 8:53:19	60.3 dB		
SEA	-99.9 dB			
LAS > 60.0 dB (Exceedence Counts / Duration)	1	911.4 s		
LAS > 115.0 dB (Exceedence Counts / Duration)	0	0.0 s		
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0 s		
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0 s		
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0 s		

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	66.5	66.5	-99.9	66.5	66.5	-99.9	-99.9
LCeq	75.6 dB						
LAeq	66.5 dB						
LCeq - LAeq	9.1 dB						
LAIeq	67.1 dB						
LAeq	66.5 dB						
LAIeq - LAeq	0.6 dB						
# Overloads	0						
Overload Duration	0.0 s						

Statistics	
LAS5.00	68.7 dB
LAS10.00	68.3 dB
LAS33.30	67.0 dB
LAS50.00	66.3 dB
LAS66.60	65.6 dB
LAS90.00	63.8 dB

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location NP-5

Summary					
Filename	LxT_Data.013				
Serial Number	3828				
Model	SoundExpert™ LxT				
Firmware Version	2.206				
User					
Location	NP-5				
Job Description	6086.0				
Note					
Measurement Description					
Start	2015/03/04 9:16:37				
Stop	2015/03/04 9:31:59				
Duration	0:15:22.6				
Run Time	0:15:21.2				
Pause	0:00:01.4				
Pre Calibration	2015/03/04 9:14:56				
Post Calibration	None				
Calibration Deviation	---				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	A Weighting				
Detector	Slow				
Preamp	PRMLxT1L				
Microphone Correction	Off				
Integration Method	Linear				
OBA Range	Low				
OBA Bandwidth	None				
OBA Freq. Weighting	Z Weighting				
OBA Max Spectrum	Bin Max				
Overload	121.7 dB				

	A	C	Z
Under Range Peak	**77.9**	74.9	79.9 dB
Under Range Limit	**25.1**	25.2	30.1 dB
Noise Floor	15.9	16.0	20.9 dB

Results				
LAeq	62.2 dB			
LAE	91.8 dB			
EA	169.399 µPa²h			
LApeak (max)	2015/03/04 9:16:55	91.4 dB		
LASmax	2015/03/04 9:16:55	77.8 dB		
LASmin	2015/03/04 9:27:23	43.8 dB		
SEA	-99.9 dB			
LAS > 60.0 dB (Exceedence Counts / Duration)	36	416.6 s		
LAS > 115.0 dB (Exceedence Counts / Duration)	0	0.0 s		
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0 s		
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0 s		
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0 s		

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	62.2	62.2	-99.9	62.2	62.2	-99.9	-99.9
LCeq	71.7 dB						
LAeq	62.2 dB						
LCeq - LAeq	9.5 dB						
LAleq	64.5 dB						
LAeq	62.2 dB						
LAleq - LAeq	2.3 dB						
# Overloads	0						
Overload Duration	0.0 s						

Statistics	
LAS5.00	67.3 dB
LAS10.00	65.2 dB
LAS33.30	60.7 dB
LAS50.00	58.0 dB
LAS66.60	55.6 dB
LAS90.00	50.3 dB

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location GH-1

Summary					
Filename	LxT_Data.014				
Serial Number	3828				
Model	SoundExpert™ LxT				
Firmware Version	2.206				
User					
Location	GH-1				
Job Description	6086.0				
Note					
Measurement Description					
Start	2015/03/04 10:56:56				
Stop	2015/03/04 11:12:30				
Duration	0:15:33.4				
Run Time	0:15:32.5				
Pause	0:00:00.9				
Pre Calibration	2015/03/04 10:55:00				
Post Calibration	None				
Calibration Deviation	---				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	A Weighting				
Detector	Slow				
Preamp	PRMLxT1L				
Microphone Correction	Off				
Integration Method	Linear				
OBA Range	Low				
OBA Bandwidth	None				
OBA Freq. Weighting	Z Weighting				
OBA Max Spectrum	Bin Max				
Overload	121.6 dB				

		A		C		Z	
Under Range Peak		**77.8**		74.8		79.8	dB
Under Range Limit		**25.0**		25.2		30.0	dB
Noise Floor		15.9		16.0		20.9	dB
Results							
LAeq		63.9	dB				
LAE		93.6	dB				
EA		254.360	µPa²h				
LApeak (max)	2015/03/04 11:07:55			95.0	dB		
LASmax	2015/03/04 11:07:56			81.1	dB		
LASmin	2015/03/04 11:00:28			47.9	dB		
SEA		-99.9	dB				
LAS > 60.0 dB (Exceedence Counts / Duration)		30		418.4	s		
LAS > 115.0 dB (Exceedence Counts / Duration)		0		0.0	s		
LApeak > 135.0 dB (Exceedence Counts / Duration)		0		0.0	s		
LApeak > 137.0 dB (Exceedence Counts / Duration)		0		0.0	s		
LApeak > 140.0 dB (Exceedence Counts / Duration)		0		0.0	s		

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	63.9	63.9	-99.9	63.9	63.9	-99.9	-99.9

LCeq	72.5	dB
LAeq	63.9	dB
LCeq - LAeq	8.6	dB
LAleq	65.8	dB
LAeq	63.9	dB
LAleq - LAeq	1.9	dB
# Overloads	0	
Overload Duration	0.0	s
Statistics		
LAS5.00	68.5	dB
LAS10.00	64.8	dB
LAS33.30	60.2	dB
LAS50.00	58.2	dB
LAS66.60	56.1	dB
LAS90.00	52.9	dB

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location GH-2

Summary						
Filename	LxT_Data.015					
Serial Number	3828					
Model	SoundExpert™ LxT					
Firmware Version	2.206					
User						
Location	GH-2					
Job Description	6086.0					
Note						
Measurement Description						
Start	2015/03/04 11:29:42					
Stop	2015/03/04 11:45:08					
Duration	0:15:26.7					
Run Time	0:15:25.6					
Pause	0:00:01.1					
Pre Calibration	2015/03/04 11:25:33					
Post Calibration	None					
Calibration Deviation	---					
Overall Settings						
RMS Weight	A Weighting					
Peak Weight	A Weighting					
Detector	Slow					
Preamp	PRMLxT1L					
Microphone Correction	Off					
Integration Method	Linear					
OBA Range	Low					
OBA Bandwidth	None					
OBA Freq. Weighting	Z Weighting					
OBA Max Spectrum	Bin Max					
Overload	121.6 dB					

	A		C		Z	
Under Range Peak	**77.8**		74.8		79.8	dB
Under Range Limit	**25.0**		25.2		30.0	dB
Noise Floor	15.9		16.0		20.9	dB
Results						
LAeq	60.0	dB				
LAE	89.7	dB				
EA	103.598	µPa²h				
LApeak (max)	2015/03/04 11:31:55		88.4	dB		
LASmax	2015/03/04 11:43:19		74.2	dB		
LASmin	2015/03/04 11:30:38		46.0	dB		
SEA	-99.9	dB				
LAS > 60.0 dB (Exceedence Counts / Duration)	35		268.5	s		
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0	s		
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0	s		
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0	s		
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0	s		

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	60.0	60.0	-99.9	60.0	60.0	-99.9	-99.9
LCeq	69.7 dB						
LAeq	60.0 dB						
LCeq - LAeq	9.7 dB						
LAleq	61.7 dB						
LAeq	60.0 dB						
LAleq - LAeq	1.7 dB						
# Overloads	0						
Overload Duration	0.0 s						
Statistics							
LAS5.00	65.8 dB						
LAS10.00	64.2 dB						
LAS33.30	57.8 dB						
LAS50.00	54.9 dB						
LAS66.60	52.8 dB						
LAS90.00	49.1 dB						

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location GH-3

Summary						
Filename	LxT_Data.016					
Serial Number	3828					
Model	SoundExpert™ LxT					
Firmware Version	2.206					
User						
Location	GH-3					
Job Description	6086.0					
Note						
Measurement Description						
Start	2015/03/04 12:01:48					
Stop	2015/03/04 12:17:10					
Duration	0:15:21.6					
Run Time	0:15:20.5					
Pause	0:00:01.1					
Pre Calibration	2015/03/04 11:56:54					
Post Calibration	None					
Calibration Deviation	---					
Overall Settings						
RMS Weight	A Weighting					
Peak Weight	A Weighting					
Detector	Slow					
Preamp	PRMLxT1L					
Microphone Correction	Off					
Integration Method	Linear					
OBA Range	Low					
OBA Bandwidth	None					
OBA Freq. Weighting	Z Weighting					
OBA Max Spectrum	Bin Max					
Overload	121.7 dB					

	A	C	Z	
Under Range Peak	**77.8**	74.8	79.8	dB
Under Range Limit	**25.1**	25.2	30.0	dB
Noise Floor	15.9	16.0	20.9	dB

Results					
LAeq	74.5	dB			
LAE	104.2	dB			
EA	2.914	mPa²h			
LApeak (max)	2015/03/04 12:06:32		103.0	dB	
LASmax	2015/03/04 12:06:33		82.0	dB	
LASmin	2015/03/04 12:07:37		64.9	dB	
SEA	-99.9	dB			
LAS > 60.0 dB (Exceedence Counts / Duration)	1		920.4	s	
LAS > 115.0 dB (Exceedence Counts / Duration)	0		0.0	s	
LApeak > 135.0 dB (Exceedence Counts / Duration)	0		0.0	s	
LApeak > 137.0 dB (Exceedence Counts / Duration)	0		0.0	s	
LApeak > 140.0 dB (Exceedence Counts / Duration)	0		0.0	s	

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	74.5	74.5	-99.9	74.5	74.5	-99.9	-99.9

LCeq	77.5	dB
LAeq	74.5	dB
LCeq - LAeq	2.9	dB
LAleq	75.7	dB
LAeq	74.5	dB
LAleq - LAeq	1.1	dB
# Overloads	0	
Overload Duration	0.0	s

Statistics		
LAS5.00	76.9	dB
LAS10.00	76.4	dB
LAS33.30	75.1	dB
LAS50.00	74.3	dB
LAS66.60	73.5	dB
LAS90.00	71.5	dB

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location GH-4

Summary						
Filename	LxT_Data.018					
Serial Number	3828					
Model	SoundExpert™ LxT					
Firmware Version	2.206					
User						
Location	GH-4					
Job Description	6086.0					
Note						
Measurement Description						
Start	2015/03/04 12:41:42					
Stop	2015/03/04 12:57:06					
Duration	0:15:24.0					
Run Time	0:15:22.9					
Pause	0:00:01.1					
Pre Calibration	2015/03/04 12:32:28					
Post Calibration	None					
Calibration Deviation	---					
Overall Settings						
RMS Weight	A Weighting					
Peak Weight	A Weighting					
Detector	Slow					
Preamp	PRMLxT1L					
Microphone Correction	Off					
Integration Method	Linear					
OBA Range	Low					
OBA Bandwidth	None					
OBA Freq. Weighting	Z Weighting					
OBA Max Spectrum	Bin Max					
Overload	121.6 dB					

	A	C	Z
Under Range Peak	**77.7**	74.7	79.7 dB
Under Range Limit	**25.0**	25.1	30.0 dB
Noise Floor	15.9	16.0	20.9 dB

Results						
LAeq	73.2 dB					
LAE	102.9 dB					
EA	2.145 mPa²h					
LApeak (max)	2015/03/04 12:54:39	99.1 dB				
LASmax	2015/03/04 12:44:14	80.6 dB				
LASmin	2015/03/04 12:50:20	60.7 dB				
SEA	-99.9 dB					
LAS > 60.0 dB (Exceedence Counts / Duration)	1	922.8 s				
LAS > 115.0 dB (Exceedence Counts / Duration)	0	0.0 s				
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0 s				
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0 s				
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0 s				

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	73.2	73.2	-99.9	73.2	73.2	-99.9	-99.9

LCeq	79.7 dB					
LAeq	73.2 dB					
LCeq - LAeq	6.4 dB					
LAleq	74.5 dB					
LAeq	73.2 dB					
LAleq - LAeq	1.3 dB					
# Overloads	0					
Overload Duration	0.0 s					
Statistics						
LAS5.00	76.7 dB					
LAS10.00	75.6 dB					
LAS33.30	73.5 dB					
LAS50.00	72.7 dB					
LAS66.60	71.6 dB					
LAS90.00	69.1 dB					

6086 Uptown, Greater North Park, Golden Hill CPUs
Measurement Location GH-5

Summary					
Filename	LxT_Data.019				
Serial Number	3828				
Model	SoundExpert™ LxT				
Firmware Version	2.206				
User					
Location	GH-5				
Job Description	6086.0				
Note					
Measurement Description					
Start	2015/03/04 13:20:03				
Stop	2015/03/04 13:35:31				
Duration	0:15:28.4				
Run Time	0:15:27.3				
Pause	0:00:01.1				
Pre Calibration	2015/03/04 13:14:25				
Post Calibration	None				
Calibration Deviation	---				
Overall Settings					
RMS Weight	A Weighting				
Peak Weight	A Weighting				
Detector	Slow				
Preamp	PRMLxT1L				
Microphone Correction	Off				
Integration Method	Linear				
OBA Range	Low				
OBA Bandwidth	None				
OBA Freq. Weighting	Z Weighting				
OBA Max Spectrum	Bin Max				
Overload	121.6 dB				

	A	C	Z	
Under Range Peak	**77.7**	74.7	79.7	dB
Under Range Limit	**25.0**	25.1	30.0	dB
Noise Floor	15.9	16.0	20.9	dB

Results				
LAeq	63.4	dB		
LAE	93.0	dB		
EA	223.802	µPa²h		
LApeak (max)	2015/03/04 13:33:48	97.1	dB	
LASmax	2015/03/04 13:31:44	83.1	dB	
LASmin	2015/03/04 13:21:13	41.3	dB	
SEA	-99.9	dB		
LAS > 60.0 dB (Exceedence Counts / Duration)	28	217.8	s	
LAS > 115.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 135.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 137.0 dB (Exceedence Counts / Duration)	0	0.0	s	
LApeak > 140.0 dB (Exceedence Counts / Duration)	0	0.0	s	

Community Noise	**Ldn**	**LDay 07:00-23:00**	**LNight 23:00-07:00**	**Lden**	**LDay 07:00-19:00**	**LEvening 19:00-23:00**	**LNight 23:00-07:00**
	63.4	63.4	-99.9	63.4	63.4	-99.9	-99.9

LCeq	80.5	dB
LAeq	63.4	dB
LCeq - LAeq	17.1	dB
LAleq	66.2	dB
LAeq	63.4	dB
LAleq - LAeq	2.8	dB
# Overloads	0	
Overload Duration	0.0	s

Statistics		
LAS5.00	67.6	dB
LAS10.00	64.2	dB
LAS33.30	56.2	dB
LAS50.00	53.7	dB
LAS66.60	51.4	dB
LAS90.00	46.0	dB

ATTACHMENT 2

FHWA Existing Vehicle Traffic Contour Distance Calculations – Uptown, North Park, and Golden Hill Planning Areas

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FHWA RD-77-108

Traffic Noise Prediction Model

Data Input Sheet

Project Name : Uptown, North Park, Golden Hill CPUs
Project Number : 6086
Modeled Condition : Freeway Existing

