Appendix J: Noise Analysis for the Mission Valley Community Plan Update

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Noise Analysis for the Mission Valley Community Plan Update San Diego, California

Prepared for City of San Diego Development Services Department 1222 First Avenue San Diego, CA 92101

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RECON Number 7899 February 5, 2019

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Acronyms and Abbreviations

ADT	average daily traffic
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CNEL	community noise equivalent level
CPU	community plan update
CREATE	Rail Efficiency and Transportation Efficiency
dB	decibel
dB(A)	A-weighted Decibel
EB	eastbound
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
HVAC	heating, ventilation, and air conditioning
Hz	hertz
I-15	Interstate 15
I-5	Interstate 5
I-8	Interstate 8
I-805	Interstate 805
inch/sec	inch per second
L_{eq}	one-hour equivalent noise level
LLG	Linscott, Law & Greenspan, Engineers
LOSSAN	Los Angeles–San Diego–San Luis Obispo
Lmax	Maximum sound level
L_{pw}	sound power level
mph	miles per hour
MTS	Metropolitan Transit System
PPV	peak particle velocity
SDMC	San Diego Municipal Code
SEL	sound exposure level
SR-163	State Route 163
VdB	vibration decibel
WB	westbound

Executive Summary

This report evaluates potential local and regional noise impacts associated with the proposed Mission Valley Community Plan Update (CPU). The CPU would update the adopted 1984 Mission Valley Community Plan. The CPU provides goals and supporting policies for future development within the planning area, consistent with the City of San Diego General Plan (General Plan), as well as a long-range, comprehensive policy framework for growth and development in the community through 2050.

The CPU encompasses a broad range of the land use designations defined in the General Plan and contains a more detailed description and distribution of land uses than the citywide General Plan. As related to the issue of noise, the CPU 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 CPU are intended to reflect and implement the general noisereduction 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 specific areas within the CPU.

The dominant source of noise in the CPU area is existing vehicle traffic noise from freeways and local roadways. Other sources of noise include trolleys, stationary noise (such mechanical equipment, emergency electrical generators; parking lot activities; and other activities associated with a given land use), and construction activities.

Increase in Ambient Noise

- A significant impact would occur if implementation of the CPU would result in or create a significant increase in the existing ambient noise levels. The CPU area is dominated by freeway noise. There are some roadway segments that experience calculated noise level increases that are 3 decibels (dB) or greater; however, due to the proximity to a freeway and its associated freeway noise, the actual increase in ambient noise levels attributable to the specified roadway would be less than 3 dB. Additionally, there are areas where there are no noise-sensitive land uses. A significant and unavoidable noise impact was identified for existing land uses adjacent to the following three roadway segments. Phyllis Place from Abbots Hill Road to Interstate 805 (I-805) southbound ramps
- Bachman Place from Hotel Circle South to Lewis Street
- Rancho Mission Road from San Diego Mission Road to Camino del Rio North

The increase in ambient noise levels adjacent to these three roadway segments would result in the exposure of existing noise-sensitive receptors to a significant increase in ambient noise levels, and impacts would be significant. Because the significant noise impacts are to existing homes and other noise-sensitive uses in an already urbanized area, there is no feasible mitigation. Thus, impacts to sensitive land uses would remain significant and unavoidable. An existing regulatory framework and review process exists for new development in areas exposed to high levels of ambient noise. Policies in the proposed CPU and General Plan related to decibel levels, procedures in the San Diego Municipal Code (SDMC), and regulations including Title 24 would reduce traffic noise exposure, because they set standards for the siting of sensitive land uses. Site-specific noise analyses demonstrating that future development implemented under the proposed CPU would not subject sensitive receptors to existing or future noise levels exceeding the Land Use – Noise Compatibility Guidelines of the General Plan would be required as part of the review process for discretionary projects. With the implementation of these regulations and procedures, noise impacts applicable to new discretionary projects would be less than significant as exterior noise would be attenuated. However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts attributed to ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant. As there is no procedure to ensure that exterior noise is adequately attenuated for ministerial projects, no feasible mitigation measures are available, and the impact would remain significant and unavoidable. Interior noise impacts for all projects, including ministerial projects, would be less than significant because building permit applicants must demonstrate compliance with the relevant interior noise standards through submission and approval of a Title 24 Compliance Report. The proposed CPU includes a policy encouraging retrofitting of older structures with noise sensitive land uses with acoustically rated windows and doors featuring higher Sound Transmission Class ratings, which is a measure of exterior noise reduction performance. However, because not all existing noise sensitive land uses would be retrofitted, impacts to existing sensitive land uses would be significant and unavoidable.

For all other street segments in the CPU area, the increase in ambient noise would be less than significant.

Land Use Compatibility

A significant impact would occur if implementation of the CPU 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.

In the CPU areas, noise levels for all land uses would be incompatible (i.e., greater than 75 CNEL) closest to the freeways. These areas are currently developed and the CPU would change the land use designations in some of these areas. While land uses in these areas would be exposed to noise levels that exceed General Plan standards, Section B of the General Plan Noise Element requires future residential uses in areas above 70 CNEL to include noise attenuation measures to ensure interior levels of 45 CNEL and that they be located in an area where a community plan allows multi-family and mixed-use residential uses.

The proposed CPU includes policies that would support site design strategies and noise reduction measures for new development within 500 feet of freeways. Additionally, policies in the General Plan Noise Element require the reduction of traffic noise exposure because

they set standards for the siting of sensitive land uses, while Title 24 requires that projects demonstrate that interior noise levels would be reduced to acceptable levels (45 CNEL or less). General Plan Noise Element policy NE-A.4 requires an acoustical study consistent with the 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. Future discretionary proposals within the CPU area would, therefore, be required to conduct sitespecific exterior noise analyses to demonstrate that the proposed project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the Land Use - Noise Compatibility Guidelines. Additionally, for all future discretionary and ministerial projects located in areas where exterior noise levels exceed the Land Use – Noise Compatibility Guidelines, site-specific interior noise analyses demonstrating compliance with the interior noise standards of the General Plan would be required. These requirements for site-specific noise analyses would be implemented through submission of a Title 24 Compliance Report to demonstrate interior noise levels of 45 CNEL. Through implementation of this regulatory framework, exterior traffic noise impacts associated with new discretionary development and interior traffic noise impacts for both ministerial and discretionary projects would be less than significant.

However, in the case of exterior noise impacts associated with ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas where the noise level exceeds the applicable land use and noise compatibility level would be significant. As there is no procedure to ensure that exterior noise is adequately attenuated for ministerial projects, no feasible mitigation measures are available and impacts would remain significant and unavoidable. Regarding trolley noise, vehicle traffic noise would exceed the contribution of noise from trolley operations. Although vehicle traffic would be the dominant noise source, trolley noise levels in close proximity to the tracks would contribute to the overall exterior noise level, and the combined vehicle traffic and trolley exterior noise levels could exceed the Land Use – Noise Compatibility Guidelines. Future discretionary proposals within the CPU area would be required to conduct site-specific exterior noise analyses to demonstrate that the proposed project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the Land Use – Noise Compatibility Guidelines. However, in the case of exterior noise impacts associated with ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas where the noise level exceeds the applicable land use and noise compatibility level would be significant.

Interior noise impacts for both discretionary and ministerial projects would be less than significant because building permit applicants must demonstrate compliance with the relevant interior noise standards through submission and approval of a Title 24 Compliance Report.

The future Mid-Coast Trolley extension (Blue Line Trolley) is currently under construction along the western CPU boundary. The closest station to the CPU area would be located at West Morena Boulevard and Tecolote Road. It is anticipated that rail traffic would generate a noise level of 60 CNEL at approximately 270 feet from the railway centerline. However, no sensitive land uses exist or are proposed in the CPU area adjacent to the Blue Line Trolley extension and, thus, there would be no noise impacts due to future Blue Line Trolley operations. The Mid-Coast Corridor Transit Project noise analysis also found noise impacts in this area to be less than significant (SANDAG 2014).

The Regional Plan's planned Purple Line Trolley would provide a new north-south transit connection through the Stadium Specific Plan area and would generally parallel to Interstate 15 (I-15). It is anticipated that noise levels due to future Purple Line Trolley operation would be similar to noise levels from the Blue and Green Line Trolleys. Vehicle traffic noise levels along I-15 would exceed 70 and 75 CNEL in the vicinity of the future Purple Line Trolley alignment. As with the Blue and Green Line Trolleys, vehicle traffic noise would exceed the contribution of noise from trolley operations. However, the exact alignment of the Purple Line Trolley is not known at this time, and it could be located in close proximity to noise sensitive land uses. As with the Green Line Trolley, although vehicle traffic would be the dominant noise source, trolley noise levels in close proximity to the tracks would contribute to the overall exterior noise level, and the combined vehicle traffic and trolley exterior noise levels could exceed the Land Use – Noise Compatibility Guidelines, resulting in a significant and unavoidable impact.

Stationary Noise

A significant impact could occur if implementation of the 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 San Diego Municipal Code (SDMC). Implementation of the CPU would promote pedestrian-oriented mixed-use area. Mixed-use and areas where residential uses are located in proximity to commercial sites could result in exposure of sensitive receptors to additional noise. Although noise-sensitive residential land uses would be exposed to noise associated with the operation of commercial uses, future projects would be required to show compliance with the Noise Abatement and Control Ordinance to ensure noise compatibility between various land uses. Through enforcement of the Noise Abatement and Control Ordinance of the SDMC, impacts would be less than significant.

Construction Noise

Although no specific construction or development is proposed at this time, construction noise impacts could occur as future development within the CPU area occurs. Due to the developed nature of the CPU area, there is a high likelihood that construction activities would take place adjacent to existing structures and that sensitive receptors would be located in proximity to construction activities. The City regulates noise associated with construction equipment and activities through its Noise Abatement and Control Ordinance, which puts limits on the days of the week and hours of operation allowed for construction. Hourly average noise levels would be approximately 83 dB(A) one-hour equivalent noise level (L_{eq}) at 50 feet from the center of construction activity when assessing three pieces of common construction equipment working simultaneously. Construction noise levels of

would attenuate to 75 dB(A) L_{eq} at 120 feet. Therefore, significant impacts would occur if sensitive land uses are located closer than 120 feet from construction activities. Implementation of the mitigation measures specified in Section 8.4 of this analysis would reduce construction-related noise impacts. However, even with implementation of this mitigation, at the program level it cannot be known whether the noise reduction measures would be adequate to reduce noise levels to below a level of significance. Construction noise impacts would therefore be significant and unavoidable.

Vibration

Potential sources of ground-borne vibration could occur as a result of railway operations. The Mid-Coast Corridor Transit Project noise and vibration analysis found vibration impacts to be less than significant (SANDAG 2014). The east-west Green Line Trolley bisects the CPU area. The Federal Transit Administration (FTA) methodology and equations provided in their Transit Noise and Vibration Impact Assessment Manual (FTA 2018) were used to calculate potential site-specific vibration levels within the CPU area. Portions of the Green Line Trolley tracks are on elevated structures and do not cause significant vibration impacts to adjacent development. Areas where noise- and vibrationsensitive uses are located the closest to the tracks (as close as 25 feet) are at the existing trolley stations. Because all trolleys stop at each station, trolley speeds approaching and departing from the stations would be very low and would not cause significant vibration levels over existing levels. These screening distances are therefore conservative. Impacts related to trolley vibration associated with the Green Line trolley would be less than significant. The future Purple Line Trolley would run through the Stadium Specific Plan area. The exact alignment is not known at this time; however, vibration impacts and screening distances for the Purple Line Trolley are anticipated to be the same as those for the Green Line Trolley. Impacts would be less than significant.

1.0 Introduction

The Mission Valley Community Plan Update (CPU) provides goals and supporting policies for future development within the planning area consistent with the 2008 General Plan and provides a long-range, comprehensive policy framework for growth and development in the community through 2050. The purpose of this study is to assess the potential for significant adverse noise impacts resulting from development that could occur with the CPU area.

2.0 **Project Description**

2.1 **Project Location**

Mission Valley is located at nearly the geographic center of the city of San Diego. The CPU area encompasses the valley formed by the San Diego River, a significant natural and recreational asset for the city. The CPU area sits at the crossroads of the regional freeway system, with access from Interstate 5 (I-5), Interstate 8 (I-8), Interstate 15 (I-15), Interstate 805 (I-805) and State Route 163 (SR-163). The CPU area is a regional center of offices, hotels, and retail sales. The CPU area is also a major regional visitor center, hosting a large number of hotels in close proximity to nearby tourist attractions such as Mission Bay, Sea World, and Balboa Park.

The CPU area encompasses 3,216 acres, or 2,428 acres not including rights-of-way, and is generally bounded by Friars Road and the northern slopes of the valley on the north, the eastern banks of the San Diego River on the east, the southern slopes of the valley on the south, and I-5 on the west. The CPU area is surrounded by several other community planning areas: Old Town San Diego, Uptown, Greater North Park, Normal Heights, Kensington–Talmadge, College Area, Navajo, Tierrasanta, Kearny Mesa, Serra Mesa, Linda Vista, and Mission Bay Park.

Figure 1 shows the regional location of the CPU area and Figure 2 shows an aerial photograph.

2.2 **Project Overview**

The CPU would update the adopted 1984 Mission Valley Community Plan. The CPU provides goals and supporting policies for future development within the CPU area, consistent with the General Plan, and a long-range, comprehensive policy framework for growth and development in the community through 2050.

The CPU addresses a range of topics, including land use; mobility; urban design; economic prosperity; public facilities, services, and safety; recreation; conservation; noise; historic preservation; and arts and culture.



FIGURE 1 Regional Location





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FIGURE 2 Existing Community Plan Land Use The CPU evaluates existing conditions on a community-wide level and develops the longterm vision for Mission Valley. In addition to augmenting the General Plan and providing detailed land use guidance for the Mission Valley community, the CPU would also play a role in helping to achieve statewide regulatory objectives including reducing greenhouse gas emissions; promoting public health; improving air and water quality; reducing automobile use and fuel consumption; encouraging efficient development patterns; protecting natural and agricultural resources; encouraging infill and compact development; revitalizing urban and community centers; increasing availability of affordable housing; promoting water conservation; improving the infrastructure system; and promoting energy efficiency and conservation measures.

2.3 Development Summary

The CPU encompasses a broad range of the land use designations defined in the General Plan and contains a more detailed description and distribution of land uses than the citywide General Plan. Land uses for the base year (2012), the adopted Community Plan, and the proposed CPU build-out are summarized in Table 1. Figure 3 shows the proposed CPU land uses.

Table 1						
Existing, Adopted, and Proposed Land Uses						
		Adopted				
	Base Year	Community Plan	Proposed CPU			
Land Use	(2012)	(2050)	(2050)			
Residential D	evelopment (dwell	ling units)				
Single Family	1	1	1			
Multi-Family	11,243	23,199	39,156			
Total Housing	11,244	23,200	39,157			
Non-Residential Development (square feet)						
Commercial/Retail	5,231,350	6,215,920	7,244,347			
Office	7,418,523	11,788,498	12,087,208			
Motel/Hotel	3,648,880	6,293,266	4,406,391			
Industrial	603,210	529,348	120,711			
Institutional/Community Facilities	158,839	175,129	195,358			
Hospital/Clinic	67,223	67,223	42,803			
University and Other College	$247,\!577$	223,098	189,163			
Schools K to 12	96,200	96,200	$105,\!650$			
Recreational	195,181	180,956	646,278			
Total Non-Residential Development	17,666,983	25,569,638	25,037,909			



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FIGURE 3 Proposed CPU Land Uses

2.4 Policies and Implementing Actions

The CPU contains policies and implementing actions to guide future development within the CPU area. The following policies are related to noise:

Residential Development

• RES-5 Any residential development built within 500 feet of a freeway needs to be designed to minimize the exposure of freeway noise, including siting buildings and balconies perpendicular to the freeway, and using parking structures to shield units from noise.

Commercial Development

• COM-7 Any new commercial development sited adjacent to residential development should provide for the privacy and noise attenuation of adjacent homes.

Noise

- NOI-1 Beyond site planning strategies, new development within 500 feet of the freeway should include building design techniques that address noise exposure and the insulation of buildings to reduce interior noise levels to acceptable limits. Methods may include, but are not limited to, forced-air ventilation systems, double-paned or sound rated windows, sound insulating exterior walls and roofs, and attic vents.
- NOI-2 New development should include site planning techniques and landscaping to help minimize exposure of noise sensitive uses to rail corridor and trolley line noise.

Area Specific: Freeway Adjacent

- FAD-1 Buildings adjacent to a freeway should be buffered from the freeway by offstreet parking or ample landscaping.
- FAD-2 Freeway-adjacent buildings should be oriented such that courtyards and residential units with operable windows and balconies face away from the freeway.
- FAD-3 All residential units should be located above the freeway elevation.
- FAD-4 All freeway-adjacent development should incorporate noise attenuation measures.

Implementing Actions: Public Facilities, Services, and Safety

• IA-91 Coordination. Work with the California Department of Transportation (Caltrans) to landscape freeway-highway rights-of-way buffers and install low noise pavement surfaces, berms, and noise barriers to mitigate state freeway and highway traffic noise.

- IA-92 Seek to reduce exposure, when parks are in noisier areas, through site planning, including locating the most noise sensitive uses, such as children's play areas and picnic tables, in the quieter areas of the site.
- IA-93 Exposure Mitigation. Limit future residential and other noise-sensitive land uses in areas exposed to high levels of noise.

3.0 Fundamentals of Noise and Vibration

3.1 Fundamentals of Noise

Sound 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 halving of the energy would result in a 3 dB decrease.

Additionally, in technical terms, sound levels are described as either a "sound power level" or a "sound pressure level," which while commonly confused are two distinct characteristics of sound. Both share the same unit of measure, the dB. However, sound power, expressed as L_{pw} , is the energy converted into sound by the source. The L_{pw} is used to estimate how far a noise will travel and to predict the sound levels at various distances from the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers such as an ear drum or microphone and is the sound pressure level. Noise measurement instruments only measure sound pressure, and noise level limits used in standards are generally sound pressure levels.

The human ear is not equally sensitive to all frequencies within the sound spectrum. To accommodate this phenomenon, the A-scale, which approximates the frequency response of the average young ear when listening to most ordinary everyday sounds, was devised. When people make relative judgments of the loudness or annoyance of a sound, their judgments correlate well with the A-scale sound levels of those sounds. Therefore, the "A-weighted" noise scale is used for measurements and standards involving the human perception of noise. Noise levels using A-weighted measurements are designated with the notation dB(A).

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this study are the one-hour equivalent noise level (L_{eq}), the community noise equivalent level (CNEL), and the sound exposure level (SEL). The CNEL is a 24-hour equivalent sound level. The CNEL calculation applies a 5 dB(A) penalty to noise occurring during evening hours, between 7:00 p.m. and 10:00 p.m., and a 10 dB(A) penalty is added to noise occurring during the night, between 10:00 p.m. sensitivity of humans to noise during the evening and night. The SEL is a noise level over a stated period of time or event and normalized to one second.

Sound from a small, localized source (approximating a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dB(A) for each doubling of the distance.

Traffic noise is not a single, stationary point source of sound. The movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point when viewed over some time interval. The drop-off rate for a line source is 3 dB(A) for each doubling of distance.

The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site (such as parking lots or smooth bodies of water) receives no additional ground attenuation, and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. A soft site (such as soft dirt, grass, or scattered bushes and trees) receives an additional ground attenuation value of 1.5 dB(A) per doubling of distance. Thus, a point source over a soft site would attenuate at 7.5 dB(A) per doubling of distance.

Human perception of noise has no simple correlation with acoustical energy. A change in noise levels is generally perceived as follows: 3 dB(A) barely perceptible, 5 dB(A) readily perceptible, and 10 dB(A) perceived as a doubling or halving of noise (California Department of Transportation [Caltrans] 2013).

3.2 Fundamentals of Vibration

Vibration consists of energy waves transmitted through solid material (Federal Transit Administration [FTA] 2006). Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration may be composed of a single pulse, a series of pulses, or a continuous oscillatory motion. The frequency of a vibrating object describes how rapidly it is oscillating, measured in hertz (Hz). The normal frequency range of most groundborne vibration that can be felt generally starts from a low frequency of less than 1 Hz to a high of about 200 Hz (FTA 2018).

Vibration energy spreads out as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. Groundborne vibration is measured by its peak particle velocity (PPV). The PPV is normally described in inches per second (inch/sec). PPV is appropriate for determining potential structure damage but does not evaluate human response to vibration. The ground motion caused by vibration may also be described in decibel notation (vibration decibels), referenced as VdB, which serves to compress the range of numbers required to describe vibration relative to human response. The general human response to different levels of groundborne vibration velocity levels is described in Table 2.

Table 2					
Human	Human Response to Different Levels of Groundborne Vibration				
Vibration					
Velocity Level	Human Reaction				
$65~{ m VdB}$	Approximate threshold of perception for many people.				
75 VdB	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find that transportation-related vibration				
	Vibration acceptable only if there are an infrequent number of events				
85 VdB	per day.				
SOURCE: FTA 2018.					
VdB = vibration decibel					

Groundborne vibration can be a concern for nearby residents along a transit system route or maintenance facility, causing buildings to shake and rumbling sounds to be heard. In contrast to groundborne noise, described below, groundborne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of groundborne vibration are trains; buses on rough roads; and construction activities such as blasting, pile-driving, and operating heavy earth-moving equipment.

The rumbling sound caused by the vibration of building structures is referred to as groundborne noise. Like broadband noise, groundborne noise is usually characterized with the A-weighted sound level, which is intended to represent the normal frequency response of the human ear. However, there are potential problems when characterizing low-frequency noise using A-weighting, because human hearing causes sounds dominated by low-frequency components to seem louder than broadband sounds that have the same A-weighted level. This is accounted for by setting the limits for groundborne noise lower than would be the case for broadband noise. The sound level accompanying vibration is generally 25 to 40 dB(A) lower than the vibration velocity level in VdB. Groundborne vibration levels of 65 VdB can result in groundborne noise levels up to 40 dB(A), which can disturb sleep. Groundborne vibration levels of 85 VdB can result in groundborne noise such as schools (FTA 2018).

4.0 Applicable Standards and Guidelines

The CPU area is exposed to noise from vehicle traffic on area roadways, trolley 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

The noise section of the City of San Diego's Significance Determination Thresholds for the California Environmental Quality Act (CEQA) identifies thresholds for traffic noise (City of San Diego 2016). These noise levels are summarized in Table 3 below.

Table 3 Traffic Noise Significance Thresholds (dB[A] CNEL)						
Structure or Proposed Use that would be Impacted by Traffic Noise	Interior Space	Exterior Useable Space*	General Indication of Potential Significance			
Single-family detached	$45~\mathrm{dB}$	$65~\mathrm{dB}$				
Multi-family, school, library, hospital, day care center, hotel, motel, park, convalescent home	Development Services Department ensures 45 dB pursuant to Title 24	$65~\mathrm{dB}$	Structure or outdoor useable area is <50 feet from the center of the closest (outside) lane on a street with existing or future ADTs >7,500			
Office, church, business, professional uses	n/a	70 dB	Structure or outdoor useable area is <50 feet from the center of the closest lane on a street with existing or future ADTs >20,000			
Commercial, retail, industrial, outdoor spectator sports uses	n/a	75 dB	Structure or outdoor useable area is <50 feet from the center of the closest lane on a street with existing or future ADTs >40,000			

SOURCE: City of San Diego 2016.

ADT = average daily traffic; dB = decibel

*If a project is currently at or exceeds the significance thresholds for traffic noise described above and noise levels would result in less than a 3 dB increase, then the impact is not considered significant.

4.2 California Code of Regulations

4.2.1 Noise Insulation Standards

Interior noise levels for habitable rooms are regulated by Title 24 of the California Code of Regulations (CCR; 2016), California Noise Insulation Standards. Title 24, Chapter 12, Section 1207 of the California Building Code requires that interior noise levels, attributable to exterior sources, not exceed 45 CNEL in any habitable room within a residential structure. 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 rooms for this regulation (24 CCR 1207 2016).

4.2.2 California Green Building Standards Code – Environmental Comfort

For nonresidential structures, Title 24, Chapter 12, Section 1207.5 refers to 2016 California Green Building Standards (CALGreen), Chapter 5 – Nonresidential Mandatory Measures, Division 5.5 - Environmental Quality, Section 5.507 - Environmental Comfort, Subsection 5.507.4 - Acoustical Control. Pursuant to these standards, all nonresidential building construction shall employ building assemblies and components that achieve a composite sound transmission class rating of at least 50 or shall otherwise demonstrate that exterior noise shall not result in interior noise environment where noise levels exceed 50 A-weighted equivalent decibels [dB(A) L_{eq}] in occupied areas during any hour of operation (24 CCR 1207.5 2016).

4.3 City of San Diego General Plan

The Noise Element of the General Plan specifies compatibility guidelines for different categories of land use. The land use compatibility guidelines are summarized in Table 4. As shown in Table 4, for a particular land use category, noise levels are either considered compatible, conditionally compatible, or incompatible. A "compatible" land use indicates that standard construction methods will attenuate exterior noise to an acceptable indoor noise level and people can carry out outdoor activities with minimal noise interference. Evaluation of land use that falls into the "conditionally compatible" noise environment should have an acoustical study. For land uses indicated as conditionally compatible, structures must be capable of attenuating exterior noise to the indoor noise level shown in Table 4. For land uses indicated as incompatible, new construction should generally not be undertaken. Due to severe noise interference, outdoor activities are unacceptable and for structures, extensive mitigation techniques are required to make the indoor environment acceptable.

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 CNEL in noise-sensitive interior rooms. This conforms to Title 24 of the CCR, which requires interior noise levels for habitable rooms due to exterior sources not to exceed 45 CNEL (see Section 4.2.1). The City also specifies that the interior noise level due to exterior sources is not to exceed 45 CNEL for institutional uses and is not to exceed 50 CNEL for office buildings and commercial uses.

	(Nity of Son Diag	Table 4	4:L:1:4	Cuidal			
City of San Diego – Land Use – Noise Compatibility Guidelines Exterior Noise					r Noise I	Exposure	Э	
					[d	B(A) CN	EL]	
Duul	Demotional	Land Use Cate	egory	6	0 6	55 5	70	75
Parks	s and Recreational	vo Romontion						
Outd	oor Spectator Spor	te Golf Courses: V	Vater Recreational Facilities:					
Indoc	or Recreation Facil	ities	vater neereational racinties,					
Agric	ultural	10105				1		
Crop	Raising & Farmin	g: Community Ga	rdens, Aquaculture, Dairies:					
Horti	culture Nurseries	& Greenhouses, A	nimal Raising, Maintain &					
Keep	ing; Commercial S	tables						
Resid	lential							
Singl	e Dwelling Units;	Mobile Homes			45			
Multi	iple Dwelling Unit	s *For uses affected	d by aircraft noise, refer to		45	45*		
Polici	ies NE-D.2. & NE-	D.3.			40	40		
Instit	utional							
Hosp	itals; Nursing Fac	ilities; Intermedia	te Care Facilities;					
Kinde	ergarten through (Frade 12 Educatio	nal Facilities; Libraries;		45			
Othor	Eums; Places of Wo	litica including Vo	racinties					
Collo	r Educational Faci	os)	cational/1 rade Schools and		45	45		
Come	torios							
Retai	l Sales							
Build	ing Supplies/Equi	nment: Food Beve	rages & Groceries: Pets & Pet					
Supp	lies: Sundries. Pha	armaceutical. & Co	invenience Sales: Wearing			50	50	
Appa	rel & Accessories							
Com	nercial Services		·				•	
Building Services; Business Support; Eating & Drinking; Financial								
Institutions; Maintenance & Repair; Personal Services; Assembly &								
Enter	Entertainment (includes public and religious assembly); Radio &							
Television Studios; Golf Course Support								
Visitor Accommodations 45 45 45								
Office	28				[
Busir	ness & Professiona	l; Government; Me	edical, Dental & Health			50	50	
Pract	itioner; Regional &	& Corporate Head	uarters					
Venic	ile and Venicular I	Lquipment Sales a	M Services Use				1	
Comr	nercial or Persona	l Venicle Kepair &	Maintenance; Commercial or					
& Ro	ntale: Vehicle Sales	a nemais, venicie	e Equipment & Supplies Sales					
Whol	esale Distribution	Storage Use Cate	ฐกาง					
Equi	oment & Materials	<u>s Storage Vards: M</u>	loving & Storage Facilities:					
Ware	house: Wholesale	Distribution	a storage racinetes,					
Indus	strial		·				•	
Heav	y Manufacturing;	Light Manufacturi	ing; Marine Industry; Trucking					
& Tra	ansportation Term	inals; Mining & E	xtractive Industries					
Resea	arch & Developme	nt					50	
		Indoor Uses	Standard construction methods	should a	attenuate	e exterior	noise to	an
	Compatible	Indoor Oses	acceptable indoor noise level. Re	efer to Se	ection I.			
Outdoor Uses Activities associated with the land use may be carried out.								
		Indoor Uses	Building structure must attenu	ate exter	rior noise	e to the in	idoor noi	se level
	Conditionally		indicated by the number for occupied areas. Refer to Section I.					
	Compatible	Outdoor Uses	Feasible noise mitigation techniques should be analyzed and incorporated				porated	
		Indoor User	to make the outdoor activities acceptable. Keter to Section I.					
Incompatible Indoo		Indoor Uses	Severe poice interference malage outdage estivities unconstable					
SOL	RCF: City of Som T	Outdoor Uses	Severe noise interference makes	s outdooi	r activiti	es unacce	ptable.	
	= A-weighted dec	right contained and $right contained and right contained a$	munity noise equivalent level					

In addition to the compatibility guidelines shown in Table 4, Section B of the Noise Element provides additional guidance for multi-family and mixed-use residential developments that is applicable to the CPU area. Section B of the Noise Element states that although not generally considered compatible, the City conditionally allows multi-family and mixed-use residential uses up to 75 CNEL with a requirement to include attenuation measures to ensure an interior noise level of 45 CNEL where a community plan allows multi-family and mixed-use. 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

While the General Plan Noise Element addresses land use compatibility of a proposed use with the surrounding noise environment, the City's Municipal Code addresses the noise generated on-site impacting adjacent properties. This includes both on-site stationary noise and temporary construction noise.

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 5 shows the exterior noise limits specified in the City's Noise Control Ordinance.

Table 5 City of San Diego Property Line Noise Limits					
Noise Level [dB(A)]					
	7:00 a.m. to	7:00 p.m. to	10:00 p.m. to		
Receiving Land Use Category	7:00 p.m.	10:00 p.m.	7:00 a.m.		
Single-family Residential	50	45	40		
Multi-family Residential (up to a					
maximum density of 1 dwelling	55	50	45		
unit/2,000 square feet)					
All Other Residential	60	55	50		
Commercial	65	60	60		
Industrial or Agricultural	75	75	75		
SOURCE: City of San Diago, Municipal Code Section 59 5 0401					

Construction Noise 4.4.2

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.

Vibration 4.5

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, guidelines from the FTA and Caltrans serve as a useful tool to evaluate vibration impacts. Caltrans guidelines recommend that a standard of 0.2 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 2018).

5.0 Existing Conditions

5.1 Noise Measurements

As part of this assessment, ambient noise levels were measured in the planning area to provide a characterization of the variability of noise and to assist in determining constraints and opportunities for future development. Ten 15-minute daytime noise level measurements were conducted throughout the study area. Noise measurements were taken with a Larson-Davis LxT Type 1 Integrating Sound Level Meters, serial numbers 3827. The following parameters were used:

Filter:	A-weighted
Response:	Slow
Time History Period:	5 seconds
Height of Instrument:	5 feet above ground level

Each measurement location is shown in Figure 4. A summary of the measurements is provided in Table 6, and traffic counts taken during measurements are summarized in Table 7. Noise measurement data are contained in Attachment 1. Based on the measurement data, daytime noise levels in the planning area are typical of an urban environment. Each measurement location and noise source observed during the measurements is discussed below.

Table 6 Noise Measurements									
ID^1	Location	Date	Time	Leq					
MV-1	Friars Road at Goshen Street	9/16/2015	1:07 p.m. – 1:22 p.m.	63.4					
MV-2	Hotel Circle North east of the Crowne Plaza	9/16/2015	2:00 p.m. – 2:15 p.m.	65.1					
MV-3	Hazard Center Drive west end	9/16/2015	2:41 p.m. – 2:56 p.m.	66.1					
MV-4	Friars Road east of Frazee	9/16/2015	3:47 p.m. – 4:02 p.m.	65.2					
MV-5	Camino del Rio South at the Scottish Right Event Center	9/16/2015	4:36 p.m. – 4:51 p.m.	73.0					
MV-6	I-8 at I-805	9/16/2015	5:28 p.m. – 5:43 p.m.	76.4					
MV-7	Rio San Diego Drive east of River Run Drive	9/17/2015	9:22 a.m. – 9:37 a.m.	56.2					
MV-8	Fenton Parkway south end	9/17/2015	9:58 a.m. – 10:13 a.m.	59.9					
MV-9	Qualcomm Way at Rio San Diego Drive	9/17/2015	11:03 a.m. – 11:18 a.m.	65.4					
MV-10	San Diego Trolley east of Mission Valley Center Station	9/17/2015	12:12 p.m. – 12:27 p.m.	60.2					
¹ Measurement locations are shown in Figure 4 and correspond to ID the provided above. L_{eq} = one-hour equivalent noise level									





Mission Valley Community Plan Boundary

• Noise Measurement Locations



FIGURE 4 Aerial Photograph of CPU Vicinity and Noise Measurement Locations

Measurement MV-1 was taken on Friars Road south of Goshen Street. The main source of noise at this measurement location was vehicle traffic on Friars Road. Traffic volumes on Friars Road during Measurement MV-1 were counted and the results are shown in Table 7. Other sources of noise included vehicle traffic on Goshen Street and vehicles entering and exiting the Courtyards condominium complex. The average measured noise level was $63.4 \text{ dB}(A) L_{eq}$.

Measurement MV-2 was taken on Hotel Circle North east of the Crowne Plaza and west of the parking lot of Budget Truck Rental. The main source of noise at this measurement location was vehicle traffic on I-8. Other sources of noise included vehicle traffic on Hotel Circle North. Traffic volumes on Hotel Circle North during Measurement MV-2 were counted and the results are shown in Table 7. The average measured noise level was $65.1 \text{ dB}(A) L_{eq}$.

Measurement MV-3 was taken 100 feet west of the end of Hazard Center Drive and 50 feet north of the San Diego Trolley Line. The main source of noise at this measurement location was vehicle traffic on SR-163. Additionally, during this measurement a trolley passed by generating noise levels up to 75.0 dB(A). The average measured noise level was $66.1 \text{ dB}(A) \text{ L}_{eq}$.