Surface Refelction: CNEL
Assessment Metric: Soft
Peak ratio to ADT: 10.00
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	K-Factor
1	I-5	Old Town Avenue	Washington Street	187,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
2		Washington Street	Sassafras Street	141,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
3		Sassafras Street	Pacific Highway	145,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
4		Pacific Highway	India Street	186,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
5		India Street	Hawthorn Street	192,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
6		Hawthorn Street	First Avenue	161,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
7		First Avenue	Sixth Avenue	204,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
8		Sixth Avenue	SR-163	204,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
9		SR-163	Pershing Drive	212,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
10		Pershing Drive	SR-94	212,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
11		SR-94	Imperial Avenue	165,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
12	I-8	Hotel Circle (W)	Hotel Circle (E)	188,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
13		Hotel Circle (E)	SR-163	197,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
14		SR-163	Mission Center Road	203,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
15		Mission Center Road	Qualcomm Way	217,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
16		Qualcomm Way	I-805	192,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
17		I-805	I-15	234,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
18	I-15	I-805	SR-94	113,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
19	I-805	I-8	Adams Avenue	194,000	65	50	94.00	4.00	2.00	80.00	10.00	10.00	
20		Adams Avenue	El Cajon Boulevard	176,000	65	50	94.00	4.00	2.00	80.00	10.00	10.00	
21		El Cajon Boulevard	University Avenue	172,000	65	50	94.00	4.00	2.00	80.00	10.00	10.00	
22		University Avenue	I-15	166,000	65	50	94.00	4.00	2.00	80.00	10.00	10.00	
23	SR-94	25th Street	28th Street	127,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
24		28th Street	30th Street	133,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
25		30th Street	I-15	147,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
26	SR-163	I-8	Sixth Avenue	161,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
27		Sixth Avenue	Washington Street	128,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
28		Washington Street	Robinson Avenue	96,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
29		Robinson Avenue	Richmond Street	105,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
30		Richmond Street	Quince Street	108,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	
31		Quince Street	I-5	110,000	65	50	96.00	3.00	1.00	80.00	10.00	10.00	

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Traffic Noise Prediction Model

Predicted Noise Levels

Project Name : Uptown, North Park, Golden Hill CPUs
Project Number : 6086
Modeled Condition : Freeway Existing
Assessment Metric: Soft

Segment	Roadway	Segment From	Segment To	Noise Levels, dBA Soft Auto	MT	HT	Total	Distance to Traffic Noise Level Contours, Feet 75 dB	70 dB	65 dB	60 dB	55 dB	50 dB
1	I-5	Old Town Avenue	Washington Street	84.4	75.5	74.2	85	243	524	1,128	2,430	5,236	11,280
2		Washington Street	Sassafras Street	83.2	74.3	73.0	84	199	429	924	1,991	4,288	9,239
3		Sassafras Street	Pacific Highway	83.3	74.4	73.1	84	205	442	953	2,053	4,422	9,527
4		Pacific Highway	India Street	84.4	75.5	74.2	85	239	516	1,111	2,393	5,156	11,108
5		India Street	Hawthorn Street	84.5	75.6	74.3	85	247	532	1,145	2,468	5,317	11,454
6		Hawthorn Street	First Avenue	83.7	74.8	73.5	85	218	470	1,013	2,183	4,702	10,131
7		First Avenue	Sixth Avenue	84.8	75.9	74.6	86	254	548	1,181	2,545	5,482	11,811
8	I-805	I-8	SR-163	84.5	76.9	77.4	86	262	565	1,218	2,624	5,653	12,180
9		Adams Avenue	Pershing Drive	84.0	76.5	76.9	85	247	532	1,145	2,468	5,317	11,454
10		Pershing Drive	SR-94	84.9	76.0	74.7	86	262	565	1,218	2,624	5,653	12,180
11		SR-94	Imperial Avenue	83.8	74.9	73.6	85	222	477	1,029	2,216	4,775	10,287
12	I-8	Hotel Circle (W)	Hotel Circle (E)	84.4	75.5	74.2	85	243	524	1,128	2,430	5,236	11,280
13		Hotel Circle (E)	SR-163	84.6	75.7	74.4	86	251	540	1,163	2,506	5,399	11,632
14		SR-163	Mission Center Road	84.7	75.8	74.5	86	254	548	1,181	2,545	5,482	11,811
15		Mission Center Road	Qualcomm Way	85.0	76.1	74.8	86	266	574	1,237	2,665	5,741	12,368
16		Qualcomm Way	I-805	84.5	75.6	74.3	85	247	532	1,145	2,468	5,317	11,454
17		I-805	I-15	85.4	76.5	75.2	86	279	601	1,295	2,790	6,011	12,951
18	I-15	I-805	SR-94	82.2	73.3	72.0	83	173	374	805	1,734	3,735	8,047
19	I-805	I-8	Adams Avenue	84.5	76.9	77.4	86	262	565	1,218	2,624	5,653	12,180
20		Adams Avenue	El Cajon Boulevard	84.0	76.5	76.9	85	247	532	1,145	2,468	5,317	11,454
21		El Cajon Boulevard	University Avenue	83.9	76.4	76.8	85	243	524	1,128	2,430	5,236	11,280
22		University Avenue	I-15	83.8	76.2	76.7	85	236	508	1,094	2,357	5,077	10,939
23	SR-94	25th Street	28th Street	82.7	73.8	72.5	84	187	403	869	1,872	4,033	8,689
24		28th Street	30th Street	82.9	74.0	72.7	84	193	416	896	1,930	4,159	8,960
25		30th Street	I-15	83.3	74.4	73.1	84	205	442	953	2,053	4,422	9,527
26	SR-163	I-8	Sixth Avenue	83.7	74.8	73.5	85	218	470	1,013	2,183	4,702	10,131
27		Sixth Avenue	Washington Street	82.7	73.8	72.5	84	187	403	869	1,872	4,033	8,689
28		Washington Street	Robinson Avenue	81.5	72.6	71.3	82	156	335	723	1,557	3,355	7,227
29		Robinson Avenue	Richmond Street	81.9	73.0	71.7	83	166	357	768	1,656	3,567	7,685
30		Richmond Street	Quince Street	82.0	73.1	71.8	83	168	362	780	1,681	3,622	7,804
31		Quince Street	I-5	82.1	73.2	71.9	83	171	368	792	1,707	3,678	7,924

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Traffic Noise Prediction Model

Data Input Sheet

Project Name : Uptown, North Park, Golden Hill CPUs
Project Number : 6086
Modeled Condition : Existing

Surface Refelction: CNEL
Assessment Metric: Hard
Peak ratio to ADT: 10.00
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	K-Factor
1	First Avenue	Arbor Drive	Washington Street	5,240	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
2		Washington Street	University Avenue	7,400	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
3		University Avenue	Robinson Avenue	10,100	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
4		Robinson Avenue	Pennsylvania Avenue	7,500	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
5		Pennsylvania Avenue	Walnut Avenue	7,261	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
6		Walnut Avenue	Laurel Street	4,695	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
7		Laurel Street	Hawthorn Street	7,290	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
8		Hawthorn Street	Grape Street	7,330	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
9		Grape Street	Elm Street	3,285	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
10	Fourth Avenue	Arbor Drive	Washington Street	12,390	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
11		Washington Street	University Avenue	10,400	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
12		University Avenue	Robinson Avenue	11,800	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
13		Robinson Avenue	Walnut Avenue	6,946	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
14		Walnut Avenue	Laurel Street	8,492	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
15		Laurel Street	Grape Street	7,790	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
16		Grape Street	Elm Street	7,570	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
17	Fifth Avenue	Washington Street	University Avenue	11,700	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
18		University Avenue	Robinson Avenue	10,300	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
19		Robinson Avenue	Walnut Avenue	12,209	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
20		Walnut Avenue	Laurel Street	11,400	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
21		Laurel Street	Hawthorn Street	9,260	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
22		Hawthorn Street	Grape Street	10,045	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
23		Grape Street	Elm Street	9,220	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
24	Sixth Avenue	Washington Street	University Avenue	16,877	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
25		University Avenue	Robinson Avenue	24,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
26		Robinson Avenue	Upas Street	15,000	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
27		Upas Street	Laurel Street	15,128	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
28		Laurel Street	Juniper Street	10,140	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
29		Juniper Street	Grape Street	10,915	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
30		Grape Street	Elm Street	10,650	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
31	Ninth Avenue	Washington Street	University Avenue	5,204	25	50	96.00	3.00	1.00	80.00	10.00	10.00	
32	Campus Avenue	Madison Avenue	Washington Avenue	3,175	25	50	96.00	3.00	1.00	80.00	10.00	10.00	

33		Washington Avenue	Polk Avenue	5,610	25	50	96.00	3.00	1.00	80.00	10.00	10.00
34	Cleveland Avenue	Tyler Street	Lincoln Street	4,865	25	50	96.00	3.00	1.00	80.00	10.00	10.00
35		Lincoln Street	Richmond Street	7,775	25	50	96.00	3.00	1.00	80.00	10.00	10.00
36	Curlew Street	Robinson Avenue	Reynard Way	1,720	25	50	96.00	3.00	1.00	80.00	10.00	10.00
37	Elm Street	Second Avenue	Third Avenue	7,889	25	50	96.00	3.00	1.00	80.00	10.00	10.00
38		Third Avenue	Fifth Avenue	8,179	25	50	96.00	3.00	1.00	80.00	10.00	10.00
39		Fifth Avenue	Sixth Avenue	8,179	25	50	96.00	3.00	1.00	80.00	10.00	10.00
40	Fort Stockton Drive	Arista Street	Sunset Boulevard	3,290	25	50	96.00	3.00	1.00	80.00	10.00	10.00
41		Sunset Boulevard	Hawk Street	6,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
42		Hawk Street	Goldfinch Street	8,450	25	50	96.00	3.00	1.00	80.00	10.00	10.00
43		Goldfinch Street	Falcon Street	2,910	25	50	96.00	3.00	1.00	80.00	10.00	10.00
44	Front Street	Dickinson Street	Arbor Drive	3,790	25	50	96.00	3.00	1.00	80.00	10.00	10.00
45		Arbor Drive	Washington Street	5,510	25	50	96.00	3.00	1.00	80.00	10.00	10.00
46	Grape Street	Albatross Street	First Avenue	2,082	25	50	96.00	3.00	1.00	80.00	10.00	10.00
47		First Avenue	Third Avenue	4,289	25	50	96.00	3.00	1.00	80.00	10.00	10.00
48		Third Avenue	Sixth Avenue	2,097	25	50	96.00	3.00	1.00	80.00	10.00	10.00
49	Hawthorn Street	Brant Street	First Avenue	11,558	30	50	96.00	3.00	1.00	80.00	10.00	10.00
50		First Avenue	Third Avenue	3,634	30	50	96.00	3.00	1.00	80.00	10.00	10.00
51		Third Avenue	Sixth Avenue	3,577	30	50	96.00	3.00	1.00	80.00	10.00	10.00
52	India Street	Washington Street	Winder Street	23,355	35	50	96.00	3.00	1.00	80.00	10.00	10.00
53		Winder Street	Glenwood Drive	23,355	35	50	96.00	3.00	1.00	80.00	10.00	10.00
54		Glenwood Drive	Sassafras Street	26,178	35	50	96.00	3.00	1.00	80.00	10.00	10.00
55		Sassafras Street	Redwood Street	18,676	35	50	96.00	3.00	1.00	80.00	10.00	10.00
56		Redwood Street	Palm Street	16,705	35	50	96.00	3.00	1.00	80.00	10.00	10.00
57	Juan Street	Harney Street	Witherby Street	2,345	30	50	96.00	3.00	1.00	80.00	10.00	10.00
58	Laurel Street	Columbia Street	Union Street	13,691	25	50	96.00	3.00	1.00	80.00	10.00	10.00
59		Union Street	First Avenue	11,128	25	50	96.00	3.00	1.00	80.00	10.00	10.00
60		First Avenue	Third Avenue	11,326	25	50	96.00	3.00	1.00	80.00	10.00	10.00
61		Third Avenue	Sixth Avenue	11,516	25	50	96.00	3.00	1.00	80.00	10.00	10.00
62	Lewis Street	Fort Stockton Drive	Goldfinch Street	3,720	25	50	96.00	3.00	1.00	80.00	10.00	10.00
63	Lincoln Avenue	Washington Street	Park Boulevard	8,155	25	50	96.00	3.00	1.00	80.00	10.00	10.00
64	Madison Avenue	Cleveland Avenue	Park Boulevard	3,750	25	50	96.00	3.00	1.00	80.00	10.00	10.00
65	Meade Avenue	Cleveland Avenue	Park Boulevard	3,290	25	50	96.00	3.00	1.00	80.00	10.00	10.00
66	Normal Street	Park Boulevard	Washington Street	22,296	30	50	96.00	3.00	1.00	80.00	10.00	10.00
67		Washington Street	University Avenue	4,974	30	50	96.00	3.00	1.00	80.00	10.00	10.00
68	Park Boulevard	Adams Avenue	Mission Avenue	14,839	30	50	96.00	3.00	1.00	80.00	10.00	10.00
69		Mission Avenue	El Cajon Boulevard	11,806	30	50	96.00	3.00	1.00	80.00	10.00	10.00
70		El Cajon Boulevard	Polk Avenue	11,524	30	50	96.00	3.00	1.00	80.00	10.00	10.00
71		Polk Avenue	University Avenue	13,936	35	50	96.00	3.00	1.00	80.00	10.00	10.00
72		University Avenue	Robinson Avenue	14,400	35	50	96.00	3.00	1.00	80.00	10.00	10.00
73		Robinson Avenue	Upas Street	12,501	35	50	96.00	3.00	1.00	80.00	10.00	10.00
74		Upas Street	Zoo Place	13,807	35	50	96.00	3.00	1.00	80.00	10.00	10.00
75	Reynard Way	Torrance Street	Curlew Street	1,955	30	50	96.00	3.00	1.00	80.00	10.00	10.00

76		Curlew Street	Laurel Street	7,200	30	50	96.00	3.00	1.00	80.00	10.00	10.00
77	Richmond Street	Cleveland Avenue	University Avenue	7,085	25	50	96.00	3.00	1.00	80.00	10.00	10.00
78		University Avenue	Robinson Avenue	5,345	25	50	96.00	3.00	1.00	80.00	10.00	10.00
79		Robinson Avenue	Upas Street	5,015	25	50	96.00	3.00	1.00	80.00	10.00	10.00
80	Robinson Avenue	Brant Street	First Avenue	1,995	25	50	96.00	3.00	1.00	80.00	10.00	10.00
81		First Avenue	Third Avenue	5,800	25	50	96.00	3.00	1.00	80.00	10.00	10.00
82		Third Avenue	Eighth Avenue	11,022	25	50	96.00	3.00	1.00	80.00	10.00	10.00
83		Eighth Avenue	Tenth Avenue	21,298	25	50	96.00	3.00	1.00	80.00	10.00	10.00
84		Tenth Avenue	Richmond Street	21,298	30	50	96.00	3.00	1.00	80.00	10.00	10.00
85		Richmond Street	Park Boulevard	7,269	30	50	96.00	3.00	1.00	80.00	10.00	10.00
86	San Diego Avenue	Hortensia Street	McKee Street	5,830	35	50	96.00	3.00	1.00	80.00	10.00	10.00
87		McKee Street	Washington Street	13,920	35	50	96.00	3.00	1.00	80.00	10.00	10.00
88		Washington Street	India Street	4,920	35	50	96.00	3.00	1.00	80.00	10.00	10.00
89	State Street	Laurel Street	Juniper Street	4,140	25	50	96.00	3.00	1.00	80.00	10.00	10.00
90	Sunset Boulevard	Witherby Street	Fort Stockton Drive	2,595	25	50	96.00	3.00	1.00	80.00	10.00	10.00
91	University Avenue	Ibis Street	Albatross Street	10,527	25	50	96.00	3.00	1.00	80.00	10.00	10.00
92		Albatross Street	First Avenue	16,851	25	50	96.00	3.00	1.00	80.00	10.00	10.00
93		First Avenue	Fourth Avenue	20,250	25	50	96.00	3.00	1.00	80.00	10.00	10.00
94		Fourth Avenue	Fifth Avenue	20,250	25	50	96.00	3.00	1.00	80.00	10.00	10.00
95		Fifth Avenue	Sixth Avenue	21,184	25	50	96.00	3.00	1.00	80.00	10.00	10.00
96		Sixth Avenue	Eighth Avenue	24,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
97		Eighth Avenue	Vermont Street	24,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
98		Vermont Street	Richmond Street	23,938	25	50	96.00	3.00	1.00	80.00	10.00	10.00
99		Richmond Street	Park Boulevard	16,275	25	50	96.00	3.00	1.00	80.00	10.00	10.00
100	Upas Street	Third Avenue	Sixth Avenue	4,475	25	50	96.00	3.00	1.00	80.00	10.00	10.00
101	Washington Street	India Street	University Avenue	27,929	45	50	96.00	3.00	1.00	80.00	10.00	10.00
102		University Avenue	First Avenue	20,477	35	50	96.00	3.00	1.00	80.00	10.00	10.00
103		First Avenue	Fourth Avenue	32,515	35	50	96.00	3.00	1.00	80.00	10.00	10.00
104		Fourth Avenue	Fifth Avenue	30,900	35	50	96.00	3.00	1.00	80.00	10.00	10.00
105		Fifth Avenue	Sixth Avenue	38,428	35	50	96.00	3.00	1.00	80.00	10.00	10.00
106		Sixth Avenue	Richmond Street	41,778	35	50	96.00	3.00	1.00	80.00	10.00	10.00
107		Richmond Street	Normal Street	38,725	35	50	96.00	3.00	1.00	80.00	10.00	10.00
108	30th Street	Adams Avenue	Meade Avenue	6,325	25	50	96.00	3.00	1.00	80.00	10.00	10.00
109		Meade Avenue	El Cajon Boulevard	10,912	25	50	96.00	3.00	1.00	80.00	10.00	10.00
110		El Cajon Boulevard	Howard Avenue	12,684	25	50	96.00	3.00	1.00	80.00	10.00	10.00
111		Howard Avenue	Lincoln Avenue	12,703	25	50	96.00	3.00	1.00	80.00	10.00	10.00
112		Lincoln Avenue	University Avenue	12,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
113		University Avenue	North Park Way	20,407	25	50	96.00	3.00	1.00	80.00	10.00	10.00
114		North Park Way	Upas Street	12,241	25	50	96.00	3.00	1.00	80.00	10.00	10.00
115		Upas Street	Redwood Street	8,824	25	50	96.00	3.00	1.00	80.00	10.00	10.00
116		Redwood Street	Juniper Street	10,013	25	50	96.00	3.00	1.00	80.00	10.00	10.00
117	32nd Street	Howard Avenue	Lincoln Avenue	1,845	25	50	96.00	3.00	1.00	80.00	10.00	10.00
118		Lincoln Avenue	University Avenue	3,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00

119		University Avenue	Myrtle Street	5,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
120		Myrtle Street	Upas Street	6,985	25	50	96.00	3.00	1.00	80.00	10.00	10.00
121		Upas Street	Redwood Street	5,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
122		Redwood Street	Juniper Street	2,218	25	50	96.00	3.00	1.00	80.00	10.00	10.00
123	Adams Avenue	Park Boulevard	Alabama Street	6,758	25	50	96.00	3.00	1.00	80.00	10.00	10.00
124		Alabama Street	Texas Street	8,966	25	50	96.00	3.00	1.00	80.00	10.00	10.00
125		Texas Street	30th Street	10,700	25	50	96.00	3.00	1.00	80.00	10.00	10.00
126		30th Street	West Mountain View Dr	19,929	25	50	96.00	3.00	1.00	80.00	10.00	10.00
127	Boundary Street	University Avenue	North Park Way	12,620	25	50	96.00	3.00	1.00	80.00	10.00	10.00
128		North Park Way	Upas Street	2,730	25	50	96.00	3.00	1.00	80.00	10.00	10.00
129		Upas Street	Redwood Street	4,670	25	50	96.00	3.00	1.00	80.00	10.00	10.00
130		Redwood Street	Commonwealth Avenue	3,550	25	50	96.00	3.00	1.00	80.00	10.00	10.00
131	Commonwealth Avenue	Boundary Street	Juniper Street	1,480	25	50	96.00	3.00	1.00	80.00	10.00	10.00
132	El Cajon Boulevard	Park Boulevard	Florida Street	19,407	35	50	96.00	3.00	1.00	80.00	10.00	10.00
133		Florida Street	Texas Street	23,366	35	50	96.00	3.00	1.00	80.00	10.00	10.00
134		Texas Street	Oregon Street	24,479	35	50	96.00	3.00	1.00	80.00	10.00	10.00
135		Oregon Street	Utah Street	32,468	35	50	96.00	3.00	1.00	80.00	10.00	10.00
136		Utah Street	30th Street	32,191	35	50	96.00	3.00	1.00	80.00	10.00	10.00
137		30th Street	Illinois Street	39,116	35	50	96.00	3.00	1.00	80.00	10.00	10.00
138		Illinois Street	32nd Street	46,062	35	50	96.00	3.00	1.00	80.00	10.00	10.00
139	Florida Street	El Cajon Boulevard	University Avenue	3,375	25	50	96.00	3.00	1.00	80.00	10.00	10.00
140		University Avenue	Robinson Avenue	5,450	25	50	96.00	3.00	1.00	80.00	10.00	10.00
141		Robinson Avenue	Upas Street	5,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
142	Florida Drive	Upas Street	Morley Field Drive	5,498	45	50	96.00	3.00	1.00	80.00	10.00	10.00
143	Howard Avenue	Park Boulevard	Florida Street	3,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
144		Florida Street	Texas Street	3,566	25	50	96.00	3.00	1.00	80.00	10.00	10.00
145		Texas Street	Utah Street	4,815	25	50	96.00	3.00	1.00	80.00	10.00	10.00
146		Utah Street	30th Street	6,137	25	50	96.00	3.00	1.00	80.00	10.00	10.00
147		30th Street	32nd Street	7,187	25	50	96.00	3.00	1.00	80.00	10.00	10.00
148	Juniper Street	30th Street	32nd Street	3,646	25	50	96.00	3.00	1.00	80.00	10.00	10.00
149		32nd Street	Commonwealth Avenue	2,826	25	50	96.00	3.00	1.00	80.00	10.00	10.00
150	Landis Street	Boundary Street	Nile Street	3,790	25	50	96.00	3.00	1.00	80.00	10.00	10.00
151	Lincoln Avenue	Florida Street	Texas Street	990	25	50	96.00	3.00	1.00	80.00	10.00	10.00
152		Texas Street	Oregon Street	2,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
153		Oregon Street	30th Street	4,550	30	50	96.00	3.00	1.00	80.00	10.00	10.00
154		30th Street	32nd Street	5,563	30	50	96.00	3.00	1.00	80.00	10.00	10.00
155		32nd Street	Boundary Street	5,473	30	50	96.00	3.00	1.00	80.00	10.00	10.00
156	Madison Avenue	Park Boulevard	Mission Avenue	6,110	25	50	96.00	3.00	1.00	80.00	10.00	10.00
157		Mission Avenue	Texas Street	8,040	25	50	96.00	3.00	1.00	80.00	10.00	10.00
158		Texas Street	Boundary Street	5,295	25	50	96.00	3.00	1.00	80.00	10.00	10.00
159	Meade Avenue	Park Boulevard	Texas Street	4,060	25	50	96.00	3.00	1.00	80.00	10.00	10.00
160		Texas Street	30th Avenue	5,280	25	50	96.00	3.00	1.00	80.00	10.00	10.00
161		30th Avenue	Illinois Avenue	8,576	25	50	96.00	3.00	1.00	80.00	10.00	10.00

162		Illinois Avenue	32nd Street	8,651	25	50	96.00	3.00	1.00	80.00	10.00	10.00
163	Mission Avenue	Park Boulevard	Texas Street	1,497	25	50	96.00	3.00	1.00	80.00	10.00	10.00
164	Monroe Avenue	Park Boulevard	Mission Avenue	1,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
165		Mission Avenue	Texas Street	1,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
166		Texas Street	30th Street	2,158	25	50	96.00	3.00	1.00	80.00	10.00	10.00
167	Nile Street	Landis Street	Thorn Street	4,305	25	50	96.00	3.00	1.00	80.00	10.00	10.00
168	North Park Way	30th Street	32nd Street	6,737	25	50	96.00	3.00	1.00	80.00	10.00	10.00
169		32nd Street	Boundary Street	6,737	25	50	96.00	3.00	1.00	80.00	10.00	10.00
170	Orange Avenue/Howard Av	Iowa Street	I-805	5,938	25	50	96.00	3.00	1.00	80.00	10.00	10.00
171	Pentuckett Avenue	Juniper Street	Fir Street	2,225	25	50	96.00	3.00	1.00	80.00	10.00	10.00
172	Pershing Drive	Upas Street	Redwood Street	6,439	25	50	96.00	3.00	1.00	80.00	10.00	10.00
173	Redwood Street	28th Street	30th Street	5,988	25	50	96.00	3.00	1.00	80.00	10.00	10.00
174		30th Street	32nd Street	4,912	25	50	96.00	3.00	1.00	80.00	10.00	10.00
175		32nd Street	Boundary Street	1,650	25	50	96.00	3.00	1.00	80.00	10.00	10.00
176	Robinson Avenue	Park Boulevard	Florida Street	4,160	30	50	96.00	3.00	1.00	80.00	10.00	10.00
177	Texas Street	Adams Avenue	Mission Avenue	27,532	40	50	96.00	3.00	1.00	80.00	10.00	10.00
178		Mission Avenue	El Cajon Boulevard	16,563	40	50	96.00	3.00	1.00	80.00	10.00	10.00
179		El Cajon Boulevard	Howard Avenue	10,404	25	50	96.00	3.00	1.00	80.00	10.00	10.00
180		Howard Avenue	University Avenue	9,461	25	50	96.00	3.00	1.00	80.00	10.00	10.00
181		University Avenue	Myrtle Avenue	3,821	25	50	96.00	3.00	1.00	80.00	10.00	10.00
182		Myrtle Avenue	Upas Street	2,814	25	50	96.00	3.00	1.00	80.00	10.00	10.00
183	University Avenue	Park Boulevard	Florida Street	19,200	30	50	96.00	3.00	1.00	80.00	10.00	10.00
184		Florida Street	Texas Street	21,611	30	50	96.00	3.00	1.00	80.00	10.00	10.00
185		Texas Street	Oregon Street	20,058	30	50	96.00	3.00	1.00	80.00	10.00	10.00
186		Oregon Street	Utah Street	20,361	30	50	96.00	3.00	1.00	80.00	10.00	10.00
187		Utah Street	30th Street	19,173	25	50	96.00	3.00	1.00	80.00	10.00	10.00
188		30th Street	Illinois Street	21,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
189		Illinois Street	32nd Street	25,857	25	50	96.00	3.00	1.00	80.00	10.00	10.00
190		32nd Street	Boundary Street	25,568	25	50	96.00	3.00	1.00	80.00	10.00	10.00
191	Upas Street	Alabama Street	Texas Street	7,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
192		Texas Street	Pershing Road	7,160	25	50	96.00	3.00	1.00	80.00	10.00	10.00
193		Pershing Road	30th Street	9,574	25	50	96.00	3.00	1.00	80.00	10.00	10.00
194		30th Street	32nd Street	4,347	25	50	96.00	3.00	1.00	80.00	10.00	10.00
195		32nd Street	Boundary Street	2,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
196	Utah Street	Adams Avenue	Monroe Avenue	992	25	50	96.00	3.00	1.00	80.00	10.00	10.00
197		Monroe Avenue	Meade Avenue	2,841	25	50	96.00	3.00	1.00	80.00	10.00	10.00
198		Meade Avenue	El Cajon Boulevard	2,841	25	50	96.00	3.00	1.00	80.00	10.00	10.00
199		El Cajon Boulevard	Howard Avenue	4,362	30	50	96.00	3.00	1.00	80.00	10.00	10.00
200		Howard Avenue	Lincoln Avenue	2,535	30	50	96.00	3.00	1.00	80.00	10.00	10.00
201		Lincoln Avenue	University Avenue	2,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00
202		University Avenue	North Park Way	4,740	25	50	96.00	3.00	1.00	80.00	10.00	10.00
203		North Park Way	Upas Street	1,919	25	50	96.00	3.00	1.00	80.00	10.00	10.00
204	25th Street	Russ Boulevard	C Street	1,198	25	50	96.00	3.00	1.00	80.00	10.00	10.00

205		C Street	Broadway	9,409	25	50	96.00	3.00	1.00	80.00	10.00	10.00
206		Broadway	F Street	12,105	25	50	96.00	3.00	1.00	80.00	10.00	10.00
207	26th Street	Russ Boulevard	B Street	9,152	25	50	96.00	3.00	1.00	80.00	10.00	10.00
208		B Street	C Street	2,146	25	50	96.00	3.00	1.00	80.00	10.00	10.00
209	28th Street	Russ Boulevard	C Street	4,888	30	50	96.00	3.00	1.00	80.00	10.00	10.00
210		C Street	Broadway	8,150	30	50	96.00	3.00	1.00	80.00	10.00	10.00
211		Broadway	SR-94	10,697	30	50	96.00	3.00	1.00	80.00	10.00	10.00
212	30th Street	Grape Street	Beech Street	3,865	30	50	96.00	3.00	1.00	80.00	10.00	10.00
213		Beech Street	A Street	16,610	30	50	96.00	3.00	1.00	80.00	10.00	10.00
214		A Street	Broadway	16,610	30	50	96.00	3.00	1.00	80.00	10.00	10.00
215		Broadway	SR-94	4,210	30	50	96.00	3.00	1.00	80.00	10.00	10.00
216	31st Street	Juniper Street	Grape Street	2,299	25	50	96.00	3.00	1.00	80.00	10.00	10.00
217	B Street	19th Street	20th Street	5,372	30	50	96.00	3.00	1.00	80.00	10.00	10.00
218		20th Street	25th Street	3,708	30	50	96.00	3.00	1.00	80.00	10.00	10.00
219		25th Street	26th Street	4,600	30	50	96.00	3.00	1.00	80.00	10.00	10.00
220		26th Street	28th Street	6,200	30	50	96.00	3.00	1.00	80.00	10.00	10.00
221		28th Street	30th Street	2,713	30	50	96.00	3.00	1.00	80.00	10.00	10.00
222	Beech Street	28th Street	Fern Street	1,770	30	50	96.00	3.00	1.00	80.00	10.00	10.00
223	Broadway	19th Street	20th Street	5,788	25	50	96.00	3.00	1.00	80.00	10.00	10.00
224		20th Street	25th Street	4,867	25	50	96.00	3.00	1.00	80.00	10.00	10.00
225		25th Street	28th Street	4,165	25	50	96.00	3.00	1.00	80.00	10.00	10.00
226		28th Street	30th Street	3,279	25	50	96.00	3.00	1.00	80.00	10.00	10.00
227		30th Street	SR-94	15,881	25	50	96.00	3.00	1.00	80.00	10.00	10.00
228	C Street	19th Street	20th Street	3,827	30	50	96.00	3.00	1.00	80.00	10.00	10.00
229		20th Street	25th Street	3,923	30	50	96.00	3.00	1.00	80.00	10.00	10.00
230		25th Street	28th Street	3,923	30	50	96.00	3.00	1.00	80.00	10.00	10.00
231		28th Street	30th Street	2,658	30	50	96.00	3.00	1.00	80.00	10.00	10.00
232		30th Street	34th Street	4,230	30	50	96.00	3.00	1.00	80.00	10.00	10.00
233	Cedar Street	Fern Street	Felton Street	2,815	30	50	96.00	3.00	1.00	80.00	10.00	10.00
234	Fern Street	Juniper Street	Grape Street	8,350	25	50	96.00	3.00	1.00	80.00	10.00	10.00
235		Grape Street	A Street	8,082	25	50	96.00	3.00	1.00	80.00	10.00	10.00
236	Grape Street	30th Street	31st Street	2,614	25	50	96.00	3.00	1.00	80.00	10.00	10.00
237	Florida Drive	Morley Field Drive	Zoo Place	7,770	45	50	96.00	3.00	1.00	80.00	10.00	10.00
238	Golf Course Drive	26th Street	28th Street	3,249	25	50	96.00	3.00	1.00	80.00	10.00	10.00
239	Park Boulevard	Zoo Place	Space Theater Way	17,200	40	50	96.00	3.00	1.00	80.00	10.00	10.00
240		Space Theater Way	Presidents Way	16,172	40	50	96.00	3.00	1.00	80.00	10.00	10.00
241		Presidents Way	SR-163 NB On-Ramp	20,351	40	50	96.00	3.00	1.00	80.00	10.00	10.00
242	Pershing Drive	Redwood Street	Florida Drive	10,663	50	50	96.00	3.00	1.00	80.00	10.00	10.00
243		Florida Drive	I-5 Ramps	32,826	50	50	96.00	3.00	1.00	80.00	10.00	10.00
244		I-5 Ramps	B Street	2,299	50	50	96.00	3.00	1.00	80.00	10.00	10.00