Measurement MV-4 was taken on Friars Road east of Frazee Road in front of Robbins Brothers Engagement Ring Store. The main source of noise at this measurement location was vehicle traffic on Friars Road. Traffic volumes on Friars Road during Measurement MV-4 were counted and the results are shown in Table 7. This included vehicles queueing at red lights and vehicles accelerating when lights turned green. Other sources of noise included vehicle traffic on Frazee Road. The average measured noise level was $65.2 \text{ dB}(A) \text{ L}_{eq}.$

Measurement MV-5 was taken in the parking lot of the Scottish Rite Event Center overlooking Camino del Rio South. The main source of noise at this measurement location was vehicle traffic on I-8. Other sources of noise included vehicle traffic on Camino del Rio South. Traffic volumes on Camino del Rio South during Measurement MV-5 were counted and the results are shown in Table 7. The average measured noise level was 73.0 dB(A) Leq.

Measurement MV-6 was taken in the parking lot north of I-8 and east of I-805. At this location, I-805 and associated on- and off-ramps are elevated above the measurement location. The main sources of noise at this measurement location were vehicle traffic on I-8 and ramps connecting I-8 and I-805. Other sources of noise included parking lot activities and construction equipment approximately 700 feet away. The average measured noise level was 76.4 dB(A) L_{eq} .

Measurement MV-7 was taken on Rio San Diego Drive between River Run Drive and Fenton Parkway. The main source of noise at this measurement location was vehicle traffic on Rio San Diego Drive. Traffic volumes on Rio San Diego Drive during Measurement MV-7 were counted and the results are shown in Table 7. Other sources of noise included activities associated with the adjacent Club River Run Apartment Homes complex such as a leaf blower approximately 200 to 300 feet away, movers loading furniture from a residence approximately 300 feet away, and vehicles entering and exiting the parking lot approximately 50 feet way. Additionally, a plane flyover occurred during the measurement. The average measured noise level was 56.2 dB(A) L_{eq} .

Measurement MV-8 was taken on the sidewalk east of the south end of Fenton Parkway and immediately adjacent to the San Diego Trolley Line at Fenton Parkway Station. The main source of noise at this measurement location was trolley activity. During the measurement one eastbound and one westbound trolley pass-by occurred. Pass-bys resulted in noise levels of up to 72.6 dB(A). Other sources of noise included vehicle traffic on I-8 and Fenton Parkway. The average measured noise level was 59.9 dB(A) L_{eq} .

Measurement MV-9 was taken on Qualcomm Way, north of Rio San Diego Drive, on the walkway connecting Qualcomm Way to the parking lot for the U.S. Department of Veterans Affairs building. The main source of noise at this measurement location was vehicle traffic on Qualcomm Way. Traffic volumes on Qualcomm Way during Measurement MV-9 were counted and the results are shown in Table 7. Other sources of noise included vehicle traffic on Rio San Diego Drive. The average measured noise level was 65.4 dB(A) L_{eq}.

Measurement MV-10 was taken in the parking lot north of Camino de la Reina, west of Camino del Este. The measurement was taken approximately 25 feet south of the San Diego Trolley Line. The main source of noise at this measurement location was trolleys. During the measurement one eastbound and one westbound trolley pass-by occurred. Pass-bys resulted in noise levels of up to 80.3 dB(A). Other sources of noise included parking lot activities and vehicle traffic on Camino de la Reina (approximately 250 feet way). The average measured noise level was 60.2 dB(A) Leq.

Table 7										
15-minute Traffic Counts										
Medium Heavy										
Measurement	Roadway	Direction	Autos	Trucks	Trucks	Buses	Motorcycles			
1	Evience Dood	Westbound	128	1	0	1	2			
Ţ	Friars Road	Eastbound	142	4	1	0	0			
9	Hotel Circle	Westbound	28	0	0	1	0			
2	North	Eastbound	23	0	0	2	0			
4	Friars Road	Westbound	420	2	0	0	1			
4		Eastbound	660	3	0	0	7			
-	Camino del Rio	Westbound	156	1	0	0	0			
Ð	South	Eastbound	69	0	0	0	0			
7	Rio San Diego	Westbound	53	1	0	0	0			
1	Drive	Eastbound	44	0	0	0	0			
9	O la la construction West	Northbound	97	6	3	0	1			
	Qualcomm way	Southbound	79	5	2	0	0			
NOTE: Traffic counts were not conducted during Measurements 3, 6, 8, or 10. The main source of noise during										
Measurements 3 and 10 was vehicle traffic on freeways and freeway traffic volumes could not be										
manually counted. The main source of noise during Measurements 6 and 8 was trolley activity.										

5.2 Existing Vehicle Traffic Noise Contours

The roads generating the greatest noise level in the CPU area are I-5, I-8, I-15, I-805, SR-163, and Friars Road. 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 sitespecific but are rather guides to determine when detailed acoustic analysis should be undertaken.

Figure 5 shows the existing vehicle traffic noise contours for the CPU area. As shown, existing noise levels throughout the community exceed 60 CNEL. The local freeways are the dominant noise sources in the CPU area. Noise contours from the freeways in many cases overlap with and encompass the noise contours from local roadways. The distances to various traffic CNEL noise contours for these major roads are provided in Attachment 2.

5.3 Existing Trolley Noise Contours

The San Diego Metropolitan Transit System (MTS) Green Line Trolley traverses an eastwest railway alignment that includes nine trolley stops in the CPU area. On weekdays, 96 trolley passes occur during daytime hours (7 a.m. to 7 p.m.), 19 trolley passes occur during evening hours (7 p.m. to 10 p.m.), and 33 trolley passes occur during nighttime hours (10 p.m. to 7 a.m.). There are fewer trolley pass-bys on Saturdays and Sundays, therefore, the worst-case weekday scenario was modeled. Existing contour distances were calculated. Figure 6 shows the existing trolley noise contours for the CPU area. As shown, the 60 CNEL contour extends up to approximately 270 feet from the center of the trolley tracks between the Old Town and Grantville trolley stations, and the 65 CNEL contour extends up to approximately 85 feet of the trolley tracks. Trolley contours noise calculation data is provided in Attachment 3.

6.0 Noise Sources and 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. Traffic volumes and speeds for the local roadways were obtained from the traffic impact analysis prepared for the CPU (Chen Ryan Associates 2018). Existing freeway volumes were obtained from Caltrans traffic counts (Caltrans 2016a). Future freeway volumes were obtained from the San Diego Association of Governments' Transportation Forecast Information Center (SANDAG 2018).



Mission Valley Community Plan Boundary Traffic Noise Contours



FIGURE 5 Existing Vehicle Traffic Noise Contours



Mission Valley Community Plan Boundary Trolley Noise Contours

-----+ Trolley Line

Trolley Stations

 \bigcirc

----- 60 CNEL ----- 65 CNEL



FIGURE 6 Trolley Noise Contours The traffic mix (i.e., autos, medium trucks, and heavy trucks) for I-5, I-8, I-15, I-805, and SR-163 were derived from Caltrans truck counts (Caltrans 2016b). The traffic mixes are summarized in Table 8 along with the vehicle traffic parameters used in this analysis for each roadway segment. For local roadways in the CPU area, 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 similar to Caltrans truck counts for most area freeways.

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 modeled predicted noise levels do not account for obstructions, they are higher than those which would actually occur. In actuality, buildings and other obstructions along the roadways would shield distant receivers from the traffic noise. Existing and future vehicle traffic noise calculations are provided in Attachment 2.

Table 8 Vohielo Traffie Perometora									
	Segn	nent.			Vehicle Mix (Percent)				
			Existing	Future	Speed	Medium Hea			
Roadway	From	То	ADT	ADT	(mph)	Autos	Trucks	Trucks	
	Washington Street	Old Town Avenue	203,000	185,100	65	96.1	2.9	1.0	
	Old Town	I-8	205,000	231,000	65				
I-5	I-8	Sea World	207,000	192,600	65				
	Sea World Drive	Clairemont	222,000	243,600	65				
	Midway Drive	I-5	102.000	107 900	65				
		Morena	102,000	101,000	00	-		0.7	
	I-5 Manana	Boulevard	134,000	150,100	65				
	Boulevard	Taylor Street	196,000	199,400	65				
	Hotel Circle/ Taylor Street	Hotel Circle	199,000	199,400	65				
	Hotel Circle	SR-163	215,000	211,300	65				
I-8	SR-163	Mission Center Road	221,000	196,300	65	96.8	2.5		
	Mission Center Road	Texas Street	237,000	221,500	65				
	Texas Street	I-805	210,000	193,000	65				
	I-805	I-15	246,000	247,000	65				
	I-15	Fairmount Avenue	224,000	297,300	65				
	Fairmount Avenue	Waring Road	247,000	242,200	65				
	El Cajon Boulevard	Adams Avenue	169,000	209,000	65		2.8		
I-15	Adams Avenue	I-8	177,000	219,600	65	96.0		1.2	
	I-8	Friars Road	217,000	276,100	65				
	Friars Road	Aero Drive	224,000	255,100	65				
	El Cajon Boulevard	Adams Avenue	192,000	223,600	65		4.1		
TROF	Adams Avenue	I-8	213,000	250,700	65	02.6		2.3	
1-805	I-8	Murray Ridge	203,000	254,800	65	95.0			
	Murray Ridge	Kearny Villa Road	199,000	260,900	65				
	Washington Street	6th Avenue	130,000	134,700	65				
	6th Avenue	I-8	162,000	194,600	65				
SD 169	I-8	Friars Road	153,000	187,300	65	06 5	9.7	0.8	
SR-163	Friars Road	Genesee Avenue	179,000	214,900	65	96.0	2.1	0.8	
	Genesee Avenue	Mesa College Drive	163,000	211,100	65				
Phyllis Place	Abbotshill Road	I-805 SB Ramps	2,270	32,600	25	96.0	3.0	1.0	
Sea World	Mission Bay Parkway	Friars Road	34,200	41,200	50	96.0	3.0	1.0	
Drive	Friars Road	I-5 SB Ramps	29,490	34,800	40	00.0	0.0	1.0	
(T), , , 1 , (I-5 SB Ramps	I-5 NB Ramps	30,470	34,800	40				
Tecolote Road	I-5 NB Ramps	Morena Boulevard	22,410	31,900	35	96.0	3.0	1.0	

Table 8 Vehicle Troffic Perspectors									
	Segn	nent	frame r ar	ameters		Vehicle Mix (Percent)			
			Existing	Future	Speed		Medium	Heavy	
Roadway	From	То	ADT	ADT	(mph)	Autos	Trucks	Trucks	
Mission	Frazee Road	Metropolitan Drive	7,440	6,500	- 25	96.0	3.0	1.0	
Road	Metropolitan Drive	Mission Center Road	7,440	16,400		50.0			
	Mission Center Road	Via Alta	2,480	5,000	25	96.0	3.0	1.0	
Civita Boulevard	Via Alta	Qualcomm Way	2,480	4,200	25	96.0	3.0	1.0	
	Qualcomm Way	Franklin Ridge Road		11,000	25	96.0	3.0	1.0	
Westside Drive	Mission Center Road	Via Alta	4,070	5,100	25	96.0	3.0	1.0	
	Sea World Drive	Napa Street	13,650	15,400	55				
	Napa Street	Colusa Street	19,170	19,400	45				
	Colusa Street	Via las Cumbres	19,200	25,200	45		3.0		
	Via las Cumbres	Fashion Valley Road	22,270	24,600	45				
	Fashion Valley Road	Via de la Moda	26,100	27,200	45				
	Via de la Moda	Fashion Valley Driveway	25,920	26,500	45	96.0			
	Fashion Valley Driveway	Avenida de las Tiendas	26,830	41,300	45				
	Avenida de las Tiendas	Ulric Street/ SR-163 SB Ramps	40,510	58,200	45				
	Ulric Street/ SR-163 SB Ramps	SR-163 NB Ramps	53,170	55,600	45				
	SR-163 NB Ramps	Frazee Road	54,150	45,400	45				
Friars Road	Frazee Road	Mission Center Road	42,780	41,500	45			1.0	
	Mission Center Road	Qualcomm Way	37,050	35,500	45				
	Qualcomm Way	River Run Drive	33,250	38,900	45				
	River Run Drive	Fenton Parkway	22,080	40,200	45				
	Fenton Parkway	Northside Drive	28,430	34,300	45				
	Northside Drive	San Diego Mission Road	45,330	51,700	45				
	San Diego Mission Road	I-15 SB Ramps	57,740	85,200	45				
	I-15 SB Ramps	I-15 NB Ramps	46,570	74,100	45				
	I-15 NB Ramps	Rancho Mission Road	51,610	70,300	45				
	Rancho Mission Road	Santo Road	39,430	58,700	45				
	Santo Road	Riverdale Street	43,380	62,000	45				

Table 8 Vehicle Traffic Parameters									
	Segr	nent				Veh	icle Mix (Pe	rcent)	
			Existing	Future	Speed		Medium	Heavy	
Roadway	From	To	ADT	ADT	(mph)	Autos	Trucks	Trucks	
	Riverdale Street	Mission Gorge Road	31,300	42,600	45				
Mission Gorge Road	Friars Road	Zion Avenue	40,690	33,200	45	96.0	3.0	1.0	
Hazard Contor	Avenida del Rio	Hazard Center W. Driveway		12,500	35	96.0	3.0	1.0	
Drive	Hazard Center W. Driveway	Mission Center Road	8,710	15,900	35	96.0	3.0	1.0	
D's Gas	Gill Village Way	Qualcomm Way	10,500	15,600	40				
Diego	Qualcomm Way	River Run Drive	11,280	14,700	40	96.0	3.0	1.0	
Drive	River Run Drive	Fenton Parkway	9,090	13,900	40				
	Friars Road EB Ramps	Rancho Mission Road	7,590	12,400	40				
San Diego Mission	Rancho Mission Road	950 feet West of Fairmount Avenue	8,020	13,700	35	96.0	3.0	1.0	
κοαα	950 feet West of Fairmount Avenue	Fairmount Avenue	8,020	13,700	35				
	Pacific Highway	Morena Boulevard	19,060	18,800	35				
Taylor Street	Morena Boulevard	I-8 EB Ramps	17,750	4,000	35	96.0	3.0	1.0	
	I-8 EB Ramps	Hotel Circle South	14,410	5,000	35				
II. (.1	Hotel Circle South	Hotel Circle Place	15,340		35				
Circle	Hotel Circle Place	I-8 WB Ramps	6,510		35	06.0	2.0	1.0	
North (Existing Network)	I-8 WB Ramps	Fashion Valley Road	15,510		40	96.0	5.0	1.0	
	Fashion Valley Road	Camino de la Reina	12,460		35				
Hotel Circle North (Proposed Network)	Hotel Circle South	Fashion Valley Road		8,200	35				
	Fashion Valley Road	I-8 WB Off- ramp		14,200	35				
	I-8 WB Off- ramp	Street "J"		35,000	35	96.0	3.0	1.0	
	Street "J"	I-8 WB On- ramp		15,300	35				
	I-8 WB On- ramp	Hotel Circle South		3,300	35				
Table 8 Vehicle Traffic Parameters									
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	Segn	nent				Veh	icle Mix (Pe	rcent)	
	begi		Existing	Future	Speed	VCII	Medium	Heavy	
Roadway	From	То	ADT	ADT	(mph)	Autos	Trucks	Trucks	
	Hotel Circle North	Avenida del Rio	8,480	9,900	25				
	Avenida del Rio	Camino de la Siesta	13,360	17,100	30				
Camino de la Reina	Camino de la Siesta	Mission Center Road	10,730	10,800	30	96.0	3.0	1.0	
	Mission Center Road	Camino del Este	18,530	19,700	30				
	Camino del Este	Qualcomm Way	13,770	13,200	30				
	Camino de la Siesta	Mission Center Road	5,430	12,800	35				
	Mission Center Road	I-8 WB Ramps	24,030	29,600	35				
Camino del Rio North	I-8 WB Ramps	Camino del Este	11,910	11,300	35			1.0	
	Camino del Este	Qualcomm Way	12,180	21,500	35				
	Qualcomm Way	Mission City Parkway	10,590	15,700	45		3.0		
	Mission City Parkway	800 feet East of Mission City Parkway	8,080	8,900	30	96.0			
	800 feet East of Mission City Parkway	1,800 feet West of Ward Road	8,060	8,900	45				
	1,800 feet West of Ward Road	Ward Road	8,920	9,700	45				
	Ward Road	1,000 feet West of Fairmount Avenue	11,830	9,700	45				
	1,000 feet West of Fairmount Avenue	Fairmount Avenue	13,470	20,400	45				
	Taylor Street	1,200 feet East of Hotel Circle North	12,010	3,100	35				
Hotel Circle	1,200 feet East of Hotel Circle North	I-8 Ramps	12,340	3,100	35	96.0	3.0	1.0	
South	I-8 Ramps	Street "J"	17,200	15,500	35				
	Street "J"	I-8 EB Ramps	17,200	30,200	35				
	I-8 EB Ramps	Bachman Place	17,200	14,100	35				
	Bachman Place	Hotel Circle North	15,580	14,700	35				
	Western Terminus	1,800 feet west of Mission Center Road	7,330	7,500	25				
del Rio South	1,800 feet west of Mission Center Road	Mission Center Road	6,870	7,500	35	96.0	3.0	1.0	
	Mission Center Road	Texas Street	7,410	8,700	35				

Table 8 Vehicle Traffic Parameters									
	Segn	nent				Veh	icle Mix (Pe	rcent)	
			Existing	Future	Speed		Medium	Heavy	
Roadway	From	To	ADT	ADT	(mph)	Autos	Trucks	Trucks	
	Texas Street	Mission City Parkway	8,140	11,200	35				
	Mission City Parkway	I-15 SB Off- ramp	11,750	14,100	45				
	I-15 SB Off- ramp	I-15 SB On- ramp	9,580	17,000	40				
	I-15 SB On- ramp	Fairmount Avenue	6,370	7,700	40				
West Morena Boulevard	Tecolote Road	Morena Boulevard		16,700	35	96.0	3.0	1.0	
	Tecolote Road	West Morena Boulevard	16,180		35				
Morena	West Morena Boulevard	Linda Vista Road	17,740	16,100	40			1.0	
Boulevard	Linda Vista Road	I-8 WB Off- ramp	41,930	28,900	40	96.0	3.0	1.0	
	I-8 WB Off- ramp	Taylor Street	11,570	15,600	35				
Napa Street	Morena Boulevard	Friars Road	13,430	15,700	25	96.0	3.0	1.0	
Colusa Street	Linda Vista Road	Friars Road	2,720	2,700	25	96.0	3.0	1.0	
	Linda Vista Road	Friars Road	10,920	12,200	35	96.0	3.0	1.0	
Via Las Cumbres	Friars Road	South End (dead end before trolley tracks)		5,000	35	96.0	3.0	1.0	
	Friars Road	Riverwalk Drive		11,300	35	96.0	3.0	1.0	
Street "J"	Riverwalk Drive	Levi-Cushman Street "B"		17,200	35	96.0	3.0	1.0	
	Levi-Cushman Street "B"	Hotel Circle North		17,900	35	96.0	3.0	1.0	
Decline	Friars Road	Riverwalk Drive	9,980	8,200	35				
Valley	Riverwalk Drive	Levi-Cushman Street "B"	9,980	17,400	35	96.0	3.0	1.0	
поац	Levi-Cushman Street "B"	Hotel Circle North	9,980	24,600	35				
Bachman Place	Hotel Circle South	Lewis Street	9,140	20,800	40	96.0	3.0	1.0	
Avenida del Rio	Fashion Valley Parking Lot	Camino de la Reina	8,740	19,100	35	96.0	3.0	1.0	
Ulric	Fashion Hills Boulevard	600 feet South of Fashion Hills Boulevard	20,380	25,800	40	96.0	3.0	1.0	
	600 feet South of Fashion Hills Boulevard	Friars Road	20,430	27,100	40				

Table 8 Vehicle Traffic Parameters									
	Segn	nent				Veh	icle Mix (Pe	rcent)	
	_		Existing	Future	Speed		Medium	Heavy	
Roadway Camino do	From Camino do la	To Camino dol Rio	ADT	ADT	(mph)	Autos	Trucks	Trucks	
la Siesta	Reina	North	5,150	9,400	25	96.0	3.0	1.0	
Metropolitan	Mission Valley Road	Murray Canyon Road	3,840	11,400	25	96.0	3.0	1.0	
Drive	Murray Canyon Road	Frazee Road	3,840	200	20	50.0	5.0	1.0	
Murray Canyon Road	Metropolitan Drive	Frazee Road	7,400	5,600	25	96.0	3.0	1.0	
	Metropolitan Drive	Murray Canyon Road		6,200	25				
Frazee Road	Murray Canyon Road	Friars Road	14,670	20,400	30	96.0	3.0	1.0	
	Friars Road	Hazard Center Drive	17,050	19,200	30	50.0	5.0	1.0	
	Murray Ridge Road	1,200 feet West of Murray Ridge Road	10,970	14,700	45				
	1,200 feet West of Murray Ridge Road	950 feet North of Mission Valley Road	10,720	14,700	45				
	950 feet North of Mission Valley Road	Mission Valley Road	10,940	14,700	40				
Mission	Mission Valley Road	Westside Drive	14,170	20,100	40				
Center Road	Westside Drive	Friars Road WB Ramps	26,020	33,000	40	96.0	3.0	1.0	
	Friars Road WB Ramps	Friars Road EB Ramps	22,830	25,600	40				
	Friars Road EB Ramps	Mission Center Court	19,470	22,400	40				
	Mission Center Court	Hazard Center Drive	19,450	26,100	40				
	Hazard Center Drive	Camino de la Reina	27,060	32,100	40				
	Camino de la Reina	Camino del Rio North	23,280	31,700	40				
Auto	Camino del Rio North	I-8 EB Ramps	34,100	41,100	40	96.0	3.0	1.0	
Circle	I-8 EB Ramps	Camino del Rio South	20,980	18,000	40	00.0	5.0	1.0	
Via Alta	Franklin Ridge Road	Civita Boulevard	1,340	10,900	25	96.0	3.0	1.0	
	Civita Boulevard	Westside Drive	1,340	6,400	25	00.0	5.0	1.0	
Murray Ridge	Mission Center Road	I-805 NB Ramps	20,000	23,800	35	96.0	3.0	1.0	
Road	I-805 NB Ramps	I-805 SB Ramps	11,700	24,300	35	50.0	5.0	1.0	
Russell Park Way	Friars Road	Civita Boulevard	1,020	7,400	30	96.0	3.0	1.0	

Table 8 Vehicle Traffic Parameters									
	Segn	nent				Veh	icle Mix (Pe	rcent)	
Roadway	From	То	Existing ADT	Future ADT	Speed (mph)	Autos	Medium Trucks	Heavy Trucks	
Camino	Rio San Diego Drive	Camino de la Reina	8,450	13,900	35			1.0	
del Este	Camino de la Reina	Camino del Rio North	9,880	18,200	25	96.0	3.0	1.0	
Franklin	Phyllis Place	Via Alta		31,800	25			1.0	
Ridge Road	Via Alta	Cıvıta Boulevard		17,100	25	96.0	3.0	1.0	
	Civita Boulevard	Friars Road WB Ramps		19,700	30				
	Friars Road WB Ramps	Friars Road EB Ramps	9,300	30,300	35				
Qualcomm Way	Friars Road EB Ramps	Rio San Diego Drive	10,200	26,300	35				
	Rio San Diego Drive	Camino del Rio North	24,330	42,700	35	96.0	3.0	1.0	
	Camino del Rio North	I-8 WB Ramps	23,560	49,400	35				
	I-8 WB Ramps	I-8 EB Ramps	36,410	53,500	35				
	I-8 EB Ramps	Camino del Rio South	25,830	32,100	35				
	Camino del Rio South	1,400 feet North of Madison Avenue	29,050	33,200	40				
Texas Street	1400 Feet North of Madison Ave	Madison Avenue	29,240	33,200	40	96.0	3.0	1.0	
	Madison Avenue	Meade Avenue	17,090	20,400	25				
	Meade Avenue	El Cajon Boulevard	14,310	15,600	25				
River Run Drive	Friars Road	Rio San Diego Drive	4,030	4,100	25	96.0	3.0	1.0	
	Portofino Driveway	Friars Road	4,120	4,900	25				
	Friars Road	Rio San Diego Drive	12,610	15,700	30				
Fenton Parkway	Rio San Diego Drive	Del Rio Apartments Driveway	5,400	9,300	30	96.0	3.0	1.0	
	Del Rio Apartments Driveway	New Street I		9,300	30				
	New Street I	Camino del Rio North		13,900	30				
Mission City Parkway	Camino del Rio North	Camino del Rio South	6,430	11,000	35	96.0	3.0	1.0	
Nanthall	Portofino Driveway	Friars Road	6,590	5,100	25				
Drive	Friars Road	Fenton Marketplace Driveway	20,310	24,600	30	96.0	3.0	1.0	

Table 8 Vehicle Traffic Parameters									
	Segn	nent	I america			Veh	icle Mix (Pe	rcent)	
Roadway	From	То	Existing ADT	Future ADT	Speed (mph)	Autos	Medium Trucks	Heavy Trucks	
	Fenton Marketplace Driveway	Lowe's Frontage Road	15,890	19,600	30				
Mission	Ronda Avenue	Friars Road WB Ramps	17,220	17,900	45	06.0	2.0	1.0	
Drive	Friars Road WB Ramps	Friars Road EB Ramps	13,660	30,600	45	50.0	5.0	1.0	
Rancho Mission	Friars Road	San Diego Mission Road	12,820	16,200	35	96.0	3.0	1.0	
Road	San Diego Mission Road	Camino del Rio North		19,300	35	50.0	5.0	1.0	
Ward Road	San Diego Mission Road	Camino del Rio North	9,580		35	96.0	3.0	1.0	
Santo Road	Northern Terminus	Friars Road	6,360	15,700	30	96.0	3.0	1.0	
Riverdale	Zion Road	Friars Road	2,770	2,200	30			1.0	
Street	Friars Road	Vandever Avenue	8,900	26,500	30	96.0	3.0	1.0	
Mission Gorge Road	Friars Road	Camino del Rio North	14,710	22,700	30	96.0	3.0	1.0	
Fairmount	Camino del Rio North/I-8 WB Off-ramp	I-8 EB Off- ramp	40,210	53,300	35	96.0	96.0 3.0	1.0	
Avenue	I-8 EB Off-ramp	Camino del Rio South	82,880	93,300	35				
	West of Street "J"			6,000	25				
Riverwalk	Street "J"	Fashion Valley Road		3,700	25	96.0	3.0	1.0	
Drive	Fashion Valley Road	Avenida del Rio		15,200	25				
Levi- Cushman Street "B"	Street "J"	Fashion Valley Road		11,300	35	96.0	3.0	1.0	
Goshen	Linda Vista Road	Gaines Street		4,300	25	00.0	20	1.0	
Street	Gaines Street	Friars Road		3,400	25	96.0	5.0	1.0	
	Friars Road	South End		3,900	25				
New Street "I"	Mission City Parkway	Eastern End		11,900	25	96.0	3.0	1.0	
Gill Village Way	Friars Road	Rio San Diego Drive		5,700	25	96.0	3.0	1.0	
Rio Bonito Way	Friars Road	Rio San Diego Drive		4,100	25	96.0	3.0	1.0	
SOURCE: C ADT = avera	hen Ryan Associate ge daily traffic; EB	es 2018; Caltrans 2 = eastbound; WB	016a; Caltra: = westbound	ns, 2016b.					

6.2 Trolley Noise

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

The San Diego MTS provides trolley service along a railway alignment designated the "Green Line." The Green Line Trolley generally parallels I-8 throughout the planning area. The trolleys travel between 15 and 60 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 calculated assuming flat-site conditions and no intervening buildings that would provide noise attenuation.

6.3 Stationary Noise

Stationary sources of noise include activities associated with a given land use. The CPU area includes multiple land uses, including residential, commercial, and mixed-use land uses as well as recreational and institutional uses. Various land uses contain 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 recreation activities. Stationary noise is considered a "point source" and attenuates over distance at a rate of 6 dB(A) for each doubling of distance. The exact location and nature of future stationary noise sources is not known at this time and can, therefore, not be calculated in this analysis. Impacts are assessed in this analysis by identifying potential types of stationary sources and locations of mixed-use land use interfaces and identifying applicable regulations and mitigation framework for addressing impacts.

6.4 Construction Noise

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

Construction noise has the potential to result in temporary ambient noise increase due to construction activities. Construction noise is 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 bring materials to the site and remove the spoils from excavation. Table 9 summarizes typical construction equipment noise levels.

Table 9						
Typical Construction Eq	uipment Noise Levels					
	Noise Level at 50 Feet	Typical Duty				
Equipment	[dB(A) L _{eq}]	Cycle				
Auger Drill Rig	85	20%				
Backhoe	80	40%				
Blasting	94	1%				
Chain Saw	85	20%				
Clam Shovel	93	20%				
Compactor (ground)	80	20%				
Compressor (air)	80	40%				
Concrete Mixer Truck	85	40%				
Concrete Pump	82	20%				
Concrete Saw	90	20%				
Crane (mobile or stationary)	85	20%				
Dozer	85	40%				
Dump Truck	84	40%				
Excavator	85	40%				
Front End Loader	80	40%				
Generator (25 kilovolt ampts or less)	70	50%				
Generator (more than 25 kilovolt amps)	82	50%				
Grader	85	40%				
Hydra Break Ram	90	10%				
Impact Pile Driver (diesel or drop)	95	20%				
In situ Soil Sampling Rig	84	20%				
Jackhammer	85	20%				
Mounted Impact Hammer (hoe ram)	90	20%				
Paver	85	50%				
Pneumatic Tools	85	50%				
Pumps	77	50%				
Rock Drill	85	20%				
Roller	74	40%				
Scraper	85	40%				
Tractor	84	40%				
Vacuum Excavator (vac-truck)	85	40%				
Vibratory Concrete Mixer	80	20%				
Vibratory Pile Driver	95	20%				
SOURCE: FHWA 2006.		<u>.</u>				
dB(A) L _{eq} = A-weighted decibels average noise	level					

Construction equipment would generate maximum noise levels between 70 and 95 dB(A) L_{max} at 50 feet from the source when in operation. During excavation, 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, such as measurement. Average construction noise levels were calculated for the simultaneous operation of three common pieces of construction equipment: backhoe, excavator, and loader. The usage factors were applied to the maximum noise level at 50 feet for each piece of equipment, and then noise levels were added logarithmically. Hourly average noise levels would be approximately 83 dB(A) L_{eq} at 50 feet from the center of construction activity when assessing three pieces of common construction 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.

Impacts are assessed in this analysis by identifying potential construction noise levels and buffer distances at which construction noise levels would be less than the noise levels identified in the City's Noise Abatement and Control Ordinance (75 dB).

6.5 Vibration

Potential sources of ground-borne vibration could come from railway operations. For conventional commuter railroad traffic such as the train and freight traffic that occurs on the railway at the western CPU area boundary, the FTA provides generalized screening distances for land uses that may be subject to vibration impacts (FTA 2018). For Category 1 uses such as vibration sensitive equipment, the screening distance from the right-of-way is 600 feet. For Category 2 land uses such as residences and buildings where people would normally sleep, the screening distance is 200 feet. The screening distance for Category 3 land uses such as institutional land uses with primarily daytime uses, is 120 feet. These screening distances were used to assess vibration impacts due to the railway at the western CPU area boundary.

The east-west tracks that bisect the CPU area provide only trolley service (Green Line Trolley) and do not include larger commuter trains or freight trains. Trolleys do not generate the same vibration levels as larger trains. Additionally, portions of the Green Line Trolley are elevated above grade and would not cause significant vibration at adjacent uses. Thus, the screening distances discussed above would be overly conservative. Therefore, for portions of the railway that are at-grade, rather than using the generalized screening distances for conventional commuter railroad traffic, FTA methodology and equations provided in their Transit Noise and Vibration Impact Assessment Manual (FTA 2018) were used to calculate potential site-specific vibration levels within the CPU area.

7.0 Future Acoustical Environment and Impacts

7.1 Increase in Ambient Noise

As discussed in Section 5.1, Noise Measurements, existing noise levels were measured in the CPU area to identify existing ambient noise conditions (refer to Table 6).

Traffic noise generally dominates the noise environment around the CPU area. Future development implemented under the CPU would increase traffic along local roadways due to increased allowable density and intensity of uses throughout the CPU area. Traffic noise increases may affect various noise-sensitive land uses, including residences. Using the traffic parameters summarized in Section 6.1, a traffic noise analysis has been completed for the build-out of the CPU. Table 10 summarizes the existing and build-out traffic noise levels along various roadway segments in the CPU area. Roadway noise is measured in CNEL at 50 feet from the roadway centerline.

A significant impact would occur if build-out of the CPU would result in traffic noise levels that exceed the City's significance thresholds for traffic noise (see Table 3). Per the City's significance thresholds, if a land use is currently at or exceeds the significance thresholds for traffic noise, then an increase of more than 3 dB is considered significant.