FHWA RD-77-108

Traffic Noise Prediction Model

Predicted Noise Levels

Project Name : Uptown, North Park, Golden Hill CPUs
Project Number : 6086
Modeled Condition : Existing
Assessment Metric: Hard

		Segment		Noise Levels, dBA Hard				Distance to Traffic Noise Level Contours, Feet					
Segment	Roadway	From	To	Auto	MT	HT	Total	75 dB	70 dB	65 dB	60 dB	55 dB	50 dB
1	First Avenue	Arbor Drive	Washington Street	59.2	54.7	57.1	62	3	8	26	81	256	811
2		Washington Street	University Avenue	60.7	56.2	58.6	64	4	11	36	115	362	1,145
3		University Avenue	Robinson Avenue	62.0	57.6	59.9	65	5	16	50	158	500	1,581
4		Robinson Avenue	Pennsylvania Avenue	60.8	56.3	58.6	64	4	12	37	117	371	1,172
5		Pennsylvania Avenue	Walnut Avenue	60.6	56.1	58.5	64	4	11	36	115	362	1,145
6		Walnut Avenue	Laurel Street	58.7	54.2	56.6	62	2	7	23	74	234	740
7		Laurel Street	Hawthorn Street	60.6	56.2	58.5	64	4	11	36	115	362	1,145
8		Hawthorn Street	Grape Street	60.7	56.2	58.5	64	4	11	36	115	362	1,145
9		Grape Street	Elm Street	57.2	52.7	55.0	60	2	5	16	51	162	512
10	Fourth Avenue	Arbor Drive	Washington Street	62.9	58.5	60.8	66	6	19	62	195	615	1,945
11		Washington Street	University Avenue	62.2	57.7	60.0	65	5	16	51	162	512	1,618
12		University Avenue	Robinson Avenue	62.7	58.2	60.6	66	6	19	59	186	587	1,858
13		Robinson Avenue	Walnut Avenue	60.4	55.9	58.3	63	3	11	35	109	346	1,094
14		Walnut Avenue	Laurel Street	61.3	56.8	59.2	64	4	13	42	132	416	1,315
15		Laurel Street	Grape Street	60.9	56.4	58.8	64	4	12	39	123	388	1,227
16		Grape Street	Elm Street	60.8	56.3	58.7	64	4	12	37	117	371	1,172
17	Fifth Avenue	Washington Street	University Avenue	62.7	58.2	60.6	66	6	18	57	182	574	1,815
18		University Avenue	Robinson Avenue	62.1	57.7	60.0	65	5	16	51	162	512	1,618
19		Robinson Avenue	Walnut Avenue	62.9	58.4	60.7	66	6	19	60	190	601	1,901
20		Walnut Avenue	Laurel Street	62.6	58.1	60.4	66	6	18	56	177	561	1,774
21		Laurel Street	Hawthorn Street	61.7	57.2	59.5	65	5	14	46	144	456	1,442
22		Hawthorn Street	Grape Street	62.0	57.5	59.9	65	5	16	50	158	500	1,581
23		Grape Street	Elm Street	61.6	57.2	59.5	65	5	14	46	144	456	1,442
24	Sixth Avenue	Washington Street	University Avenue	64.3	59.8	62.1	67	8	26	83	262	830	2,624
25		University Avenue	Robinson Avenue	66.0	61.5	63.8	69	12	39	123	388	1,227	3,881
26		Robinson Avenue	Upas Street	63.8	59.3	61.6	67	7	23	74	234	740	2,339
27		Upas Street	Laurel Street	63.8	59.3	61.7	67	7	23	74	234	740	2,339
28		Laurel Street	Juniper Street	62.1	57.6	59.9	65	5	16	50	158	500	1,581
29		Juniper Street	Grape Street	62.4	57.9	60.3	65	5	17	54	169	536	1,694
30		Grape Street	Elm Street	62.3	57.8	60.1	65	5	17	52	166	524	1,656
31	Ninth Avenue	Washington Street	University Avenue	56.9	53.5	56.3	61	2	6	18	57	182	574
32	Campus Avenue	Madison Avenue	Washington Avenue	54.7	51.3	54.2	58	1	3	11	35	109	346
33		Washington Avenue	Polk Avenue	57.2	53.8	56.6	61	2	6	19	62	195	615

34	Cleveland Avenue	Tyler Street	Lincoln Street	56.6	53.2	56.0	60	2	5	17	54	169	536
35		Lincoln Street	Richmond Street	58.6	55.2	58.1	62	3	8	27	85	269	849
36	Curlew Street	Robinson Avenue	Reynard Way	52.1	48.6	51.5	56	1	2	6	19	59	186
37	Elm Street	Second Avenue	Third Avenue	58.7	55.3	58.1	62	3	9	27	87	275	869
38		Third Avenue	Fifth Avenue	58.8	55.4	58.3	63	3	9	28	89	281	889
39		Fifth Avenue	Sixth Avenue	58.8	55.4	58.3	63	3	9	28	89	281	889
40	Fort Stockton Drive	Arista Street	Sunset Boulevard	54.9	51.5	54.3	59	1	4	11	36	115	362
41		Sunset Boulevard	Hawk Street	57.6	54.1	57.0	61	2	7	21	66	208	659
42		Hawk Street	Goldfinch Street	59.0	55.6	58.4	63	3	9	29	93	294	931
43		Goldfinch Street	Falcon Street	54.4	50.9	53.8	58	1	3	10	32	100	315
44	Front Street	Dickinson Street	Arbor Drive	55.5	52.1	54.9	59	1	4	13	42	132	416
45		Arbor Drive	Washington Street	57.1	53.7	56.6	61	2	6	19	60	190	601
46	Grape Street	Albatross Street	First Avenue	52.9	49.5	52.3	57	1	2	7	23	72	229
47		First Avenue	Third Avenue	56.0	52.6	55.5	60	1	5	15	47	148	467
48		Third Avenue	Sixth Avenue	52.9	49.5	52.4	57	1	2	7	23	72	229
49	Hawthorn Street	Brant Street	First Avenue	62.6	58.2	60.5	66	6	18	57	182	574	1,815
50		First Avenue	Third Avenue	57.6	53.1	55.5	61	2	6	18	56	177	561
51		Third Avenue	Sixth Avenue	57.5	53.1	55.4	61	2	6	18	56	177	561
52	India Street	Washington Street	Winder Street	67.6	62.3	62.7	70	15	47	148	467	1,476	4,666
53		Winder Street	Glenwood Drive	67.6	62.3	62.7	70	15	47	148	467	1,476	4,666
54		Glenwood Drive	Sassafras Street	68.1	62.7	63.2	70	17	52	166	524	1,656	5,236
55		Sassafras Street	Redwood Street	66.6	61.3	61.7	69	12	37	117	371	1,172	3,707
56		Redwood Street	Palm Street	66.2	60.8	61.2	68	10	33	104	330	1,045	3,303
57	Juan Street	Harney Street	Witherby Street	55.7	51.2	53.6	59	1	4	11	36	115	362
58	Laurel Street	Columbia Street	Union Street	61.1	57.7	60.5	65	5	15	48	151	477	1,510
59		Union Street	First Avenue	60.2	56.8	59.6	64	4	12	39	123	388	1,227
60		First Avenue	Third Avenue	60.3	56.8	59.7	64	4	12	39	123	388	1,227
61		Third Avenue	Sixth Avenue	60.3	56.9	59.8	64	4	13	40	126	397	1,256
62	Lewis Street	Fort Stockton Drive	Goldfinch Street	55.4	52.0	54.9	59	1	4	13	41	129	406
63	Lincoln Avenue	Washington Street	Park Boulevard	58.8	55.4	58.3	63	3	9	28	89	281	889
64	Madison Avenue	Cleveland Avenue	Park Boulevard	55.5	52.0	54.9	59	1	4	13	41	129	406
65	Meade Avenue	Cleveland Avenue	Park Boulevard	54.9	51.5	54.3	59	1	4	11	36	115	362
66	Normal Street	Park Boulevard	Washington Street	65.5	61.0	63.4	68	11	35	109	346	1,094	3,459
67		Washington Street	University Avenue	59.0	54.5	56.8	62	2	8	24	77	245	774
68	Park Boulevard	Adams Avenue	Mission Avenue	63.7	59.2	61.6	67	7	23	74	234	740	2,339
69		Mission Avenue	El Cajon Boulevard	62.7	58.2	60.6	66	6	19	59	186	587	1,858
70		El Cajon Boulevard	Polk Avenue	62.6	58.1	60.5	66	6	18	57	182	574	1,815
71		Polk Avenue	University Avenue	65.4	60.0	60.4	67	9	27	87	275	869	2,748
72		University Avenue	Robinson Avenue	65.5	60.2	60.6	68	9	29	91	288	910	2,877
73		Robinson Avenue	Upas Street	64.9	59.5	60.0	67	8	25	79	251	792	2,506
74		Upas Street	Zoo Place	65.3	60.0	60.4	67	9	27	87	275	869	2,748
75	Reynard Way	Torrance Street	Curlew Street	54.9	50.4	52.8	58	1	3	10	31	97	308
76		Curlew Street	Laurel Street	60.6	56.1	58.4	64	4	11	35	112	354	1,119

77	Richmond Street	Cleveland Avenue	University Avenue	58.2	54.8	57.7	62	2	8	24	77	245	774
78		University Avenue	Robinson Avenue	57.0	53.6	56.4	61	2	6	19	59	186	587
79		Robinson Avenue	Upas Street	56.7	53.3	56.2	60	2	5	17	55	173	548
80	Robinson Avenue	Brant Street	First Avenue	52.7	49.3	52.1	56	1	2	7	22	69	218
81		First Avenue	Third Avenue	57.4	53.9	56.8	61	2	6	20	63	199	629
82		Third Avenue	Eighth Avenue	60.1	56.7	59.6	64	4	12	38	120	379	1,199
83		Eighth Avenue	Tenth Avenue	63.0	59.6	62.4	67	7	23	74	234	740	2,339
84		Tenth Avenue	Richmond Street	65.3	60.8	63.2	68	10	33	104	330	1,045	3,303
85		Richmond Street	Park Boulevard	60.6	56.1	58.5	64	4	11	36	115	362	1,145
86	San Diego Avenue	Hortensia Street	McKee Street	61.6	56.2	56.6	64	4	12	37	117	371	1,172
87		McKee Street	Washington Street	65.4	60.0	60.4	67	9	27	87	275	869	2,748
88		Washington Street	India Street	60.8	55.5	55.9	63	3	10	31	97	308	975
89	State Street	Laurel Street	Juniper Street	55.9	52.5	55.3	60	1	5	14	46	144	456
90	Sunset Boulevard	Witherby Street	Fort Stockton Drive	53.9	50.4	53.3	58	1	3	9	28	89	281
91	University Avenue	Ibis Street	Albatross Street	59.9	56.5	59.4	64	4	11	36	115	362	1,145
92		Albatross Street	First Avenue	62.0	58.6	61.4	66	6	19	59	186	587	1,858
93		First Avenue	Fourth Avenue	62.8	59.4	62.2	67	7	22	71	223	706	2,233
94		Fourth Avenue	Fifth Avenue	62.8	59.4	62.2	67	7	22	71	223	706	2,233
95		Fifth Avenue	Sixth Avenue	63.0	59.5	62.4	67	7	23	74	234	740	2,339
96		Sixth Avenue	Eighth Avenue	63.6	60.2	63.0	67	8	27	85	269	849	2,685
97		Eighth Avenue	Vermont Street	63.6	60.2	63.0	67	8	27	85	269	849	2,685
98		Vermont Street	Richmond Street	63.5	60.1	62.9	67	8	26	83	262	830	2,624
99		Richmond Street	Park Boulevard	61.8	58.4	61.3	66	6	18	56	177	561	1,774
100	Upas Street	Third Avenue	Sixth Avenue	56.2	52.8	55.7	60	2	5	15	49	155	489
101	Washington Street	India Street	University Avenue	71.5	64.7	64.5	73	32	100	315	998	3,155	9,976
102		University Avenue	First Avenue	67.0	61.7	62.1	69	13	41	129	406	1,285	4,064
103		First Avenue	Fourth Avenue	69.0	63.7	64.1	71	20	64	204	644	2,037	6,441
104		Fourth Avenue	Fifth Avenue	68.8	63.5	63.9	71	19	62	195	615	1,945	6,151
105		Fifth Avenue	Sixth Avenue	69.8	64.4	64.8	72	24	76	239	757	2,393	7,568
106		Sixth Avenue	Richmond Street	70.1	64.8	65.2	72	26	83	262	830	2,624	8,298
107		Richmond Street	Normal Street	69.8	64.4	64.9	72	24	77	245	774	2,449	7,744
108	30th Street	Adams Avenue	Meade Avenue	57.7	54.3	57.2	61	2	7	22	69	218	690
109		Meade Avenue	El Cajon Boulevard	60.1	56.7	59.5	64	4	12	38	120	379	1,199
110		El Cajon Boulevard	Howard Avenue	60.8	57.3	60.2	64	4	14	44	138	435	1,377
111		Howard Avenue	Lincoln Avenue	60.8	57.3	60.2	64	4	14	44	138	435	1,377
112		Lincoln Avenue	University Avenue	60.7	57.3	60.1	64	4	14	44	138	435	1,377
113		University Avenue	North Park Way	62.8	59.4	62.2	67	7	22	71	223	706	2,233
114		North Park Way	Upas Street	60.6	57.2	60.0	64	4	13	43	135	426	1,346
115		Upas Street	Redwood Street	59.2	55.7	58.6	63	3	10	31	97	308	975
116		Redwood Street	Juniper Street	59.7	56.3	59.2	63	3	11	35	109	346	1,094
117	32nd Street	Howard Avenue	Lincoln Avenue	52.4	48.9	51.8	56	1	2	6	20	64	204
118		Lincoln Avenue	University Avenue	54.9	51.5	54.3	59	1	4	11	36	115	362
119		University Avenue	Myrtle Street	56.7	53.3	56.1	60	2	5	17	55	173	548