Table 10								
Increases in Ambient Vehicle Traffic Noise								
(CNEL at 50 feet from Centerline)								
	Se	egment	Base					
			Year	CPU				
Roadway	From	То	(2012)	(2050)	ΔdB			
	Washington Street	Old Town Avenue	85.6	85.2	-0.4			
TF	Old Town Avenue	I-8	85.7	86.2	0.5			
1-0	I-8	Sea World Drive	85.7	85.4	-0.3			
	Sea World Drive	Clairemont Drive	86.0	86.4	0.4			
	Midway Drive	I-5	82.5	82.7	0.2			
	I-5	Morena Boulevard	83.7	84.2	0.5			
	Morena Boulevard	Hotel Circle/Taylor Street	85.3	85.4	0.1			
	Hotel Circle/Taylor Street	Hotel Circle	85.4	85.4	0.0			
I-8	Hotel Circle	SR-163	85.7	85.6	-0.1			
	SR-163	Mission Center Road	85.8	85.3	-0.5			
	Mission Center Road	Texas Street	86.1	85.9	-0.2			
	Texas Street	I-805	85.6	85.3	-0.3			
	I-805	I-15	86.3	86.3	0.0			
	I-15	Fairmount Avenue	85.9	87.1	1.2			
	Fairmount Avenue	Waring Road	86.3	86.2	-0.1			
	El Cajon Boulevard	Adams Avenue	84.9	85.8	0.9			
	Adams Avenue	I-8	85.1	86.0	0.9			
1-15	I-8	Friars Road	86.0	87.0	1.0			
	Friars Road	Aero Drive	86.1	86.7	0.6			
	El Cajon Boulevard	Adams Avenue	85.9	86.5	0.6			
1.005	Adams Avenue	I-8	86.3	87.0	0.7			
1-805	I-8	Murray Ridge	86.1	87.1	1.0			
	Murray Ridge	Kearny Villa Road	86.0	87.2	1.2			
	Washington Street	6th Avenue	83.6	83.7	0.1			
	6th Avenue	I-8	84.5	85.3	0.8			
SR-163	I-8	Friars Road	84.3	85.2	0.9			
	Friars Road	Genesee Avenue	85.0	85.8	0.8			
	Genesee Avenue	Mesa College Drive	84.6	85.7	1.1			
Phyllis Place	Abbotshill Road	I-805 SB Ramps	57.0	68.5	11.5			
C. W. HD.	Mission Bay Parkway	Friars Road	75.0	75.8	0.8			
Sea world Drive	Friars Road	I-5 SB Ramps	72.0	72.7	0.7			
Taalata Daad	I-5 SB Ramps	I-5 NB Ramps	72.2	72.7	0.5			
Tecolote Road	I-5 NB Ramps	Morena Boulevard	69.5	71.0	1.5			
Mission Valler Davi	Frazee Road	Metropolitan Drive	62.1	61.5	-0.6			
Mission valley Road	Metropolitan Drive	Mission Center Road	62.1	65.5	3.4			
	Mission Center Road	Via Alta	57.3	60.4	3.1			
Civita Boulevard	Via Alta	Qualcomm Way	57.3	59.6	2.3			
	Qualcomm Way	Franklin Ridge Road		63.8				
Westside Drive	Mission Center Road	Via Alta	59.5	60.5	1.0			

Table 10								
Increases in Ambient Vehicle Traffic Noise								
(CNEL at 50 feet from Centerline)								
	Seg	ment	Base					
	_		Year	CPU				
Roadway	From	То	(2012)	(2050)	ΔdB			
	Sea World Drive	Napa Street	72.0	72.6	0.6			
	Napa Street	Colusa Street	71.4	71.4	0.0			
	Colusa Street	Via Las Cumbres	71.4	72.6	1.2			
	Via Las Cumbres	Fashion Valley Road	72.0	72.5	0.5			
	Fashion Valley Road	Via de la Moda	72.7	72.9	0.2			
	Via de la Moda	Fashion Valley Driveway	72.7	72.8	0.1			
	Fashion Valley Driveway	Avenida de las Tiendas	72.8	'74.'7	1.9			
		Ulric Street/SR-163 SB	74.6	76.2	1.6			
	Avenida de las Tiendas	Ramps						
Friars Road	Ulric Street/SR-163 SB	SR-163 NB Ramps	75.8	76.0	0.2			
	Ramps CD 162 ND Deces	For a Dec 1	75.0		0.0			
	SR-163 NB Ramps	Frazee Road	75.9	75.1	-0.8			
	Frazee Road	Mission Center Road	76.0	75.8	-0.2			
	Mission Center Road	Qualcomm Way	75.4	75.2	-0.2			
	Qualcomm Way	River Run Drive	74.9	75.6	0.7			
	River Run Drive	Fenton Parkway	73.1	75.7	2.6			
	Fenton Parkway	Northside Drive	74.2	75.0	0.8			
	Northside Drive	L 15 CD Denne		76.8	0.6			
	San Diego Mission Road	I-15 SB Ramps	77.3	79.0	1.7			
	I-15 SB Kamps	I-15 NB Kamps	75.2	77.2	2.0			
	1-10 ND Kamps	Santa Read	70.7	76.9	1.3			
	Canta Daad	Binondala Stucet	74.0	76.2	1.1			
	Biyondolo Street	Mission Corres Road	74.9	76.5	1.0			
Mission Course Road	Friend Road	Zion Auguno	75.0	79.0	1.5			
Hagand Conton	Avanida dal Pia	Lion Avenue Hogand Conton W. Drivouou	74.0	13.0	-0.8			
Drivo	Hazand Conton W. Drivouau	Mission Conton Bood	65.4	68.0	 9.6			
Drive	Cill Village Wey	Mission Center Road	65.4	60.0 60.2	2.0			
Pio San Diago Drivo	Ouelcomm Wey	Qualcomm way	67.0	69.5	1.0			
nio San Diego Drive	Qualcomm way	Fonton Darkway	66.0	69.0	1.1			
	Friera Pood FR Pompa	Panaha Miggian Paad	66.1	68.2	1.9			
	Friars Road ED Ramps	050 foot West of Foirmount	00.1	00.0	2.2			
San Diego Mission Boad	Rancho Mission Road	Avenue	65.0	67.4	2.4			
itoau	950 feet West of Fairmount Avenue	Fairmount Avenue	65.0	67.4	2.4			
	Pacific Highway	Morena Boulevard	68.8	68.7	-0.1			
Tavlor Street	Morena Boulevard	I-8 EB Ramps	68.5	62.0	-6.5			
	I-8 EB Ramps	Hotel Circle South	67.6	63.0	-4.6			
	Hotel Circle South	Fashion Valley Road	68.3	65.1	-3.2			
	Fashion Valley Road	I-8 WB Off-ramp	69.2	67.5	-1.7			
Hotel Circle North	I-8 WB Off-ramp	Street "J"	64.1	70.0	5.9			
	Street "J"	I-8 WB On-ramp	64.1	67.8	3.7			
	I-8 WB On-ramp	Hotel Circle South	67.9	61.2	-6.7			
	Hotel Circle North	Avenida del Rio	62.7	63.4	0.7			
	Avenida del Rio	Camino de la Siesta	66.2	67.3	1.1			
Camino de la Reina	Camino de la Siesta	Mission Center Road	65.3	65.3	0.0			
	Mission Center Road	Camino del Este	67.6	67.9	0.3			
	Camino del Este	Qualcomm Way	66.3	66.2	-0.1			

Table 10 Increases in Ambient Vehicle Traffic Noise							
	(CNEL at 50 fee	et from Centerline)					
	Seg	ment	Base				
			Year	CPU			
Roadway	From	То	(2012)	(2050)	ΔdB		
	Camino de la Siesta	Mission Center Road	63.3	67.1	3.8		
	Mission Center Road	I-8 WB Ramps	69.8	70.7	0.9		
	I-8 WB Ramps	Camino del Este	66.8	66.5	-0.3		
	Camino del Este	Qualcomm Way	66.9	69.3	2.4		
	Qualcomm Way	Mission City Parkway	68.8	70.5	1.7		
Camino del Rio	Mission City Parkway	800 feet East of Mission City Parkway	64.0	64.4	0.4		
North	800 feet East of Mission City Parkway	1,800 feet West of Ward Road	67.6	68.0	0.4		
	1,800 feet West of Ward Road	Ward Road	68.1	68.4	0.3		
	Ward Road	1,000 feet West of Fairmount Avenue	69.3	68.4	-0.9		
	1,000 feet West of Fairmount Avenue	Fairmount Avenue	69.8	71.6	1.8		
	Taylor Street	I-8 EB Off-Ramp	66.8	60.9	-5.9		
	I-8 EB Off-Ramp	Street "J"	66.9	67.9	1.0		
Hotel Circle South	Street "J"	I-8 EB On-Ramp	66.9	70.8	3.9		
	I-8 EB On-Ramp	Bachman Place	68.4	67.5	-0.9		
	Bachman Place	Hotel Circle North	67.9	67.7	-0.2		
	Western Terminus	1,800 feet west of Mission Center Road	62.0	62.1	0.1		
Camino del Rio	1,800 feet west of Mission Center Road	Mission Center Road	64.4	64.8	0.4		
	Mission Center Road	Texas Street	64.7	65.4	0.7		
South	Texas Street	Mission City Parkway	65.1	66.5	1.4		
	Mission City Parkway	I-15 SB Off-ramp	69.2	70.0	0.8		
	I-15 SB Off-ramp	I-15 SB On-ramp	67.1	69.6	2.5		
	I-15 SB On-ramp	Fairmount Avenue	65.4	66.2	0.8		
West Morena Boulevard	Tecolote Road	Morena Boulevard		68.2			
	Tecolote Road	West Morena Boulevard	68.1				
Manana Davilanani	West Morena Boulevard	Linda Vista Road	69.8	69.4	-0.4		
Morena boulevard	Linda Vista Road	I-8 WB Off-ramp	73.6	71.9	-1.7		
	I-8 WB Off-ramp	Taylor Street	66.6	67.9	1.3		
Napa Street	Morena Boulevard	Friars Road	64.7	65.4	0.7		
Colusa Street	Linda Vista Road	Friars Road	57.7	57.5	-0.2		
Via Las Cumbros	Linda Vista Road	Friars Road	66.4	66.9	0.5		
via Las Cumbres	Friars Road	South End		63.0			
	Friars Road	Riverwalk Drive		66.5			
Street "J"	Riverwalk Drive	Levi-Cushman Street "B"		68.4			
	Levi-Cushman Street "B"	Hotel Circle North		68.5			
	Friars Road	Riverwalk Drive	66.0	65.1	-0.9		
Fashion Valley Road	Riverwalk Drive	Levi-Cushman Street "B"	66.0	68.4	2.4		
	Levi-Cushman Street "B"	Hotel Circle North	66.0	69.9	3.9		
Bachman Place	Hotel Circle South	Lewis Street	66.9	70.5	3.6		
Avenida del Rio	Fashion Valley Parking Lot	Camino de la Reina	65.4	68.8	3.4		
Illric Street	Fashion Hills Boulevard	600 feet South of Fashion Hills Boulevard	70.4	71.4	1.0		
	600 feet South of Fashion Hills Boulevard	Friars Road	70.4	71.7	1.3		
Camino de la Siesta	Camino de la Reina	Camino del Rio North	60.5	63.1	2.6		
Metropolitan Drive	Mission Valley Road	Murray Canyon Road	59.2	64.0	4.8		

Table 10								
Increases in Ambient Vehicle Traffic Noise								
	(CNEL at 50 fee	et from Centerline)	D					
	Segi	ment	Base	CDU				
Doodwow	From	To	1 ear (9019)	(2050)	AJD			
noauway	Murray Canyon Road	To Frazee Road	<u>(2012)</u> 59.2	(2050)	<u>-128</u>			
Murray Canyon	Metropolitan Drive	Frazee Road	63.6	62.4	-1.2			
Itoau	Metropolitan Drive	Murray Canyon Road		61.3				
Frazee Road	Murray Canyon Road	Friars Road	66.6	68.0	14			
Tradee Road	Friars Road	Hazard Center Drive	67.3	67.8	0.5			
	Murray Ridge Road	1,200 feet West of Murray Bidge Boad	69.0	70.2	1.2			
	1,200 feet West of Murray Ridge Road	950 feet North of Mission Valley Road	68.9	70.2	1.3			
	950 feet North of Mission Valley Boad	Mission Valley Road	67.7	69.0	1.3			
Mission Center Road	Mission Valley Road	Westside Drive	68.8	70.4	1.6			
	Westside Drive	Friars Road WB Ramps	71.5	72.5	1.0			
	Friars Road WB Ramps	Friars Road EB Ramps	70.9	71.4	0.5			
	Friars Road EB Ramps	Mission Center Court	70.2	70.8	0.6			
	Mission Center Court	Hazard Center Drive	70.2	71.5	1.3			
	Hazard Center Drive	Camino de la Reina	71.7	72.4	0.7			
	Camino de la Reina	Camino del Rio North	71.0	72.3	1.3			
	Camino del Rio North	I-8 EB Ramps	72.7	73.5	0.8			
Auto Circle	I-8 EB Ramps	Camino del Rio South	70.6	69.9	-0.7			
Via Alta	Franklin Ridge Road	Civita Boulevard	54.7	63.8	9.1			
	Civita Boulevard	Westside Drive	54.7	61.5	6.8			
	Mission Center Road	I-805 NB Ramps	69.0	69.8	0.8			
Murray Ridge Road	I-805 NB Ramps	I-805 SB Ramps	66.7	69.9	3.2			
Russell Park Way	Friars Road	Civita Boulevard	55.0	63.6	8.6			
Contra 1.1 Esta	Rio San Diego Drive	Camino de la Reina	65.3	67.4	2.1			
Camino del Este	Camino de la Reina	Camino del Rio North	63.3	66.0	2.7			
Enonlin Didgo Dood	Phyllis Place	Via Alta		68.4				
Franklin Kluge Koad	Via Alta	Civita Boulevard		65.7				
	Civita Boulevard	Friars Road WB Ramps		67.9				
	Friars Road WB Ramps	Friars Road EB Ramps	65.7	70.8	5.1			
	Friars Road EB Ramps	Rio San Diego Drive	66.1	70.2	4.1			
Qualcomm Way	Rio San Diego Drive	Camino del Rio North	69.9	72.3	2.4			
	Camino del Rio North	I-8 WB Ramps	69.7	72.9	3.2			
	I-8 WB Ramps	I-8 EB Ramps	71.6	73.3	1.7			
	I-8 EB Ramps	Camino del Rio South	70.1	71.1	1.0			
	Camino del Rio South	1,400 feet North of Madison Avenue	72.0	72.5	0.5			
Texas Street	1,400 feet North of Madison Avenue	Madison Avenue	72.0	72.5	0.5			
	Madison Avenue	Meade Avenue	65.7	66.5	0.8			
	Meade Avenue	El Cajon Boulevard	65.0	65.3	0.3			
River Run Drive	Friars Road	Rio San Diego Drive	59.4	59.5	0.1			
	Portofino Driveway	Friars Road	59.5	60.3	0.8			
	Friars Road	Rio San Diego Drive	66.0	66.9	0.9			
Fenton Parkwav	Rio San Diego Drive	Del Rio Apartments Driveway	62.3	64.6	2.3			
	Del Rio Apartments Drivewav	New Street I		64.6				
	New Street I	Camino del Rio North		66.4				
Mission City Parkway	Camino del Rio North	Camino del Rio South	64.1	66.4	2.3			

Table 10							
Increases in Ambient Vehicle Traffic Noise							
	(CNEL at 50 fee	et from Centerline)	D				
	Seg	ment	Base	CDU			
D 1 .	T	m.	Year	CPU			
Roadway	From		(2012)	(2050)	ΔdB		
	Portofino Driveway	Friars Road	61.6	60.5	-1.1		
Northside Drive	Friars Road	Fenton Marketplace Driveway	68.0	68.9	0.9		
	Fenton Marketplace Driveway	Lowe's Frontage Road	67.0	67.9	0.9		
Mission Village	Ronda Avenue	Friars Road WB Ramps	70.9	71.1	0.2		
Drive	Friars Road WB Ramps	Friars Road EB Ramps	69.9	73.4	3.5		
Rancho Mission	Friars Road	San Diego Mission Road	67.1	68.1	1.0		
Road	San Diego Mission Road	Camino del Rio North	65.8	68.9	3.1		
Santo Road	Northern Terminus	Friars Road	63.0	66.9	3.9		
Riverdale Street	Zion Road	Friars Road	59.4	58.4	-1.0		
	Friars Road	Vandever Avenue	64.4	69.2	4.8		
Mission Gorge Road	Friars Road	Camino del Rio North	66.6	68.5	1.9		
Fairmount Avenue	Camino del Rio North/ I-8 WB Off-ramp	I-8 EB Off-ramp	72.0	73.3	1.3		
	I-8 EB Off-ramp	Camino del Rio South	75.2	75.7	0.5		
	West of Street "J"			61.2			
Riverwalk Drive	Street "J"	Fashion Valley Road		59.2			
	Fashion Valley Road	Avenida del Rio		65.2			
Levi-Cushman Street "B"	Street "J"	Fashion Valley Road		66.5			
	Linda Vista Road	Gaines Street		59.7			
Goshen Street	Gaines Street	Friars Road		58.7			
	Friars Road	South End		59.3			
New Street "I"	Mission City Parkway	Eastern End		64.1			
Gill Village Way	Friars Road	Rio San Diego Drive		61.0			
Rio Bonito Way	Friars Road	Rio San Diego Drive		59.5			
Bold = 2035 noise lev	el would exceed the established e	exterior compatibility level for the	surround	ling land u	ıse		

and noise levels would increase by 3 dB or more, or future noise levels would be below 65 dB(A) CNEL but ambient noise levels would increase by more than 5 dB over existing noise levels.

The CPU area is dominated by freeway noise. There are some roadway segments that experience noise level increases that are 3 dB or greater as shown in Table 10; however, due to the proximity to a freeway and its associated freeway noise, the actual increase in ambient noise levels attributable to the specified roadway would be less than 3 dB. Additionally, there are areas where there are no noise-sensitive land uses. In order to specifically identify where noise impacts would occur, the surrounding land uses as well as their proximity to freeways were more closely examined to determine if the noise level increase along identified roadway segments would be significant.

A less than significant impact would occur adjacent to the following roadway segments:

Mission Valley Road from Metropolitan Drive to Mission Center Road

No noise-sensitive land uses are located adjacent to this segment. Commercial uses are located adjacent to this segment. Noise levels would not exceed the significance threshold of 75 CNEL for commercial land uses; therefore, impacts would be less than significant.

• Civita Boulevard from Mission Center Road to Via Alta

Multi-family uses are located adjacent to this segment. However, noise levels would not exceed the significance threshold of 65 CNEL for multi-family residential land uses; therefore, impacts would be less than significant.

Hotel Circle North from I-8 Westbound Off-ramp to I-8 Westbound On-ramp

Hotel and commercial land uses are located adjacent to this segment. However, existing noise levels due to vehicle traffic on I-8 exceed 75 CNEL. Although an increase of 3.7 to 5.9 dB is shown with a future noise level up to 70 CNEL, when combined with existing traffic from I-8, the actual noise increase due to Hotel Circle North would be less than 1 dB. Therefore, impacts would be less than significant.

• Camino del Rio North from Camino de la Siesta to Mission Center Road

Multi-family uses are located adjacent to this segment. However, existing noise levels due to vehicle traffic on I-8 exceed 75 CNEL. Although an increase of 3.8 dB is shown with a future noise level of 67 CNEL, when combined with existing traffic from I-8, the actual noise increase due to Camino del Rio North would be less than 1 dB. Therefore, impacts would be less than significant.

Hotel Circle South from Street "J" to I-8 Eastbound On-ramp

Hotel and commercial uses are located adjacent to this segment. However, existing noise levels due to vehicle traffic on I-8 exceed 75 CNEL. Although an increase of 3.9 dB is shown with a future noise level of 71 CNEL, when combined with existing traffic from I-8, the actual noise increase due to Hotel Circle South would be less than 1 dB. Therefore, impacts would be less than significant.

• Fashion Valley Road from Levi-Cushman Street "B" to Hotel Circle North

Hotel uses and a golf course are located adjacent to this segment. However, existing noise levels due to vehicle traffic on I-8 range from 70 to 75 CNEL. Although an increase of 3.9 dB is shown with a future noise level of 70 CNEL, when combined with existing traffic from I-8, the actual noise increase due to Fashion Valley would be less than 3 dB. Therefore, impacts would be less than significant.

• Avenida del Rio from Fashion Valley Parking Lot to Camino de la Reina

Commercial uses are located adjacent to this segment. Noise levels would not exceed the commercial significance threshold of 75 CNEL. Additionally, existing noise levels due to vehicle traffic on SR-163 are 70 CNEL. Although an increase of 3.4 dB is shown with a future noise level of 69 CNEL, when combined with existing traffic from SR-163, the actual noise increase due to Avenida del Rio would be less than 3 dB. Therefore, impacts would be less than significant.

Metropolitan Drive from Mission Valley Road to Murray Canyon Road

Commercial uses are located adjacent to this segment. Future noise levels would not exceed the commercial significance threshold of 75 CNEL for commercial land uses; therefore, impacts would be less than significant.

• Via Alta from Franklin Ridge Road to Westside Drive

Multi-family land uses are located adjacent to this segment. However, existing noise levels due to vehicle traffic on I-805, Friars Road, and Mission Center Road exceed 65 CNEL. Although an increase of 6.8 to 9.1 dB is shown with a future noise level up to 64 CNEL, when combined with existing traffic from I-805, the actual noise increase due to Via Alta would be less than 3 dB. Therefore, impacts would be less than significant.

• Murray Ridge Road from I-805 Northbound Ramps to I-805 Southbound Ramps

Single-family land uses are located adjacent to this segment. However, existing noise levels due to vehicle traffic on I-805 exceed 75 CNEL. Although an increase of 3.2 dB is shown with a future noise level of 70 CNEL, when combined with existing traffic from I-805, the actual noise increase due to Murray Ridge Road would be less than 3 dB. Therefore, impacts would be less than significant.

Russell Park Way from Friars Road to Civita Boulevard

The lots adjacent to this segment are currently undeveloped. Existing noise levels due to vehicle traffic on Friars Road exceed 65 CNEL. Although an increase of 8.6 dB is shown with a future noise level of 64 CNEL, when combined with existing traffic from Friars Road, the actual noise increase due to Russell Park Way would be less than 3 dB. Therefore, impacts would be less than significant.

• Qualcomm Way from Friars Road Westbound Ramps to Friars Road Eastbound Ramps

This roadway segment is under the Friars Road overpass and there are no existing or planned immediately adjacent land uses. Therefore, impacts would be less than significant.

• Qualcomm Way from Friars Road Eastbound Ramps to Rio San Diego Drive

Commercial uses are located adjacent to this segment. Future noise levels would not exceed the commercial significance threshold of 75 CNEL for commercial land uses; therefore, impacts would be less than significant.

Qualcomm Way from Camino del Rio North to I-8 Westbound Ramps

This segment is within the I-8 right-of-way and there are no existing or planned immediately adjacent land uses. Therefore, impacts would be less than significant.

• Mission Village Drive from Friars Road Westbound Ramps to Friars Road Eastbound Ramps

This segment is the Friars Road overpass accessing the stadium parking lot, and there are no existing or planned immediately adjacent land uses, as it is within the Friars Road right-of-way. Therefore, impacts would be less than significant.

• Santo Road from the Northern Terminus to Friars Road

Multi-family land uses are located adjacent to this segment; however, they are set back approximately 120 feet from the centerline of Santo Road. Noise levels at this distance would be less than 65 CNEL (59 CNEL in the existing condition and 63 CNEL at build-out). Therefore, impacts would be less than significant.

• Riverdale Street from Friars Road to Vandever Avenue

Commercial uses are located adjacent to this segment. Future noise levels would not exceed the commercial significance threshold of 75 CNEL for commercial land uses; therefore, impacts would be less than significant.

A significant noise impact would occur adjacent to the following three roadway segments.

• Phyllis Place from Abbots Hill Road to I-805 Southbound Ramps

Single- and multi-family residential uses are located towards the western terminus of Phyllis Place. Noise levels are dominated by vehicle traffic on I-805, with existing noise contours ranging from 65 to 75 CNEL. However, because noise levels due to vehicle traffic on Phyllis Place would increase from 57 to 69 CNEL and would result in a 3 dB increase in ambient noise levels even when taking existing traffic noise from I-805 into account, noise impacts would be significant.

Bachman Place from Hotel Circle South to Lewis Street

Residential, hospital, and hotel land uses are located adjacent to this segment of Bachman Place. Noise levels currently exceed the significance threshold of 65 CNEL, and future vehicle traffic would increase ambient noise levels by more than 3 dB. Noise impacts would be significant.

• Rancho Mission Road from San Diego Mission Road to Camino del Rio North

Residential land uses are located adjacent to this segment of Rancho Mission Road. Existing noise levels due to I-15 would range from 65 to 75 CNEL. However, even when taking existing traffic from I-15 into account, future vehicle traffic noise along this roadway segment could increase by 3 dB. Noise impacts would be significant.

The increase in ambient noise levels adjacent to these three roadway segments would result in the exposure of existing noise-sensitive receptors to a significant increase in ambient noise levels, and impacts would be significant. Possible noise-reduction measures would include retrofitting older structures with acoustically rated windows and doors featuring higher Sound Transmission Class ratings, which is a measure of exterior noise reduction performance. However, there is no mechanism in place for implementing such a retrofit program. Because the significant noise impacts are to existing homes and other noisesensitive uses in an already urbanized area, there is no feasible mitigation. Thus, impacts to existing sensitive land uses would remain significant and unavoidable.

An existing regulatory framework and review process exists for new development in areas exposed to high levels of ambient noise. Policies in the proposed CPU and General Plan related to decibel levels, procedures in the SDMC, and regulations including Title 24 would reduce traffic noise exposure, because they set standards for the siting of sensitive land uses. Site-specific noise analyses demonstrating that future development implemented under the CPU would not subject sensitive receptors to existing or future noise levels exceeding the General Plan's Land Use – Noise Compatibility Guidelines would be required as part of the review process for discretionary projects. With the implementation of these regulations and procedures, noise impacts applicable to new discretionary projects would be less than significant as exterior noise would be attenuated. However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts attributed to ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unavoidable. Interior noise impacts for all projects, including ministerial projects, would be less than significant because building permit applicants must demonstrate compliance with the relevant interior noise standards through submission and approval of a Title 24 Compliance Report.

While future discretionary projects have a framework in place that would ensure exterior noise levels are appropriately attenuated to meet the General Plan Compatibility Standards, there is no similar mechanism in place for ministerial projects, resulting in a significant impact. This impact and mitigation is discussed further under Section 7.2.

7.2 Land Use Compatibility

A significant impact could occur if implementation of the CPU resulted in an exposure of people to current or future motor vehicle traffic noise levels that exceed standards established in the Noise Element of the General Plan. The General Plan's Land Use – Noise Compatibility Guidelines are presented in Table 4. The CPU proposes multi-family residential, visitor accommodations, commercial, institutional, industrial, and park and open space land uses, which are compatible with the following noise levels.

- Multi-family residential and mixed uses are compatible up to 60 CNEL and conditionally compatible up to 70 CNEL.
- Additionally, as stated in Section B of the Noise Element, although not generally considered compatible, the City conditionally allows multi-family and mixed-use residential uses up to 75 CNEL in areas affected by motor vehicle traffic noise with existing residential uses. Any future residential use exposed to noise levels up to 75 CNEL must include attenuation measures to ensure an interior noise level of 45

CNEL and be located in an area where a community plan allows multi-family and mixed-use residential uses.

- Visitor accommodations are compatible up to 60 CNEL and conditionally compatible up to 75 CNEL.
- Sales, commercial services, and office uses are compatible up to 65 CNEL and conditionally compatible up to 75 CNEL.
- Institutional uses are compatible up to 60 CNEL and conditionally compatible up to 65 or 70 CNEL depending on the type of institutional use.
- Industrial uses are compatible up to 75 CNEL.
- Neighborhood parks are compatible up to 70 CNEL and conditionally compatible up to 75 CNEL.

7.2.1 Vehicle Traffic Noise

Traffic noise generally dominates the noise environment around the CPU area. The freeways generating the greatest noise levels in the CPU area are I-5, I-8, I-15, I-805, and SR-163, and the roadway segments generating the greatest noise levels include Friars Road, Mission Center Road, Qualcomm Way, and Fairmount Avenue, among others. The distances to the 60, 65, and 70 CNEL noise contours in the build-out condition for freeways and major roadways in the CPU area are shown in Table 11. 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 (2050) noise contours for the CPU area are shown in Figure 7.

Table 11									
Future venicle Tranic Noise Contour Distances									
	Seg	ment	Distance (feet) to Noise Contour						
			75	70	65	60			
Roadway	From	То	CNEL	CNEL	CNEL	CNEL			
U	Washington Street	Old Town Avenue	239	516	1,111	2,393			
T -	Old Town Avenue	I-8	279	601	1,295	2,790			
1-5	I-8	Sea World Drive	247	532	1,145	2,468			
	Sea World Drive	Clairemont Drive	288	620	1,335	2,877			
	Midway Drive	I-5	163	351	757	1,630			
	I-5	Morena Boulevard	205	442	953	2,053			
	Morena Boulevard	Hotel Circle/Taylor Street	247	532	1,145	2,468			
I-8	Hotel Circle/Taylor Street	Hotel Circle	247	532	1,145	2,468			
	Hotel Circle	SR-163	254	548	1,181	2,545			
	SR-163	Mission Center Road	243	524	1,128	2,430			
	Mission Center Road	Texas Street	266	574	1,237	2,665			
	Texas Street	I-805	243	524	1,128	2,430			
	I-805	I-15	283	610	1,315	2,833			
	I-15	Fairmount Avenue	320	690	1,487	3,204			
	Fairmount Avenue	Waring Road	279	601	1,295	2,790			
	El Cajon Boulevard	Adams Avenue	262	565	1,218	2,624			
	Adams Avenue	I-8	271	583	1,256	2,706			
1-15	I-8	Friars Road	315	680	1,464	3,155			
	Friars Road	Aero Drive	301	649	1,398	3,013			
	El Cajon Boulevard	Adams Avenue	292	629	1,356	2,922			
LOOF	Adams Avenue	I-8	315	680	1,464	3,155			
1-805	I-8	Murray Ridge	320	690	1,487	3,204			
	Murray Ridge	Kearny Villa Road	325	701	1,510	3,253			
	Washington Street	6th Avenue	190	410	882	1,901			
	6th Avenue	I-8	243	524	1,128	2,430			
SR-163	I-8	Friars Road	239	516	1,111	2,393			
	Friars Road	Genesee Avenue	262	565	1,218	2,624			
	Genesee Avenue	Mesa College Drive	258	557	1,199	2,584			
Phyllis Place	Abbotshill Road	I-805 SB Ramps		35	112	354			
See World Drive	Mission Bay Parkway	Friars Road	60	190	601	1,901			
Sea world Drive	Friars Road	I-5 SB Ramps	29	93	294	931			
Teeslate Deed	I-5 SB Ramps	I-5 NB Ramps	29	93	294	931			
Tecolote Road	I-5 NB Ramps	Morena Boulevard		63	199	629			
Mission Valley Pood	Frazee Road	Metropolitan Drive							
wission valley Road	Metropolitan Drive	Mission Center Road			$\overline{56}$	177			
	Mission Center Road	Via Alta				55			
Civita Boulevard	Via Alta	Qualcomm Way				46			
	Qualcomm Way	Franklin Ridge Road			38	120			
Westside Drive	Mission Center Road	Via Alta				56			

Table 11 Future Vehicle Traffic Noise Contour Distances							
	Future venicle II	anie Noise Contour Dista					
	Segment		Distance (feet) to Noise Contour				
			75	70	65	60	
Roadway	From	То	CNEL	CNEL	CNEL	CNEL	
	Sea World Drive	Napa Street	29	91	288	910	
	Napa Street	Colusa Street	22	69	218	690	
	Colusa Street	Via Las Cumbres	29	91	288	910	
	Via Las Cumbres	Fashion Valley Road	28	89	281	889	
	Fashion Valley Road	Via de la Moda	31	97	308	975	
	Via de la Moda	Fashion Valley Driveway	30	95	301	953	
	Fashion Valley Driveway	Avenida de las Tiendas	47	148	467	1,476	
	Avenida de las Tiendas	Ulric Street/SR-163 SB Ramps	66	208	659	2,084	
	Ulric Street/SR-163 SB Ramps	SR-163 NB Ramps	63	199	629	1,991	
	SR-163 NB Ramps	Frazee Road	51	162	512	1,618	
Friars Road	Frazee Road	Mission Center Road	60	190	601	1,901	
	Mission Center Road	Qualcomm Way	52	166	524	1.656	
	Qualcomm Way	River Run Drive	57	182	574	1.815	
	River Run Drive	Fenton Parkway	59	186	587	1.858	
	Fenton Parkway	Northside Drive	50	158	500	1.581	
	Northside Drive	San Diego Mission Road	76	239	757	2,393	
	San Diego Mission Road	I-15 SB Ramps	126	397	1,256	3,972	
	I-15 SB Ramps	I-15 NB Ramps	83	262	830	2,624	
	I-15 NB Ramps	Rancho Mission Road	79	251	792	2,506	
	Rancho Mission Road	Santo Road	66	208	659	2,084	
	Santo Road	Riverdale Street	71	223	706	2,233	
	Riverdale Street	Mission Gorge Road	48	151	477	1,510	
Mission Gorge Road	Friars Road	Zion Avenue	38	120	379	1,199	
Hazard Center	Avenida del Rio	Hazard Center West Driveway		25	79	251	
Drive	Hazard Center West				100	0.1 -	
	Driveway	Mission Center Road		32	100	315	
	Gill Village Way	Qualcomm Way		43	135	426	
Rio San Diego Drive	Qualcomm Way	River Run Drive		40	126	397	
, , , , , , , , , , , , , , , , , , ,	River Run Drive	Fenton Parkway		38	120	379	
	Friars Road EB Ramps	Rancho Mission Road		34	107	338	
San Diego Mission	Rancho Mission Road	950 feet West of Fairmount Avenue		27	87	275	
Road	950 feet West of	Fairmount Avenue		27	87	275	
	Parific Highway	Monona Reulawand		97	117	971	
Taylor Street Hotel Circle North	Morono Boulouard	I S FR Pampa		51	- 117	- 371 - 70	
	I & FR Pampa	Hotel Circle South			20 29	100	
	Hotol Circle South	Fashion Valley Read			51	162	
	Fashion Valloy Road	I 8 WB Off romp			80	10 <u>2</u> 981	
	L-8 WB Off-ramp	Stroot "I"		<u>20</u> 50	158	500	
	Stroot ".I"	L-8 WB On-ramp		30	95	301	
	L-8 WB On-ramp	Hotol Circle South		50	55	66	
	Hotel Circle North	Avenida del Rio			35	109	
	Avenida del Rio	Camino de la Siesta			85	269	
Camino de la Reina	Camino de la Siesta	Mission Center Road			54	169	
Camino de la Menila	Mission Center Road	Camino del Este		31	97	308	
	Camino del Este	Qualcomm Way			66	208	

Table 11 Entrum Valida Traffic Nation Containe Distance						
	ruture venicle ir	ame Noise Contour Distai	nces			
	Sogment		Distance (feet) to Noise Contern			
	Segment		75	70	65	60
Roadway	From	То	CNEL	CNEL	CNEL	CNEL
	Camino de la Siesta	Mission Center Road		26	81	256
	Mission Center Road	I-8 WB Ramps		59	186	587
	I-8 WB Ramps	Camino del Este			71	223
	Camino del Este	Qualcomm Way		43	135	426
	Qualcomm Way	Mission City Parkway		56	177	561
Contracted Dia	Mission City Parkway	800 feet East of Mission City Parkway			44	138
North	800 feet East of Mission	1,800 feet West of Ward		32	100	315
	1 800 foot Wost of Word	Коай				
	Road	Ward Road		35	109	346
	Ward Road	1,000 feet West of		35	109	346
	1 000 fast Wast of	Fairmount Avenue				
	Little Formeunt Avenue	Fairmount Avenue		72	229	723
	Taylor Street	L8 FB Off-Bamp				62
						02
Hotel Circle South	I-8 EB Off-Ramp	Street "J"		31	97	308
	Street "J"	I-8 EB On-Ramp		60	190	601
	I-8 EB On-Ramp	Bachman Place		28	89	281
	Bachman Place	Hotel Circle North		29	93	294
	Western Terminus	1,800 feet west of Mission Center Road			26	81
	1,800 feet west of Mission Center Road	Mission Center Road			48	151
Camino del Rio	Mission Center Road	Texas Street			55	173
South	Texas Street	Mission City Parkway			71	223
	Mission City Parkway	I-15 SB Off-ramp		50	158	500
	I-15 SB Off-ramp	I-15 SB On-ramp		46	144	456
	I-15 SB On-ramp	Fairmount Avenue			66	208
West Morena Boulevard	Tecolote Road	Morena Boulevard		33	104	330
	West Morena Boulevard	Linda Vista Road		44	138	435
Morena Boulevard	Linda Vista Road	I-8 WB Off-ramp		77	245	774
	I-8 WB Off-ramp	Taylor Street		31	97	308
Napa Street	Morena Boulevard	Friars Road			55	173
Colusa Street	Linda Vista Road	Friars Road				
Via Las Cumbros	Linda Vista Road	Friars Road			77	245
via Las Cumbres	Friars Road	South End			32	100
Street "J"	Friars Road	Riverwalk Drive			71	223
	Riverwalk Drive	Levi-Cushman Street "B"		35	109	346
	Levi-Cushman Street "B"	Hotel Circle North		35	112	354
	Friars Road	Riverwalk Drive			51	162
Fashion Valley Road	Riverwalk Drive	Levi-Cushman Street "B"		35	109	346
	Levi-Cushman Street "B"	Hotel Circle North		49	155	489
Bachman Place	Hotel Circle South	Lewis Street		56	177	561
Avenida del Rio	Fashion Valley Parking	Camino de la Reina		38	120	379

Table 11 Future Vehicle Traffic Noise Conteur Distances						
	ruture venicle fr	and Noise Contour Distan	lces			
	Segment		Distance (feet) to Noise Contour			
			75	70	65	60
Roadway	From	То	CNEL	CNEL	CNEL	CNEL
	Fashion Hills Boulevard	600 feet South of Fashion Hills Boulevard		69	218	690
Ulric Street	600 feet South of Fashion	Friars Road		74	234	740
Camino de la Siesta	Camino de la Reina	Camino del Rio North			32	102
	Mission Valley Road	Murray Canyon Road			40	126
Metropolitan Drive	Murray Canyon Road	Frazee Road				71
Murray Canyon	Metropolitan Drive	Frazee Road			27	87
Road	Motropoliton Drivo	Mumou Convon Pood				67
Frazoo Road	Murray Canyon Road	Friars Road		39	100	315
Trazee noau	Friers Boad	Hazard Center Drive		30	95	301
		1 200 feet West of Murray		00	50	501
	Murray Ridge Road	Ridge Road		52	166	524
	1,200 feet West of Murray	950 feet North of Mission		52	166	524
	Ridge Road	Valley Road				
	Valley Road	Mission Valley Road		40	126	397
Mission Center Road	Mission Valley Road	Westside Drive		55	173	548
	Westside Drive	Friars Road WB Ramps	28	89	281	889
	Friars Road WB Ramps	Friars Road EB Ramps	22	69	218	690
	Friars Road EB Ramps	Mission Center Court		60	190	601
	Mission Center Court	Hazard Center Drive		71	223	706
	Hazard Center Drive	Camino de la Reina	27	87	275	869
	Camino de la Reina	Camino del Rio North	27	85	269	849
	Camino del Rio North	I-8 EB Ramps	35	112	354	1,119
Auto Circle	I-8 EB Ramps	Camino del Rio South		49	155	489
Via Alta	Franklin Ridge Road	Civita Boulevard			38	120
via Alta	Civita Boulevard	Westside Drive				71
Mumou Pidgo Pood	Mission Center Road	I-805 NB Ramps		48	151	477
Murray Muge Mau	I-805 NB Ramps	I-805 SB Ramps		49	155	489
Russell Park Way	Friars Road	Civita Boulevard			36	115
Camina dal Esta	Rio San Diego Drive	Camino de la Reina		27	87	275
	Camino de la Reina	Camino del Rio North			63	199
Franklin Ridge Road	Phyllis Place	Via Alta		35	109	346
Trankini Muge Mau	Via Alta	Civita Boulevard			59	186
Qualcomm Way	Civita Boulevard	Friars Road WB Ramps		31	97	308
	Friars Road WB Ramps	Friars Road EB Ramps		60	190	601
	Friars Road EB Ramps	Rio San Diego Drive		52	166	524
	Rio San Diego Drive	Camino del Rio North	27	85	269	849
	Camino del Rio North	I-8 WB Ramps	31	97	308	975
	I-8 WB Ramps	I-8 EB Ramps	34	107	338	1,069
	I-8 EB Ramps	Camino del Rio South		64	204	644
Texas Street	Camino del Rio South	1,400 feet North of Madison Ave	28	89	281	889
	1,400 feet North of Madison Ave	Madison Avenue	28	89	281	889
	Madison Avenue	Meade Ave			71	223
	Meade Ave	El Cajon Boulevard			54	169
River Run Drive	Friars Road	Rio San Diego Drive				45

Table 11							
Future Vehicle Traffic Noise Contour Distances							
	Seg	ment	Distance (feet) to Noise Contour				
			75	70	65	60	
Roadway	From	То	CNEL	CNEL	CNEL	CNEL	
	Portofino Driveway	Friars Road				54	
	Friars Road	Rio San Diego Drive			77	245	
Fouter Devloyer	Rio San Diego Drive	Del Rio Apartments Driveway			46	144	
renton rarkway	Del Rio Apartments Driveway	New Street I			46	144	
	New Street I	Camino del Rio North			69	218	
Mission City Parkway	Camino del Rio North	Camino del Rio South			69	218	
	Portofino Driveway	Friars Road				56	
Northside Drive	Friars Road	Fenton Marketplace Driveway		39	123	388	
	Fenton Marketplace Driveway	Lowe's Frontage Road		31	97	308	
Mission Village	Ronda Avenue	Friars Road WB Ramps		64	204	644	
Drive	Friars Road WB Ramps	Friars Road EB Ramps	35	109	346	1,094	
Rancho Mission	Friars Road	San Diego Mission Road		32	102	323	
Road	San Diego Mission Road	Camino del Rio North		39	123	388	
Santo Road	Northern Terminus	Friars Road			77	245	
Riverdale Street	Zion Road	Friars Road				35	
Invertale Street	Friars Road	Vandever Avenue		42	132	416	
Mission Gorge Road	Friars Road	Camino del Rio North		35	112	354	
Fairmount Avenue	Camino del Rio North/I-8 WB Off-ramp	I-8 EB Off-ramp	34	107	338	1,069	
	I-8 EB Off-ramp	Camino del Rio South	59	186	587	1,858	
	West of Street "J"	t "J"				66	
Riverwalk Drive	Street "J"	Fashion Valley Road			41	32	
	Fashion Valley Road	Avenida del Rio			52	166	
Levi-Cushman Street "B"	Via Las Cumbres	Fashion Valley Road			71	223	
Goshen Street	Linda Vista Road	Gaines Street				47	
	Gaines Street	Friars Road				37	
	Friars Road	South End				43	
New Street "I"	Mission City Parkway	Eastern End			41	129	
Gill Village Way	Friars Road	Rio San Diego Drive				63	
Rio Bonito Way	Friars Road	Rio San Diego Drive				45	



Mission Valley Community Plan Boundary Traffic Noise Contours



FIGURE 7 Future Vehicle Traffic Noise Contours At any specific location the actual existing noise depends on the source noise level and 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 General Plan Noise Element has a compatibility level of 60 CNEL or less for residential uses, noise levels up to 65 CNEL for single-family residential and up to 70 CNEL for multi-family residential are considered conditionally compatible, since interior noise levels can be reduced to 45 CNEL through simple means, such as closing/sealing windows and providing mechanical ventilation. Additionally, as stated in Section B of the General Plan Noise Element, although not generally considered compatible, the General Plan conditionally allows multi-family and mixed-use residential uses up to 75 CNEL in areas affected by motor vehicle traffic noise with existing residential uses. Any future residential use exposed to noise levels up to 75 CNEL must include attenuation measures to ensure an interior noise level of 45 CNEL and be located in an area where a community plan allows multi-family and mixed-use residential uses. Project design features such as noise walls adjacent to freeways and roadways can usually reduce exterior noise levels to comply with General Plan Noise Element guidelines. Some residential land uses planned for the CPU area would be located between the 70 and 75 CNEL contours. Multi-family and mixed-use residential uses that meet the requirements of Section B of the General Plan Noise Element would be conditionally compatible up to 75 CNEL and would also be required to provide structural attenuation to reduce noise levels at interior locations.

As shown in Figure 7, noise levels would exceed 60 CNEL in the entire CPU area at buildout (2050), and noise levels would exceed 65 CNEL in a majority of the CPU area. Noise levels greater than 75 CNEL are generally considered incompatible for all land use types. Land uses located within 239 to 288 feet of I-5, 163 to 320 feet of I-8, 262 to 315 feet of I-15, 292 to 325 feet of I-805, and 190 to 262 feet of SR-163 would potentially be exposed to noise levels greater than 75 CNEL and would be considered incompatible.

The CPU area is generally developed; however, implementation of the CPU would result in changes to the land uses, which would introduce new noise-sensitive land uses in areas exceeding the Land Use – Noise Compatibility Guidelines. Therefore, impacts associated with future development within these areas would be significant.

The CPU includes policies that would require site design strategies and noise reduction measures for new development within 500 feet of freeways (see Section 2.0). Additionally, as detailed in Section 4.0, policies in the General Plan Noise Element and CCR Title 24 require the reduction of traffic noise exposure because they set standards for the siting of sensitive land uses. General Plan Noise Element 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. Future discretionary proposals within the CPU area would, therefore, be required to conduct site-specific exterior noise analyses to demonstrate that the proposed project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the Land Use – Noise Compatibility Guidelines of the General Plan Noise Element. Additionally, for all future discretionary and ministerial projects located in areas where exterior noise levels exceed the Land Use – Noise Compatibility Guidelines as defined in the General Plan Noise Element, Table N-3, site-specific interior noise analyses demonstrating compliance with the interior standards of the General Plan would be required. These requirements for site-specific noise analyses would be implemented through submission of a Title 24 Compliance Report to demonstrate interior noise levels of 45 CNEL. Through implementation of this regulatory framework, exterior traffic noise impacts associated with new discretionary development and interior traffic noise impacts for both ministerial and discretionary projects would be less than significant.

However, in the case of exterior noise impacts associated with ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas where the noise level exceeds the applicable land use and noise compatibility level would be significant and unavoidable.

7.2.2 Trolley Noise

Figure 6 shows the existing noise contours for the Green Line Trolley operations. Future Green Line Trolley operations are anticipated to continue similar to the existing schedule. The 60, 65, and 70 CNEL contour distances for the Green Line Trolley are summarized in Table 12. As shown, the 60 CNEL contour extends up to approximately 272 feet from the center of the trolley tracks between the Stadium and Fenton Parkway trolley stations, and the 65 CNEL contour extends up to approximately 86 feet from the trolley tracks.

Table 12							
Green Line Trolley Noise Contour Distances							
	Noise Level	Distance to Noise Contour (feet)					
	at 50 feet						
Stations	(CNEL)	70 CNEL	65 CNEL	60 CNEL			
Grantville to Mission San Diego	63	10	33	105			
Mission San Diego to Stadium	58	3	10	32			
Stadium to Fenton Parkway	67	27	86	272			
Fenton Parkway to Rio Vista	64	12	37	117			
Rio Vista to Mission Valley Center	63	10	33	105			
Mission Valley Center to Hazard Center	63	10	33	105			
Hazard Center to Fashion Valley	61	7	22	68			
Fashion Valley to Morena/Linda Vista	64	13	41	130			
Morena/Linda Vista to Old Town631033105				105			
NOTE: Calculation data provided in Attachment 3.							
CNEL = community noise equivalent level							

The nearest noise-sensitive land uses would be located on both sides of the trolley alignment, with some uses abutting the right-of-way at distances as close as 25 feet from the centerline. Although noise-sensitive land uses would be in close proximity to the trolley

tracks, as shown in Figure 7, vehicle traffic noise along the freeways would exceed 60 CNEL in the entire CPU area. The vehicle traffic noise would exceed the contribution of noise from trolley operations. However, although vehicle traffic would be the dominant noise source, trolley noise levels in close proximity to the tracks would contribute to the overall exterior noise level, and the combined vehicle traffic and trolley exterior noise levels could exceed the Land Use – Noise Compatibility Guidelines. As discussed above, future discretionary proposals within the CPU area would be required to conduct site-specific exterior noise analyses to demonstrate that the proposed project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the Land Use – Noise Compatibility Guidelines. However, in the case of exterior noise impacts associated with ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts for ministerial projects located in areas where the noise level exceeds the applicable land use and noise compatibility level would be significant. As discussed above, interior noise impacts for both discretionary and ministerial projects would be less than significant because building permit applicants must demonstrate compliance with the relevant interior noise standards through submission and approval of a Title 24 Compliance Report. Therefore, interior noise impacts resulting from trolley operations would be less than significant.

The future Mid-Coast Trolley extension (Blue Line Trolley) is currently under construction along the western CPU boundary. Once constructed, this trolley extension would provide trolley service from the Old Town Transit Center to the University of California, San Diego and University Town Center along the rail corridor parallel to I-5. The closest station to the CPU area would be located at West Morena Boulevard and Tecolote Road. Sound level distances from future San Diego MTS Trolley service were derived from SANDAG's Noise and Vibration Impacts Technical Report for the Mid-Coast Corridor Transit Project (SANDAG 2014). Freight and passenger train noise levels were based on Amtrak, Coaster, and freight train assumptions provided by the Los Angeles-San Diego-San Luis Obispo (LOSSAN) Rail Corridor Agency (LOSSAN 2012). Based on these studies, it is anticipated that rail traffic would generate a noise level of 60 CNEL at approximately 270 feet from the railway centerline. However, no sensitive land uses exist or are proposed in the CPU area adjacent to the Blue Line Trolley extension. The area adjacent to the tracks is designated Open Space (San Diego River). Additionally, noise levels in the vicinity of the western CPU boundary are dominated by vehicle traffic noise from I-5 and I-8. There would be no noise impacts due to future Blue Line Trolley operations. The Mid-Coast Corridor Transit Project noise analysis also found noise impacts in this area to be less than significant (SANDAG 2014).

The planned Purple Line Trolley would provide a new north-south transit connection through the Stadium Specific Plan area and would generally parallel to I-15. It is anticipated that noise levels due to future Purple Line Trolley operation would be similar to noise levels from the Blue and Green Line Trolleys. Noise levels along I-15 would exceed 70 and 75 CNEL along the future Purple Line Trolley. As with the Blue and Green Line Trolley, vehicle traffic noise would exceed the contribution of noise from trolley operations. However, the exact alignment of the Purple Line Trolley is not known at this time, and it could be located in close proximity to noise sensitive land uses. As with the Green Line Trolley, although vehicle traffic would be the dominant noise source, trolley noise levels in close proximity to the tracks would contribute to the overall exterior noise level, and the combined vehicle traffic and trolley exterior noise levels could exceed the Land Use – Noise Compatibility Guidelines, resulting in a significant impact.

7.3 Stationary Noise

A significant impact could occur if implementation of the 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 SDMC. Stationary sources of noise include activities associated with a given land use. For example, noise sources from commercial land uses would include car washes, fast food restaurants, auto repair facilities, parking lots, and a variety of other uses.

Implementation of the CPU could result in pedestrian-oriented mixed-use areas and areas where residential uses could be located in proximity to commercial sites that could expose sensitive receptors to additional noise. The noise associated with these types of land uses is generally produced by pedestrian traffic, parking lot activity, and public gatherings, but could also include loading docks, mechanical equipment (such as HVAC equipment and generators), deliveries, trash-hauling activities, and customer and employee use of commercial facilities. Noise generated by residential or commercial uses is generally shortlived and intermittent, while noise generated by auto-oriented commercial and industrial uses is usually sporadic, highly variable, and spatially distributed.

The land uses proposed by the CPU would be similar to the land uses that currently exist in the CPU area, although with greater density. Because noise levels in the CPU area are dominated by vehicle traffic on freeways and heavily traveled area roadways, noise levels from stationary sources throughout the CPU area would not be expected to increase the hourly or daily average sound level with respect to current conditions. While noise-sensitive residential land uses would be exposed to noise associated with the operation of commercial uses, future projects would be required to show compliance with the Noise Abatement and Control Ordinance to ensure noise compatibility between various land uses. As detailed in Section 4.4, the City regulates specific noise level limits allowable between land uses including the requirement for noise studies, limits on hours of operation for various noisegenerating activities, and standards for the compatibility of various land uses with the existing and future noise environment. Through enforcement of the Noise Abatement and Control Ordinance of the SDMC, impacts would be less than significant.

7.4 Construction Noise

A significant impact could occur if implementation of the CPU resulted in the exposure of people to significant temporary construction noise. Future development implemented under the CPU could result in a temporary ambient noise increase due to construction activities.

Although no specific construction or development is proposed at this time, construction noise impacts could occur as future development within the CPU area occurs. Due to the

developed nature of the CPU area, there is a high likelihood that construction activities would take place adjacent to existing structures and that sensitive receptors would be located in proximity to construction activities.

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 would be short term and would include noise from activities such as site preparation, truck hauling of material, pouring of concrete, and the use of power tools. Noise would also be generated by construction equipment use, including earthmovers, material handlers, and portable generators, and could reach high noise levels for brief periods.

As discussed in Section 6.4, hourly average noise levels would be approximately 83 dB(A) L_{eq} at 50 feet from the center of construction activity when assessing three pieces of common construction equipment working simultaneously. Noise levels would vary depending on the nature of the construction activities including the duration of specific activities, the equipment involved, the location of the sensitive receivers, and the presence of intervening barriers. Construction noise levels of 83 dB(A) L_{eq} at 50 feet would attenuate to 75 dB(A) L_{eq} at 120 feet. Therefore, significant impacts could occur if sensitive land uses are located closer than 120 feet of construction activities.

The City regulates construction noise through its Noise Abatement and Control Ordinance, which puts limits on the days of the week and hours of operation allowed for construction. The City also imposes requirements for building and grading permits related to construction noise. However, there is also a procedure in place that allows for a permit to deviate from the noise ordinance. Due to the highly developed nature of the CPU area with sensitive receivers potentially located in proximity to construction sites, there is a potential for the construction of future projects to expose existing sensitive receptors to significant noise levels. This would result in a potentially significant impact.

NOISE-1: Future discretionary projects within the CPU area shall implement the following measures to minimize short-term noise levels caused by construction activities. Measures to reduce construction noise shall be included in the contractor specifications and shall include, but not be limited to, the following:

- 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" that shall 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.

However, even with implementation of this mitigation, at the program level it cannot be known whether the noise reduction measures would be adequate to reduce noise levels to below a level of significance. Construction noise impacts would, therefore, be significant and unavoidable.

7.5 Vibration

As discussed, potential sources of ground-borne vibration could occur as a result of railway operations. For frequent events such as trolley operations, a vibration level of 65 VdB or less at buildings where vibration would interfere with interior operations (Category 1), a vibration level of 72 VdB or less at residential uses and places where people normally sleep (Category 2), and a vibration level 75 VdB or less at institutional uses with primarily daytime use (Category 3) would be considered acceptable (FTA 2018).

There are no Category 1, 2, or 3 land uses located within 600 feet of the right-of-way of the railway located at the western CPU boundary. Additionally, the Mid-Coast Corridor Transit Project noise and vibration analysis also found vibration impacts in this area to be less than significant (SANDAG 2014).

The east-west Green Line Trolley bisects the CPU area; however, no freight trains or larger commuter trains utilize this railway. Vibration levels were calculated using FTA methodology. Vibration levels are a function of trolley speed and distance to the nearest structure, among other factors. Table 13 summarizes the trolley vibration screening distances, and calculations are provided in Attachment 3. As discussed, portions of the Green Line Trolley tracks are on elevated structures and do not cause significant vibration impacts to adjacent development. Areas where noise- and vibration-sensitive uses are located the closest to the tracks (as close as 25 feet) are at the existing trolley stations. Because all trolleys stop at each station, trolley speeds approaching and departing from the stations would be very low and would not cause significant vibration levels over existing levels. These screening distances are therefore conservative.

Table 13 Trolley Vibration Screening Distances							
	Vibration Level	Distance to (feet)					
Trolley Speed	at 25 Feet	$75 \mathrm{VdB}$	$72 \mathrm{VdB}$	65 VdB			
(mph)	(VdB)	(Category 3)	(Category 2)	(Category 1)			
15	67	1	9	33			
20	70	6	14	48			
25	72	11	21	63			
30	73	16	28	77			
35	74	21	35	90			
40	76	26	42	102			
45	77	31	49	114			
50	78	36	55	125			
55	78	41	62	136			
60	79	45	68	147			
Source: Attachment 3.							

As discussed, the future Purple Line Trolley would run through the Stadium Specific Plan area. The exact alignment is not known at this time, however, vibration impacts and screening distances for the Purple Line Trolley are anticipated to be the same as those for the Green Line Trolley. Impacts would be less than significant; therefore, no mitigation measures are required.

8.0 Summary of Impacts and Mitigation

8.1 Increase in Ambient Noise

The CPU area is dominated by freeway noise. There are some roadway segments that experience noise level increases that are 3 dB or greater as shown in Table 10; however, due to the proximity to a freeway and its associated freeway noise, the actual increase in ambient noise levels attributable to the specified roadway would be less than 3 dB. Additionally, there are areas where there are no noise-sensitive land uses. A significant noise impact was identified adjacent to the following three roadway segments.

• Phyllis Place from Abbots Hill Road to I-805 Southbound Ramps

Single- and multi-family residential uses are located towards the western terminus of Phyllis Place. Noise levels are dominated by vehicle traffic on I-805, with existing noise contours ranging from 65 to 75 CNEL. However, because noise levels due to vehicle traffic on Phyllis Place would increase from 57 to 69 CNEL and would result in a 3 dB increase in ambient noise levels even when taking existing traffic noise from I-805 into account, noise impacts would be significant.

• Bachman Place from Hotel Circle South to Lewis Street

Residential, hospital, and hotel land uses are located adjacent to this segment of Bachman Place. Noise levels currently exceed the significance threshold of 65 CNEL, and future vehicle traffic would increase ambient noise levels by more than 3 dB. Noise impacts would be significant.

• Rancho Mission Road from San Diego Mission Road to Camino del Rio North

Residential land uses are located adjacent to this segment of Rancho Mission Road. Existing noise levels due to I-15 would range from 65 to 75 CNEL. However, even when taking existing traffic from I-15 into account, future vehicle traffic noise along this roadway segment could increase by 3 dB. Noise impacts would be significant.

The increase in ambient noise levels adjacent to these three roadway segments would result in the exposure of existing noise-sensitive receptors to a significant increase in ambient noise levels, and impacts would be significant. Because the significant noise impacts are to existing homes and other noise-sensitive uses in an already urbanized area, there is no feasible mitigation. Thus, impacts to existing sensitive land uses would remain significant and unavoidable.

An existing regulatory framework and review process exists for new development in areas exposed to high levels of ambient noise. Site-specific noise analyses demonstrating that future development implemented under the CPU would not subject sensitive receptors to existing or future noise levels exceeding the General Plan's Land Use – Noise Compatibility Guidelines would be required as part of the review process for discretionary projects. With the implementation of these regulations and procedures, noise impacts applicable to new discretionary projects would be less than significant as exterior noise would be attenuated. However, in the case of ministerial projects, there is no procedure to ensure that exterior noise is adequately attenuated. Therefore, exterior noise impacts attributed to ministerial projects located in areas that exceed the applicable land use and noise compatibility level would be significant and unavoidable. Interior noise impacts for all projects, including ministerial projects, would be less than significant because building permit applicants must demonstrate compliance with the relevant interior noise standards through submission and approval of a Title 24 Compliance Report.

The proposed CPU includes a policy encouraging retrofitting of older structures with noise sensitive land uses with acoustically rated windows and doors featuring higher Sound Transmission Class ratings, which is a measure of exterior noise reduction performance. However, because not all existing noise sensitive land uses would be retrofitted, impacts to existing sensitive land uses would be significant and unavoidable. No feasible mitigation has been identified at the program level to reduce this impact to less than significant.

For future noise sensitive land uses, while some projects may adequately attenuate exterior noise, there could still be new noise sensitive land uses located in areas that would experience a significant increase in ambient noise levels exceeding the applicable Land Use – Noise Compatibility Guidelines, and therefore impacts would be significant and unavoidable.

8.2 Land Use Compatibility

8.2.1 Vehicle Traffic Noise

Noise levels greater than 75 CNEL are generally considered incompatible for all land use types. Land uses located within 239 to 288 feet of I-5, 163 to 320 feet of I-8, 262 to 315 feet of I-15, 292 to 325 feet of I-805, and 190 to 262 feet of SR-163 would potentially be exposed to noise levels greater than 75 CNEL and would be considered incompatible. Implementation of the CPU would result in changes to the land uses, which would introduce new noise-sensitive land uses in areas exceeding the Land Use – Noise Compatibility Guidelines. Therefore, impacts associated with future development within these areas would be significant.

Future discretionary proposals within the CPU area would be required to conduct sitespecific exterior noise analyses to demonstrate that the proposed project would not place sensitive receptors in locations where the exterior existing or future noise levels would exceed the Land Use – Noise Compatibility Guidelines of the General Plan Noise Element. Additionally, for all future projects located in areas where exterior noise levels exceed the Land Use – Noise Compatibility Guidelines as defined in the General Plan Noise Element, Table N-3, site-specific interior noise analyses demonstrating compliance with the interior standards of the General Plan would be required. These requirements for site-specific noise analyses would be implemented through submission of a Title 24 Compliance Report to demonstrate interior noise levels of 45 CNEL. Through implementation of this regulatory framework, exterior traffic noise impacts associated with new development requiring discretionary approvals and interior traffic noise impacts for both ministerial and discretionary projects would be less than significant.

However, in the case of exterior noise impacts associated with 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 unavoidable.

8.2.2 Trolley Noise

It is anticipated that noise levels due to future Purple Line Trolley operation would be similar to noise levels from the Blue and Green Line Trolleys. Noise levels along I-15 would exceed 70 and 75 CNEL along the future Purple Line Trolley. As with the Blue and Green Line Trolley, vehicle traffic noise would exceed the contribution of noise from trolley operations. However, the exact alignment of the Purple Line Trolley is not known at this time, and it could be located in close proximity to noise sensitive land uses. As with the Green Line Trolley, although vehicle traffic would be the dominant noise source, trolley noise levels in close proximity to the tracks would contribute to the overall exterior noise level, and the combined vehicle traffic and trolley exterior noise levels could exceed the Land Use – Noise Compatibility Guidelines, resulting in a significant impact.

8.3 Stationary Noise

The land uses proposed by the CPU would be similar to the land uses that currently exist in the CPU area, although with greater density. Because noise levels in the CPU area are dominated by vehicle traffic on freeways and heavily traveled area roadways, noise levels from stationary sources throughout the CPU area would not be expected to increase the hourly or daily average sound level with respect to current conditions. While noise-sensitive residential land uses would be exposed to noise associated with the operation of commercial uses, future projects would be required to show compliance with the Noise Abatement and Control Ordinance to ensure noise compatibility between various land uses. As detailed in Section 4.4, the City regulates specific noise level limits allowable between land uses including the requirement for noise studies, limits on hours of operation for various noisegenerating activities, and standards for the compatibility of various land uses with the existing and future noise environment. Through enforcement of the Noise Abatement and Control Ordinance of the SDMC, impacts would be less than significant.

8.4 Construction Noise

Although no specific construction or development is proposed at this time, construction noise impacts could occur as future development within the CPU area occurs. Due to the developed nature of CPU area, there is a high likelihood that construction activities would take place adjacent to existing structures and that sensitive receptors would be located in proximity to construction activities. The City regulates noise associated with construction equipment and activities through its Noise Abatement and Control Ordinance, which puts limits on the days of the week and hours of operation allowed for construction. The construction noise levels of 83 dB(A) L_{eq} at 50 feet would attenuate to 75 dB(A) L_{eq} at 120 feet. Therefore, significant impacts would occur if sensitive land uses are located closer than 120 feet of construction activities. The following mitigation measure would be implemented to address potential construction noise impacts:

NOISE-1: Future discretionary projects within the CPU area shall implement the following measures to minimize short-term noise levels caused by construction activities. Measures to reduce construction noise shall be included in the contractor specifications and shall include, but not be limited to, the following:

- 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" that shall 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 this mitigation measure would reduce construction-related noise impacts for future discretionary projects implemented under the proposed CPU. However, in the case of ministerial projects, there is no procedure to ensure that construction-related noise impacts are mitigated. Even with implementation of NOISE-1, significant construction noise impacts may still occur, therefore this impact would be significant and unavoidable.

8.5 Vibration

Potential sources of ground-borne vibration could occur as a result of trolley operations. Portions of the Green Line Trolley tracks are on elevated structures and do not cause significant vibration impacts to adjacent development. It should be noted that the areas where noise- and vibration-sensitive uses are located the closest to the tracks (as close as 25 feet) are at the existing trolley stations. Impacts related to trolley vibration associated with the Green Line trolley would be less than significant.

The future Purple Line Trolley would run through the Stadium Specific Plan area. The exact alignment is not known at this time, however, vibration impacts and screening distances for the Purple Line Trolley are anticipated to be the same as those for the Green Line Trolley. Impacts would be less than significant; therefore, no mitigation measures are required.

9.0 References Cited

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ATTACHMENTS

ATTACHMENT 1

Noise Measurement Data

Measurem	ent 1	Leq =	63.4				
Record #	Date	Time	LAeq		LApeak	LASmax	LASmin
3	2015/09/16	13:07:33 13:07:35	54.7 60 9	292340.2	74.1 76 1	55.1 62.4	51.7 55 1
4 5	2015/09/16	13:07:40	62.7	1871462	76.2	63.6	61.6
6	2015/09/16	13:07:45	60.7	1187048	74.0	61.6	59.7
7 8	2015/09/16	13:07:50 13:07:55	58.7 63.6	746908.4	76.5 78.2	59.7 65 9	58.4 59.3
9	2015/09/16	13:07:55	68.4	6926363	82.4	69.3	65.9
10	2015/09/16	13:08:05	67.4	5551904	80.7	69.4	66.8
11	2015/09/16	13:08:10	64.7	2934864	77.8	66.7	63.8
12 13	2015/09/16	13:08:15 13:08:20	62.9 55.4	1934286	77.5 73.0	65.0 59.5	59.5 55.0
14	2015/09/16	13:08:25	59.9	972916.7	74.2	61.5	56.3
15	2015/09/16	13:08:30	52.9	193929	75.8	56.8	52.5
16	2015/09/16	13:08:35	57.5	566844.2	73.9	60.2	52.4
17	2015/09/16	13:08:40	67.2 65.2	5270467 3332405	85.5 79.8	67.2	63.6
19	2015/09/16	13:08:50	61.1	1284327	78.1	67.2	57.9
20	2015/09/16	13:08:55	62.2	1672033	76.4	63.8	58.4
21 22	2015/09/16	13:09:00 13:09:05	62.9 63.4	1931678	78.1 79.0	65.5 66.4	58.2 50 1
23	2015/09/16	13:09:10	62.9	1933405	80.0	64.9	58.3
24	2015/09/16	13:09:15	68.3	6814636	83.4	70.0	64.9
25	2015/09/16	13:09:20	64.4	2758733	78.5	68.0	61.7
26 27	2015/09/16	13:09:25	64.1 63.7	2358901	79.7 77.4	65.3	60.5 63.1
28	2015/09/16	13:09:35	57.1	509999.2	73.9	63.4	55.6
29	2015/09/16	13:09:40	64.9	3108384	80.2	67.2	56.8
30 21	2015/09/16	13:09:45	66.0	3957656	79.1 78.6	67.2	65.6 65.6
31	2015/09/16	13:09:55	63.2	2087662	79.4	66.3	61.6
33	2015/09/16	13:10:00	63.6	2265505	76.9	64.4	61.5
34	2015/09/16	13:10:05	57.8	606055.9	72.5	63.1	54.6
35	2015/09/16	13:10:10 13:10:15	54.4 63.4	275030.6	68.2 78.3	55.8 65.5	53.1 55.8
37	2015/09/16	13:10:20	54.4	277842.4	71.1	62.2	52.7
38	2015/09/16	13:10:25	54.9	311919	81.2	56.3	53.7
39	2015/09/16	13:10:30	51.2	132592.1	64.6	53.7	51.2
40 41	2015/09/16	13:10:35	53.6 52.0	156828.7	67.9	54.4 53.7	50.5
42	2015/09/16	13:10:45	54.4	273435	71.3	57.3	50.0
43	2015/09/16	13:10:50	64.1	2593696	77.8	65.8	57.3
44 45	2015/09/16	13:10:55	64.1 62.9	2562469	76.9 76.9	63.3	63.3 62.7
46	2015/09/16	13:11:05	66.1	4027605	82.4	68.0	63.1
47	2015/09/16	13:11:10	62.2	1652055	78.7	64.7	60.0
48 49	2015/09/16	13:11:15	69.2 65.8	8225189 3780053	82.3 70.0	69.7 68.0	64.7 64.4
49 50	2015/09/16	13:11:25	60.3	1079162	78.0	64.7	58.0
51	2015/09/16	13:11:30	57.1	513090.1	71.1	58.2	55.6
52 52	2015/09/16	13:11:35	57.8	603590.3	79.8	58.9	54.8
53 54	2015/09/16	13:11:40	62.9 59.7	940939.8	78.8	64.0 61.6	56.9 57.9
55	2015/09/16	13:11:50	63.1	2051135	79.1	65.4	57.8
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57 58	2015/09/16	13:12:00 13:12:05	62.8 67.8	1910329	78.0 81 3	64.6 68.7	61.0 64.6
59	2015/09/16	13:12:10	61.5	1417039	79.0	68.1	58.0
60	2015/09/16	13:12:15	55.0	318036.4	70.2	58.0	53.8
61 62	2015/09/16	13:12:20	61.8	1496924	77.1	63.1	54.3
63	2015/09/16	13:12:20	64.6	2864575	78.7	66.4	50.0 57.5
64	2015/09/16	13:12:35	63.7	2366399	77.9	66.5	62.6
65 66	2015/09/16	13:12:40	63.9	2434414	82.3	64.7	62.3
67	2015/09/16	13:12:45	57.7	583068.5	78.9 81.6	65.5	55.2
68	2015/09/16	13:12:55	54.8	301526.2	72.0	57.8	51.7
69	2015/09/16	13:13:00	65.2	3348525	79.1	66.6	57.8
70 71	2015/09/16	13:13:05 13:13:10	63.8 64 5	2421735	78.7 79.8	66.6 64 9	61.9 61.7
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75 76	2015/09/16	13:13:30 13:13:35	62.4 58.1	1728436	77.4 72.6	64.4 60.5	60.5 56.2
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79	2015/09/16	13:13:50	64.7	2972937	78.1	65.3	59.7
80 81	2015/09/16	13:14:00	49.2	82368.51	62.4	52.6	52.0 48.5
82	2015/09/16	13:14:05	49.6	90856.04	62.3	50.2	48.6
83	2015/09/16	13:14:10	56.0	401434.3	74.1	59.3	49.0
84 95	2015/09/16	13:14:15	65.1	3236305	82.1 75.0	67.3	59.3
86	2015/09/16	13:14:20	59.8	949178.6	73.9 74.1	62.8	57.9 58.1
87	2015/09/16	13:14:30	65.0	3148370	78.8	66.3	59.7
88	2015/09/16	13:14:35	67.7	5832570	82.3	69.0	66.2
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147	2015/09/16	13.19.30	60.5	1111727	73.9	61 1	59.0
148	2015/09/16	13.19.35	58.0	628118.4	72.9	61.0	55.9
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155	2015/09/16	13:20:10	62.9	1958550	78.8	64.1	59.0
156	2015/09/16	13:20:15	63.9	2479781	77.9	64.6	63.3
157	2015/09/16	13:20:20	62.7	1868860	84.5	64.8	59.1
158	2015/09/16	13:20:25	53.6	230312.2	74.7	59.0	53.8
159	2015/09/16	13:20:30	55.8	381756.4	72.1	57.9	53.8
160	2015/09/16	13:20:35	66.8	4760602	82.4	68.7	57.9
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162	2015/09/16	13:20:45	66.6	4581669	80.2	68.3	64.5
163	2015/09/16	13:20:50	67.4	5536185	81.7	68.5	64.5
164	2015/09/16	13:20:55	66.5	4463596	81.2	67.8	64.2
165	2015/09/16	13:21:00	62.1	1626123	79.3	64.8	59.8
166	2015/09/16	13:21:05	62.3	1698237	84.8	66.2	56.8
167	2015/09/16	13:21:10	50.1	103096.3	63.7	56.7	48.8
168	2015/09/16	13:21:15	48.4	69936.77	61.8	49.2	47.8
169	2015/09/16	13:21:20	55.9	387021.4	74.8	58.9	49.2
170	2015/09/16	13:21:25	65.8	3776389	79.4	66.7	58.9
171	2015/09/16	13:21:30	66.8	4/41772	80.3	67.6	65.4
172	2015/09/16	13:21:35	61.1	1289288	/5.1	65.4	60.0
1/3	2015/09/16	13:21:40	61.3	1333812	/5.8	61.8	60.3
1/4	2015/09/16	13:21:45	62.0	1583454	75.9	62.8	60.4
1/5	2015/09/16	13:21:50	58.4	694693.8	13.3	62.5	56.3
1/6	2015/09/16	13:21:55	5/.6	240040 0	71.6	58.7	56.3
1//	2015/09/16	13:22:00	58.7	143948.9	12.4	59.5	56.8
178	2015/09/16	13:22:05	69.2 74 C	02/3432	86.1 0 <i>E</i> 4	/2.1 70 5	59.4
1/9	2015/09/16	13.22.10	0.11 67 0	1404433Z	00.1	12.0 70 F	10.0 65 1
190	2013/09/10	13.22.13	627	2201020 2221265	02.0 72 0	70.0 65 7	61 P
182	2013/09/10	13.22.20	66 A	2024200 1272560	10.9 RU 1	67.2	65 2
183	2015/09/16	13.22.20	6 <u>3</u> 8	2 <u>395</u> 970	78.4	65.3	62 8
						55.0	