120		Myrtle Street	Upas Street	58.2	54.7	57.6	62	2	8	24	76	239	757
121		Upas Street	Redwood Street	56.9	53.4	56.3	61	2	6	18	57	182	574
122		Redwood Street	Juniper Street	53.2	49.7	52.6	57	1	2	8	24	77	245
123	Adams Avenue	Park Boulevard	Alabama Street	58.0	54.6	57.4	62	2	7	23	74	234	740
124		Alabama Street	Texas Street	59.2	55.8	58.7	63	3	10	31	97	308	975
125		Texas Street	30th Street	60.0	56.6	59.4	64	4	12	37	117	371	1,172
126		30th Street	West Mountain View Dr	62.7	59.3	62.1	66	7	22	69	218	690	2,183
127	Boundary Street	University Avenue	North Park Way	60.7	57.3	60.2	64	4	14	44	138	435	1,377
128		North Park Way	Upas Street	54.1	50.6	53.5	58	1	3	10	30	95	301
129		Upas Street	Redwood Street	56.4	53.0	55.8	60	2	5	16	51	162	512
130		Redwood Street	Commonwealth Avenue	55.2	51.8	54.6	59	1	4	12	39	123	388
131	Commonwealth Avenue	Boundary Street	Juniper Street	51.4	48.0	50.9	55	1	2	5	16	51	162
132	El Cajon Boulevard	Park Boulevard	Florida Street	66.8	61.4	61.9	69	12	39	123	388	1,227	3,881
133		Florida Street	Texas Street	67.6	62.3	62.7	70	15	47	148	467	1,476	4,666
134		Texas Street	Oregon Street	67.8	62.5	62.9	70	15	49	155	489	1,545	4,886
135		Oregon Street	Utah Street	69.0	63.7	64.1	71	20	64	204	644	2,037	6,441
136		Utah Street	30th Street	69.0	63.6	64.1	71	20	64	204	644	2,037	6,441
137		30th Street	Illinois Street	69.9	64.5	64.9	72	24	77	245	774	2,449	7,744
138		Illinois Street	32nd Street	70.6	65.2	65.6	73	29	91	288	910	2,877	9,099
139	Florida Street	El Cajon Boulevard	University Avenue	55.0	51.6	54.4	59	1	4	12	37	117	371
140		University Avenue	Robinson Avenue	57.1	53.7	56.5	61	2	6	19	60	190	601
141		Robinson Avenue	Upas Street	57.2	53.8	56.6	61	2	6	19	62	195	615
142	Florida Drive	Upas Street	Morley Field Drive	64.5	57.7	57.4	66	6	20	63	199	629	1,991
143	Howard Avenue	Park Boulevard	Florida Street	54.5	51.1	53.9	58	1	3	10	33	104	330
144		Florida Street	Texas Street	55.2	51.8	54.7	59	1	4	12	39	123	388
145		Texas Street	Utah Street	56.5	53.1	56.0	60	2	5	17	52	166	524
146		Utah Street	30th Street	57.6	54.2	57.0	61	2	7	21	67	213	674
147		30th Street	32nd Street	58.3	54.9	57.7	62	3	8	25	79	251	792
148	Juniper Street	30th Street	32nd Street	55.3	51.9	54.8	59	1	4	13	40	126	397
149		32nd Street	Commonwealth Avenue	54.2	50.8	53.7	58	1	3	10	31	97	308
150	Landis Street	Boundary Street	Nile Street	55.5	52.1	54.9	59	1	4	13	42	132	416
151	Lincoln Avenue	Florida Street	Texas Street	49.7	46.2	49.1	53	0	1	3	11	35	109
152		Texas Street	Oregon Street	53.5	50.1	52.9	57	1	3	8	26	83	262
153		Oregon Street	30th Street	58.6	54.1	56.5	62	2	7	22	71	223	706
154		30th Street	32nd Street	59.5	55.0	57.3	62	3	9	27	87	275	869
155		32nd Street	Boundary Street	59.4	54.9	57.3	62	3	8	27	85	269	849
156	Madison Avenue	Park Boulevard	Mission Avenue	57.6	54.1	57.0	61	2	7	21	67	213	674
157		Mission Avenue	Texas Street	58.8	55.3	58.2	62	3	9	27	87	275	869
158		Texas Street	Boundary Street	57.0	53.5	56.4	61	2	6	18	57	182	574
159	Meade Avenue	Park Boulevard	Texas Street	55.8	52.4	55.2	60	1	4	14	45	141	446
160		Texas Street	30th Avenue	56.9	53.5	56.4	61	2	6	18	57	182	574
161		30th Avenue	Illinois Avenue	59.1	55.6	58.5	63	3	9	29	93	294	931
162		Illinois Avenue	32nd Street	59.1	55.7	58.5	63	3	10	30	95	301	953

163	Mission Avenue	Park Boulevard	Texas Street	51.5	48.0	50.9	55	1	2	5	16	51	162
164	Monroe Avenue	Park Boulevard	Mission Avenue	50.5	47.1	49.9	54	0	1	4	13	42	132
165		Mission Avenue	Texas Street	51.5	48.0	50.9	55	1	2	5	17	52	166
166		Texas Street	30th Street	53.1	49.6	52.5	57	1	2	7	23	74	234
167	Nile Street	Landis Street	Thorn Street	56.1	52.6	55.5	60	1	5	15	47	148	467
168	North Park Way	30th Street	32nd Street	58.0	54.6	57.4	62	2	7	23	74	234	740
169		32nd Street	Boundary Street	58.0	54.6	57.4	62	2	7	23	74	234	740
170	Orange Avenue/Howard Av	Iowa Street	I-805	57.5	54.0	56.9	61	2	6	20	64	204	644
171	Pentuckett Avenue	Juniper Street	Fir Street	53.2	49.8	52.6	57	1	2	8	24	77	245
172	Pershing Drive	Upas Street	Redwood Street	57.8	54.4	57.2	62	2	7	22	71	223	706
173	Redwood Street	28th Street	30th Street	57.5	54.1	56.9	61	2	7	21	66	208	659
174		30th Street	32nd Street	56.6	53.2	56.1	60	2	5	17	54	169	536
175		32nd Street	Boundary Street	51.9	48.5	51.3	56	1	2	6	18	57	182
176	Robinson Avenue	Park Boulevard	Florida Street	58.2	53.7	56.1	61	2	6	20	64	204	644
177	Texas Street	Adams Avenue	Mission Avenue	70.0	63.9	63.9	72	23	74	234	740	2,339	7,396
178		Mission Avenue	El Cajon Boulevard	67.8	61.7	61.7	70	14	45	141	446	1,409	4,456
179		El Cajon Boulevard	Howard Avenue	59.9	56.5	59.3	64	4	11	36	115	362	1,145
180		Howard Avenue	University Avenue	59.5	56.0	58.9	63	3	10	33	104	330	1,045
181		University Avenue	Myrtle Avenue	55.5	52.1	55.0	59	1	4	13	42	132	416
182		Myrtle Avenue	Upas Street	54.2	50.8	53.6	58	1	3	10	31	97	308
183	University Avenue	Park Boulevard	Florida Street	64.8	60.4	62.7	68	10	30	95	301	953	3,013
184		Florida Street	Texas Street	65.3	60.9	63.2	68	11	34	107	338	1,069	3,380
185		Texas Street	Oregon Street	65.0	60.5	62.9	68	10	32	100	315	998	3,155
186		Oregon Street	Utah Street	65.1	60.6	63.0	68	10	32	100	315	998	3,155
187		Utah Street	30th Street	62.5	59.1	62.0	66	7	21	66	208	659	2,084
188		30th Street	Illinois Street	63.0	59.5	62.4	67	7	23	72	229	723	2,285
189		Illinois Street	32nd Street	63.8	60.4	63.3	68	9	28	89	281	889	2,812
190		32nd Street	Boundary Street	63.8	60.4	63.2	68	9	28	89	281	889	2,812
191	Upas Street	Alabama Street	Texas Street	58.2	54.8	57.7	62	2	8	24	77	245	774
192		Texas Street	Pershing Road	58.3	54.8	57.7	62	2	8	24	77	245	774
193		Pershing Road	30th Street	59.5	56.1	59.0	63	3	10	33	104	330	1,045
194		30th Street	32nd Street	56.1	52.7	55.5	60	2	5	15	48	151	477
195		32nd Street	Boundary Street	53.9	50.4	53.3	58	1	3	9	28	89	281
196	Utah Street	Adams Avenue	Monroe Avenue	49.7	46.3	49.1	53	0	1	3	11	35	109
197		Monroe Avenue	Meade Avenue	54.3	50.8	53.7	58	1	3	10	31	97	308
198		Meade Avenue	El Cajon Boulevard	54.3	50.8	53.7	58	1	3	10	31	97	308
199		El Cajon Boulevard	Howard Avenue	58.4	53.9	56.3	61	2	7	21	67	213	674
200		Howard Avenue	Lincoln Avenue	56.0	51.6	53.9	59	1	4	13	40	126	397
201		Lincoln Avenue	University Avenue	56.6	52.1	54.5	60	1	5	14	46	144	456
202		University Avenue	North Park Way	56.5	53.0	55.9	60	2	5	17	52	166	524
203		North Park Way	Upas Street	52.6	49.1	52.0	56	1	2	7	21	66	208
204	25th Street	Russ Boulevard	C Street	50.5	47.1	49.9	54	0	1	4	13	42	132
205		C Street	Broadway	59.5	56.0	58.9	63	3	10	32	102	323	1,021

206		Broadway	F Street	60.5	57.1	60.0	64	4	13	42	132	416	1,315
207	26th Street	Russ Boulevard	B Street	59.3	55.9	58.8	63	3	10	32	100	315	998
208		B Street	C Street	53.0	49.6	52.5	57	1	2	7	23	74	234
209	28th Street	Russ Boulevard	C Street	58.9	54.4	56.8	62	2	8	24	76	239	757
210		C Street	Broadway	61.1	56.6	59.0	64	4	13	41	129	406	1,285
211		Broadway	SR-94	62.3	57.8	60.2	65	5	17	52	166	524	1,656
212	30th Street	Grape Street	Beech Street	57.9	53.4	55.7	61	2	6	19	60	190	601
213		Beech Street	A Street	64.2	59.7	62.1	67	8	26	81	256	811	2,564
214		A Street	Broadway	64.2	59.7	62.1	67	8	26	81	256	811	2,564
215		Broadway	SR-94	58.2	53.8	56.1	61	2	7	21	66	208	659
216	31st Street	Juniper Street	Grape Street	53.3	49.9	52.8	57	1	3	8	25	79	251
217	B Street	19th Street	20th Street	59.3	54.8	57.2	62	3	8	26	83	262	830
218		20th Street	25th Street	57.7	53.2	55.6	61	2	6	18	57	182	574
219		25th Street	26th Street	58.6	54.2	56.5	62	2	7	23	72	229	723
220		26th Street	28th Street	59.9	55.4	57.8	63	3	10	31	97	308	975
221		28th Street	30th Street	56.3	51.9	54.2	59	1	4	13	43	135	426
222	Beech Street	28th Street	Fern Street	54.5	50.0	52.4	57	1	3	9	27	87	275
223	Broadway	19th Street	20th Street	57.3	53.9	56.8	61	2	6	20	63	199	629
224		20th Street	25th Street	56.6	53.2	56.0	60	2	5	17	54	169	536
225		25th Street	28th Street	55.9	52.5	55.3	60	1	5	14	46	144	456
226		28th Street	30th Street	54.9	51.4	54.3	59	1	4	11	36	115	362
227		30th Street	SR-94	61.7	58.3	61.2	65	5	17	55	173	548	1,734
228	C Street	19th Street	20th Street	57.8	53.4	55.7	61	2	6	19	60	190	601
229		20th Street	25th Street	57.9	53.5	55.8	61	2	6	19	62	195	615
230		25th Street	28th Street	57.9	53.5	55.8	61	2	6	19	62	195	615
231		28th Street	30th Street	56.2	51.8	54.1	59	1	4	13	42	132	416
232		30th Street	34th Street	58.3	53.8	56.1	61	2	7	21	66	208	659
233	Cedar Street	Fern Street	Felton Street	56.5	52.0	54.4	59	1	4	14	44	138	435
234	Fern Street	Juniper Street	Grape Street	58.9	55.5	58.4	63	3	9	29	91	288	910
235		Grape Street	A Street	58.8	55.4	58.2	63	3	9	28	89	281	889
236	Grape Street	30th Street	31st Street	53.9	50.5	53.3	58	1	3	9	29	91	288
237	Florida Drive	Morley Field Drive	Zoo Place	66.0	59.2	58.9	68	9	28	89	281	889	2,812
238	Golf Course Drive	26th Street	28th Street	54.8	51.4	54.3	59	1	4	11	35	112	354
239	Park Boulevard	Zoo Place	Space Theater Way	68.0	61.8	61.9	70	15	47	148	467	1,476	4,666
240		Space Theater Way	Presidents Way	67.7	61.6	61.6	69	14	44	138	435	1,377	4,355
241		Presidents Way	SR-163 NB On-Ramp	68.7	62.6	62.6	70	17	55	173	548	1,734	5,482
242	Pershing Drive	Redwood Street	Florida Drive	68.7	61.3	60.7	70	15	49	155	489	1,545	4,886
243		Florida Drive	I-5 Ramps	73.6	66.1	65.6	75	48	151	477	1,510	4,775	15,100
244		I-5 Ramps	B Street	62.0	54.6	54.0	63	3	11	34	107	338	1,069

ATTACHMENT 3

FHWA Future (2035) Traffic Contour Distance Calculations – Uptown, North Park, and Golden Hill Planning Areas

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FHWA RD-77-108

Traffic Noise Prediction Model

Data Input Sheet

Project Name : Uptown, North Park, Golden Hill CPUs
Project Number : 6086
Modeled Condition : 2035

Surface Refelction: CNEL
Assessment Metric: Hard
Peak ratio to ADT: 10.00
Traffic Desc. (Peak or ADT) : ADT

Segment	Roadway	Segment From	Segment To	Traffic Vol.	Speed (Mph)	Distance to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	K-Factor
1	First Avenue	Arbor Drive	Washington Street	7,500	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
2		Washington Street	University Avenue	9,100	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
3		University Avenue	Robinson Avenue	16,300	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
4		Robinson Avenue	Pennsylvania Avenue	11,500	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
5		Pennsylvania Avenue	Walnut Avenue	12,800	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
6		Walnut Avenue	Laurel Street	11,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
7		Laurel Street	Hawthorn Street	8,400	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
8		Hawthorn Street	Grape Street	6,800	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
9		Grape Street	Elm Street	4,500	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
10	Fourth Avenue	Arbor Drive	Washington Street	14,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
11		Washington Street	University Avenue	10,000	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
12		University Avenue	Robinson Avenue	12,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
13		Robinson Avenue	Walnut Avenue	11,400	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
14		Walnut Avenue	Laurel Street	15,100	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
15		Laurel Street	Grape Street	13,700	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
16		Grape Street	Elm Street	9,700	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
17	Fifth Avenue	Washington Street	University Avenue	11,800	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
18		University Avenue	Robinson Avenue	14,000	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
19		Robinson Avenue	Walnut Avenue	15,800	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
20		Walnut Avenue	Laurel Street	14,800	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
21		Laurel Street	Hawthorn Street	14,400	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
22		Hawthorn Street	Grape Street	14,300	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
23		Grape Street	Elm Street	10,100	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
24	Sixth Avenue	Washington Street	University Avenue	45,100	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
25		University Avenue	Robinson Avenue	32,600	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
26		Robinson Avenue	Upas Street	29,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
27		Upas Street	Laurel Street	25,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
28		Laurel Street	Juniper Street	16,600	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
29		Juniper Street	Grape Street	18,700	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
30		Grape Street	Elm Street	20,300	30	50	96.00	3.00	1.00	80.00	10.00	10.00	
31	Ninth Avenue	Washington Street	University Avenue	8,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00	