Measurem	ent 2	Leq =	65.1				
Record #	Date	Time	LAeq		LApeak	LASmax	LASmin
2	2015/09/16	14:00:27 14:00:30	65.3 65.9	3422893 3884839	78.2 80.8	66.6 67.4	65.2 64.6
4	2015/09/16	14:00:35	64.0	2511039	78.3	64.6	63.6
5	2015/09/16	14:00:40	64.8	3009235	77.7	66.1	63.1
6 7	2015/09/16 2015/09/16	14:00:45	63.2 63.4	2104891 2205393	78.1 77.5	64.2 64.4	62.4 62.9
8	2015/09/16	14:00:55	63.6	2275491	75.9	64.1	62.8
9 10	2015/09/16	14:01:00 14:01:05	66.0	3965729	77.6 70.1	66.1	64.2
10	2015/09/16	14:01:05	66.0	3943658	79.1 79.2	66.7	65.2
12	2015/09/16	14:01:15	62.8	1898327	76.3	65.2	61.7
13 14	2015/09/16	14:01:20 14:01:25	63.8 62.2	2403888	76.7 75 4	64.3 63.0	62.5 61.0
15	2015/09/16	14:01:30	64.8	3037251	80.0	66.2	62.3
16	2015/09/16	14:01:35	60.9	1226243	74.4	62.6	60.7
17 18	2015/09/16	14:01:40 14:01:45	66.5 66.3	4507289 4228671	80.2 80.2	67.2 67.3	61.7 64.6
19	2015/09/16	14:01:50	63.3	2136948	76.3	64.6	63.1
20	2015/09/16	14:01:55	63.9	2466667	76.0	64.7	63.1
21 22	2015/09/16	14:02:00	66.9	4527343 4914761	79.8 79.3	66.8 67.6	64.7 66.3
23	2015/09/16	14:02:10	64.4	2744473	77.3	67.1	63.6
24 25	2015/09/16	14:02:15	64.0	2504123	81.6	64.2	63.6
25 26	2015/09/16	14:02:20	65.0	3129363	02.1 77.5	67.8	64.1 64.6
27	2015/09/16	14:02:30	66.8	4836630	80.9	67.7	65.2
28 29	2015/09/16	14:02:35	65.5 65.8	3553561	78.6 78.7	67.2 66.2	65.3 65.3
30	2015/09/16	14:02:45	65.0	3186233	77.5	65.9	64.1
31	2015/09/16	14:02:50	64.2	2660389	76.6	64.8	63.5
32 33	2015/09/16	14:02:55 14:03:00	62.0 63.2	1572082 2112398	75.1 78.0	63.5 64 0	61.7 62.0
34	2015/09/16	14:03:05	63.9	2473836	77.8	65.0	62.7
35	2015/09/16	14:03:10	64.7	2983333	79.3	65.9	63.3
36 37	2015/09/16	14:03:15	62.6	4136942 1834937	80.7 76.2	64.9	64.9 62.2
38	2015/09/16	14:03:25	62.5	1791692	76.1	63.0	61.9
39 40	2015/09/16	14:03:30 14:03:35	62.5 62 1	1759067	76.4 74 7	63.3 62 7	61. <i>1</i> 61.4
41	2015/09/16	14:03:40	62.6	1802314	78.1	63.3	61.6
42	2015/09/16	14:03:45	63.8 62.0	2391635	93.1 79.7	64.7	62.5
43 44	2015/09/16	14:03:55	64.2	2621598	76.9	64.9	63.4 63.3
45	2015/09/16	14:04:00	64.7	2933710	77.8	64.9	64.5
46 47	2015/09/16	14:04:05 14:04:10	66.2 66.4	4212537	81.1 80.7	67.6 68 1	64.8 64.9
48	2015/09/16	14:04:15	65.4	3496221	77.8	65.9	64.6
49 50	2015/09/16	14:04:20	65.3	3370817	78.5	66.1	64.4
50 51	2015/09/16	14:04:25	69.3	3292052 8536498	87.7 85.6	65.7 72.2	64.7 64.5
52	2015/09/16	14:04:35	68.6	7254265	84.3	72.4	65.6
53 54	2015/09/16	14:04:40 14:04:45	63.6 63.5	2275961 2216114	77.4 78.6	65.6 64 7	63.1 62.1
55	2015/09/16	14:04:50	65.7	3718366	79.2	66.4	64.6
56 57	2015/09/16	14:04:55	66.8	4749818	80.3	67.3	66.1
58	2015/09/16	14:05:00	65.8	3789621	79.2 79.5	66.2	65.2
59	2015/09/16	14:05:10	65.1	3210540	78.2	66.2	64.8
60 61	2015/09/16 2015/09/16	14:05:15	64.5 63.5	2833569 2232739	77.2	65.5 64.0	63.8 62.7
62	2015/09/16	14:05:25	64.4	2739974	77.4	65.4	62.9
63 64	2015/09/16	14:05:30 14:05:35	61.7 62.5	1484416	74.2 75.6	62.9	61.3
65	2015/09/16	14:05:40	62.3	1691690	76.1	63.7	60.6
66	2015/09/16	14:05:45	63.4	2194537	76.4	64.1	62.7
67 68	2015/09/16	14:05:50 14:05:55	61.8 62.4	1516798 1756950	75.3 75.8	62.7 62.7	61.4 62.2
69	2015/09/16	14:06:00	63.5	2255974	77.4	64.1	62.2
70	2015/09/16	14:06:05	61.9	1543270	75.3	64.1	61.4
71	2015/09/16	14:06:10	62.7 66.4	4340675	76.2 79.8	63.7 67.6	63.7
73	2015/09/16	14:06:20	69.2	8225637	81.3	70.7	66.3
74 75	2015/09/16	14:06:25 14:06:30	63.3 63.1	2157691 2052504	76.9 76.2	66.3 63.4	62.8 62.9
76	2015/09/16	14:06:35	63.1	2018400	76.3	63.6	62.4
77	2015/09/16	14:06:40	64.3	2697548	79.3	64.6	63.4
78 79	2015/09/16 2015/09/16	14:06:45 14:06:50	66.8 64.3	4763857 2714195	79.5 76.5	67.3 66.3	64.6 64.1
80	2015/09/16	14:06:55	65.5	3569666	80.1	66.7	64.2
81	2015/09/16	14:07:00	66.1	4061718	78.4	66.9	65.7
o∠ 83	2015/09/16	14:07:10	65.8	3343028 3778074	79.0	66.4	65.1
84	2015/09/16	14:07:15	65.9	3919463	78.7	66.4	65.5
85 86	2015/09/16	14:07:20 14:07:25	64.6	2892433	78.0 77 4	65.5 65 6	64.4
87	2015/09/16	14:07:30	68.5	7083588	81.6	69.1	65.4
88	2015/09/16	14:07:35	64.3	2694186	78.4	67.7	62.9
89 90	2015/09/16	14:07:40 14:07:45	64.6 65 7	2874107 3713255	/7.4 79 7	65.1 66 7	62.8 63 7
91	2015/09/16	14:07:50	64.6	2888579	79.9	66.7	64.1

92	2015/09/16	14.07.55	63.3	2158380	77 4	64 4	63.0
93	2015/09/16	14:08:00	63.9	2429371	77.2	64.2	63.1
94	2015/09/16	14:08:05	63.6	2301197	75.7	64.0	63.3
05	2015/00/16	14:08:10	63.2	2101802	75.8	63.8	62.2
35 06	2015/09/10	14:00:10	65.0	2056202	90 7	67.4	62.7
90	2015/09/10	14.00.13	64.0	3030303	00.7	67.4	60.7
97	2015/09/10	14.00.20	04.2	2040610	77.0	07.9	02.1
90	2015/09/16	14.08.25	03.3	2110000	77.0	64.7	01.0
99	2015/09/16	14:08:30	65.0	3155203	78.8	65.9	63.8
100	2015/09/16	14:08:35	63.Z	2088673	78.4	63.8	62.7
101	2015/09/16	14:08:40	65.9	3904551	79.3	66.4	63.8
102	2015/09/16	14:08:45	64.6	2851651	77.5	65.8	63.6
103	2015/09/16	14:08:50	64.5	2822505	76.3	64.6	63.6
104	2015/09/16	14:08:55	68.1	6396547	83.3	69.7	64.5
105	2015/09/16	14:09:00	65.5	3565855	/8./	69.3	64.3
106	2015/09/16	14:09:05	63.4	2205217	/8.1	65.1	62.5
107	2015/09/16	14:09:10	64.1	2572708	77.8	65.2	63.4
108	2015/09/16	14:09:15	64.0	2484824	77.3	64.4	63.5
109	2015/09/16	14:09:20	64.6	2872103	78.0	65.5	63.6
110	2015/09/16	14:09:25	64.0	2502037	85.3	64.3	63.4
111	2015/09/16	14:09:30	62.6	1830875	85.6	64.0	62.0
112	2015/09/16	14:09:35	61.4	1391340	74.9	62.0	61.0
113	2015/09/16	14:09:40	63.0	1987898	76.9	63.4	62.0
114	2015/09/16	14:09:45	65.7	3736419	78.5	66.2	63.4
115	2015/09/16	14:09:50	63.6	2294746	86.5	66.0	63.0
116	2015/09/16	14:09:55	62.2	1667324	75.8	63.0	61.6
117	2015/09/16	14:10:00	64.3	2681258	77.5	64.8	62.8
118	2015/09/16	14:10:05	62.5	1798848	80.6	64.2	62.4
119	2015/09/16	14:10:10	65.9	3897444	79.0	66.6	62.8
120	2015/09/16	14:10:15	64.9	3090687	78.1	66.2	64.0
121	2015/09/16	14:10:20	72.3	17067628	93.4	76.8	65.3
122	2015/09/16	14:10:25	73.5	22394646	92.5	77.3	68.9
123	2015/09/16	14:10:30	65.4	3488828	78.6	68.9	63.7
124	2015/09/16	14:10:35	62.5	1781109	75.7	64.1	62.1
125	2015/09/16	14:10:40	63.8	2387412	80.5	66.3	61.8
126	2015/09/16	14:10:45	65.6	3599192	79.0	66.7	64.7
127	2015/09/16	14:10:50	63.4	2193762	76.6	64.7	62.7
128	2015/09/16	14:10:55	62.8	1886833	76.0	63.3	61.7
129	2015/09/16	14:11:00	63.8	2406669	76.9	64.4	63.2
130	2015/09/16	14:11:05	66.8	4791899	79.3	67.6	64.1
131	2015/09/16	14:11:10	63.8	2381142	82.4	66.5	63.6
132	2015/09/16	14:11:15	64.4	2745399	78.8	66.3	63.0
133	2015/09/16	14:11:20	64.5	2815157	78.2	65.0	63.0
134	2015/09/16	14:11:25	62.5	1771390	83.0	64.1	62.1
135	2015/09/16	14:11:30	60.2	1041925	75.1	62.2	59.1
136	2015/09/16	14:11:35	62.1	1625662	76.3	62.8	60.1
137	2015/09/16	14:11:40	62.3	1697993	82.1	62.9	61.3
138	2015/09/16	14:11:45	64.4	2732624	83.6	66.2	61.8
139	2015/09/16	14:11:50	66.7	4630274	81.6	68.3	65.2
140	2015/09/16	14:11:55	62.2	1675756	75.9	65.2	61.4
141	2015/09/16	14:12:00	65.8	3770940	79.5	66.3	61.9
142	2015/09/16	14:12:05	64.4	2758699	78.9	66.2	62.6
143	2015/09/16	14.12.10	01.2	1323193	74.7	62.6	60.9
144	2015/09/16	14.12.13	02.7 64.7	1002/14	70.4	63.9 65 0	01.4 62.0
145	2015/09/10	14.12.20	04.7	2901140	77.3	65.0	03.0
140	2015/09/10	14.12.20	64.7	2920792	77.4	65.4 65.2	64.4
147	2015/09/16	14.12.30	04.7 67.4	2940002	02.2	00.3	04.1
140	2015/09/16	14.12.30	65.0	2249760	02.2 70.6	00.1 66.4	64.7
149	2015/09/10	14.12.40	70.4	10260125	70.0 06.2	72.5	64.0
150	2015/09/10	14.12.40	70.1 65.4	3468140	83.6	72.5	63.3
152	2015/09/16	14.12.50	62.6	1830707	75.6	63.8	61.0
152	2015/09/16	14.12.00	60.0	7055474	83.0	72.4	61.6
154	2015/09/16	14:13:00	67.9	6140852	82.3	72.4	65.1
155	2015/09/16	14:13:10	65.3	3370935	78.6	65.9	64.4
156	2015/09/16	14:13:10	65.2	3306182	78.5	65.6	64.8
157	2015/09/16	14:13:20	65 1	3230585	78.3	66.2	63.8
158	2015/09/16	14:13:25	65.4	3442878	77.9	65.9	63.7
159	2015/09/16	14.13.30	63.9	2461033	78.2	65.4	63.3
160	2015/09/16	14.13.35	63.3	2127707	76.3	63.4	62.9
161	2015/09/16	14:13:40	64.0	2514840	77.8	64.5	63.4
162	2015/09/16	14:13:45	62.9	1928036	81.3	64.5	62.2
163	2015/09/16	14:13:50	63.1	2061607	75.7	63.8	62.1
164	2015/09/16	14:13:55	64.0	2534760	77.8	64.6	63.3
165	2015/09/16	14:14:00	64.2	2619817	78.9	65.1	62.6
166	2015/09/16	14:14:05	64.5	2797267	76.8	65.2	63.7
167	2015/09/16	14:14:10	65.2	3305317	78.9	65.7	64.4
168	2015/09/16	14:14:15	64.8	3034552	77.8	65.5	64.2
169	2015/09/16	14:14:20	65.9	3935284	80.4	67.5	63.4
170	2015/09/16	14:14:25	65.3	3361131	78.9	67.2	64.5
171	2015/09/16	14:14:30	64.3	2715779	76.8	64.7	64.0
172	2015/09/16	14:14:35	62.4	1720983	77.2	64.0	61.4
173	2015/09/16	14:14:40	60.6	1141263	72.8	61.5	59.7
174	2015/09/16	14:14:45	62.0	1598481	74.5	62.9	59.8
175	2015/09/16	14:14:50	63.8	2420638	76.6	64.1	62.9
176	2015/09/16	14:14:55	65.8	3772987	78.8	66.9	63.9
177	2015/09/16	14:15:00	65.7	3733513	80.0	67.0	65.6
1/8	2015/09/16	14:15:05	63.8	2400213	76.8	65.6	63.2
1/9	2015/09/16	14:15:10	65.3	42/2450	79.4 70 5	66.8	64.6
10U 104	2015/09/16	14:15:15	05.1 64.0	322/306	10.5 70.0	00.1 65.7	04.U
101	2015/09/16	14.15:20 17-15:20	04.Z	2019803	10.0 75.0	00./ 62.4	03.U 63.0
104	LUIU/U3/10	1-7.10.20	00.0	L122042	10.0	00.4	JZ.J

Measurement 3		Leq =	66.1				
Record #	Date	Time	LAeq		LApeak	LASmax	LASmin
2	2015/09/16	14:41:08	63.7	2334840	76.3	70.8	66.2
3	2015/09/16	14:41:10	64.1	2568603	77.3	66.2	63.6
4 5	2015/09/16	14:41:15 14:41:20	64.7 65.6	2926159	//./ 77.2	65.5 65.8	63.5 65.2
6	2015/09/16	14:41:25	65.2	3310256	82.7	65.9	64.9
7	2015/09/16	14:41:30	65.0	3184230	82.1	65.6	64.6
8	2015/09/16	14:41:35	64.9	3058792	77.5	65.5	64.4
9 10	2015/09/16	14:41:40	64.9 65.4	3086168	78.4 78.9	65.6 65.9	64.6 64.8
11	2015/09/16	14:41:50	65.5	3562493	78.3	65.7	65.3
12	2015/09/16	14:41:55	65.6	3594712	79.3	66.4	64.9
13	2015/09/16	14:42:00	64.2	2649554	77.0	64.9	64.0
14 15	2015/09/16	14:42:05 14:42:10	63.9 64 1	2461074 2594133	77.1	64.4 64 7	63.6 63.5
16	2015/09/16	14:42:15	64.4	2785708	76.8	64.7	64.1
17	2015/09/16	14:42:20	64.5	2817012	78.6	64.8	64.1
18	2015/09/16	14:42:25	64.5 65 0	2842948	76.8	64.8	64.3
19 20	2015/09/16	14:42:30	65.6	3601051	76.3 79.2	65.9	65.3
21	2015/09/16	14:42:40	64.6	2915860	77.9	65.3	64.5
22	2015/09/16	14:42:45	65.3	3423482	79.6	65.6	64.8
23 24	2015/09/16	14:42:50	65.0 65.0	3133863	78.2 78.5	65.2	64.8 64.6
24 25	2015/09/16	14:42:55	65.6	3649830	78.7	66.0	65.2
26	2015/09/16	14:43:05	67.5	5565087	83.1	68.5	65.7
27	2015/09/16	14:43:10	69.6	9173597	88.1	70.7	67.7
28 20	2015/09/16	14:43:15	68.9	7695198	86.4 70.4	71.9 67 5	67.5 66.7
29 30	2015/09/16	14:43:20	66.7	4707041	79.4 80.0	67.3	66.3
31	2015/09/16	14:43:30	65.8	3802418	77.9	66.8	65.7
32	2015/09/16	14:43:35	65.9	3850656	79.4	66.1	65.5
33 24	2015/09/16	14:43:40	65.9	3846329	78.9	66.1	65.6
34 35	2015/09/16	14:43:45	66.9	4284777 4917490	80.9 80.2	67.2	65.9 66.4
36	2015/09/16	14:43:55	66.9	4927426	79.6	67.2	66.7
37	2015/09/16	14:44:00	66.3	4226035	78.7	66.8	65.9
38	2015/09/16	14:44:05	66.2	4153559	80.3	66.4	66.0
39 40	2015/09/16	14:44:10	65.8	4099632 3837150	78.3	66 6	65.9 65.3
41	2015/09/16	14:44:20	67.2	5216213	83.7	67.4	66.6
42	2015/09/16	14:44:25	67.4	5442522	79.7	67.7	67.1
43	2015/09/16	14:44:30	67.3	5425101 6705608	82.5	68.5	66.4 67.7
44 45	2015/09/16	14:44:35	69.9	9835031	от.т 84.4	66.9 71.6	67.7
46	2015/09/16	14:44:45	74.4	27332482	87.0	75.0	71.6
47	2015/09/16	14:44:50	70.3	10796506	85.5	74.1	68.9
48	2015/09/16	14:44:55	68.3	6715487	81.7	68.8 68.2	67.9
49 50	2015/09/16	14:45:00	68.0	6376946	82.0	69.0	67.3
51	2015/09/16	14:45:10	67.4	5460545	80.6	67.6	67.1
52	2015/09/16	14:45:15	70.3	10605571	83.9	71.7	67.4
53 54	2015/09/16	14:45:20	72.3	17082836	85.7	72.9	71.6
54 55	2015/09/16	14:45:25	66.2	4154187	80.2	66.8	65.9
56	2015/09/16	14:45:35	65.5	3545343	78.5	66.1	65.3
57	2015/09/16	14:45:40	65.5	3518056	78.5	65.7	65.2
58 59	2015/09/16	14:45:45 14:45:50	66.3 66.2	4257907 4194055	79.0 79.6	66.8 66.8	65.5 65.8
60	2015/09/16	14:45:55	67.2	5197015	80.6	67.7	66.1
61	2015/09/16	14:46:00	66.5	4483684	79.2	66.9	66.2
62 62	2015/09/16	14:46:05	65.3	3405451	78.8	66.7	64.8 65 5
63 64	2015/09/16	14:46:10	66.3	4910653	79.7 79.0	67.0	65.5 66.0
65	2015/09/16	14:46:20	65.6	3600450	78.0	66.0	65.1
66	2015/09/16	14:46:25	66.2	4148622	81.1	66.4	65.6
67 68	2015/09/16	14:46:30 14:46:35	66.2 66.2	4138112	/8./ 83.2	66.6 66.6	65.5 65.7
69	2015/09/16	14:46:40	66.4	4332569	79.1	66.7	65.8
70	2015/09/16	14:46:45	65.8	3824109	78.4	66.6	65.2
71	2015/09/16	14:46:50	66.1	4055379	78.9	66.3	65.4
72 73	2015/09/16	14:46:55	65.2	4141341 3836739	79.4 78.1	66.0 66.1	65.6
74	2015/09/16	14:47:05	64.7	2958495	78.1	65.6	64.3
75	2015/09/16	14:47:10	64.8	3032298	77.6	65.1	64.4
76 77	2015/09/16	14:47:15	64.7	2946452	76.8	64.9 66 5	64.4 64.5
78	2015/09/16	14:47:20	65.9	3876311	78.9	66.4	65.8
79	2015/09/16	14:47:30	64.9	3072325	78.0	65.9	64.5
80	2015/09/16	14:47:35	65.6	3636243	79.2	66.1	64.6
81 82	2015/09/16	14:47:40 1 <i>1</i> :47:45	66.3	4267897	79.1 79.7	66.7 66.7	65.9
83	2015/09/16	14:47:50	64.7	2933875	78.3	65.4	64.5
84	2015/09/16	14:47:55	65.3	3415337	78.2	65.6	64.6
85	2015/09/16	14:48:00	65.1	3272517	77.9	65.6	64.8
86 87	2015/09/16	14:48:05	65.7	3695678	78.2	65.8	65.2
88	2015/09/16	14:48:10 14:48:15	00.0 65.6	3590332	77.8	oo.ơ 66.2	05.∠ 65.0
89	2015/09/16	14:48:20	66.4	4368497	80.0	66.6	66.0
90	2015/09/16	14:48:25	66.1	4027286	79.2	66.5	65.7
91 02	2015/09/16	14:48:30	65.6	3589632	80.9 70 4	65.8	65.3
9∠ 93	2015/09/16 2015/09/16	14:48:35 14:48:40	00.4 65 6	3672766	78.1 80 0	00.8 66 1	00.∠ 65.3
94	2015/09/16	14:48:45	66.0	3985984	80.7	66.9	65.2
95 06	2015/09/16	14:48:50	64.9	3056976	78.1	65.7	64.3
30	∠∪15/09/16	14:48:55	vo.4	3434053	18.9	6.00	0.00

97	2015/09/16	14:49:00	67.1	5077389	80.9	67.5	65.8
98	2015/09/16	14:49:05	66.1	4044053	79.1 77 7	66.8 65.6	65.6
99 100	2015/09/16	14.49.10 1 <i>1</i> .49.15	64.3 64.8	2004009	77.6	65.7	63.6
100	2015/09/10	14.49.15	64.0 64.7	2053308	78.4	65 G	63.0
101	2015/09/16	14.49.20	64.7	2933300	77.8	65.7	64 1
103	2015/09/16	14:49:30	65.0	3171335	78.2	65.4	64.4
104	2015/09/16	14:49:35	64.3	2695114	77.1	64.9	63.9
105	2015/09/16	14:49:40	65.6	3600741	78.3	65.9	64.8
106	2015/09/16	14:49:45	66.0	3962895	78.9	66.5	65.6
107	2015/09/16	14:49:50	64.9	3124683	78.3	65.9	64.7
108	2015/09/16	14:49:55	64.6	2877118	78.0	65.3	64.4
109	2015/09/16	14:50:00	64.7	2923133	77.4	65.1	64.1
110	2015/09/16	14:50:05	64.9	3119439	78.0	65.4	64.4
111	2015/09/16	14:50:10	65.5	3583986	79.7	66.2	64.8
112	2015/09/16	14:50:15	63.5	2244198	76.7	64.8	63.1
113	2015/09/16	14:50:20	63.6	2265953	75.8	63.9	63.2
114	2015/09/16	14:50:25	64.1	2558263	78.4 70.7	64.3	63.8
115	2015/09/16	14:50:30	65.6	3641472	/8./ 70.4	66.1	64.2
116	2015/09/16	14:50:35	66.5	4447324	79.4	67.0	66.0
117	2015/09/16	14.50.40	66 3	4000000	79.0 70 /	67.0	65.8
110	2015/09/16	14:50:40	65.9	3852388	78.6	66 1	65.5
120	2015/09/16	14:50:55	64.8	3020824	78.0	65.8	64 5
120	2015/09/16	14:51:00	65 1	3249248	77.2	65.4	64.6
122	2015/09/16	14:51:05	65.2	3279095	77.6	65.5	64.9
123	2015/09/16	14:51:10	64.9	3094866	77.9	65.2	64.7
124	2015/09/16	14:51:15	64.9	3063573	78.7	65.2	64.7
125	2015/09/16	14:51:20	65.2	3341638	78.9	65.5	64.7
126	2015/09/16	14:51:25	66.0	3947830	79.4	66.1	65.5
127	2015/09/16	14:51:30	65.9	3925652	78.1	66.2	65.7
128	2015/09/16	14:51:35	66.4	4412979	79.3	66.7	65.9
129	2015/09/16	14:51:40	65.8	3824834	78.8	66.3	65.7
130	2015/09/16	14:51:45	66.4	4402735	79.0	66.6	65.8
131	2015/09/16	14:51:50	66.2	4214299	78.6	66.5	66.0
132	2015/09/16	14:51:55	65.8	3765042	78.8	66.5	65.4
133	2015/09/16	14:52:00	66.7	4629135	79.4	66.9 67.0	65.8
134	2015/09/16	14.52.05	65.2	4211000	01.Z 70.2	07.0 66.2	65 1
135	2015/09/16	14.52.10	65 A	3371093	70.5	65.8	65.2
130	2015/09/16	14.52.15	65.6	3648875	78.2	65 Q	65.2
138	2015/09/16	14:52:25	65.3	3366887	78.3	65.5	64.9
139	2015/09/16	14:52:30	64.8	3046153	77.8	65.4	64.6
140	2015/09/16	14:52:35	63.5	2231365	76.7	64.9	62.8
141	2015/09/16	14:52:40	64.0	2507033	77.5	64.9	62.8
142	2015/09/16	14:52:45	65.1	3228032	77.9	65.3	64.8
143	2015/09/16	14:52:50	65.4	3443235	77.3	65.6	65.1
144	2015/09/16	14:52:55	66.5	4466506	79.6	66.8	65.3
145	2015/09/16	14:53:00	66.9	4915546	79.3	67.5	66.2
146	2015/09/16	14:53:05	66.2	4171775	79.5	66.5	65.9
147	2015/09/16	14:53:10	65.9	3891307	81.3	66.6	65.2
148	2015/09/16	14:53:15	64.9	3095426	78.2	65.2	64.6
149	2015/09/16	14:53:20	66.4	4393232	/8./	66.7	65.0 66 5
150	2015/09/16	14:53:25	0/./ 71 /	5828903	81.9 97.4	00.3 70.2	60.5 67.6
152	2015/09/16	14.53.30	67.4	5519550	82.0	72.3	66.2
152	2015/09/16	14.53.35	67.1	5122183	80.0	67.6	66 5
154	2015/09/16	14:53:45	66.3	4264082	79.3	67.0	65.7
155	2015/09/16	14:53:50	65.3	3366160	79.7	65.7	65.1
156	2015/09/16	14:53:55	65.5	3510500	79.5	66.1	65.0
157	2015/09/16	14:54:00	65.4	3488166	79.5	66.1	64.9
158	2015/09/16	14:54:05	66.4	4391041	80.2	67.3	65.7
159	2015/09/16	14:54:10	66.0	3949551	80.9	67.3	65.2
160	2015/09/16	14:54:15	64.5	2799007	77.1	65.4	64.1
161	2015/09/16	14:54:20	64.4	2743326	77.0	64.5	64.1
162	2015/09/16	14:54:25	64.6 C4.0	2876997	77.4	65.0 CE 0	64.2
105 164	2015/09/16	14.04:30 11.51.25	04.9 62 1	3093779 2177910	11.4 76 1	00.3 61 1	04.4 62 2
165	2015/09/16	14.54.35	64 6	2878974	78.3	64.8	63.5
166	2015/09/16	14:54:45	64.6	2854759	77.3	64.8	64.3
167	2015/09/16	14:54:50	64.7	2967229	77.7	65.1	64.4
168	2015/09/16	14:54:55	64.0	2528857	77.3	64.9	63.0
169	2015/09/16	14:55:00	64.1	2570314	77.9	64.9	63.2
170	2015/09/16	14:55:05	64.2	2640892	77.4	64.9	63.1
171	2015/09/16	14:55:10	65.1	3267123	77.8	65.7	64.7
172	2015/09/16	14:55:15	66.4	4359152	79.6	66.7	65.7
173	2015/09/16	14:55:20	66.2	4127193	78.6	66.5	65.9
1/4	2015/09/16	14:55:25	66.2	4141996	80.3	66.5	66.0
175 176	2015/09/16	14.00:30	00.1 64 F	320/100	10.3 70 1	00.U	04.5 62 7
170 177	2015/09/10	14.00.00	04.0 65 0	2030915	10.1 72.2	00.3 66 2	03.1 65 1
178	2015/09/10	14.00.40 14.55.45	00.9 65 2	304009U 3202101	10.3 77 2	00.3 65 8	64 8
179	2015/00/16	14:55:50	65 4	3471005	78 2	65 7	64 8
180	2015/09/16	14:55:55	66.2	4162975	79 1	66.5	65.5
181	2015/09/16	14:56:00	65.9	3884047	78.8	66.3	65.7
182	2015/09/16	14:56:05	65.2	3288399	78.3	66.1	64.4
183	2015/09/16	14:56:10	64.9	3122866	80.05129	65.70419	64.16195
184	2015/09/16	14:56:15	64.9	3069989	77.99551	65.65887	64.50668
185	2015/09/16	14:56:20	64.5	2819373	78.06465	64.91598	64.008
186	2015/09/16	14:56:25	65.4	3493514	78.38793	65.96295	64.83136
187	2015/09/16	14:56:30	65.6	3668813	78.83763	66.09921	65.18893
188	2015/09/16	14:56:35	64.4	2751062	77.40466	65.2225	63.94806
189	2015/09/16	14:56:40	65.5	3524861	79.49493	65.92074	64.65369
190	2015/09/16	14:56:45	65.4	3445843	80.70742	65.59314	65.17072
191	2015/09/16	14:56:50	65.0	3133753	79.22923	65.5334	64.48317

Measurem	ent 4	Leq =	65.5				
Record #	Date	Time	LAeq		LApeak	LASmax	LASmin
3 ⊿	2015/09/16	15:47:39 15:47:40	75.8 73.0	38416489	87.1 86.7	73.7 74 9	72.0 70.4
4 5	2015/09/16	15:47:40	67.6	5692802	85.6	74.9	67.6
6	2015/09/16	15:47:50	65.3	3386260	80.7	67.6	64.3
7	2015/09/16	15:47:55 15:48:00	66.3 65 7	4245143	81.5 78 7	66.6 66.6	64.5 64.8
9	2015/09/16	15:48:00	69.1	8149334	82.7	69.9	64.8 64.9
10	2015/09/16	15:48:10	66.6	4572607	93.7	69.8	64.0
11	2015/09/16	15:48:15	64.3	2663218	83.3	65.0	63.3
12 13	2015/09/16	15:48:20 15:48:25	65.6 64.7	3605216	78.3 78.5	66.1 65.9	64.4 63.7
14	2015/09/16	15:48:30	61.2	1330788	79.1	63.6	60.3
15	2015/09/16	15:48:35	59.9	984795.4	77.4	61.0	59.7
16 17	2015/09/16	15:48:40 15:48:45	63.9	2482900	77.7 77.5	65.5 64.7	60.2
17	2015/09/16	15:48:50	59.7	935670.9	75.0	61.6	58.9
19	2015/09/16	15:48:55	58.7	740420.1	71.2	59.2	58.4
20	2015/09/16	15:49:00	58.9	784784.1	72.9	59.2	58.6
21 22	2015/09/16	15:49:05 15:49:10	60.0 59.4	867686.6	73.0 72.0	60.5 60.5	58.7 59.0
23	2015/09/16	15:49:15	58.4	696596.6	71.5	59.4	58.1
24	2015/09/16	15:49:20	58.2	663768.3	71.4	58.8	57.8
25 26	2015/09/16	15:49:25 15:49:30	59.1 61 7	810225.6 1/70753	72.6 74.8	59.7 62.5	58.5 59.8
20	2015/09/16	15:49:35	62.5	1794799	77.0	63.2	62.1
28	2015/09/16	15:49:40	59.3	846594.9	71.8	62.3	58.7
29 20	2015/09/16	15:49:45	58.4	694362	71.2 76 5	58.7	58.1
30 31	2015/09/16	15:49:50	60.6	1372709	76.5 74.9	62.4 61.6	58.6 59.7
32	2015/09/16	15:50:00	58.9	771995.6	72.5	62.0	57.9
33	2015/09/16	15:50:05	58.4	684050.2	72.3	58.7	58.0
34 35	2015/09/16	15:50:10 15:50:15	59.7 60.2	927322.9 1050682	73.8 79 9	60.6 61.2	58.6 59.2
36	2015/09/16	15:50:10	57.2	526306.9	70.6	59.6	56.8
37	2015/09/16	15:50:25	56.7	471972.4	72.3	57.0	56.5
38	2015/09/16	15:50:30	60.6	1159191	77.2	62.8	57.1
39 40	2015/09/16	15:50:35	72.8	18867854	79.3 87.9	74.1	67.0
41	2015/09/16	15:50:45	67.9	6213677	81.8	72.2	67.3
42	2015/09/16	15:50:50	72.3	16806660	87.1	74.1	67.2
43 44	2015/09/16	15:50:55 15:51:00	73.5 66.3	22279945 4254363	86.0 79.2	75.2 70.8	70.9 65.9
45	2015/09/16	15:51:05	67.3	5325724	80.3	67.4	66.5
46	2015/09/16	15:51:10	65.3	3370420	79.5	67.0	64.7
47 48	2015/09/16	15:51:15 15:51:20	65.4 64.0	3466115 2498069	78.5 77 4	65.8 65.3	64.8 63.6
49	2015/09/16	15:51:25	68.1	6429613	82.7	70.5	64.0
50	2015/09/16	15:51:30	67.9	6232875	81.9	69.9	66.3
51 52	2015/09/16	15:51:35	68.0 66.3	6262377	84.1 82.0	69.2	66.9 65.0
53	2015/09/16	15:51:45	66.7	4727010	79.8	67.0	65.9
54	2015/09/16	15:51:50	65.2	3338475	79.7	67.2	62.6
55 56	2015/09/16	15:51:55	60.0	990138.3	75.0 76.2	62.6	59.2
50 57	2015/09/16	15:52:00	63.0	2016833	76.2	63.8	61.8
58	2015/09/16	15:52:10	60.1	1017495	72.5	61.8	59.4
59 60	2015/09/16	15:52:15	58.7	738796.7	71.6	59.4	58.6
60 61	2015/09/16	15:52:20	57.7 57.4	594134.8	70.6 69.8	58.7 57.7	57.5 57.3
62	2015/09/16	15:52:30	58.8	755713.1	72.7	59.7	57.5
63 64	2015/09/16	15:52:35	60.5	1131661	74.5	61.5	59.7
64 65	2015/09/16	15:52:40	61.6 58.6	728844.1	75.3 71.9	62.5 60.4	60.4 58.1
66	2015/09/16	15:52:50	57.7	588711.9	71.7	58.1	57.4
67	2015/09/16	15:52:55	57.8	606940.7	71.5	58.3	57.5
68 69	2015/09/16	15:53:00 15:53:05	58.2 58.3	676000.9	70.9 73.0	58.7 59.3	57.6 57.8
70	2015/09/16	15:53:10	57.7	592654.5	69.6	58.3	57.5
71	2015/09/16	15:53:15	59.7	938795.1	76.6	60.3	57.5
72 73	2015/09/16	15:53:20 15:53:25	59.1 59.5	811680.8 886454 1	72.0 73.3	59.7 60.5	58.9 58.6
74	2015/09/16	15:53:30	59.8	957268.4	74.5	60.5	59.6
75	2015/09/16	15:53:35	59.8	964155.1	72.7	60.3	59.5
76 77	2015/09/16	15:53:40 15:52:45	69.1 75.7	8199206	86.7	74.1	59.4 74 1
78	2015/09/16	15:53:45	70.0	9933868	90.2 86.3	78.0	69.2
79	2015/09/16	15:53:55	67.4	5445678	81.7	69.4	66.3
80	2015/09/16	15:54:00	66.9	4944421	81.6	67.7	66.2
୪1 ୫୨	2015/09/16 2015/00/16	15:54:05 15:54:10	67.0 67.1	5011890 5132003	79.6 80.2	67.7 67.8	66 3
83	2015/09/16	15:54:15	68.1	6450044	81.6	68.3	67.7
84	2015/09/16	15:54:20	65.5	3560478	78.2	68.1	65.1
85	2015/09/16	15:54:25	65.3	3393376	78.1	65.8	64.6
80 87	2015/09/16 2015/09/16	15:54:30 15:54:35	07.9 66 7	01512/1 4671288	80.7 79.5	ხშ.U 67 7	66.3
88	2015/09/16	15:54:40	66.0	3964092	78.5	66.3	65.6
89	2015/09/16	15:54:45	64.5	2805313	77.9	66.2	64.2
90	2015/09/16	15:54:50	66.5	4436415	80.5	67.4	64.6
91 92	2015/09/16	15:55:00	62.9	1968242	77.6	65.6	61.4

93	2015/09/16	15:55:05	63.3	2139393	79.0	65.4	61.3
94	2015/09/16	15:55:10	61.9	1561801	77.2	65.4	59.9
95	2015/09/16	15:55:15	62.2	1671491	77.0	64.0	58.5
96	2015/09/16	15:55:20	62.3	1694770	80.1	63.7	61.1
97	2015/09/16	15:55:25	60.0	998746.5	74.6	61.1	59.4
98	2015/09/16	15:55:30	58.4	686375.8	71.4	59.4	57.8
99	2015/09/16	15:55:35	57.3	532488.2	71.5	58.8	56.8
100	2015/09/16	15:55:40	57.1	517579	70.4	57.6	56.6
101	2015/09/16	15:55:45	58.4	685175.9	71.2	59.1	57.4
102	2015/09/16	15:55:50	59.8	965385 5	73.9	60.7	59.1
102	2015/00/16	15:55:55	50.0	822154.8	70.0	59.6	58.5
103	2015/09/10	15:56:00	62.2	2074090	70.2	64.4	50.3
104	2015/09/10	15.50.00	03.2	2074909	79.2	04.4	59.5
105	2015/09/16	15.56.05	01.0	1527953	77.0	62.9	01.5
106	2015/09/16	15:56:10	64.1	2582747	77.6	64.6	62.2
107	2015/09/16	15:56:15	62.1	1624854	77.5	64.5	60.9
108	2015/09/16	15:56:20	60.4	1097817	73.1	61.0	60.0
109	2015/09/16	15:56:25	59.2	838750.5	72.6	60.0	58.9
110	2015/09/16	15:56:30	58.3	678470.2	83.4	60.0	57.4
111	2015/09/16	15:56:35	58.6	724829.1	72.8	59.7	57.3
112	2015/09/16	15:56:40	60.1	1019565	73.4	61.1	59.2
113	2015/09/16	15:56:45	60.0	1009666	72.7	60.2	59.5
114	2015/09/16	15:56:50	60.7	1174034	73.8	60.9	59.8
115	2015/09/16	15:56:55	60.1	1013238	72.2	60.8	59.8
116	2015/00/16	15:57:00	61.0	1251814	72.2	61.0	60.0
110	2015/09/10	15:57:00	61.6	1426059	73.9	62.0	61.0
117	2015/09/10	15.57.05	01.0	1430956	74.4	62.0	01.2
118	2015/09/16	15:57:10	64.7	2977892	78.0	65.7	62.0
119	2015/09/16	15:57:15	70.5	11335351	85.8	72.7	65.7
120	2015/09/16	15:57:20	68.6	7268424	81.1	72.4	68.5
121	2015/09/16	15:57:25	68.6	7187567	81.6	68.8	68.3
122	2015/09/16	15:57:30	70.3	10742247	84.8	71.5	68.1
123	2015/09/16	15:57:35	69.2	8341190	86.1	71.5	67.9
124	2015/09/16	15:57:40	70.5	11183464	86.7	71.9	68.7
125	2015/09/16	15:57:45	67.2	5282433	80.3	68.7	67.0
126	2015/09/16	15:57:50	66.8	4779322	79.9	67.3	66.5
127	2015/09/16	15:57:55	66.8	4837658	79.1	67.5	66.5
128	2015/09/16	15:58:00	66.7	4714653	80.5	66.9	66.4
120	2015/00/16	15:58:05	66 1	4032114	70.1	66.8	65.6
120	2015/00/16	15:59:10	65.5	25/6277	79.0	66 0	65.2
120	2015/09/10	15.50.10	62.7	0060777	70.9	00.0 65.2	62.0
131	2015/09/10	15.56.15	03.7	2303777	74.0	05.3	02.9
132	2015/09/16	15:58:20	61.9	1541410	74.9	63.0	01.4
133	2015/09/16	15:58:25	62.7	18/1631	75.0	63.2	61.3
134	2015/09/16	15:58:30	62.7	1879311	76.0	63.3	61.9
135	2015/09/16	15:58:35	58.7	738958.3	72.0	61.8	57.5
136	2015/09/16	15:58:40	57.6	581453.9	72.4	58.2	57.0
137	2015/09/16	15:58:45	58.1	647326.9	72.4	58.7	57.5
138	2015/09/16	15:58:50	58.6	730783.3	71.9	59.9	57.7
139	2015/09/16	15:58:55	57.2	527620.1	70.9	58.0	57.0
140	2015/09/16	15:59:00	57.3	540287.8	70.0	57.6	56.9
141	2015/09/16	15:59:05	58.3	678302.7	71.4	58.6	57.3
142	2015/09/16	15:59:10	58.5	710125.6	71.1	58.7	58.1
143	2015/09/16	15:59:15	60.4	1095536	73.9	61.3	58.6
144	2015/09/16	15:59:20	62.4	1738175	75.3	62.7	61.2
145	2015/00/16	15:50:25	60.2	1030406	73.4	62.1	58.7
146	2015/09/10	15:50:20	57.2	522106 7	73.4	59.7	56.0
140	2015/09/10	15.59.50	57.5	532100.7	71.1	50.7	50.9
147	2015/09/16	15.59.35	57.1	516260.4	71.4	57.5	7.0C
148	2015/09/16	15:59:40	58.2	661171.3	71.8	59.5	56.7
149	2015/09/16	15:59:45	61.4	1380607	74.7	61.9	59.5
150	2015/09/16	15:59:50	59.4	875345.5	73.1	61.2	59.0
151	2015/09/16	15:59:55	59.8	945852.1	72.9	60.5	59.0
152	2015/09/16	16:00:00	60.2	1044371	73.6	60.6	59.7
153	2015/09/16	16:00:05	63.3	2154582	77.5	64.6	60.4
154	2015/09/16	16:00:10	59.3	856162.4	75.6	63.9	58.3
155	2015/09/16	16:00:15	59.9	971324.2	75.3	61.6	58.0
156	2015/09/16	16:00:20	71.9	15466855	90.6	74.1	61.7
157	2015/09/16	16:00:25	65.8	3802838	79.2	69.5	64.9
158	2015/09/16	16:00:30	66.1	4077123	78.2	66.4	65.3
159	2015/09/16	16:00:35	67.0	4999948	82.9	67.8	66.1
160	2015/09/16	16:00:40	67.5	5637756	80.9	68.8	66.5
161	2015/09/16	16:00:45	67.4	5440304	81.2	68.4	66.7
162	2015/09/16	16:00:50	72 1	16281583	87.1	73.7	66.8
163	2015/09/16	16:00:55	65.6	3617861	78.9	70.9	64.3
164	2015/09/16	16:01:00	66.0	3077353	70.5	67.0	64.2
165	2015/00/16	16:01:05	66.0	30/0200	70.4	66.7	65 7
166	2015/00/46	16-01-10	65 0	2000202	19.9 QG 7	66.2	65 5
100	2015/09/10	10.01.10	00.9	5909362	00.7	00.3	05.5
107	2015/09/16	10.01.15	00.1	0422049	61.5	00.0	00.9
108	2015/09/16	10:01:20	69.4	0/82389	83.0	/0.1	68.1
169	2015/09/16	16:01:25	67.1	5117911	80.4	68.8	66.3
170	2015/09/16	16:01:30	65.2	3339695	78.0	66.3	64.9
171	2015/09/16	16:01:35	62.9	1949737	77.7	65.3	61.3
172	2015/09/16	16:01:40	59.3	860143.8	74.2	61.3	58.6
173	2015/09/16	16:01:45	59.4	870542.5	71.9	59.6	58.8
174	2015/09/16	16:01:50	62.9	1947126	78.0	66.0	59.1
175	2015/09/16	16:01:55	66.5	4471382	80.5	68.0	64.7
176	2015/09/16	16:02:00	63.2	2108981	79.3	66.8	60.3
177	2015/09/16	16:02:05	58.8	765262.5	72.2	60.3	58.2
178	2015/09/16	16:02:10	60.3	1064655	73.5	61.2	58.6
179	2015/09/16	16.02.15	59.0	813205 1	72 5	60.0	58.8
180	2015/00/16	16.02.10	52.7	676206.0	70.6	50.0	50.0
104	2013/03/10	10.02.20	50.5	1245000	10.0	03.4 60.4	50.2
101	2013/09/10	10.02.25	01.3	1040930	00.1	02.1	00.3
102	2015/09/16	10:02:30	00.8 00.0	1211264	76.8	02.2	00.2
183	2015/09/16	16:02:35	62.6	1833321	80.3	65.0	60.6
184	2015/09/16	16:02:40	67.2	5194970	78.60943	65.48159	65.03259

Measurem	ent 5	Leq =	73.0				
Record #	Date	Time	LAeq		LApeak	LASmax	LASmin
2	2015/09/16	16:36:30 16:36:35	69.8 68 7	9642923 7397746	84.9 84 3	73.4 69.1	68.7 68.4
4	2015/09/16	16:36:40	70.3	10655583	83.0	71.2	69.0
5	2015/09/16	16:36:45	67.9	6138770	82.2	69.1	67.3
6 7	2015/09/16	16:36:50 16:36:55	69.7 69.5	9285341 8859326	84.8 82.4	70.8 70.4	67.1 68.9
8	2015/09/16	16:37:00	70.8	12037954	91.8	71.2	70.0
9	2015/09/16	16:37:05	71.2	13151539	84.6	71.5	70.6
10	2015/09/16	16:37:10	70.9	12337256	84.2	71.7	70.2
12	2015/09/16	16:37:15	70.8 69.5	8904309	84.7 84.2	71.3	70.4 68.8
13	2015/09/16	16:37:25	69.1	8047529	81.4	69.4	68.4
14	2015/09/16	16:37:30	70.7	11697563	87.0	71.7	69.1
15	2015/09/16	16:37:35	71.9	12278337	04.0 83.5	72.7	71.1
17	2015/09/16	16:37:45	70.5	11301728	88.3	71.1	70.0
18	2015/09/16	16:37:50	71.2	13042895	83.5	71.7	70.8
19 20	2015/09/16	16:37:55	70.8 70.4	10990164	83.9 83.8	71.3	70.3 69.8
21	2015/09/16	16:38:05	70.6	11518240	84.7	71.5	69.5
22	2015/09/16	16:38:10	71.1	13020368	83.8	72.1	70.3
23 24	2015/09/16	16:38:15 16:38:20	70.6 72.5	17579625	84.3 85.6	71.0 73.3	70.2 70.6
25	2015/09/16	16:38:25	72.6	18213249	86.0	73.3	72.1
26	2015/09/16	16:38:30	81.1	1.29E+08	107.6	84.5	73.3
27 28	2015/09/16	16:38:35 16:38:40	74.2 72.3	26017688	87.5 86.7	//./ 75.4	73.9 71.5
29	2015/09/16	16:38:45	71.4	13838787	86.1	71.8	71.1
30	2015/09/16	16:38:50	72.3	16821577	84.9	72.8	71.0
31 32	2015/09/16	16:38:55 16:39:00	72.2 70.9	16417119	85.6 85.0	72.6 72.2	71.9 70.7
33	2015/09/16	16:39:05	72.1	16117720	85.2	72.4	70.8
34	2015/09/16	16:39:10	71.6	14587167	84.2	72.0	71.3
35 36	2015/09/16	16:39:15 16:30:20	70.9 70.4	12288566	84.0 83.8	71.3 70.9	70.8 70.1
37	2015/09/16	16:39:25	71.6	14468543	94.7	72.2	70.6
38	2015/09/16	16:39:30	72.8	19021009	86.4	73.4	72.1
39 40	2015/09/16	16:39:35 16:39:40	75.2 75.4	33346885 34406655	92.6 92.0	77.8 78.7	72.8 74.0
40	2015/09/16	16:39:45	74.6	28609845	90.1	75.8	73.4
42	2015/09/16	16:39:50	72.5	17895770	87.0	73.7	71.2
43 44	2015/09/16	16:39:55 16:40:00	71.1 72.8	12740768	83.9 90 5	71.7 73.0	70.2 71.6
45	2015/09/16	16:40:05	72.1	16083355	84.7	72.9	71.6
46	2015/09/16	16:40:10	72.2	16614147	86.6	72.6	71.5
47 48	2015/09/16	16:40:15 16:40:20	72.4 71.2	17181462 13159004	85.6 85.0	73.0 72 9	71.3 70.9
40	2015/09/16	16:40:25	71.3	13402783	84.8	71.8	70.7
50	2015/09/16	16:40:30	71.6	14301933	83.9	71.7	70.9
51 52	2015/09/16	16:40:35 16:40:40	70.9 71.3	12411863	84.2 84.5	71.6 71.7	70.8 70.7
53	2015/09/16	16:40:45	71.6	14430442	84.7	71.8	71.2
54	2015/09/16	16:40:50	72.1	16270861	86.7	73.1	71.3
55 56	2015/09/16	16:40:55	75.3 75.5	35280021	90.0 92.0	77.0	73.0 73.6
57	2015/09/16	16:41:05	74.3	26831664	88.5	75.1	72.4
58	2015/09/16	16:41:10	72.1	16035169	87.2	75.2	71.4
59 60	2015/09/16	16:41:15	71.5 72.7	18511368	84.3 85.5	71.9 73.5	71.1
61	2015/09/16	16:41:25	71.4	13931919	84.5	73.0	71.1
62 62	2015/09/16	16:41:30	72.5	17925472	85.6	73.1	71.2
63 64	2015/09/16	16:41:35	71.2	13958965	83.4 83.5	72.7	71.0
65	2015/09/16	16:41:45	72.9	19604274	86.2	73.8	71.3
66 67	2015/09/16	16:41:50 16:41:55	73.7 73.3	23454300	86.9 86.5	74.4 73.4	73.2
68	2015/09/16	16:42:00	73.3	21223044	86.4	73.9	72.9
69	2015/09/16	16:42:05	73.4	21698342	86.8	73.7	72.9
70 71	2015/09/16	16:42:10 16:42:15	73.5 73.4	22577024	86.2 86.4	73.9 74 1	73.2 72.5
72	2015/09/16	16:42:20	72.6	18144619	86.4	73.3	72.3
73	2015/09/16	16:42:25	72.0	15950014	85.5	72.7	71.6
74 75	2015/09/16	16:42:30 16:42:35	73.1 73.2	20396436	88.1 86.4	74.4 74.5	71.6 72.9
76	2015/09/16	16:42:40	73.7	23658520	91.1	75.3	72.4
77	2015/09/16	16:42:45	72.4	17308032	85.5	73.1	71.7
78 79	2015/09/16	16:42:50 16:42:55	71.2 71 7	13299210 14894852	84.2 86 2	72.0 72 0	/1.0 71 3
80	2015/09/16	16:43:00	73.9	24604821	90.0	75.8	71.0
81	2015/09/16	16:43:05	77.5	56451094	95.9	79.0	75.1
82 83	2015/09/16 2015/00/16	16:43:10 16:43:15	1.9/ ל ל	15657072 18081754	85.3 86 5	15.9 731	/1.6 72 0
84	2015/09/16	16:43:20	71.5	14166379	85.5	72.4	71.3
85	2015/09/16	16:43:25	71.9	15665023	84.5	72.4	71.5
86 87	2015/09/16 2015/00/16	16:43:30 16:43:35	/1.1 70 1	12860558 10243179	85.2 83 a	/2.4 71 ∩	/0.7 69 6
88	2015/09/16	16:43:40	71.8	15019372	86.2	72.6	69.6
89	2015/09/16	16:43:45	70.2	10549102	83.0	71.7	69.8
90 91	2015/09/16 2015/09/16	16:43:50 16:43:55	69.9 69.9	9675604 9801122	82.0 82.5	70.5 70.3	69.4 69.4

92	2015/09/16	16:44:00	71.3	13395768	85.2	71.8	70.2
93	2015/09/16	16:44:05	72.9	19316055	85.6	73.4	71.5
94	2015/09/16	16:44:10	73.2	21089494	86.8	73.8	72.6
95	2015/09/16	16:44:15	74.5	28081428	87.7	75.1	73.6
96	2015/09/16	16:44:20	74.4	27242266	88.9	75.2	73.9
97	2015/09/16	16:44:25	74.2	26417226	87.5	75.3	73.1
98	2015/09/16	16:44:30	74.3	26612580	88.7	74.9	72.9
99	2015/09/16	16:44:35	73.4	21807098	86.4	74.4	73.1
100	2015/09/16	16:44:40	72.9	19421227	86.1	73.3	72.6
101	2015/09/16	16:44:45	71.7	14701519	88.1	73.1	71.1
102	2015/09/16	16:44:50	71.3	13515802	83.9	71.9	70.4
103	2015/09/16	16:44:55	72.1	16047061	85.9	72.5	71.7
104	2015/09/16	16:45:00	72.7	18793357	87.0	73.2	71.8
105	2015/09/16	16:45:05	72.3	16966346	86.2	73.2	71.8
106	2015/09/16	16:45:10	73.1	20525440	85.7	73.2	72.3
107	2015/09/16	16:45:15	71.9	15632913	85.7	72.9	71.8
108	2015/09/16	16:45:20	72.3	17135103	86.7	72.8	71.6
109	2015/09/16	16:45:25	72.3	16910018	85.1	73.2	71.5
110	2015/09/16	16:45:30	71.9	15448932	85.0	72.3	71.5
111	2015/09/16	16:45:35	72.5	17781576	85.8	73.6	71.2
112	2015/09/16	16:45:40	72.5	17644754	85.5	73.6	71.8
113	2015/09/16	16:45:45	73.6	22756889	86.9	74.1	71.7
114	2015/09/16	16:45:50	72.9	19638123	86.2	74.0	72.5
115	2015/09/16	16:45:55	72.4	17241450	85.5	72.8	71.9
116	2015/09/16	16:46:00	73.4	21664177	86.3	74.3	72.4
117	2015/09/16	16:46:05	72.5	17855261	85.4	72.9	72.1
118	2015/09/16	16:46:10	71.8	14990481	84.9	72.4	71.6
119	2015/09/16	16:46:15	72.7	18595883	85.5	73.4	71.9
120	2015/09/16	16:46:20	73.8	23952974	89.3	74.4	72.9
121	2015/09/16	16:46:25	72.6	18267210	86.3	73.1	72.4
122	2015/09/16	16:46:30	72.9	19601003	86.9	74.0	71.8
123	2015/09/16	16:46:35	72.3	16986476	85.3	73.2	71.3
124	2015/09/16	16:46:40	72.5	17938577	85.5	73.3	71.9
125	2015/09/16	16:46:45	73.1	20408551	86.3	73.9	71.8
126	2015/09/16	16:46:50	74.7	29255524	87.7	75.0	73.9
127	2015/09/16	16:46:55	74.8	30359543	87.5	75.1	74.7
128	2015/09/16	16:47:00	74.4	27476717	86.8	74.8	73.9
129	2015/09/16	16:47:05	74.4	27468899	88.1	74.8	74.1
130	2015/09/16	16:47:10	74.6	28831136	89.6	75.2	73.9
131	2015/09/16	16:47:15	74.6	28841470	87.0	75.1	73.7
132	2015/09/16	16:47:20	74.6	28863823	87.6	75.0	74.2
133	2015/09/16	16:47:25	73.6	23104525	86.8	74.8	72.8
134	2015/09/16	16:47:30	74.9	31128319	89.0	75.6	72.8
135	2015/09/16	16:47:35	73.8	23894723	87.6	74.5	72.9
136	2015/09/16	16:47:40	73.5	22502108	86.1	74.4	73.2
137	2015/09/16	16:47:45	73.1	20623245	86.4	73.9	72.5
138	2015/09/16	16:47:50	73.1	20579960	89.8	73.9	72.1
139	2015/09/16	16:47:55	73.6	23063405	86.3	74.0	73.4
140	2015/09/16	16:48:00	73.1	20433340	87.3	73.5	72.9
141	2015/09/16	16:48:05	73.4	21947723	86.3	73.7	72.7
142	2015/09/16	16:48:10	72.8	18877668	86.1	73.8	72.2
143	2015/09/16	16:48:15	73.8	23868250	87.2	74.2	73.1
144	2015/09/16	16:48:20	73.4	22048392	87.4	74.2	73.0
145	2015/09/16	16:48:25	75.1	32522231	89.1	75.8	73.6
146	2015/09/16	16:48:30	74.5	28468863	88.8	75.1	74.3
147	2015/09/16	16:48:35	74.1	25518358	88.5	74.5	74.0
148	2015/09/16	16:48:40	74.4	27655361	88.2	75.3	73.3
149	2015/09/16	16:48:45	74.1	25499895	86.6	74.6	73.6
150	2015/09/16	16:48:50	73.2	21020918	86.4	73.8	72.6
151	2015/09/16	16:48:55	73.8	23728280	87.8	74.5	72.4
152	2015/09/16	16:49:00	73.4	21839416	87.0	74.2	72.8
100	2015/09/16	16.49.05	74.2	20041333	07.4	74.0 75.6	73.7
134	2015/09/16	16:49.10	74.9	31003913	09.0	73.0	73.9
155	2015/09/10	16:49:13	74.0	23009403	07.9	74.7	73.7
157	2015/09/10	16.43.20 16.70.22	74.0	26935706	87 a	7 <u>4</u> .7	727
158	2015/09/16	16:40:30	73.7	23186/56	873	74.3	73.2
150	2015/09/16	16:40:35	73.0	20100400	873	73.5	72.7
160	2015/09/16	16:49:40	73.8	24063559	86.4	74.4	73.0
161	2015/09/16	16:49:45	74.1	25546481	87.2	74.5	73.8
162	2015/09/16	16:49:50	73.1	20402636	85.6	74.0	72.5
163	2015/09/16	16:49:55	73.6	22772685	86.5	73.9	72.6
164	2015/09/16	16:50:00	73.0	20106105	89.9	73.9	72.9
165	2015/09/16	16:50:05	74.0	24940827	86.5	74.5	73.0
166	2015/09/16	16:50:10	73.2	20676680	86.3	73.4	73.0
167	2015/09/16	16:50:15	72.8	18973019	85.4	73.2	72.5
168	2015/09/16	16:50:20	73.1	20443213	85.7	73.5	72.6
169	2015/09/16	16:50:25	73.5	22497049	87.7	74.1	73.0
170	2015/09/16	16:50:30	73.3	21485134	85.8	73.7	73.0
171	2015/09/16	16:50:35	74.1	25468109	91.6	74.4	73.2
172	2015/09/16	16:50:40	74.6	28980988	87.9	75.3	73.9
173	2015/09/16	16:50:45	73.2	20949546	86.6	74.2	72.5
174	2015/09/16	16:50:50	73.3	21252990	85.9	74.0	72.6
175	2015/09/16	16:50:55	73.2	20763894	89.1	73.7	72.7
176	2015/09/16	16:51:00	73.1	20435924	90.9	73.3	72.7
177	2015/09/16	16:51:05	73.0	20115891	86.4	73.4	72.8
178	2015/09/16	16:51:10	73.3	21271816	92.7	73.9	72.6
179	2015/09/16	16:51:15	72.6	18302736	85.9	73.9	72.5
180	2015/09/16	16:51:20	74.4	27385255	88.2	75.7	72.6
181	2015/09/16	16:51:25	73.8	23823804	88.2	75.8	73.0
182	2015/09/16	16.21.30	73.8	23782908	85.7	73 5	73 3

Measurem	ent 6	Leq =	76.4				
Record #	Date	Time	LAeq		LApeak	LASmax	LASmin
2	2015/09/16	17:27:58 17:28:00	76.6 77 3	45291562	88.8 01 1	77.0 78.2	76.5 75 9
3 4	2015/09/16	17:28:00	78.5	70667962	91.1 91.4	78.2	78.1
5	2015/09/16	17:28:10	77.4	54866037	89.7	78.4	77.2
6 7	2015/09/16	17:28:15	77.3 79.5	53748898	90.9	78.0 78.0	76.5 77.0
8	2015/09/16	17:28:25	78.5 77.7	70499079 58945077	92.9 90.7	78.9 78.1	77.9 77.4
9	2015/09/16	17:28:30	77.6	57753914	90.2	78.0	77.2
10	2015/09/16	17:28:35	76.3	42177726	89.4	77.2	75.8
11 12	2015/09/16	17:28:40 17:28:45	76.6 75.7	46118543	90.0 88.5	77.0 76.4	76.3 75.2
12	2015/09/16	17:28:50	76.8	47951664	91.0	70.4	76.0
14	2015/09/16	17:28:55	77.8	60252931	90.9	78.5	77.2
15	2015/09/16	17:29:00	75.2	33272335	89.3	77.4	74.5
16 17	2015/09/16	17:29:05	76.4 77.2	44018687	89.4 90.6	76.8 77.2	75.6 76.2
18	2015/09/16	17:29:15	76.7	47032451	91.5	77.3	76.2
19	2015/09/16	17:29:20	77.0	50663226	90.9	77.6	76.2
20 21	2015/09/16	17:29:25	76.7 76.8	47230005	89.7 01 /	77.6 77.1	76.5 76.3
22	2015/09/16	17:29:30	76.6	45451851	90.1	77.2	76.0
23	2015/09/16	17:29:40	76.7	47013204	90.0	77.3	76.4
24	2015/09/16	17:29:45	77.0	50471258	88.9	77.4	76.4
25 26	2015/09/16	17:29:50	75.9 74 9	39265274	90.3 87.2	77.2 75.4	75.1 74 1
27	2015/09/16	17:30:00	75.3	33515556	90.7	75.8	74.8
28	2015/09/16	17:30:05	75.9	38529223	89.6	76.3	75.2
29 20	2015/09/16	17:30:10	78.0	62685296	91.6 80.0	78.6	76.3 76.2
30 31	2015/09/16	17:30:15	76.9 75.6	35902309	89.9 89.6	76.3 76.3	76.3 75.4
32	2015/09/16	17:30:25	76.4	43525406	89.3	76.7	75.6
33	2015/09/16	17:30:30	76.1	40403252	88.6	76.7	75.6
34 35	2015/09/16	17:30:35 17:30:40	76.7 77.5	46802742	90.4 90.1	77.0 78.0	76.3 76.6
36	2015/09/16	17:30:45	77.1	51840847	90.6	77.8	76.7
37	2015/09/16	17:30:50	75.9	38645818	88.6	76.8	75.4
38	2015/09/16	17:30:55	76.1	40505874	90.0	76.5	75.8
39 40	2015/09/16	17:31:00	74.0 74.3	25230444	oo.∠ 86.8	76.1 74.7	73.1
41	2015/09/16	17:31:10	75.6	36444225	89.0	76.0	74.6
42	2015/09/16	17:31:15	75.6	35924958	89.4	76.4	74.6
43 44	2015/09/16	17:31:20 17:31:25	76.8 75.2	48213091	89.9 88.7	77.3 76.7	76.1 74.6
45	2015/09/16	17:31:30	75.7	36984575	89.2	76.3	74.5
46	2015/09/16	17:31:35	77.2	52721704	89.7	77.5	76.3
47 48	2015/09/16	17:31:40 17:31:45	77.2 75.6	52743937 36571725	89.6 88.4	77.7 76.6	76.6 75 4
49	2015/09/16	17:31:50	75.7	37419304	88.5	75.9	75.3
50	2015/09/16	17:31:55	76.9	48735863	89.5	77.2	75.8
51 52	2015/09/16	17:32:00	75.4 75.5	34614723	89.5	76.8 75.0	75.1
52 53	2015/09/16	17:32:05	75.5 76.4	43956250	90.1	75.9	74.8 75.1
54	2015/09/16	17:32:15	76.8	48176431	90.2	77.4	76.4
55	2015/09/16	17:32:20	75.4	34808331	88.3	76.5	75.2
56 57	2015/09/16	17:32:25	76.2 76.4	41553527 43575977	09.0 91.7	76.5 77.0	75.2 75.8
58	2015/09/16	17:32:35	76.2	41221786	88.7	76.5	75.7
59	2015/09/16	17:32:40	75.9	38774753	88.9	76.8	75.2
60 61	2015/09/16	17:32:45 17:32:50	76.2 76.8	41324962 48124748	89.9 90.6	76.6 77.0	75.4 76.6
62	2015/09/16	17:32:55	77.1	50746065	90.2	77.8	76.3
63	2015/09/16	17:33:00	75.9	38805145	89.6	76.4	75.3
64 65	2015/09/16	17:33:05	76.5 75.6	44389175	89.3 88.0	76.9 76.4	75.9 75.4
66	2015/09/16	17:33:15	77.0	50525195	90.0	77.5	75.6
67	2015/09/16	17:33:20	77.1	50726100	90.4	77.6	76.8
68 60	2015/09/16	17:33:25	77.2	52300410	90.9	77.7	76.5
69 70	2015/09/16	17:33:30	76.4 76.3	44027503	00.0 91.2	76.6	76.1
71	2015/09/16	17:33:40	76.6	45622484	90.9	77.1	76.4
72	2015/09/16	17:33:45	76.0	40169844	88.7	76.4	75.8
73 74	2015/09/16	17:33:50	76.2 76.3	41217731	90.6 80.1	76.8 77 3	/5./ 75.7
75	2015/09/16	17:34:00	74.5	28303206	89.5	75.9	74.1
76	2015/09/16	17:34:05	74.4	27310932	87.6	74.6	73.9
77	2015/09/16	17:34:10	75.6	36591711	90.2	76.2	74.3
79 79	2015/09/16 2015/09/16	17:34:15 17:34:20	76.0 76.6	39368810 45540647	89.0 89.9	70.5 77 0	75.3 76.2
80	2015/09/16	17:34:25	77.0	49656692	90.9	77.4	76.5
81	2015/09/16	17:34:30	76.4	43893052	90.7	77.0	76.1
82	2015/09/16	17:34:35	76.5 76 5	45078195	88.9 80 F	77.0 77.0	76.2 75 7
84	2015/09/16	17:34:40	75.8	37611745	89.7	76.0	75.4
85	2015/09/16	17:34:50	75.7	36973401	88.8	76.3	75.2
86	2015/09/16	17:34:55	75.4	34756271	87.8	75.8	75.2
୪/ ୫୫	2015/09/16 2015/09/16	17:35:00 17:35:05	76.3 77 9	42903134 61293949	88.8 90 6	77.0 78.0	75.5 77 0
89	2015/09/16	17:35:10	77.5	56183280	89.6	78.1	77.0
90	2015/09/16	17:35:15	77.3	53782240	90.3	78.1	76.4
91	2015/09/16	17:35:20	76.6	45204364	90.6	77 6	76 1