32	Campus Avenue	Madison Avenue	Washington Avenue	5,800	25	50	96.00	3.00	1.00	80.00	10.00	10.00
33		Washington Avenue	Polk Avenue	7,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
34	Cleveland Avenue	Tyler Street	Lincoln Street	7,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
35		Lincoln Street	Richmond Street	9,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
36	Curlew Street	Robinson Avenue	Reynard Way	4,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
37	Elm Street	Second Avenue	Third Avenue	8,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
38		Third Avenue	Fifth Avenue	9,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
39		Fifth Avenue	Sixth Avenue	8,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
40	Fort Stockton Drive	Arista Street	Sunset Boulevard	4,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
41		Sunset Boulevard	Hawk Street	7,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
42		Hawk Street	Goldfinch Street	8,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
43		Goldfinch Street	Falcon Street	3,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
44	Front Street	Dickinson Street	Arbor Drive	4,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
45		Arbor Drive	Washington Street	7,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
46	Grape Street	Albatross Street	First Avenue	7,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
47		First Avenue	Third Avenue	7,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
48		Third Avenue	Sixth Avenue	9,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
49	Hawthorn Street	Brant Street	First Avenue	15,000	30	50	96.00	3.00	1.00	80.00	10.00	10.00
50		First Avenue	Third Avenue	7,300	30	50	96.00	3.00	1.00	80.00	10.00	10.00
51		Third Avenue	Sixth Avenue	8,700	30	50	96.00	3.00	1.00	80.00	10.00	10.00
52	India Street	Washington Street	Winder Street	11,000	35	50	96.00	3.00	1.00	80.00	10.00	10.00
53		Winder Street	Glenwood Drive	10,700	35	50	96.00	3.00	1.00	80.00	10.00	10.00
54		Glenwood Drive	Sassafras Street	30,000	35	50	96.00	3.00	1.00	80.00	10.00	10.00
55		Sassafras Street	Redwood Street	21,300	35	50	96.00	3.00	1.00	80.00	10.00	10.00
56		Redwood Street	Palm Street	20,300	35	50	96.00	3.00	1.00	80.00	10.00	10.00
57	Juan Street	Harney Street	Witherby Street	4,600	30	50	96.00	3.00	1.00	80.00	10.00	10.00
58	Laurel Street	Columbia Street	Union Street	21,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
59		Union Street	First Avenue	17,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
60		First Avenue	Third Avenue	16,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
61		Third Avenue	Sixth Avenue	20,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
62	Lewis Street	Fort Stockton Drive	Goldfinch Street	4,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
63	Lincoln Avenue	Washington Street	Park Boulevard	11,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
64	Madison Avenue	Cleveland Avenue	Park Boulevard	6,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
65	Meade Avenue	Cleveland Avenue	Park Boulevard	3,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
66	Normal Street	Park Boulevard	Washington Street	28,300	30	50	96.00	3.00	1.00	80.00	10.00	10.00
67		Washington Street	University Avenue	4,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00
68	Park Boulevard	Adams Avenue	Mission Avenue	14,060	30	50	96.00	3.00	1.00	80.00	10.00	10.00
69		Mission Avenue	El Cajon Boulevard	15,467	30	50	96.00	3.00	1.00	80.00	10.00	10.00
70		El Cajon Boulevard	Polk Avenue	18,600	30	50	96.00	3.00	1.00	80.00	10.00	10.00
71		Polk Avenue	University Avenue	22,500	35	50	96.00	3.00	1.00	80.00	10.00	10.00
72		University Avenue	Robinson Avenue	19,800	35	50	96.00	3.00	1.00	80.00	10.00	10.00
73		Robinson Avenue	Upas Street	17,200	35	50	96.00	3.00	1.00	80.00	10.00	10.00
74		Upas Street	Zoo Place	17,700	35	50	96.00	3.00	1.00	80.00	10.00	10.00
75	Reynard Way	Torrance Street	Curlew Street	5,300	30	50	96.00	3.00	1.00	80.00	10.00	10.00
76		Curlew Street	Laurel Street	8,600	30	50	96.00	3.00	1.00	80.00	10.00	10.00
77	Richmond Street	Cleveland Avenue	University Avenue	9,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
78		University Avenue	Robinson Avenue	6,700	25	50	96.00	3.00	1.00	80.00	10.00	10.00
79		Robinson Avenue	Upas Street	8,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
80	Robinson Avenue	Brant Street	First Avenue	4,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00

81		First Avenue	Third Avenue	11,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
82		Third Avenue	Eighth Avenue	14,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
83		Eighth Avenue	Tenth Avenue	12,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
84		Tenth Avenue	Richmond Street	12,300	30	50	96.00	3.00	1.00	80.00	10.00	10.00
85		Richmond Street	Park Boulevard	9,200	30	50	96.00	3.00	1.00	80.00	10.00	10.00
86	San Diego Avenue	Hortensia Street	McKee Street	10,500	35	50	96.00	3.00	1.00	80.00	10.00	10.00
87		McKee Street	Washington Street	18,200	35	50	96.00	3.00	1.00	80.00	10.00	10.00
88		Washington Street	India Street	7,100	35	50	96.00	3.00	1.00	80.00	10.00	10.00
89	State Street	Laurel Street	Juniper Street	8,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
90	Sunset Boulevard	Witherby Street	Fort Stockton Drive	4,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
91	University Avenue	Ibis Street	Albatross Street	14,700	25	50	96.00	3.00	1.00	80.00	10.00	10.00
92		Albatross Street	First Avenue	20,800	25	50	96.00	3.00	1.00	80.00	10.00	10.00
93		First Avenue	Fourth Avenue	14,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
94		Fourth Avenue	Fifth Avenue	21,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
95		Fifth Avenue	Sixth Avenue	24,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
96		Sixth Avenue	Eighth Avenue	29,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
97		Eighth Avenue	Vermont Street	25,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
98		Vermont Street	Richmond Street	25,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
99		Richmond Street	Park Boulevard	21,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
100	Upas Street	Third Avenue	Sixth Avenue	8,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
101	Washington Street	India Street	University Avenue	34,800	45	50	96.00	3.00	1.00	80.00	10.00	10.00
102		University Avenue	First Avenue	25,400	35	50	96.00	3.00	1.00	80.00	10.00	10.00
103		First Avenue	Fourth Avenue	24,300	35	50	96.00	3.00	1.00	80.00	10.00	10.00
104		Fourth Avenue	Fifth Avenue	37,300	35	50	96.00	3.00	1.00	80.00	10.00	10.00
105		Fifth Avenue	Sixth Avenue	41,100	35	50	96.00	3.00	1.00	80.00	10.00	10.00
106		Sixth Avenue	Richmond Street	40,900	35	50	96.00	3.00	1.00	80.00	10.00	10.00
107		Richmond Street	Normal Street	47,100	35	50	96.00	3.00	1.00	80.00	10.00	10.00
108	30th Street	Adams Avenue	Meade Avenue	10,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
109		Meade Avenue	El Cajon Boulevard	14,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
110		El Cajon Boulevard	Howard Avenue	13,445	25	50	96.00	3.00	1.00	80.00	10.00	10.00
111		Howard Avenue	Lincoln Avenue	18,833	25	50	96.00	3.00	1.00	80.00	10.00	10.00
112		Lincoln Avenue	University Avenue	14,739	25	50	96.00	3.00	1.00	80.00	10.00	10.00
113		University Avenue	North Park Way	12,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
114		North Park Way	Upas Street	16,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
115		Upas Street	Redwood Street	11,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
116		Redwood Street	Juniper Street	12,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00

117	32nd Street	Howard Avenue	Lincoln Avenue	4,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
118		Lincoln Avenue	University Avenue	2,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
119		University Avenue	Myrtle Street	11,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
120		Myrtle Street	Upas Street	7,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
121		Upas Street	Redwood Street	5,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
122		Redwood Street	Juniper Street	2,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
123	Adams Avenue	Park Boulevard	Alabama Street	7,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
124		Alabama Street	Texas Street	8,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
125		Texas Street	30th Street	13,800	25	50	96.00	3.00	1.00	80.00	10.00	10.00
126		30th Street	West Mountain View Dr	19,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
127	Boundary Street	University Avenue	North Park Way	16,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
128		North Park Way	Upas Street	3,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
129		Upas Street	Redwood Street	6,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
130		Redwood Street	Commonwealth Avenue	3,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
131	Commonwealth Avenue	Boundary Street	Juniper Street	2,800	25	50	96.00	3.00	1.00	80.00	10.00	10.00
132	El Cajon Boulevard	Park Boulevard	Florida Street	27,100	35	50	96.00	3.00	1.00	80.00	10.00	10.00
133		Florida Street	Texas Street	34,600	35	50	96.00	3.00	1.00	80.00	10.00	10.00
134		Texas Street	Oregon Street	37,424	35	50	96.00	3.00	1.00	80.00	10.00	10.00
135		Oregon Street	Utah Street	45,612	35	50	96.00	3.00	1.00	80.00	10.00	10.00
136		Utah Street	30th Street	42,978	35	50	96.00	3.00	1.00	80.00	10.00	10.00
137		30th Street	Illinois Street	52,696	35	50	96.00	3.00	1.00	80.00	10.00	10.00
138		Illinois Street	32nd Street	63,229	35	50	96.00	3.00	1.00	80.00	10.00	10.00
139	Florida Street	El Cajon Boulevard	University Avenue	7,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
140		University Avenue	Robinson Avenue	8,800	25	50	96.00	3.00	1.00	80.00	10.00	10.00
141		Robinson Avenue	Upas Street	6,800	25	50	96.00	3.00	1.00	80.00	10.00	10.00
142	Florida Drive	Upas Street	Morley Field Drive	6,700	45	50	96.00	3.00	1.00	80.00	10.00	10.00
143	Howard Avenue	Park Boulevard	Florida Street	4,800	25	50	96.00	3.00	1.00	80.00	10.00	10.00
144		Florida Street	Texas Street	3,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
145		Texas Street	Utah Street	11,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
146		Utah Street	30th Street	10,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
147		30th Street	32nd Street	10,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
148	Juniper Street	30th Street	32nd Street	6,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
149		32nd Street	Commonwealth Avenue	4,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
150	Landis Street	Boundary Street	Nile Street	4,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
151	Lincoln Avenue	Florida Street	Texas Street	4,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
152		Texas Street	Oregon Street	3,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
153		Oregon Street	30th Street	7,500	30	50	96.00	3.00	1.00	80.00	10.00	10.00
154		30th Street	32nd Street	9,200	30	50	96.00	3.00	1.00	80.00	10.00	10.00
155		32nd Street	Boundary Street	9,800	30	50	96.00	3.00	1.00	80.00	10.00	10.00
156	Madison Avenue	Park Boulevard	Mission Avenue	8,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
157		Mission Avenue	Texas Street	10,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
158		Texas Street	Boundary Street	12,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00

159	Meade Avenue	Park Boulevard	Texas Street	8,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
160		Texas Street	30th Avenue	9,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
161		30th Avenue	Illinois Avenue	11,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
162		Illinois Avenue	32nd Street	11,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
163	Mission Avenue	Park Boulevard	Texas Street	3,700	25	50	96.00	3.00	1.00	80.00	10.00	10.00
164	Monroe Avenue	Park Boulevard	Mission Avenue	3,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
165		Mission Avenue	Texas Street	5,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
166		Texas Street	30th Street	5,700	25	50	96.00	3.00	1.00	80.00	10.00	10.00
167	Nile Street	Landis Street	Thorn Street	5,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
168	North Park Way	30th Street	32nd Street	8,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
169		32nd Street	Boundary Street	10,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
170	Orange Avenue/Howard Av	Iowa Street	I-805	8,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
171	Pentuckett Avenue	Juniper Street	Fir Street	2,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
172	Pershing Drive	Upas Street	Redwood Street	10,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
173	Redwood Street	28th Street	30th Street	7,200	25	50	96.00	3.00	1.00	80.00	10.00	10.00
174		30th Street	32nd Street	4,700	25	50	96.00	3.00	1.00	80.00	10.00	10.00
175		32nd Street	Boundary Street	4,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
176	Robinson Avenue	Park Boulevard	Florida Street	5,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00
177	Texas Street	Adams Avenue	Mission Avenue	39,100	40	50	96.00	3.00	1.00	80.00	10.00	10.00
178		Mission Avenue	El Cajon Boulevard	38,300	40	50	96.00	3.00	1.00	80.00	10.00	10.00
179		El Cajon Boulevard	Howard Avenue	14,038	25	50	96.00	3.00	1.00	80.00	10.00	10.00
180		Howard Avenue	University Avenue	15,738	25	50	96.00	3.00	1.00	80.00	10.00	10.00
181		University Avenue	Myrtle Avenue	5,700	25	50	96.00	3.00	1.00	80.00	10.00	10.00
182		Myrtle Avenue	Upas Street	4,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
183	University Avenue	Park Boulevard	Florida Street	23,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00
184		Florida Street	Texas Street	20,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00
185		Texas Street	Oregon Street	25,373	30	50	96.00	3.00	1.00	80.00	10.00	10.00
186		Oregon Street	Utah Street	24,699	30	50	96.00	3.00	1.00	80.00	10.00	10.00
187		Utah Street	30th Street	22,779	25	50	96.00	3.00	1.00	80.00	10.00	10.00
188		30th Street	Illinois Street	25,391	25	50	96.00	3.00	1.00	80.00	10.00	10.00
189		Illinois Street	32nd Street	25,329	25	50	96.00	3.00	1.00	80.00	10.00	10.00
190		32nd Street	Boundary Street	32,449	25	50	96.00	3.00	1.00	80.00	10.00	10.00
191	Upas Street	Alabama Street	Texas Street	8,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
192		Texas Street	Pershing Road	11,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
193		Pershing Road	30th Street	16,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
194		30th Street	32nd Street	6,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
195		32nd Street	Boundary Street	2,700	25	50	96.00	3.00	1.00	80.00	10.00	10.00

196	Utah Street	Adams Avenue	Monroe Avenue	5,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
197		Monroe Avenue	Meade Avenue	5,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
198		Meade Avenue	El Cajon Boulevard	5,300	25	50	96.00	3.00	1.00	80.00	10.00	10.00
199		El Cajon Boulevard	Howard Avenue	6,400	30	50	96.00	3.00	1.00	80.00	10.00	10.00
200		Howard Avenue	Lincoln Avenue	7,300	30	50	96.00	3.00	1.00	80.00	10.00	10.00
201		Lincoln Avenue	University Avenue	4,700	30	50	96.00	3.00	1.00	80.00	10.00	10.00
202		University Avenue	North Park Way	5,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
203		North Park Way	Upas Street	7,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
204	25th Street	Russ Boulevard	C Street	7,800	25	50	96.00	3.00	1.00	80.00	10.00	10.00
205		C Street	Broadway	10,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
206		Broadway	F Street	17,400	25	50	96.00	3.00	1.00	80.00	10.00	10.00
207	26th Street	Russ Boulevard	B Street	8,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
208		B Street	C Street	5,100	25	50	96.00	3.00	1.00	80.00	10.00	10.00
209	28th Street	Russ Boulevard	C Street	8,800	30	50	96.00	3.00	1.00	80.00	10.00	10.00
210		C Street	Broadway	10,500	30	50	96.00	3.00	1.00	80.00	10.00	10.00
211		Broadway	SR-94	19,100	30	50	96.00	3.00	1.00	80.00	10.00	10.00
212	30th Street	Grape Street	Beech Street	6,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00
213		Beech Street	A Street	19,800	30	50	96.00	3.00	1.00	80.00	10.00	10.00
214		A Street	Broadway	19,800	30	50	96.00	3.00	1.00	80.00	10.00	10.00
215		Broadway	SR-94	9,500	30	50	96.00	3.00	1.00	80.00	10.00	10.00
216	31st Street	Juniper Street	Grape Street	4,700	25	50	96.00	3.00	1.00	80.00	10.00	10.00
217	B Street	19th Street	20th Street	6,500	30	50	96.00	3.00	1.00	80.00	10.00	10.00
218		20th Street	25th Street	5,400	30	50	96.00	3.00	1.00	80.00	10.00	10.00
219		25th Street	26th Street	7,500	30	50	96.00	3.00	1.00	80.00	10.00	10.00
220		26th Street	28th Street	7,100	30	50	96.00	3.00	1.00	80.00	10.00	10.00
221		28th Street	30th Street	5,700	30	50	96.00	3.00	1.00	80.00	10.00	10.00
222	Beech Street	28th Street	Fern Street	6,200	30	50	96.00	3.00	1.00	80.00	10.00	10.00
223	Broadway	19th Street	20th Street	6,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
224		20th Street	25th Street	8,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
225		25th Street	28th Street	5,500	25	50	96.00	3.00	1.00	80.00	10.00	10.00
226		28th Street	30th Street	4,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
227		30th Street	SR-94	10,600	25	50	96.00	3.00	1.00	80.00	10.00	10.00
228	C Street	19th Street	20th Street	6,100	30	50	96.00	3.00	1.00	80.00	10.00	10.00
229		20th Street	25th Street	4,500	30	50	96.00	3.00	1.00	80.00	10.00	10.00
230		25th Street	28th Street	5,500	30	50	96.00	3.00	1.00	80.00	10.00	10.00
231		28th Street	30th Street	4,100	30	50	96.00	3.00	1.00	80.00	10.00	10.00
232		30th Street	34th Street	7,900	30	50	96.00	3.00	1.00	80.00	10.00	10.00
233	Cedar Street	Fern Street	Felton Street	3,400	30	50	96.00	3.00	1.00	80.00	10.00	10.00
234	Fern Street	Juniper Street	Grape Street	8,900	25	50	96.00	3.00	1.00	80.00	10.00	10.00
235		Grape Street	A Street	15,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
236	Grape Street	30th Street	31st Street	9,000	25	50	96.00	3.00	1.00	80.00	10.00	10.00
237	Florida Drive	Morley Field Drive	Zoo Place	9,600	45	50	96.00	3.00	1.00	80.00	10.00	10.00
238	Golf Course Drive	26th Street	28th Street	4,800	25	50	96.00	3.00	1.00	80.00	10.00	10.00
239	Park Boulevard	Zoo Place	Space Theater Way	22,600	40	50	96.00	3.00	1.00	80.00	10.00	10.00
240		Space Theater Way	Presidents Way	21,100	40	50	96.00	3.00	1.00	80.00	10.00	10.00
241		Presidents Way	SR-163 NB On-Ramp	27,100	40	50	96.00	3.00	1.00	80.00	10.00	10.00
242	Pershing Drive	Redwood Street	Florida Drive	18,600	50	50	96.00	3.00	1.00	80.00	10.00	10.00
243		Florida Drive	I-5 Ramps	40,400	50	50	96.00	3.00	1.00	80.00	10.00	10.00
244		I-5 Ramps	B Street	3,400	50	50	96.00	3.00	1.00	80.00	10.00	10.00