92	2015/09/16	17:35:25	76.3	42734488	89.8	76.8	75 7
93	2015/09/16	17:35:30	76.0	40598128	91.0	76.5	75.5
94	2015/09/16	17:35:35	77.0	50280989	89.7	77.3	76.5
95	2015/09/16	17:35:40	77.2	51912478	89.8	77.4	76.8
96	2015/09/16	17:35:45	76.6	46153556	89.5	77.4	76.2
97	2015/09/16	17:35:50	75.7	36872862	88.1	76.4	75.2
98	2015/09/16	17:35:55	75.9	38799965	89.6	76.7	75.3
99	2015/09/16	17:36:00	75.3	33561453	88.8	75.8	75.0
100	2015/09/16	17:36:05	75.1	32563564	88.7	76.4	74.1
101	2015/09/16	17:36:10	78.4	68410126	00.7 01 5	70.4 70.2	76.4
107	2015/09/16	17:36:15	77.6	57902/36	023	79.2	76.3
102	2015/09/10	17:30:15	77.0	52556017	92.5	79.0	76.0
103	2015/09/10	17.30.20	70 /	52550917	91.0	77.9	70.0
104	2015/09/16	17.30.23	70.4	69164772	91.5	70.7	77.9
105	2015/09/16	17:36:30	70.0	52610403	90.4	78.4	76.1
106	2015/09/16	17:36:35	76.8	47887433	91.0	77.1	76.2
107	2015/09/16	17:36:40	76.3	42416690	89.0	76.7	76.1
108	2015/09/16	17:36:45	76.2	42031863	89.4	76.4	75.9
109	2015/09/16	17:36:50	76.3	42665027	90.4	76.9	/5.5
110	2015/09/16	17:36:55	76.2	41895778	89.5	77.2	75.5
111	2015/09/16	17:37:00	74.9	31018598	87.3	75.7	74.5
112	2015/09/16	17:37:05	73.6	23128851	86.3	74.6	73.1
113	2015/09/16	17:37:10	75.7	36731211	88.4	76.0	74.1
114	2015/09/16	17:37:15	75.4	34811755	88.3	75.9	75.1
115	2015/09/16	17:37:20	76.8	48016824	90.1	77.3	75.3
116	2015/09/16	17:37:25	77.3	53143684	91.1	77.5	76.9
117	2015/09/16	17:37:30	77.0	50403829	90.3	77.5	76.7
118	2015/09/16	17:37:35	77.4	54723957	90.4	77.7	77.0
119	2015/09/16	17:37:40	75.6	36498685	89.3	77.3	75.0
120	2015/09/16	17:37:45	76.3	42243870	88.7	76.7	75.0
121	2015/09/16	17:37:50	76.1	40963639	90.4	76.6	75.9
122	2015/09/16	17:37:55	76.7	47273584	90.3	77.2	75.9
123	2015/09/16	17:38:00	76.9	48820354	90.0	77.2	76.4
124	2015/09/16	17:38:05	75.9	39284938	90.6	77.1	75.3
125	2015/09/16	17:38:10	76.1	41008712	89.9	77.3	74.7
126	2015/09/16	17:38:15	76.1	41112438	89.6	77.2	75.6
127	2015/09/16	17:38:20	76.3	42587523	91.0	77.0	75.4
128	2015/09/16	17:38:25	76.6	45193724	89.7	77.6	75.4
129	2015/09/16	17:38:30	74.9	30894932	88.5	75.5	74.7
130	2015/09/16	17:38:35	75.1	32325037	88.1	75.7	74.5
131	2015/09/16	17:38:40	75.2	32948700	88.0	75.8	74.7
132	2015/09/16	17:38:45	76.9	49246046	89.8	77.2	75.3
133	2015/09/16	17:38:50	77.2	52594970	89.4	77.6	76.8
134	2015/09/16	17:38:55	76.4	43855825	89.8	76.8	76.2
135	2015/09/16	17:39:00	75.2	33040571	88.9	76.2	74.7
136	2015/09/16	17:39:05	75.8	38401105	88.6	76.1	75.3
137	2015/09/16	17:39:10	75.6	36506188	89.1	76.1	75.1
138	2015/09/16	17:39:15	75.0	31871403	89.8	75.6	74.5
139	2015/09/16	17:39:20	75.2	32921738	90.2	75.6	75.0
140	2015/09/16	17:39:25	76.8	47382251	89.3	77.3	74.9
141	2015/09/16	17:39:30	77.2	53040622	90.3	77.6	77.0
142	2015/09/16	17:39:35	76.8	47689727	90.1	77.3	76.5
143	2015/09/16	17:39:40	76.2	41727426	90.0	76.7	75.9
144	2015/09/16	17:39:45	75.5	35296139	88.9	76.1	75.0
145	2015/09/16	17:39:50	76.5	44387849	93.0	77.3	75.5
146	2015/09/16	17:39:55	77.1	51513485	90.7	77.4	76.8
147	2015/09/16	17:40:00	76.3	42255597	89.2	77.4	75.7
148	2015/09/16	17:40:05	75.5	35155975	88.9	76.1	74.7
149	2015/09/16	17:40:10	75.5	35329018	90.0	75.8	74.9
150	2015/09/16	17:40:15	76.4	43438555	89.6	76.6	75.6
151	2015/09/16	17:40:20	75.9	39256722	88.7	76.6	75.4
152	2015/09/16	17:40:25	76.0	39602502	88.5	76.2	75.6
153	2015/09/16	17:40:30	75.4	35047261	88.0	76.0	75.1
154	2015/09/16	17:40:35	74.7	29193609	88.0	75.5	73.9
155	2015/09/16	17:40:40	75.2	33068153	88.3	75.9	74.1
156	2015/09/16	17:40:45	75.7	36846314	88.6	76.0	75.1
157	2015/09/16	17:40:50	76.8	48123987	89.9	77.3	76.0
158	2015/09/16	17:40:55	76.3	42649140	90.4	77.4	75.5
159	2015/09/16	17:41:00	75.9	38637537	89.7	76.3	75.3
160	2015/09/16	17:41:05	75.6	36600133	88.7	76.1	75.1
161	2015/09/16	17:41:10	76.4	43762548	89.4	76.8	75.9
162	2015/09/16	17:41:15	78.0	63193351	91.4	78.6	76.7
163	2015/09/16	17:41:20	77.0	50276307	90.5	78.1	76.6
164	2015/09/16	17:41:25	76.8	47530814	90.3	77.2	76.6
165	2015/09/16	17:41:30	76.5	44788502	90.0	77.3	75.9
166	2015/09/16	17:41:35	75.9	38686234	89.3	76.1	75.5
167	2015/09/16	17:41:40	75.3	33773368	88.8	76.0	74.5
168	2015/09/16	17:41:45	75.8	38065614	89.7	76.7	74.9
169	2015/09/16	17:41:50	73.7	23176560	87.5	74.9	73.4
170	2015/09/16	17:41:55	75.3	33753854	88.4	75.5	73.5
171	2015/09/16	17:42:00	75.3	33508315	88.3	75.7	74.8
172	2015/09/16	17:42:05	76.0	39740004	89.2	76.5	75.3
173	2015/09/16	17:42:10	75.4	34583239	93.4	76.2	74.5
174	2015/09/16	17:42:15	76.3	42398140	89.8	76.6	76.0
175	2015/09/16	17:42:20	75.1	32066280	88.0	76.1	74.3
176	2015/09/16	1/:42:25	/5.9	38478628	90.3	76.1	/5.3
177	2015/09/16	17:42:30	/6.2	41506999	88.1	76.5	/5.7
1/8	2015/09/16	17:42:35	16.6	40000397	δ9. <i>1</i>	76.9	76.4
1/9	2015/09/16	17:42:40	/b./	40498698	90.6	70.9	70.3
100	2015/09/16	17:42:45	70.0	22088848	90.5	//.ð	10.8
181	2015/09/16	17:42:50	/6.3	42238453	89.3	//.1	/5.6
182	2015/09/16	17:42:55	76.9	48427598	89.6	11.5	76.4

Measurement 7		Leq =	56.2				
Record #	Date	Time	LAeq		LApeak	LASmax	LASmin
2	2015/09/17	09:22:19 09:22:20	53.1 53.2	206489.7	63.5 75.4	53.5 53.7	53.4 52.8
4	2015/09/17	09:22:25	55.8	380264.5	70.6	57.1	53.0
5	2015/09/17	09:22:30	61.1	1302674	78.3	62.6	57.0
6 7	2015/09/17 2015/09/17	09:22:35	58.1 59.3	644924 857896.1	73.1 78.7	62.6 60.3	56.9 56.9
8	2015/09/17	09:22:45	59.8	953435.1	80.8	60.5	59.4
9 10	2015/09/17	09:22:50	58.7	743281.4	75.3 77.2	60.4	58.1
10	2015/09/17 2015/09/17	09.22.55	59.0 55.5	352841.4	69.7	59.8 57.8	57.8 55.1
12	2015/09/17	09:23:05	55.1	321736.3	68.1	55.5	54.7
13 14	2015/09/17	09:23:10	55.5 56.0	354494.4	68.0 70.6	55.9 57 1	54.8 54.5
15	2015/09/17	09:23:20	61.9	1551839	84.8	63.2	57.1
16	2015/09/17	09:23:25	53.7	236706.8	66.8	60.4	53.3
17 18	2015/09/17	09:23:30 09:23:35	53.1 55 9	201861.8	66.4 70 3	54.0 57.0	52.2 53.4
19	2015/09/17	09:23:40	57.2	527909.8	76.0	58.9	55.3
20	2015/09/17	09:23:45	60.6	1149732	77.7	61.3	58.9
21 22	2015/09/17 2015/09/17	09:23:50	63.5 55.6	364711.9	80.1 70.4	65.3 59.5	59.5 55.3
23	2015/09/17	09:24:00	51.7	147411.9	65.1	56.0	50.6
24 25	2015/09/17	09:24:05	50.4	109125.9	66.7 72.4	51.3	50.0
25 26	2015/09/17	09:24:10	52.0 50.7	116468	63.8	54.0 51.2	49.9 50.4
27	2015/09/17	09:24:20	51.4	139502.5	63.6	51.8	50.6
28 29	2015/09/17	09:24:25	53.9 54.0	246565.1 253276 3	69.7 68.6	54.7 55 4	51.7 53.5
30	2015/09/17	09:24:35	52.0	160041.1	70.7	53.6	51.7
31	2015/09/17	09:24:40	56.2	421654.3	78.8	57.0	51.9
32 33	2015/09/17	09:24:45 09:24:50	51.7 50.8	148540.4 119666 2	65.6 62 7	55.7 51.3	51.2 50.5
34	2015/09/17	09:24:55	51.1	129528.3	65.7	52.0	50.5
35	2015/09/17	09:25:00	54.8 57 5	300363.9	70.2	56.5	51.8
30 37	2015/09/17	09:25:05	54.4	277361	69.0	59.2 57.9	55.0 52.5
38	2015/09/17	09:25:15	51.0	126450.9	70.6	52.5	50.4
39 40	2015/09/17 2015/09/17	09:25:20 09:25:25	49.5 51.8	88583.14	62.3 67.2	50.7 52.3	49.1 50.1
41	2015/09/17	09:25:30	58.4	690330.7	75.9	60.8	52.3
42 42	2015/09/17	09:25:35	55.5	352556.7	70.9 68.0	57.9	54.2
44	2015/09/17	09:25:40 09:25:45	54.0 52.1	161325.5	64.8	54.2	54.0 51.6
45	2015/09/17	09:25:50	54.7	296260.6	69.4	56.4	51.9
46 47	2015/09/17	09:25:55 09:26:00	53.9 56.8	247758.9 478385 4	67.3 71.2	54.8 58 5	53.1 54.8
48	2015/09/17	09:26:05	52.1	160934.3	67.2	55.6	51.7
49 50	2015/09/17	09:26:10	50.8	120986	64.4	51.7	50.7
50 51	2015/09/17	09.26.15	53.3	215762.7	68.4	52.6 54.6	50.5 52.2
52	2015/09/17	09:26:25	52.8	191799.6	71.2	55.4	51.1
53 54	2015/09/17	09:26:30 09:26:35	59.7 53.7	925896.1 231969.1	73.7 68.5	60.9 58.8	55.5 51.5
55	2015/09/17	09:26:40	50.3	107518.6	63.7	51.5	49.9
56 57	2015/09/17	09:26:45	50.5	111456.1 341326 1	65.8 69.2	51.1 56.4	50.0
58	2015/09/17	09:26:55	53.2	210817.5	67.5	56.3	51.8
59	2015/09/17	09:27:00	55.7	375284.2	70.8	57.9	51.7
60 61	2015/09/17 2015/09/17	09:27:05	54.7 54.6	297833.4 287004.1	89.0 72.1	57.7 58.1	51.7 52.1
62	2015/09/17	09:27:15	62.4	1730675	76.7	63.9	58.2
63 64	2015/09/17	09:27:20	55.0	313840.8	69.2	60.3	52.6
64 65	2015/09/17	09.27.25	49.8 49.5	90000.00	62.5 62.6	52.6 49.9	49.4 49.2
66	2015/09/17	09:27:35	48.7	74943.85	62.1	49.3	48.6
67 68	2015/09/17	09:27:40	50.7 48.6	116545 71703 7	86.6 62 1	54.4 49.0	48.4 48.3
69	2015/09/17	09:27:50	40.0 53.9	247713.6	73.2	43.0 57.5	48.8
70	2015/09/17	09:27:55	60.8	1210268	75.2	62.2	57.2
71 72	2015/09/17 2015/09/17	09:28:00 09:28:05	53.0 49.9	198619.4 98774.17	71.5 62.1	60.4 50.8	50.8 49.8
73	2015/09/17	09:28:10	54.1	254111.7	68.4	55.4	50.1
74 75	2015/09/17	09:28:15	60.2	1044048	74.2 74.5	62.0	54.7 57.6
76	2015/09/17	09:28:25	61.1	1294517	81.7	62.4	57.8
77	2015/09/17	09:28:30	58.0	636723.5	70.9	60.4	57.9
78 79	2015/09/17 2015/09/17	09:28:35 09:28:40	62.2 63.3	1671504 2159263	79.2 81.8	64.0 65.3	58.5 61.8
80	2015/09/17	09:28:45	56.0	396079.3	70.8	61.8	53.6
81	2015/09/17	09:28:50	50.8	119703.1	64.3	53.6	50.2
o∠ 83	2015/09/17	09.20.55 09:29:00	50.0 60.0	399949.4 989285.5	73.8	56.6 60.6	50.3 58.8
84	2015/09/17	09:29:05	60.6	1142057	73.8	61.2	59.6
85 86	2015/09/17	09:29:10	58.7	746523.4	76.9 73 1	60.8	57.1
87	2015/09/17	09:29:15	58.7	735377.6	74.2	60.0	57.9
88	2015/09/17	09:29:25	55.3	337891.8	71.6	58.9	51.6
89 90	2015/09/17	09:29:30 09:29:35	49.2 49 4	82876.08 87803 76	61.4 64 1	51.6 49 7	48.9 49 0
91	2015/09/17	09:29:40	49.3	85348.71	62.6	49.8	49.0

92	2015/09/17	09:29:45	49.0	78668.28	64.4	49.3	48.7
93	2015/09/17	09:29:50	49.0	80283.81	62.1	49.3	48.8
94	2015/09/17	09:29:55	49.9	98467.26	63.7	50.6	49.2
95	2015/09/17	09:30:00	51.4	137534.9	65.3	52.0	50.6
96	2015/09/17	09:30:05	56.2	413375.2	72.6	58.8	50.6
97	2015/09/17	09:30:10	56.5	447829.6	77.7	59.1	53.6
98	2015/09/17	09:30:15	54.2	262157.3	70.5	56.2	52.0
99	2015/09/17	09:30:20	62.4	1747155	77.8	64.3	56.2
100	2015/09/17	09:30:25	53.4	217370 3	69.7	60.0	52.5
100	2015/00/17	00.20.20	56.6	454062	72.2	58.0	52.0
101	2015/09/17	09.30.30	50.0	404002	72.5	50.0	50.4
102	2015/09/17	09.30.35	54.9	306204.0	71.0	50.9	32.7
103	2015/09/17	09:30:40	49.4	86448.62	61.7	52.7	48.9
104	2015/09/17	09:30:45	48.2	66708.71	61.6	48.9	48.0
105	2015/09/17	09:30:50	48.8	75011.75	75.5	49.9	48.5
106	2015/09/17	09:30:55	50.1	102227.3	66.3	50.8	48.6
107	2015/09/17	09:31:00	51.8	152628.7	78.4	52.5	50.0
108	2015/09/17	09:31:05	52.0	158538.6	67.6	52.6	51.4
109	2015/09/17	09:31:10	49.2	82409.68	61.7	51.4	48.7
110	2015/09/17	09:31:15	56.3	427533.4	71.9	58.2	49.5
111	2015/09/17	09:31:20	57.8	601566.9	71.4	58.8	56.2
112	2015/09/17	09:31:25	59.1	804487 8	74.9	60.1	58.2
113	2015/00/17	00.31.20	54.5	28137/ 3	68.4	58.2	53.6
113	2015/09/17	09.31.30	54.5	201374.3	70.4	50.Z	53.0
114	2015/09/17	09.31.35	57.9	011120.2	72.4	59.5	54.2
115	2015/09/17	09:31:40	56.7	472945.2	71.0	59.3	54.3
116	2015/09/17	09:31:45	51.5	142369.1	67.2	54.3	50.8
117	2015/09/17	09:31:50	50.9	123210.1	64.1	51.8	50.2
118	2015/09/17	09:31:55	51.0	124970.3	63.8	51.5	50.2
119	2015/09/17	09:32:00	55.6	366299.1	70.2	57.9	50.7
120	2015/09/17	09:32:05	55.1	322379.9	74.8	57.7	54.6
121	2015/09/17	09:32:10	57.3	534894.9	71.0	57.8	55.0
122	2015/09/17	09:32:15	55.7	370196.4	69.6	57.3	53.8
123	2015/09/17	09:32:20	51.1	129766.4	65.1	53.8	49.9
124	2015/09/17	09:32:25	48.2	65422.06	61.3	49.9	47.8
125	2015/00/17	00.32.20	/8.2	66105.87	60.6	18.6	17.8
125	2015/00/17	00.22.20	52.2	229221 5	60.0		47.0
120	2015/09/17	09.32.35	55.0	230221.3	09.9	50.1	40.0
127	2015/09/17	09.32.40	55.9	303431.7	70.6	57.5	54.9
128	2015/09/17	09:32:45	56.0	396277.6	70.3	57.2	53.8
129	2015/09/17	09:32:50	59.8	948632.7	78.6	60.9	56.7
130	2015/09/17	09:32:55	59.7	943240.3	79.9	62.0	56.9
131	2015/09/17	09:33:00	58.5	703306	78.6	62.2	55.1
132	2015/09/17	09:33:05	50.8	120575.8	67.8	55.1	50.2
133	2015/09/17	09:33:10	56.5	443484.1	70.6	57.7	50.4
134	2015/09/17	09:33:15	55.3	338347.1	71.8	58.2	53.1
135	2015/09/17	09:33:20	58.2	657976.3	78.5	58.7	56.4
136	2015/09/17	09:33:25	52.2	164462.4	66.4	57.7	51.6
137	2015/09/17	09:33:30	53.1	203147.3	71.2	53.9	52.2
138	2015/09/17	09.33.35	56.5	448155 4	71.5	58.3	52.1
139	2015/09/17	09:33:40	57.3	536668 6	70.8	58.6	56.2
140	2015/09/17	00.33.45	54.2	262705.7	69.6	57.5	53 1
1/1	2015/00/17	00.33.50	51 1	1201110	72.3	53.7	10.8
141	2015/09/17	09.33.50	40.7	02200.0	72.3	40.0	49.0
142	2015/09/17	09.33.55	49.7	92390.9	00.1	49.9	49.5
143	2015/09/17	09:34:00	51.1	128538.3	64.0	52.8	49.0
144	2015/09/17	09:34:05	49.7	93536.03	61.8	50.8	49.4
145	2015/09/17	09:34:10	51.1	129492.9	73.2	52.3	49.6
146	2015/09/17	09:34:15	48.8	76429.05	69.6	50.4	48.6
147	2015/09/17	09:34:20	56.3	430867.1	73.8	59.4	48.7
148	2015/09/17	09:34:25	62.0	1587185	76.2	63.0	59.4
149	2015/09/17	09:34:30	53.7	236730.1	69.9	60.0	52.6
150	2015/09/17	09:34:35	56.1	403513.7	76.3	57.7	53.5
151	2015/09/17	09:34:40	59.4	872381.9	73.6	60.8	57.5
152	2015/09/17	09:34:45	54.2	263213.1	68.4	58.5	53.2
153	2015/09/17	09:34:50	59.5	889277.2	75.7	61.0	54.4
154	2015/09/17	09:34:55	52.7	185442.9	69.3	59.5	50.4
155	2015/09/17	09:35:00	51 7	147493.8	68.3	52.4	50.3
156	2015/09/17	09:35:05	50.2	104135 1	63.6	52.3	49.3
157	2015/00/17	00:35:10	48.0	63325.87	61.0	19.3	43.0
157	2015/09/17	09.33.10	40.0	74115 25	61.0	49.3	47.7
150	2015/09/17	09.35.15	40.7	14115.55	71.0	49.4	47.0
159	2015/09/17	09:35:20	56.1	404350.6	71.6	58.5	49.4
160	2015/09/17	09:35:25	61.7	1487401	76.4	63.2	58.5
161	2015/09/17	09:35:30	52.7	186511.1	72.9	60.1	50.3
162	2015/09/17	09:35:35	49.0	79556.2	63.4	50.3	48.8
163	2015/09/17	09:35:40	48.5	71118.74	62.7	48.9	48.3
164	2015/09/17	09:35:45	52.8	191230	80.2	56.8	48.4
165	2015/09/17	09:35:50	57.4	548932.2	76.3	59.8	50.1
166	2015/09/17	09:35:55	57.5	556559.5	73.1	59.9	53.9
167	2015/09/17	09:36:00	55.9	385233.7	85.3	59.1	52.6
168	2015/09/17	09:36:05	50.8	121409.7	77.4	52.9	49.8
169	2015/09/17	09:36:10	50.6	115039	66.1	53.0	48.5
170	2015/09/17	09:36:15	56.6	455730 R	77 4	57 5	53.0
171	2015/00/17	00.38.30	58.0 58.1	686522.2	74 /	59.5	57 <i>1</i>
172	2015/00/17	00.26.25	52.4	247502 F	62 G	57.6	51.4
172	2010/08/17	09.30.23	JJ.9 EC 7	4700540	70.0	51.0	51.1 E1 F
1/3	2015/09/17	09:30:30	50.7	4/2854.6	13.1	59.6	51.5
174	2015/09/17	09:36:35	52.2	16/165.4	66.4	55.5	50.6
175	2015/09/17	09:36:40	55.0	313270.4	76.9	58.8	50.3
176	2015/09/17	09:36:45	58.7	744893.8	73.8	60.2	56.3
177	2015/09/17	09:36:50	56.1	410076.7	71.7	58.5	54.4
178	2015/09/17	09:36:55	61.6	1433431	74.7	62.0	58.5
179	2015/09/17	09:37:00	60.4	1085927	73.7	62.1	58.4
180	2015/09/17	09:37:05	52.8	188871.9	68.6	58.4	52.1
181	2015/09/17	09:37:10	51.3	135339 1	65.0	52.5	50.5
182	2015/00/17	09:37:15	55.0	313222 0	69.6	56.2	52.5
183	2015/09/17	09:37:20	55.2	334200 5	77.38261	54,64168	54,10412
			~~.~				

Measurement 8		Leq =	59.9				
Record #	Date	Time	LAeq		LApeak	LASmax	LASmin
2	2015/09/17	09:57:56	57.2 57.3	524183.8 534201 0	69.2 81 3	57.5 58 1	56.9 56.5
4	2015/09/17	09:58:05	57.0	505229.3	79.4	57.8	56.7
5	2015/09/17	09:58:10	56.4	431975.9	68.7	56.9	56.1
6 7	2015/09/17 2015/09/17	09:58:15	57.4 57.6	550127.4 579982.3	71.0 70.1	57.7 58.0	56.4 57.1
8	2015/09/17	09:58:25	58.3	674142.6	72.7	58.6	57.9
9 10	2015/09/17	09:58:30	58.3 57.2	673421.1 523210.4	78.4 76.5	58.9 58.1	57.7 56.7
10	2015/09/17	09:58:40	56.2	421635	69.1	56.7	56.2
12	2015/09/17	09:58:45	55.8	381582.8	69.2	56.4	55.6
13 14	2015/09/17 2015/09/17	09:58:50 09:58:55	56.6 57.0	458575.2 501188.1	69.8 70.1	57.1 57.3	55.6 56.6
15	2015/09/17	09:59:00	62.0	1581457	79.5	64.0	56.6
16 17	2015/09/17	09:59:05	63.9 56 7	2476980 470813 5	83.1 68.9	67.0 60.0	60.0 56.6
18	2015/09/17	09:59:10	56.7	467276.1	69.3	57.0	56.3
19	2015/09/17	09:59:20	58.5	705646.2	87.4	60.2	56.8
20 21	2015/09/17 2015/09/17	09:59:25	57.7 57.8	589961.5 599733.5	77.5 71.6	59.0 58.2	57.5 57.4
22	2015/09/17	09:59:35	57.7	582791	70.0	58.0	57.3
23 24	2015/09/17	09:59:40 09:59:45	57.8 58.6	607570.1 720281	71.0 72.6	58.2	57.5 57.8
24	2015/09/17	09:59:50	58.0	627270.5	70.3	58.7	57.6
26	2015/09/17	09:59:55	58.6	723204.2	78.9	59.0	58.0
27 28	2015/09/17 2015/09/17	10:00:00	58.2 58.5	655918.5 708042.8	70.8 71.5	58.5 58.8	57.9 58.2
29	2015/09/17	10:00:10	59.2	831994.8	76.2	59.6	58.3
30 31	2015/09/17	10:00:15	61.4 59.1	1392902	91.1 71.5	64.2 59.5	59.0 58.9
32	2015/09/17	10:00:25	58.6	722091.5	71.6	59.0	58.2
33	2015/09/17	10:00:30	59.0	790044	71.9	59.3	58.3
34 35	2015/09/17 2015/09/17	10:00:35	58.9 58.9	775347.9	71.2	59.2 59.2	58.6 58.7
36	2015/09/17	10:00:45	59.1	817002.6	72.8	59.6	58.7
37 38	2015/09/17	10:00:50 10:00:55	58.8 59 5	762800.9 889251 4	75.0 77.6	59.7 60 1	58.5 58.8
39	2015/09/17	10:01:00	59.1	820677.2	76.4	59.7	58.8
40	2015/09/17	10:01:05	59.9	975068.3	79.8	62.0	59.0
41 42	2015/09/17 2015/09/17	10:01:10	58.7 59.1	804381.9	70.9 72.6	59.2 59.3	58.7 58.7
43	2015/09/17	10:01:20	61.0	1257648	85.5	63.7	58.9
44 45	2015/09/17	10:01:25 10:01:30	58.4 58.5	690556.9 713033 8	70.7 76.0	62.2 60 1	58.3 57 7
46	2015/09/17	10:01:35	57.3	534233.8	73.4	58.0	56.9
47	2015/09/17	10:01:40	57.7 56 7	593077.4	84.0 74.6	59.1	56.9
40 49	2015/09/17	10:01:45	58.1	467978.5 645766.3	74.0 82.0	58.5 61.2	56.0 55.9
50	2015/09/17	10:01:55	56.2	413804.6	70.1	59.8	56.2
51 52	2015/09/17 2015/09/17	10:02:00 10:02:05	56.5 57.2	444338 519221	68.6 69.7	57.0 57.3	56.0 56.9
53	2015/09/17	10:02:10	57.5	563451.8	71.0	57.8	57.2
54 55	2015/09/17	10:02:15 10:02:20	57.9 57.4	613967.6 554862.8	72.6 69.6	58.5 57 9	57.1 57.2
56	2015/09/17	10:02:25	57.8	602711.9	72.3	58.6	57.2
57 58	2015/09/17	10:02:30	57.1	515873.8	74.7	57.8	56.7
58 59	2015/09/17 2015/09/17	10:02:35	56.7 56.3	470293.9 423108.6	69.6 74.2	57.3 56.6	56.3 56.0
60	2015/09/17	10:02:45	56.9	490345.5	78.7	57.3	56.1
61 62	2015/09/17	10:02:50 10:02:55	57.1 57.5	516160.7 562504.3	69.6 69.6	57.3 57.7	56.9 57.2
63	2015/09/17	10:03:00	57.2	527031.8	69.8	57.7	57.0
64 65	2015/09/17	10:03:05	57.0 57.6	502289	73.2 70.8	57.4 57.8	56.8
66	2015/09/17	10:03:15	57.9	610978.1	70.8	58.0	57.3
67	2015/09/17	10:03:20	57.7	593812.3	72.4	57.9	57.5
69	2015/09/17 2015/09/17	10:03:25	61.4 62.1	1632289	85.9	63.6 64.4	57.9 60.6
70	2015/09/17	10:03:35	59.1	808182.1	73.4	60.6	58.5
71 72	2015/09/17	10:03:40 10:03:45	58.8 58.4	758882.7 697726 4	71.1 71.6	59.2 58.7	58.3 58.2
73	2015/09/17	10:03:50	58.3	682136.8	71.3	58.5	58.1
74 75	2015/09/17	10:03:55	59.0 58.1	794115.5	71.2 71.7	59.7	58.3
76	2015/09/17	10:04:05	57.8	602628.3	70.8	58.2	57.6
77	2015/09/17	10:04:10	57.3	536610.6	70.9	57.7	57.1
78 79	2015/09/17	10:04:15 10:04:20	ວ7.3 57.6	ეკეკი 576812.6	_{09.8} 70.3	57.5 57.7	ວ7.1 57.1
80	2015/09/17	10:04:25	57.1	507963.2	70.6	57.7	57.0
81 82	2015/09/17	10:04:30 10:04:35	56.6 56 9	454558 488511 5	69.2 70 9	57.1 57.2	56.4 56.4
83	2015/09/17	10:04:40	57.3	531616.6	73.8	57.8	56.7
84 95	2015/09/17	10:04:45	57.7	592758.1 71.5 58.2		58.2	57.0
86	2015/09/17	10:04:50	58.2	753116.8 72.1 59.1 653669.1 71.4 59.1		59.1 59.1	56.1 57.3
87	2015/09/17	10:05:00	57.0	505226.2	70.7	57.4	56.8
88 89	2015/09/17 2015/09/17	10:05:05 10:05:10	56.8 56.7	480246.7 464682 8	69.8 77.0	57.3 57.4	56.6 55.9
90	2015/09/17	10:05:15	56.0	399280	70.0	57.1	55.8
91	2015/09/17	10:05:20	56.3	428240.3	69.9	56.6	55.7