FHWA RD-77-108

Traffic Noise Prediction Model

Predicted Noise Levels

Project Name : Uptown, North Park, Golden Hill CPUs
Project Number : 6086
Modeled Condition : 2035
Assessment Metric: Hard

		Segment		Noise Levels, dBA Hard				Distance to Traffic Noise Level Contours, Feet					
Segment	Roadway	From	To	Auto	MT	HT	Total	75 dB	70 dB	65 dB	60 dB	55 dB	50 dB
1	First Avenue	Arbor Drive	Washington Street	60.8	56.3	58.6	64	4	12	37	117	371	1,172
2		Washington Street	University Avenue	61.6	57.1	59.5	65	4	14	45	141	446	1,409
3		University Avenue	Robinson Avenue	64.1	59.6	62.0	67	8	26	81	256	811	2,564
4		Robinson Avenue	Pennsylvania Avenue	62.6	58.1	60.5	66	6	18	57	182	574	1,815
5		Pennsylvania Avenue	Walnut Avenue	63.1	58.6	60.9	66	6	20	63	199	629	1,991
6		Walnut Avenue	Laurel Street	62.8	58.3	60.6	66	6	19	59	186	587	1,858
7		Laurel Street	Hawthorn Street	61.2	56.8	59.1	64	4	13	42	132	416	1,315
8		Hawthorn Street	Grape Street	60.3	55.8	58.2	63	3	11	34	107	338	1,069
9		Grape Street	Elm Street	58.5	54.1	56.4	62	2	7	22	71	223	706
10	Fourth Avenue	Arbor Drive	Washington Street	63.7	59.3	61.6	67	7	23	74	234	740	2,339
11		Washington Street	University Avenue	62.0	57.5	59.9	65	5	15	49	155	489	1,545
12		University Avenue	Robinson Avenue	63.1	58.6	61.0	66	6	20	64	204	644	2,037
13		Robinson Avenue	Walnut Avenue	62.6	58.1	60.4	66	6	18	56	177	561	1,774
14		Walnut Avenue	Laurel Street	63.8	59.3	61.7	67	7	23	74	234	740	2,339
15		Laurel Street	Grape Street	63.4	58.9	61.2	66	7	21	67	213	674	2,133
16		Grape Street	Elm Street	61.9	57.4	59.7	65	5	15	48	151	477	1,510
17	Fifth Avenue	Washington Street	University Avenue	62.7	58.2	60.6	66	6	19	59	186	587	1,858
18		University Avenue	Robinson Avenue	63.5	59.0	61.3	66	7	22	69	218	690	2,183
19		Robinson Avenue	Walnut Avenue	64.0	59.5	61.9	67	8	24	77	245	774	2,449
20		Walnut Avenue	Laurel Street	63.7	59.2	61.6	67	7	23	72	229	723	2,285
21		Laurel Street	Hawthorn Street	63.6	59.1	61.5	67	7	22	71	223	706	2,233
22		Hawthorn Street	Grape Street	63.6	59.1	61.4	67	7	22	71	223	706	2,233
23		Grape Street	Elm Street	62.0	57.6	59.9	65	5	16	50	158	500	1,581
24	Sixth Avenue	Washington Street	University Avenue	68.5	64.1	66.4	72	22	71	223	706	2,233	7,063
25		University Avenue	Robinson Avenue	67.1	62.7	65.0	70	16	51	162	512	1,618	5,116
26		Robinson Avenue	Upas Street	66.8	62.3	64.6	70	15	47	148	467	1,476	4,666
27		Upas Street	Laurel Street	66.1	61.7	64.0	69	13	41	129	406	1,285	4,064
28		Laurel Street	Juniper Street	64.2	59.7	62.1	67	8	26	81	256	811	2,564
29		Juniper Street	Grape Street	64.7	60.2	62.6	68	9	29	93	294	931	2,944
30		Grape Street	Elm Street	65.1	60.6	63.0	68	10	32	100	315	998	3,155
31	Ninth Avenue	Washington Street	University Avenue	58.8	55.3	58.2	62	3	9	27	87	275	869
32	Campus Avenue	Madison Avenue	Washington Avenue	57.4	53.9	56.8	61	2	6	20	63	199	629
33		Washington Avenue	Polk Avenue	58.4	55.0	57.8	62	3	8	26	81	256	811
34	Cleveland Avenue	Tyler Street	Lincoln Street	58.3	54.9	57.7	62	3	8	25	79	251	792
35		Lincoln Street	Richmond Street	59.5	56.1	59.0	63	3	10	33	104	330	1,045
36	Curlew Street	Robinson Avenue	Reynard Way	56.3	52.9	55.8	60	2	5	16	50	158	500

37	Elm Street	Second Avenue	Third Avenue	59.0	55.6	58.4	63	3	9	29	93	294	931
38		Third Avenue	Fifth Avenue	59.3	55.9	58.7	63	3	10	32	100	315	998
39		Fifth Avenue	Sixth Avenue	58.8	55.4	58.2	63	3	9	28	89	281	889
40	Fort Stockton Drive	Arista Street	Sunset Boulevard	56.6	53.2	56.0	60	2	5	17	54	169	536
41		Sunset Boulevard	Hawk Street	58.7	55.3	58.1	62	3	9	27	87	275	869
42		Hawk Street	Goldfinch Street	59.2	55.8	58.6	63	3	10	31	97	308	975
43		Goldfinch Street	Falcon Street	54.9	51.5	54.3	59	1	4	11	36	115	362
44	Front Street	Dickinson Street	Arbor Drive	56.3	52.9	55.8	60	2	5	16	50	158	500
45		Arbor Drive	Washington Street	58.7	55.3	58.1	62	3	9	27	87	275	869
46	Grape Street	Albatross Street	First Avenue	58.4	54.9	57.8	62	3	8	25	79	251	792
47		First Avenue	Third Avenue	58.4	54.9	57.8	62	3	8	25	79	251	792
48		Third Avenue	Sixth Avenue	59.3	55.8	58.7	63	3	10	31	97	308	975
49	Hawthorn Street	Brant Street	First Avenue	63.8	59.3	61.6	67	7	23	74	234	740	2,339
50		First Avenue	Third Avenue	60.6	56.2	58.5	64	4	11	36	115	362	1,145
51		Third Avenue	Sixth Avenue	61.4	56.9	59.3	64	4	13	43	135	426	1,346
52	India Street	Washington Street	Winder Street	64.3	59.0	59.4	66	7	22	69	218	690	2,183
53		Winder Street	Glenwood Drive	64.2	58.9	59.3	66	7	21	67	213	674	2,133
54		Glenwood Drive	Sassafras Street	68.7	63.3	63.8	71	19	60	190	601	1,901	6,011
55		Sassafras Street	Redwood Street	67.2	61.9	62.3	69	13	43	135	426	1,346	4,256
56		Redwood Street	Palm Street	67.0	61.6	62.1	69	13	41	129	406	1,285	4,064
57	Juan Street	Harney Street	Witherby Street	58.6	54.2	56.5	62	2	7	23	72	229	723
58	Laurel Street	Columbia Street	Union Street	63.0	59.5	62.4	67	7	23	72	229	723	2,285
59		Union Street	First Avenue	62.2	58.8	61.7	66	6	19	62	195	615	1,945
60		First Avenue	Third Avenue	61.8	58.4	61.2	66	6	18	56	177	561	1,774
61		Third Avenue	Sixth Avenue	62.8	59.3	62.2	66	7	22	69	218	690	2,183
62	Lewis Street	Fort Stockton Drive	Goldfinch Street	55.8	52.4	55.3	60	1	4	14	45	141	446
63	Lincoln Avenue	Washington Street	Park Boulevard	60.2	56.7	59.6	64	4	12	38	120	379	1,199
64	Madison Avenue	Cleveland Avenue	Park Boulevard	57.6	54.1	57.0	61	2	7	21	66	208	659
65	Meade Avenue	Cleveland Avenue	Park Boulevard	55.2	51.7	54.6	59	1	4	12	38	120	379
66	Normal Street	Park Boulevard	Washington Street	66.5	62.0	64.4	70	14	45	141	446	1,409	4,456
67		Washington Street	University Avenue	58.9	54.4	56.8	61.8	2	8	24	76	239	757
68	Park Boulevard	Adams Avenue	Mission Avenue	63.5	59.0	61.4	66.4	7	22	69	218	690	2,183
69		Mission Avenue	El Cajon Boulevard	63.9	59.4	61.8	66.8	8	24	76	239	757	2,393
70		El Cajon Boulevard	Polk Avenue	64.7	60.2	62.6	67.6	9	29	91	288	910	2,877
71		Polk Avenue	University Avenue	67.5	62.1	62.5	69.5	14	45	141	446	1,409	4,456
72		University Avenue	Robinson Avenue	66.9	61.5	62.0	69.0	13	40	126	397	1,256	3,972
73		Robinson Avenue	Upas Street	66.3	60.9	61.3	68.4	11	35	109	346	1,094	3,459
74		Upas Street	Zoo Place	66.4	61.0	61.5	68.5	11	35	112	354	1,119	3,540
75	Reynard Way	Torrance Street	Curlew Street	59.2	54.8	57.1	62.2	3	8	26	83	262	830
76		Curlew Street	Laurel Street	61.3	56.9	59.2	64.3	4	13	43	135	426	1,346
77	Richmond Street	Cleveland Avenue	University Avenue	59.3	55.8	58.7	62.9	3	10	31	97	308	975
78		University Avenue	Robinson Avenue	58.0	54.5	57.4	61.7	2	7	23	74	234	740
79		Robinson Avenue	Upas Street	58.8	55.4	58.2	62.5	3	9	28	89	281	889
80	Robinson Avenue	Brant Street	First Avenue	56.3	52.9	55.8	60.0	2	5	16	50	158	500
81		First Avenue	Third Avenue	60.3	56.9	59.8	64.0	4	13	40	126	397	1,256
82		Third Avenue	Eighth Avenue	61.3	57.9	60.7	65.0	5	16	50	158	500	1,581
83		Eighth Avenue	Tenth Avenue	60.6	57.2	60.0	64.3	4	13	43	135	426	1,346
84		Tenth Avenue	Richmond Street	62.9	58.4	60.8	65.8	6	19	60	190	601	1,901
85		Richmond Street	Park Boulevard	61.6	57.2	59.5	64.6	5	14	46	144	456	1,442

86	San Diego Avenue	Hortensia Street	McKee Street	64.1	58.8	59.2	66.2	7	21	66	208	659	2,084
87		McKee Street	Washington Street	66.5	61.2	61.6	68.6	11	36	115	362	1,145	3,622
88		Washington Street	India Street	62.4	57.1	57.5	64.5	4	14	45	141	446	1,409
89	State Street	Laurel Street	Juniper Street	58.9	55.4	58.3	62.5	3	9	28	89	281	889
90	Sunset Boulevard	Witherby Street	Fort Stockton Drive	56.3	52.9	55.8	60.0	2	5	16	50	158	500
91	University Avenue	Ibis Street	Albatross Street	61.4	58.0	60.8	65.1	5	16	51	162	512	1,618
92		Albatross Street	First Avenue	62.9	59.5	62.3	66.6	7	23	72	229	723	2,285
93		First Avenue	Fourth Avenue	61.2	57.8	60.6	64.9	5	15	49	155	489	1,545
94		Fourth Avenue	Fifth Avenue	63.1	59.6	62.5	66.7	7	23	74	234	740	2,339
95		Fifth Avenue	Sixth Avenue	63.7	60.2	63.1	67.4	9	27	87	275	869	2,748
96		Sixth Avenue	Eighth Avenue	64.4	61.0	63.8	68.1	10	32	102	323	1,021	3,228
97		Eighth Avenue	Vermont Street	63.8	60.4	63.2	67.5	9	28	89	281	889	2,812
98		Vermont Street	Richmond Street	63.8	60.4	63.2	67.5	9	28	89	281	889	2,812
99		Richmond Street	Park Boulevard	63.0	59.6	62.4	66.7	7	23	74	234	740	2,339
100	Upas Street	Third Avenue	Sixth Avenue	59.0	55.6	58.4	62.7	3	9	29	93	294	931
101	Washington Street	India Street	University Avenue	72.5	65.7	65.4	74.0	40	126	397	1,256	3,972	12,559
102		University Avenue	First Avenue	68.0	62.6	63.0	70.1	16	51	162	512	1,618	5,116
103		First Avenue	Fourth Avenue	67.8	62.4	62.8	69.9	15	49	155	489	1,545	4,886
104		Fourth Avenue	Fifth Avenue	69.6	64.3	64.7	71.7	23	74	234	740	2,339	7,396
105		Fifth Avenue	Sixth Avenue	70.1	64.7	65.1	72.1	26	81	256	811	2,564	8,109
106		Sixth Avenue	Richmond Street	70.0	64.7	65.1	72.1	26	81	256	811	2,564	8,109
107		Richmond Street	Normal Street	70.7	65.3	65.7	72.7	29	93	294	931	2,944	9,310
108	30th Street	Adams Avenue	Meade Avenue	59.9	56.5	59.3	63.6	4	11	36	115	362	1,145
109		Meade Avenue	El Cajon Boulevard	61.3	57.9	60.7	65.0	5	16	50	158	500	1,581
110		El Cajon Boulevard	Howard Avenue	61.0	57.6	60.4	64.7	5	15	47	148	467	1,476
111		Howard Avenue	Lincoln Avenue	62.5	59.0	61.9	66.1	6	20	64	204	644	2,037
112		Lincoln Avenue	University Avenue	61.4	58.0	60.8	65.1	5	16	51	162	512	1,618
113		University Avenue	North Park Way	60.7	57.3	60.1	64.4	4	14	44	138	435	1,377
114		North Park Way	Upas Street	61.9	58.5	61.3	65.6	6	18	57	182	574	1,815
115		Upas Street	Redwood Street	60.5	57.0	59.9	64.1	4	13	41	129	406	1,285
116		Redwood Street	Juniper Street	60.5	57.1	60.0	64.2	4	13	42	132	416	1,315
117	32nd Street	Howard Avenue	Lincoln Avenue	56.2	52.7	55.6	59.8	2	5	15	48	151	477
118		Lincoln Avenue	University Avenue	54.3	50.9	53.8	58.0	1	3	10	32	100	315
119		University Avenue	Myrtle Street	60.2	56.8	59.6	63.9	4	12	39	123	388	1,227
120		Myrtle Street	Upas Street	58.7	55.3	58.1	62.4	3	9	27	87	275	869
121		Upas Street	Redwood Street	56.8	53.4	56.2	60.5	2	6	18	56	177	561
122		Redwood Street	Juniper Street	53.9	50.4	53.3	57.5	1	3	9	28	89	281
123	Adams Avenue	Park Boulevard	Alabama Street	58.4	55.0	57.8	62.1	3	8	26	81	256	811
124		Alabama Street	Texas Street	59.0	55.6	58.4	62.7	3	9	29	93	294	931
125		Texas Street	30th Street	61.1	57.7	60.5	64.8	5	15	48	151	477	1,510
126		30th Street	West Mountain View Dr	62.6	59.2	62.0	66.3	7	21	67	213	674	2,133
127	Boundary Street	University Avenue	North Park Way	61.8	58.3	61.2	65.4	5	17	55	173	548	1,734
128		North Park Way	Upas Street	54.9	51.5	54.3	58.6	1	4	11	36	115	362
129		Upas Street	Redwood Street	57.5	54.1	56.9	61.2	2	7	21	66	208	659
130		Redwood Street	Commonwealth Avenue	55.6	52.2	55.1	59.3	1	4	13	43	135	426
131	Commonwealth Avenue	Boundary Street	Juniper Street	54.2	50.8	53.6	57.9	1	3	10	31	97	308

132	El Cajon Boulevard	Park Boulevard	Florida Street	68.3	62.9	63.3	70.3	17	54	169	536	1,694	5,358
133		Florida Street	Texas Street	69.3	64.0	64.4	71.4	22	69	218	690	2,183	6,902
134		Texas Street	Oregon Street	69.7	64.3	64.7	71.7	23	74	234	740	2,339	7,396
135		Oregon Street	Utah Street	70.5	65.2	65.6	72.6	29	91	288	910	2,877	9,099
136		Utah Street	30th Street	70.3	64.9	65.3	72.3	27	85	269	849	2,685	8,491
137		30th Street	Illinois Street	71.1	65.8	66.2	73.2	33	104	330	1,045	3,303	10,446
138		Illinois Street	32nd Street	71.9	66.6	67.0	74.0	40	126	397	1,256	3,972	12,559
139	Florida Street	El Cajon Boulevard	University Avenue	58.4	55.0	57.8	62.1	3	8	26	81	256	811
140		University Avenue	Robinson Avenue	59.2	55.7	58.6	62.8	3	10	30	95	301	953
141		Robinson Avenue	Upas Street	58.0	54.6	57.5	61.7	2	7	23	74	234	740
142	Florida Drive	Upas Street	Morley Field Drive	65.3	58.5	58.3	66.8	8	24	76	239	757	2,393
143	Howard Avenue	Park Boulevard	Florida Street	56.5	53.1	56.0	60.2	2	5	17	52	166	524
144		Florida Street	Texas Street	55.6	52.2	55.1	59.3	1	4	13	43	135	426
145		Texas Street	Utah Street	60.3	56.8	59.7	63.9	4	12	39	123	388	1,227
146		Utah Street	30th Street	59.8	56.4	59.2	63.5	4	11	35	112	354	1,119
147		30th Street	32nd Street	59.9	56.5	59.4	63.6	4	11	36	115	362	1,145
148	Juniper Street	30th Street	32nd Street	57.6	54.2	57.1	61.3	2	7	21	67	213	674
149		32nd Street	Commonwealth Avenue	56.2	52.7	55.6	59.8	2	5	15	48	151	477
150	Landis Street	Boundary Street	Nile Street	55.7	52.3	55.2	59.4	1	4	14	44	138	435
151	Lincoln Avenue	Florida Street	Texas Street	56.1	52.6	55.5	59.7	1	5	15	47	148	467
152		Texas Street	Oregon Street	54.8	51.3	54.2	58.4	1	3	11	35	109	346
153		Oregon Street	30th Street	60.8	56.3	58.6	63.7	4	12	37	117	371	1,172
154		30th Street	32nd Street	61.6	57.2	59.5	64.6	5	14	46	144	456	1,442
155		32nd Street	Boundary Street	61.9	57.4	59.8	64.9	5	15	49	155	489	1,545
156	Madison Avenue	Park Boulevard	Mission Avenue	58.8	55.4	58.2	62.5	3	9	28	89	281	889
157		Mission Avenue	Texas Street	59.8	56.4	59.3	63.5	4	11	35	112	354	1,119
158		Texas Street	Boundary Street	60.6	57.2	60.0	64.3	4	13	43	135	426	1,346
159	Meade Avenue	Park Boulevard	Texas Street	58.9	55.4	58.3	62.5	3	9	28	89	281	889
160		Texas Street	30th Avenue	59.7	56.2	59.1	63.4	3	11	35	109	346	1,094
161		30th Avenue	Illinois Avenue	60.3	56.9	59.8	64.0	4	13	40	126	397	1,256
162		Illinois Avenue	32nd Street	60.5	57.0	59.9	64.1	4	13	41	129	406	1,285
163	Mission Avenue	Park Boulevard	Texas Street	55.4	52.0	54.8	59.1	1	4	13	41	129	406
164	Monroe Avenue	Park Boulevard	Mission Avenue	54.8	51.3	54.2	58.4	1	3	11	35	109	346
165		Mission Avenue	Texas Street	57.1	53.7	56.6	60.8	2	6	19	60	190	601
166		Texas Street	30th Street	57.3	53.8	56.7	61.0	2	6	20	63	199	629
167	Nile Street	Landis Street	Thorn Street	56.7	53.3	56.1	60.4	2	5	17	55	173	548
168	North Park Way	30th Street	32nd Street	59.0	55.6	58.4	62.7	3	9	29	93	294	931
169		32nd Street	Boundary Street	60.0	56.5	59.4	63.6	4	11	36	115	362	1,145
170	Orange Avenue/Howard Av	Iowa Street	I-805	58.9	55.4	58.3	62.5	3	9	28	89	281	889
171	Pentuckett Avenue	Juniper Street	Fir Street	53.3	49.9	52.8	57.0	1	3	8	25	79	251
172	Pershing Drive	Upas Street	Redwood Street	59.9	56.5	59.4	63.6	4	11	36	115	362	1,145
173	Redwood Street	28th Street	30th Street	58.3	54.9	57.7	62.0	3	8	25	79	251	792
174		30th Street	32nd Street	56.4	53.0	55.9	60.1	2	5	16	51	162	512
175		32nd Street	Boundary Street	56.2	52.7	55.6	59.8	2	5	15	48	151	477
176	Robinson Avenue	Park Boulevard	Florida Street	59.7	55.2	57.6	62.7	3	9	29	93	294	931

177	Texas Street	Adams Avenue	Mission Avenue	71.5	65.4	65.4	73.3	34	107	338	1,069	3,380	10,690
178		Mission Avenue	El Cajon Boulevard	71.4	65.3	65.4	73.2	33	104	330	1,045	3,303	10,446
179		El Cajon Boulevard	Howard Avenue	61.2	57.8	60.6	64.9	5	15	49	155	489	1,545
180		Howard Avenue	University Avenue	61.7	58.3	61.1	65.4	5	17	55	173	548	1,734
181		University Avenue	Myrtle Avenue	57.3	53.8	56.7	61.0	2	6	20	63	199	629
182		Myrtle Avenue	Upas Street	55.8	52.4	55.3	59.5	1	4	14	45	141	446
183	University Avenue	Park Boulevard	Florida Street	65.8	61.3	63.7	68.7	12	37	117	371	1,172	3,707
184		Florida Street	Texas Street	65.2	60.7	63.1	68.1	10	32	102	323	1,021	3,228
185		Texas Street	Oregon Street	66.0	61.6	63.9	69.0	13	40	126	397	1,256	3,972
186		Oregon Street	Utah Street	65.9	61.4	63.8	68.9	12	39	123	388	1,227	3,881
187		Utah Street	30th Street	63.3	59.9	62.7	67.0	8	25	79	251	792	2,506
188		30th Street	Illinois Street	63.8	60.3	63.2	67.4	9	27	87	275	869	2,748
189		Illinois Street	32nd Street	63.8	60.3	63.2	67.4	9	27	87	275	869	2,748
190		32nd Street	Boundary Street	64.8	61.4	64.3	68.5	11	35	112	354	1,119	3,540
191	Upas Street	Alabama Street	Texas Street	59.1	55.6	58.5	62.7	3	9	29	93	294	931
192		Texas Street	Pershing Road	60.3	56.9	59.8	64.0	4	13	40	126	397	1,256
193		Pershing Road	30th Street	61.8	58.4	61.3	65.5	6	18	56	177	561	1,774
194		30th Street	32nd Street	57.6	54.1	57.0	61.2	2	7	21	66	208	659
195		32nd Street	Boundary Street	54.0	50.6	53.5	57.7	1	3	9	29	93	294
196	Utah Street	Adams Avenue	Monroe Avenue	56.7	53.3	56.1	60.4	2	5	17	55	173	548
197		Monroe Avenue	Meade Avenue	57.0	53.5	56.4	60.6	2	6	18	57	182	574
198		Meade Avenue	El Cajon Boulevard	57.0	53.5	56.4	60.6	2	6	18	57	182	574
199		El Cajon Boulevard	Howard Avenue	60.1	55.6	57.9	63.0	3	10	32	100	315	998
200		Howard Avenue	Lincoln Avenue	60.6	56.2	58.5	63.6	4	11	36	115	362	1,145
201		Lincoln Avenue	University Avenue	58.7	54.2	56.6	61.7	2	7	23	74	234	740
202		University Avenue	North Park Way	56.8	53.4	56.2	60.5	2	6	18	56	177	561
203		North Park Way	Upas Street	58.5	55.0	57.9	62.1	3	8	26	81	256	811
204	25th Street	Russ Boulevard	C Street	58.6	55.2	58.1	62.3	3	8	27	85	269	849
205		C Street	Broadway	60.1	56.7	59.5	63.8	4	12	38	120	379	1,199
206		Broadway	F Street	62.1	58.7	61.6	65.8	6	19	60	190	601	1,901
207	26th Street	Russ Boulevard	B Street	58.8	55.4	58.2	62.5	3	9	28	89	281	889
208		B Street	C Street	56.8	53.4	56.2	60.5	2	6	18	56	177	561
209	28th Street	Russ Boulevard	C Street	61.4	57.0	59.3	64.4	4	14	44	138	435	1,377
210		C Street	Broadway	62.2	57.7	60.1	65.2	5	17	52	166	524	1,656
211		Broadway	SR-94	64.8	60.3	62.7	67.8	10	30	95	301	953	3,013
212	30th Street	Grape Street	Beech Street	60.4	55.9	58.3	63.3	3	11	34	107	338	1,069
213		Beech Street	A Street	65.0	60.5	62.8	67.9	10	31	97	308	975	3,083
214		A Street	Broadway	65.0	60.5	62.8	67.9	10	31	97	308	975	3,083
215		Broadway	SR-94	61.8	57.3	59.7	64.7	5	15	47	148	467	1,476
216	31st Street	Juniper Street	Grape Street	56.4	53.0	55.9	60.1	2	5	16	51	162	512
217	B Street	19th Street	20th Street	60.1	55.7	58.0	63.1	3	10	32	102	323	1,021
218		20th Street	25th Street	59.3	54.8	57.2	62.3	3	8	27	85	269	849
219		25th Street	26th Street	60.8	56.3	58.6	63.7	4	12	37	117	371	1,172
220		26th Street	28th Street	60.5	56.0	58.4	63.5	4	11	35	112	354	1,119
221		28th Street	30th Street	59.6	55.1	57.4	62.5	3	9	28	89	281	889
222	Beech Street	28th Street	Fern Street	59.9	55.4	57.8	62.9	3	10	31	97	308	975

223	Broadway	19th Street	20th Street	57.5	54.1	56.9	61.2	2	7	21	66	208	659
224		20th Street	25th Street	58.8	55.3	58.2	62.4	3	9	27	87	275	869
225		25th Street	28th Street	57.1	53.7	56.6	60.8	2	6	19	60	190	601
226		28th Street	30th Street	56.6	53.2	56.0	60.3	2	5	17	54	169	536
227		30th Street	SR-94	60.0	56.5	59.4	63.6	4	11	36	115	362	1,145
228	C Street	19th Street	20th Street	59.9	55.4	57.7	62.8	3	10	30	95	301	953
229		20th Street	25th Street	58.5	54.1	56.4	61.5	2	7	22	71	223	706
230		25th Street	28th Street	59.4	54.9	57.3	62.3	3	8	27	85	269	849
231		28th Street	30th Street	58.1	53.7	56.0	61.1	2	6	20	64	204	644
232		30th Street	34th Street	61.0	56.5	58.9	63.9	4	12	39	123	388	1,227
233	Cedar Street	Fern Street	Felton Street	57.3	52.8	55.2	60.3	2	5	17	54	169	536
234	Fern Street	Juniper Street	Grape Street	59.2	55.8	58.6	62.9	3	10	31	97	308	975
235		Grape Street	A Street	61.5	58.0	60.9	65.2	5	17	52	166	524	1,656
236	Grape Street	30th Street	31st Street	59.3	55.8	58.7	62.9	3	10	31	97	308	975
237	Florida Drive	Morley Field Drive	Zoo Place	66.9	60.1	59.8	68.4	11	35	109	346	1,094	3,459
238	Golf Course Drive	26th Street	28th Street	56.5	53.1	56.0	60.2	2	5	17	52	166	524
239	Park Boulevard	Zoo Place	Space Theater Way	69.1	63.0	63.1	70.9	19	62	195	615	1,945	6,151
240		Space Theater Way	Presidents Way	68.8	62.7	62.8	70.6	18	57	182	574	1,815	5,741
241		Presidents Way	SR-163 NB On-Ramp	69.9	63.8	63.9	71.7	23	74	234	740	2,339	7,396
242	Pershing Drive	Redwood Street	Florida Drive	71.1	63.7	63.1	72.4	27	87	275	869	2,748	8,689
243		Florida Drive	I-5 Ramps	74.5	67.0	66.5	75.7	59	186	587	1,858	5,874	18,577
244		I-5 Ramps	B Street	63.7	56.3	55.7	65.0	5	16	50	158	500	1,581

ATTACHMENT 4

CREATE Railway Noise Calculations

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Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment
Developed for Chicago Create Project

Case: 6086 Uptown CPU

RESULTS			
Noise Source	**Ldn (dB)**	**Leq - daytime (dB)**	**Leq - nighttime (dB)**
All Sources	59	51	52
Source 1	47	43	40
Source 2	53	50	45
Source 3	45	42	37
Source 4	55	25	50
Source 5	51	8	45
Source 6	0	0	0
Source 7	0	0	0
Source 8	0	0	0

Enter noise receiver land use category below.

LAND USE CATEGORY	
Noise receiver land use category (1, 2 or 3)	2

Enter data for up to 8 noise sources below - see reference list for source numbers.

NOISE SOURCE PARAMETERS																
Parameter	**Source 1**		**Source 2**		**Source 3**		**Source 4**		**Source 5**		**Source 6**		**Source 7**		**Source 8**	
Source Num.	RRT/LRT	4	Commuter Diesel Locomotive	2	Commuter Rail Cars	3	Freight Locomotive	9	Freight Cars	10						
Distance (source to receiver)	distance (ft)	400	distance (ft)	400	distance (ft)	400	distance (ft)	400	distance (ft)	400						
Daytime Hours	speed (mph)	25	speed (mph)	30	speed (mph)	30	speed (mph)	0	speed (mph)	0						
(7 AM - 10 PM)	trains/hour	8	trains/hour	3	trains/hour	3	trains/hour	0	trains/hour	0						
	cars/train	5	locos/train	1	cars/train	8	locos/train	0	length of cars (ft) / train	0						
Nighttime Hours	speed (mph)	25	speed (mph)	30	speed (mph)	30	speed (mph)	30	speed (mph)	30						
(10 PM - 7 AM)	trains/hour	4	trains/hour	1	trains/hour	1	trains/hour	1	trains/hour	1						
	cars/train	5	locos/train	1	cars/train	8	locos/train	2	length of cars (ft) / train	1000						
Wheel Flats?	% of cars w/ wheel flats	0.00%		0.00%	% of cars w/ wheel flats	0.00%		0.00%	% of cars w/ wheel flats	0.00%						
Jointed Track?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N						
Embedded Track?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N						
Aerial Structure?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N						
Barrier Present?	Y/N	N	Y/N	N	Y/N	N	Y/N	N	Y/N	N						
Intervening Rows of of Buildings	number of rows	0	number of rows	0	number of rows	0	number of rows	0	number of rows	0						

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