92	2015/09/17	10:05:25	56.6	456775.4	71.6	56.9	56.3
93	2015/09/17	10:05:30	56.9	490197.3	73.7	57.4	56.5
94	2015/09/17	10:05:35	56.6	457914.6	70.1	56.8	56.5
95	2015/09/17	10:05:40	57.4	553310.8	70.6	58.3	56.4
96	2015/09/17	10:05:45	57.0	506360.9	69.7	58.0	56.5
97	2015/09/17	10:05:50	56.7	464031.4	71.3	57.0	56.4
98	2015/09/17	10:05:55	56.9	485740.6	69.2	57.0	56.5
99	2015/09/17	10:06:00	57.7	595147	75.5	58.6	56.6
100	2015/09/17	10.06.02	57 1	508753 6	70.0	58.2	56.7
101	2015/00/17	10:06:10	56.0	400864 5	68.0	56 Z	55.9
101	2015/09/17	10:00:10	50.0	400004.3	70.1	50.7	55.9
102	2015/09/17	10.06.15	50.4	439039.3	70.1	50.7	55.6
103	2015/09/17	10:06:20	56.6	456102.6	70.3	56.9	56.3
104	2015/09/17	10:06:25	56.9	492532.7	70.3	57.3	56.1
105	2015/09/17	10:06:30	57.1	514742.7	71.2	57.6	56.8
106	2015/09/17	10:06:35	56.8	477077	69.7	57.1	56.4
107	2015/09/17	10:06:40	56.7	463879.8	69.1	56.8	56.3
108	2015/09/17	10:06:45	56.6	456143.1	69.4	56.9	56.4
109	2015/09/17	10:06:50	56.5	449449.2	71.0	56.8	56.3
110	2015/09/17	10:06:55	56.2	417403 7	69.1	56.6	55.9
111	2015/00/17	10:07:00	55.7	375630.5	60.1	56 1	55 A
112	2015/00/17	10:07:05	56.4	440441	71 5	56.0	56.0
112	2015/09/17	10.07.03	50.4	440441	71.5	50.9	50.0
113	2015/09/17	10:07:10	56.2	412396.4	68.9	56.6	55.8
114	2015/09/17	10:07:15	56.2	413381.4	69.7	56.5	55.8
115	2015/09/17	10:07:20	56.2	420447.9	68.8	56.5	55.7
116	2015/09/17	10:07:25	55.8	379989.3	68.6	56.3	55.5
117	2015/09/17	10:07:30	56.3	428497.7	74.2	56.8	55.6
118	2015/09/17	10:07:35	56.1	408872.9	73.4	56.7	55.7
119	2015/09/17	10:07:40	55.4	348654.3	69.0	56.0	55.0
120	2015/09/17	10.07.45	55.3	336998 5	68 5	55 7	54 8
121	2015/09/17	10:07:50	54 7	296563.2	67.2	55.0	54 3
121	2015/00/17	10:07:55	55.1	226659 /	69.6	55.6	54.5
122	2015/09/17	10.07.55	55.1	320030.4	00.0	55.0	54.7
123	2015/09/17	10:08:00	56.2	413617.1	80.4	56.6	55.6
124	2015/09/17	10:08:05	56.4	438247.9	70.0	56.6	56.0
125	2015/09/17	10:08:10	55.9	392305.9	70.7	56.8	55.3
126	2015/09/17	10:08:15	56.4	432134.2	80.7	57.5	55.3
127	2015/09/17	10:08:20	56.8	476334.2	69.5	57.2	55.9
128	2015/09/17	10:08:25	57.7	593989.7	70.4	58.3	57.0
129	2015/09/17	10:08:30	56.3	427992.1	71.4	57.3	55.8
130	2015/09/17	10:08:35	57.6	580938.3	71.8	59.0	55.7
131	2015/09/17	10.08.40	69.4	8697239	85.5	71 7	59.0
132	2015/09/17	10:08:45	71 4	13800706	85.7	72.6	69.6
133	2015/00/17	10:08:50	707	117828/5	90.6	72.0	68.0
124	2015/03/17	10:00:50	69.4	6027652	90.0 90.5	72.0	67.0
134	2015/09/17	10.06.55	00.4	0927052	80.5	70.9	67.9
135	2015/09/17	10:09:00	64.6	2915271	86.4	69.1	60.1
136	2015/09/17	10:09:05	57.2	528868.2	70.4	60.0	56.3
137	2015/09/17	10:09:10	55.7	371535.3	74.4	56.3	55.5
138	2015/09/17	10:09:15	55.1	320494.1	69.3	55.7	54.8
139	2015/09/17	10:09:20	55.0	313451.8	68.4	55.1	54.6
140	2015/09/17	10:09:25	59.2	825477.7	83.4	63.1	55.1
141	2015/09/17	10:09:30	56.4	435579.1	70.9	60.4	56.3
142	2015/09/17	10.09.35	56.6	456697 1	71.0	57.2	56.2
143	2015/09/17	10:09:40	55.9	387901 2	69.1	56.3	55.6
140	2015/00/17	10:00:45	56.0	200600.7	69.9	56 A	55 5
144	2015/09/17	10:09:43	50.0	424024.2	60.0	56.6	55.5
145	2015/09/17	10.09.50	50.5	424021.2	09.2	50.0	50.0
146	2015/09/17	10:09:55	56.9	484553.8	70.3	57.2	56.4
147	2015/09/17	10:10:00	57.9	609574.7	79.1	60.8	55.9
148	2015/09/17	10:10:05	56.3	427006.8	69.0	57.5	56.0
149	2015/09/17	10:10:10	56.8	476704.6	71.2	57.3	56.1
150	2015/09/17	10:10:15	56.2	417800.9	70.3	56.5	56.0
151	2015/09/17	10:10:20	56.8	482007.7	69.9	57.2	56.0
152	2015/09/17	10:10:25	56.2	415790.7	72.2	57.0	55.9
153	2015/09/17	10:10:30	56.1	403071.2	70.0	56.3	55.7
154	2015/09/17	10:10:35	56.0	396608.8	69.8	56.4	55.7
155	2015/09/17	10.10.40	56.5	451586 9	69.6	57.4	55.6
156	2015/09/17	10.10.45	58.2	666519 5	70.8	58.8	57.3
157	2015/00/17	10:10:50	56.9	485013.3	69.9	58.7	56.2
157	2015/03/17	10:10:50	50.5	205047	71.6	56.7	50.2
100	2015/09/17	10.10.55	56.0	395047	71.0	56.2	55.6
159	2015/09/17	10:11:00	55.7	370929.8	69.1	56.0	55.4
160	2015/09/17	10:11:05	56.0	396487.2	68.9	56.2	55.8
161	2015/09/17	10:11:10	56.1	405854.4	70.4	56.5	55.7
162	2015/09/17	10:11:15	61.9	1539690	81.1	66.3	56.0
163	2015/09/17	10:11:20	61.6	1439459	83.0	64.9	58.3
164	2015/09/17	10:11:25	68.6	7198674	82.5	69.8	65.0
165	2015/09/17	10:11:30	69.3	8487988	84.1	71.2	66.0
166	2015/09/17	10:11:35	60.5	1115667	79.4	65.9	59.5
167	2015/00/17	10.11.40	60.4	1095616	73.6	60.9	59 1
169	2015/00/17	10.11.45	60 2	10/2171	76.9	60.0	50.1
160	2010/03/17	10.11.40	60.Z	11/1000	10.0 QC 1	61 O	53.3 E0 E
109	2010/09/17	10.11.50	00.0	1141089	00.1	70.4	04.0
1/0	2015/09/17	10:11:55	68.1	6461147	85.5	/0.4	61.9
171	2015/09/17	10:12:00	60.9	1219460	/8.9	66.8	59.1
172	2015/09/17	10:12:05	57.6	576244	71.7	59.1	57.2
173	2015/09/17	10:12:10	57.7	582138.7	71.3	58.3	57.1
174	2015/09/17	10:12:15	58.5	713630.3	81.3	59.3	57.6
175	2015/09/17	10:12:20	56.5	442691.3	75.7	58.4	56.0
176	2015/09/17	10:12:25	56.8	482216.9	72.5	57.1	56.1
177	2015/09/17	10:12:30	64.7	2937526	89.3	69.7	56.9
178	2015/00/17	10.12.35	64 5	2787622	87 0	68 3	60.6
170	2015/00/17	10.12.00	57 0	522075 1	70.1	63.6	57.7
100	2013/03/17	10.12.40	51.2	022010.1 606070 0	70.1	03.0 E0 7	51.1
100	2013/09/17	10.12:45	58.4 50 5	0000/9.8	12.3	JØ./	57.9
181	2015/09/17	10:12:50	58.5	1088/3.5	/1.9	59.0	58.1
182	2015/09/17	10:12:55	57.4	550334.2	70.0	58.4	57.4
183	2015/09/17	10:13:00	58.3	683310.9	71.32926	58.67811	57.47782

Measurement 9		Leq =	65.4				
Record #	Date	Time	LAeq		LApeak	LASmax	LASmin
3	2015/09/17	11:03:12 11:03:15	66.6 71.6	4574527	81.1 86 3	67.7 72 3	61.9 67.7
5	2015/09/17	11:03:13	71.0	12749545	84.9	72.3	70.6
6	2015/09/17	11:03:25	66.2	4182577	79.7	71.1	66.3
7 8	2015/09/17 2015/09/17	11:03:30 11:03:35	62.0 58.9	1574561 781081.6	76.7 72.4	66.3 59.5	59.5 58.8
9	2015/09/17	11:03:40	61.9	1552792	77.8	63.8	59.1
10 11	2015/09/17	11:03:45 11:03:50	59.2 57.2	826318.4 523765 9	79.8 69.7	63.4 58.8	58.8 56.3
12	2015/09/17	11:03:55	57.0	495518.2	77.9	57.7	56.1
13	2015/09/17	11:04:00	58.5	714182.8	88.9	60.3	56.9
14 15	2015/09/17	11:04:05 11:04:10	58.6 56.7	732487.6 470477	73.4 85.1	59.4 58.3	57.7 56.1
16	2015/09/17	11:04:15	56.4	437110.3	69.5	57.3	55.9
17 18	2015/09/17	11:04:20 11:04:25	59.2 61.9	838825.7	73.8 78 1	59.8	56.7
19	2015/09/17	11:04:30	58.8	756130	93.7	62.7	59.8 57.3
20	2015/09/17	11:04:35	64.1	2563599	77.9	65.6	57.8
21	2015/09/17 2015/09/17	11:04:40	70.1 67.7	5945602	90.5 84.0	72.5 72.3	65.1 65.1
23	2015/09/17	11:04:50	61.1	1279226	74.3	65.1	60.7
24 25	2015/09/17	11:04:55 11:05:00	61.6 61.1	1431596	74.9 75 1	63.0 62.4	60.4 59.5
26	2015/09/17	11:05:05	63.4	2177791	77.3	64.3	62.4
27	2015/09/17	11:05:10	64.3	2690998	79.4	66.5	61.6
28 29	2015/09/17 2015/09/17	11:05:15	60.7 62.6	1164044	80.2 77.0	61.6 63.2	60.1 60.5
30	2015/09/17	11:05:25	62.5	1770821	78.1	64.7	60.0
31 32	2015/09/17	11:05:30 11:05:35	63.7 58 9	2354314 769274 5	81.4 74 5	65.0 64 1	60.0 56.8
33	2015/09/17	11:05:40	60.0	1004019	77.0	63.1	55.9
34	2015/09/17	11:05:45	64.5	2844007	80.0	65.5	63.1
35 36	2015/09/17 2015/09/17	11:05:50	63.4 71.9	15439328	78.9 89.5	65.1 74.2	62.2 62.6
37	2015/09/17	11:06:00	63.2	2090637	81.6	73.4	62.8
38 39	2015/09/17	11:06:05 11:06:10	62.2 65.6	1641879 3600596	81.2 81.9	63.7 68.4	61.2 60 1
40	2015/09/17	11:06:15	62.8	1886654	78.3	67.0	62.5
41 42	2015/09/17	11:06:20 11:06:25	68.0	6278515	85.9 76 5	71.0	61.4 58.6
42 43	2015/09/17	11:06:25	59.5 59.5	890373	76.5 76.8	69.5 62.1	56.8
44	2015/09/17	11:06:35	65.0	3183978	82.2	67.9	60.2
45 46	2015/09/17	11:06:40 11:06:45	58.3 60.6	677571.5	72.9 74.4	61.1 62.2	57.7 59.0
47	2015/09/17	11:06:50	61.8	1521941	75.8	62.8	60.5
48 40	2015/09/17	11:06:55	68.6 66.4	7234259	85.0 81 1	70.6 68 7	60.4 65 5
49 50	2015/09/17	11:07:05	61.2	1307718	76.7	66.2	59.0
51	2015/09/17	11:07:10	58.3	678407	71.6	59.0	57.9
52 53	2015/09/17 2015/09/17	11:07:15	59.3 57.1	845862.7 510593.6	72.6 70.2	59.7 58.7	58.7 56.6
54	2015/09/17	11:07:25	59.3	860933	78.4	62.7	55.1
55 56	2015/09/17	11:07:30 11:07:35	61.9 55.5	1534531 353709 7	79.0 68.2	65.5 57 1	57.1 55.2
57	2015/09/17	11:07:40	57.2	523196.2	70.0	58.0	55.6
58 50	2015/09/17	11:07:45	61.8	1526556	75.5	62.8	58.0
60	2015/09/17	11:07:55	69.9	9737879	86.4	72.4	66.7
61	2015/09/17	11:08:00	73.0	19998593	89.9	73.8	70.5
62 63	2015/09/17 2015/09/17	11:08:05 11:08:10	69.0 72.2	16533671	82.8 91.4	70.5 72.8	67.9 70.1
64	2015/09/17	11:08:15	61.2	1303180	78.8	71.1	60.3
65 66	2015/09/17	11:08:20 11:08:25	59.5 60.2	887595.5 1037107	74.0 72.6	60.3 60.3	58.7 58.8
67	2015/09/17	11:08:30	63.0	1972749	76.0	63.6	60.2
68 60	2015/09/17	11:08:35	61.2	1326220	75.2	63.4 62.7	60.0
70	2015/09/17	11:08:40	61.5	1427540	76.4	62.5	60.5
71	2015/09/17	11:08:50	57.7	584819.6	70.4	60.5	57.0
72 73	2015/09/17 2015/09/17	11:08:55 11:09:00	56.7 58.8	468619.4 752686.9	70.6 75.5	57.1 59.2	56.4 56.9
74	2015/09/17	11:09:05	60.6	1153779	74.6	62.3	58.3
75 76	2015/09/17	11:09:10 11:09:15	61.0 61.2	1266932	74.5 75 3	62.2 62.4	60.9 60.1
77	2015/09/17	11:09:20	65.4	3461363	81.6	67.9	58.7
78	2015/09/17	11:09:25	72.7	18829245	87.8	74.2	67.9
79 80	2015/09/17 2015/09/17	11:09:30	76.1	42009316 41066963	91.3 90.7	78.3	72.1 72.1
81	2015/09/17	11:09:40	66.0	3985130	85.9	72.1	64.4
82 83	2015/09/17 2015/09/17	11:09:45 11:09:50	66.3 64.3	4245687 2679426	81.1 80 4	67.1 67.3	65.5 60 7
84	2015/09/17	11:09:55	69.5	8828858	88.5	72.6	61.4
85 86	2015/09/17	11:10:00 11:10:05	62.6	1834908	77.3	66.6	61.0
87	2015/09/17	11:10:05	61.4	1370425	75.1	61.7	59.1
88	2015/09/17	11:10:15	66.4	4358715	85.2	70.3	61.2
89 90	2015/09/17 2015/09/17	11:10:20	^{0ວ.8} 61.7	3602057 1489309	00.0 76.3	63.2	o3.∠ 61.0
91	2015/09/17	11:10:30	57.8	600646	71.1	61.6	57.2
92	2015/09/17	11:10:35	61.0	1250174	/3.4	61.2	57.5

93	2015/09/17	11:10:40	62.1	1616584	77.6	63.6	60.6
94	2015/09/17	11:10:45	56.5	442819.3	70.3	60.8	55.5
95	2015/09/17	11:10:50	56.0	401178.7	69.0	56.9	55.0
96	2015/09/17	11:10:55	55.7	370599.5	68.4	56.7	55.3
97	2015/09/17	11:11:00	61.5	1411197	91.8	62.5	55.3
98	2015/09/17	11:11:05	66.0	4026331	83.1	67.3	61.6
99	2015/09/17	11:11:10	69.3	8598583	83.5	70.9	67.3
100	2015/09/17	11:11:15	59.6	922058.9	74.0	67.4	58.9
101	2015/09/17	11:11:20	60.3	1077571	76.2	61.8	58.3
102	2015/09/17	11:11:25	65.1	3254080	82.9	67.4	61.6
103	2015/09/17	11:11:30	66.8	4826987	82.5	68.6	64.1
104	2015/09/17	11:11:35	60.4	4363603	81.5	68.9	63.1 50.0
105	2015/09/17	11.11.40	59 0	1033009	74.0	50.1	59.0 56.0
100	2015/09/17	11.11.40	63.0	2465207	77.1	59.0 65.0	59.9
108	2015/09/17	11.11.55	63.9	2427456	79.3	65.6	62.4
109	2015/09/17	11:12:00	66.7	4686083	81.3	67.6	63.5
110	2015/09/17	11:12:05	64.0	2517727	77.0	65.0	63.4
111	2015/09/17	11:12:10	60.8	1212004	75.1	63.4	60.8
112	2015/09/17	11:12:15	61.8	1517257	75.6	63.3	60.4
113	2015/09/17	11:12:20	61.3	1342111	76.6	63.3	60.8
114	2015/09/17	11:12:25	61.3	1362385	73.8	61.8	60.9
115	2015/09/17	11:12:30	62.8	1920324	82.3	65.1	60.2
116	2015/09/17	11:12:35	63.1	2019955	77.0	65.1	62.4
117	2015/09/17	11:12:40	60.6 50.4	1155469 966102	74.4	63.1	60.Z
110	2015/09/17	11.12.40	59.4 59.0	792576.8	72.5	59 3	58.8
120	2015/09/17	11.12.55	63.1	2059265	77.4	65.1	58.7
121	2015/09/17	11:13:00	69.6	9121034	85.5	70.8	65.1
122	2015/09/17	11:13:05	73.1	20270735	88.3	73.8	70.8
123	2015/09/17	11:13:10	67.5	5685037	83.6	72.8	64.9
124	2015/09/17	11:13:15	61.3	1355083	78.7	64.9	59.6
125	2015/09/17	11:13:20	67.3	5376883	83.5	68.7	63.0
126	2015/09/17	11:13:25	70.6	11484316	84.5	72.4	67.3
127	2015/09/17	11:13:30	62.9	1962042	80.7	69.4	61.3
128	2015/09/17	11:13:35	58.4	690745.5	75.9	61.2	57.7
129	2015/09/17	11.13.40	60.5	1116299	04.9 74 1	60.5 62.0	50.9 50.4
130	2015/09/17	11.13.43	61.3	1341076	74.1	62.5	61 1
132	2015/09/17	11:13:55	59.7	934013	72.7	61.7	58.6
133	2015/09/17	11:14:00	59.5	891549.3	73.0	60.4	58.7
134	2015/09/17	11:14:05	60.0	1001815	73.3	60.2	59.8
135	2015/09/17	11:14:10	60.4	1099826	76.1	61.0	59.8
136	2015/09/17	11:14:15	60.0	994838	78.5	61.5	58.8
137	2015/09/17	11:14:20	65.5	3541402	81.0	69.7	58.3
138	2015/09/17	11:14:25	69.9	9858885	87.2	73.1	65.4
139	2015/09/17	11:14:30	67.9 75.1	6167610 32350752	81.4	69.1 76.7	60.1
140	2015/09/17	11.14.33	71.1	12819572	90.2 85.6	73.8	70.3
142	2015/09/17	11:14:45	67.2	5297106	81.5	70.4	66.6
143	2015/09/17	11:14:50	63.7	2344826	80.2	66.7	62.4
144	2015/09/17	11:14:55	57.5	567152	73.9	63.5	56.6
145	2015/09/17	11:15:00	57.4	546117.9	72.0	58.5	56.0
146	2015/09/17	11:15:05	63.5	2229839	78.2	65.2	58.6
147	2015/09/17	11:15:10	61.8	1518671	75.8	63.2	61.5
148	2015/09/17	11:15:15	62.2	1641824	81.7	64.0 61 5	60.1
149	2015/09/17	11.10.20	01.0 61.2	1240901	77.0	62.7	59.9 50.1
150	2015/09/17	11.15.25	56.3	424136 7	69.9	59.1	55.6
152	2015/09/17	11:15:35	56.5	444898.8	71.6	57.5	55.0
153	2015/09/17	11:15:40	62.2	1668294	78.8	63.2	57.6
154	2015/09/17	11:15:45	56.2	414487.4	71.0	61.1	55.5
155	2015/09/17	11:15:50	55.5	354654.2	67.6	55.9	55.0
156	2015/09/17	11:15:55	56.6	458158.9	70.0	56.9	55.8
157	2015/09/17	11:16:00	61.9 64.0	1543164	79.0	64.5 65 0	56.6
150	2015/09/17	11.10.00	04.U 65.7	2490310	70.1 83.7	68.5	02.0 61.0
160	2015/09/17	11.10.10	63.4	2171089	81.5	69.1	60.8
161	2015/09/17	11:16:20	59.9	986898.8	83.3	60.8	59.8
162	2015/09/17	11:16:25	66.7	4671395	82.8	68.8	59.9
163	2015/09/17	11:16:30	65.5	3528703	84.0	69.3	61.2
164	2015/09/17	11:16:35	64.4	2766090	78.9	66.1	61.0
165	2015/09/17	11:16:40	65.7	3718974	81.2	67.7	63.7
166	2015/09/17	11:16:45	63.7	2336208	78.5	66.4	61.1
167 169	2015/09/17	11:16:50	59.8	965192.2	/3.8 74 4	61.3	59.0
160 160	2010/09/17 2015/00/17	11.10:55 11.17.00	57.Z	019523 1720210	71.4 774	50.9 61 0	0.0C 5 2 1
170	2015/09/17	11.17.00	66.9	4881735	80.4	68.2	64 1
171	2015/09/17	11:17:10	59.8	951175	74,4	65.0	58.8
172	2015/09/17	11:17:15	64.5	2844802	80.9	66.4	59.0
173	2015/09/17	11:17:20	61.6	1454758	76.8	64.2	61.0
174	2015/09/17	11:17:25	63.7	2323677	77.6	64.3	61.3
175	2015/09/17	11:17:30	62.2	1648725	75.6	64.0	59.3
176	2015/09/17	11:17:35	60.6	1143692	82.9	64.2	57.3
177	2015/09/17	11:17:40	66.0	4024867	84.6	67.9	63.9
170 170	2015/09/17 2015/00/17	11:17:45	04.0 62.2	2000204	00.5 70.1	05.9 65 1	სპ./ 50 1
180	2015/09/17	11.17.50	58.6	719146 3	71 <u>4</u>	60 0	57 5
181	2015/09/17	11:18:00	60.7	1162643	76.3	61.0	60.0
182	2015/09/17	11:18:05	59.7	936913.6	76.2	60.4	59.4
183	2015/09/17	11.18.10	61 7	1477656	75.2	62.4	60.1

Measurement 10		Leq =	60.1				
Record #	Date	Time	LAeq		LApeak	LASmax	LASmin
2	2015/09/17	12:12:39	52.8	189976.8	65.3	52.3	52.1
3	2015/09/17	12:12:40 12:12:45	51.9 52.5	154171.3	/1./ 78.4	52.4 54.0	51.5 51.2
5	2015/09/17	12:12:40	53.8	242476.2	72.8	55.0	52.6
6	2015/09/17	12:12:55	54.9	311038.3	86.8	58.3	52.3
7	2015/09/17	12:13:00	53.0	198408.3	70.6	57.5	52.8
8	2015/09/17	12:13:05	53.0 51.2	198028.5	74.6 64.6	54.0 52.1	52.0 51.1
3 10	2015/09/17	12:13:10	52.5	175868.1	65.3	53.1	51.5
11	2015/09/17	12:13:20	52.0	158276.5	70.0	53.0	51.8
12	2015/09/17	12:13:25	56.4	433533.2	77.8	61.0	51.3
13	2015/09/17	12:13:30	65.6	3629701	78.9 92 5	66.2	61.1
14	2015/09/17	12.13.35	53 0	197746.8	63.5 67.9	58.2	50.2 52 7
16	2015/09/17	12:13:45	54.7	296656.7	87.4	58.4	52.4
17	2015/09/17	12:13:50	53.4	216924.3	66.0	55.4	53.2
18	2015/09/17	12:13:55	54.4	275267.5	68.8	54.7	53.6
19 20	2015/09/17 2015/09/17	12:14:00	55.U 56.5	315140.3 449415 2	67.8 85.4	55.2 58.7	54.0 54.9
21	2015/09/17	12:14:10	55.0	314349	76.4	55.7	54.5
22	2015/09/17	12:14:15	68.5	7033134	90.2	72.2	55.0
23	2015/09/17	12:14:20	74.1	25966593	91.5	75.6	71.7
24 25	2015/09/17	12:14:25 12:14:30	61.5 54.7	1415656 203052 6	77.9 70.4	/1.6 57.9	57.9 54.2
26	2015/09/17	12:14:35	53.8	240962	70.4	54.4	53.3
27	2015/09/17	12:14:40	53.0	198390.3	78.2	53.9	52.5
28	2015/09/17	12:14:45	53.1	204698.8	65.9	53.6	52.5
29 20	2015/09/17	12:14:50	54.1	257634.9	66.9	54.4	53.6
30 31	2015/09/17	12:14:55	53.9 52.5	245005.5	64.8	54.6 53.4	53.4 52.4
32	2015/09/17	12:15:05	52.9	192992	66.3	53.4	52.4
33	2015/09/17	12:15:10	53.3	213255.3	67.2	53.8	52.7
34	2015/09/17	12:15:15	52.8	191067.9	70.8	53.0	52.6
35 36	2015/09/17	12:15:20	53.1 54 4	200111.8	65.9 73.4	53.3 56.1	52.8 53.2
37	2015/09/17	12:15:30	54.9	308421.1	75.1	57.7	54.0
38	2015/09/17	12:15:35	55.6	361444.9	69.8	56.2	54.0
39	2015/09/17	12:15:40	55.2	329942.3	68.0	56.1	55.0
40 41	2015/09/17 2015/09/17	12:15:45	54.0 55 3	251280.9	71.4 90.0	55.1 57.8	53.5 53.5
42	2015/09/17	12:15:55	52.8	191040.3	73.2	56.3	52.5
43	2015/09/17	12:16:00	52.1	161349.3	68.7	52.6	51.8
44	2015/09/17	12:16:05	52.6	181748.9	76.5	54.0	52.0
45 46	2015/09/17	12:16:10 12:16:15	54.8 53.6	298556.6	90.1 84 8	57.8 57.7	52.5 52.6
47	2015/09/17	12:16:20	52.4	173296.6	66.2	53.0	51.9
48	2015/09/17	12:16:25	51.7	147652.5	64.6	52.1	51.4
49 50	2015/09/17	12:16:30	53.3	214129.2	76.5	53.9	51.7
50 51	2015/09/17	12.16.35	53.5 52.8	224003.9 189014 6	67.0 66.6	53.5	53.0 52.4
52	2015/09/17	12:16:45	53.7	235603.9	66.1	54.1	52.6
53	2015/09/17	12:16:50	53.9	243427.1	67.4	54.3	53.3
54 55	2015/09/17	12:16:55	52.6	182467.6	65.1	53.3 53.0	52.5 52.5
55 56	2015/09/17	12:17:00	52.9 52.9	192959.0	66.8	53.0	52.5 52.4
57	2015/09/17	12:17:10	53.4	219760.8	68.7	53.6	53.1
58	2015/09/17	12:17:15	54.0	254045	66.9	54.3	53.6
59 60	2015/09/17	12:17:20 12:17:25	53.1 53.0	203622.5	67.3 65.2	53.9 53.3	52.3 52.3
61	2015/09/17	12:17:30	53.4	218611.8	68.1	54.0	53.0
62	2015/09/17	12:17:35	52.4	174965.2	65.2	53.4	52.1
63	2015/09/17	12:17:40	51.9	153370.8	64.5	52.5	51.5
64 65	2015/09/17	12:17:45	52.2 52.0	158254.6	72.0 71.4	52.9 52.2	51.7 51.9
66	2015/09/17	12:17:55	51.9	154775.9	66.2	52.1	51.7
67	2015/09/17	12:18:00	52.9	196618	75.3	53.4	52.1
68 60	2015/09/17	12:18:05	55.2	329704.4	90.3 76 7	59.4	52.6
09 70	2015/09/17	12:18:10	52.4 52.5	173020.9	64.9	53.0 52.9	52.2 52.0
71	2015/09/17	12:18:20	50.9	122103.5	64.0	52.0	50.7
72	2015/09/17	12:18:25	51.0	126624.5	64.9	51.3	50.7
73	2015/09/17	12:18:30	53.0	200547.4	65.8	53.6	51.2
74 75	2015/09/17	12:18:40	53.9	242852.8	66.6	53.8 54.2	53.2
76	2015/09/17	12:18:45	53.8	242068.5	66.6	54.6	53.5
77	2015/09/17	12:18:50	52.8	191082.7	65.0	53.6	52.6
78 70	2015/09/17	12:18:55	55.9	388350.5	90.7 60 7	58.3	52.8
80	2015/09/17	12:19:00	53.2	207633.3	79.7	53.8	52.9
81	2015/09/17	12:19:10	53.2	208871.7	70.0	53.7	52.8
82	2015/09/17	12:19:15	54.0	251182.5	69.6	54.3	53.6
83 94	2015/09/17	12:19:20	55.0	312665.9	80.9 69 2	56.0 54.7	53.8
85	2015/09/17	12:19:20	53.0 53.1	205141.9	69.7	53.8	53.0 52.7
86	2015/09/17	12:19:35	52.1	163216.9	66.5	53.1	51.9
87	2015/09/17	12:19:40	52.8	189461.7	69.5	52.9	52.0
88	2015/09/17	12:19:45	52.9	194521.3	65.5 65 5	53.0	52.7
90	2015/09/17	12:19:55	52.7 55.5	352846.9	74.3	56.7	52.5 53.0
91	2015/09/17	12:20:00	55.0	315479.5	69.1	55.6	54.9

92	2015/09/17	12.20.05	54 6	286768 7	68.3	55 1	54.2
93	2015/09/17	12:20:10	55.0	319807.7	67.9	55.4	54.7
94	2015/09/17	12:20:15	56.3	429605.3	72.6	56.5	55.1
95	2015/09/17	12:20:20	56.1	402792	78.8	56.9	55.7
96	2015/09/17	12:20:25	57.9	623675.2	71.2	58.3	56.0
97	2015/09/17	12:20:30	58.6	720059	72.0	59.3	57.8
98	2015/09/17	12:20:35	57.9	618248.2	72.0	59.3	57.3
99	2015/09/17	12:20:40	57.9	612471.8	70.6	58.2	57.3
100	2015/09/17	12:20:45	57.8	597345.1	69.8	58.2	57.5
101	2015/09/17	12:20:50	58.2	662842.5	70.7	58.5	57.6
102	2015/09/17	12:20:55	58.6	721800.4	74.7	59.9	57.9
103	2015/09/17	12:21:00	55.4	350480.3	75.0	58.0	54.7
104	2015/09/17	12:21:05	55.1	320453.6	68.2	55.3	54.7
105	2015/09/17	12:21:10	55.0	316247.8	67.7	55.4	54.8
106	2015/09/17	12:21:15	54.1	260008.7	66.5	55.0	53.9
107	2015/09/17	12:21:20	53.1 52.5	202626.9	60.4	54.0	52.8 52.7
100	2015/09/17	12.21.20	53.5 54.3	220432.0	80.0	55 Q	52.7
109	2015/09/17	12.21.30	54.3	207950.5	81 Q	57.7	52.9
111	2015/09/17	12.21.00	52.8	189682 7	64.7	53.1	52.0
112	2015/09/17	12:21:45	52.8	190646.5	65.4	53.1	52.5
113	2015/09/17	12:21:50	53.4	217032	66.4	53.6	53.1
114	2015/09/17	12:21:55	52.6	182126.6	65.8	53.3	52.5
115	2015/09/17	12:22:00	54.1	254623.6	70.6	55.9	52.6
116	2015/09/17	12:22:05	53.4	219603.9	72.1	53.6	53.1
117	2015/09/17	12:22:10	54.0	250825.7	66.7	54.2	53.5
118	2015/09/17	12:22:15	55.1	322147.2	68.1	55.3	54.0
119	2015/09/17	12:22:20	54.4	277791.1	67.6	55.2	54.2
120	2015/09/17	12:22:25	54.9	308916.2	67.5	55.5	54.2
121	2015/09/17	12:22:30	55.3	342709.3	68.2	55.6	55.0
122	2015/09/17	12:22:35	55.3	341383.1	სშ.4 74 0	56.U	54.5
123	2015/09/17	12:22:40	54.8 54.0	302532.8	74.9	55.7	54.Z
124	2015/09/17	12.22.40	60 2	1050001	70.2	55.5 61.5	55.4
126	2015/09/17	12:22:55	61.6	1447397	83.7	62.8	59.3
127	2015/09/17	12:22:00	55.7	369466.5	71.4	60.6	54.9
128	2015/09/17	12:23:05	54.0	251661.7	73.8	54.9	53.8
129	2015/09/17	12:23:10	54.5	282886.7	66.6	54.8	54.0
130	2015/09/17	12:23:15	55.0	318501.1	74.3	56.9	53.7
131	2015/09/17	12:23:20	53.7	236702.9	66.6	56.0	53.7
132	2015/09/17	12:23:25	54.9	308092.7	70.5	55.9	53.6
133	2015/09/17	12:23:30	61.3	1343839	85.6	64.7	55.8
134	2015/09/17	12:23:35	78.5	70621423	95.8	80.1	64.8
135	2015/09/17	12:23:40	74.6	28935509	96.4	80.3	66.4
130	2015/09/17	12:23:45	55.U	312772.5	68.4 67.0	66.4	54.6 52.7
137	2015/09/17	12.23.30	54.Z	200307.4	07.0 67.1	54.7	53.7 54.0
130	2015/09/17	12.23.55	57.2	521895.4	83.9	54.8 60.6	54.0 54.6
140	2015/09/17	12:24:00	55.0	319548.8	69 1	55.7	54 7
141	2015/09/17	12:24:10	53.7	234631.8	66.6	54.8	53.3
142	2015/09/17	12:24:15	55.1	321681.2	69.1	56.7	53.3
143	2015/09/17	12:24:20	57.2	524646.2	75.7	58.6	55.3
144	2015/09/17	12:24:25	54.3	271781.4	68.7	56.3	53.0
145	2015/09/17	12:24:30	51.9	155693	72.1	53.0	51.8
146	2015/09/17	12:24:35	51.6	143267.7	66.6	51.9	51.4
147	2015/09/17	12:24:40	51.7	147725.8	67.0	52.1	51.3
148	2015/09/17	12:24:45	51.6	145927.2	71.5	52.3	51.2
149	2015/09/17	12:24:50	52.5	178919.8	69.2	53.1	51.3
150	2015/09/17	12:24:55	52.1	163183.6	69.0 67.4	52.8	51.5
151	2015/09/17	12.20.00	52.5	100000.0	67.4 65.5	53.0	52.0 52.0
152	2015/09/17	12:25:00	53.0	197341 1	65.8	53.2	52.2
154	2015/09/17	12:25:15	53.2	210814.6	73.7	54.0	52.8
155	2015/09/17	12:25:20	52.2	167301.6	65.4	53.2	52.0
156	2015/09/17	12:25:25	52.7	185842.4	66.1	53.4	52.0
157	2015/09/17	12:25:30	52.5	178001.2	65.2	53.4	52.0
158	2015/09/17	12:25:35	53.3	216006.4	66.6	55.0	52.0
159	2015/09/17	12:25:40	52.3	170689.3	66.1	52.7	51.9
160	2015/09/17	12:25:45	52.0	157013.4	67.1	52.4	51.5
161	2015/09/17	12:25:50	53.5	226017.3	67.3	53.7	52.4
162	2015/09/17	12:25:55	53.2	208725.5	68.2	53.7	53.0
163	2015/09/17	12:26:00	52.8	191704.4	65.6	53.0	52.7
104	2015/09/17	12.20.00	54 3	267732.1	60.0	54.8	52.Z
166	2015/09/17	12:20:10	52 5	177198 5	65.5	54.0 54.1	52.5 52.1
167	2015/09/17	12:26:20	52.9	194522	70.3	53 7	52.5
168	2015/09/17	12:26:25	53.2	210446.9	68.7	53.8	52.6
169	2015/09/17	12:26:30	52.3	168383.3	65.5	52.8	52.2
170	2015/09/17	12:26:35	52.9	194967.4	66.1	53.7	52.0
171	2015/09/17	12:26:40	52.9	197087.8	65.8	53.4	52.7
172	2015/09/17	12:26:45	53.0	201221.6	67.3	53.8	52.3
173	2015/09/17	12:26:50	54.9	307405.8	67.9	55.7	53.7
174	2015/09/17	12:26:55	58.3	681306.8	72.8	60.0	55.7
175	2015/09/17	12:27:00	53.9	245791.6	67.0	57.2	53.4
176	2015/09/17	12:27:05	52.8	190317	67.3	53.5	52.5
1// 170	2015/09/17	12:27:10 12:27:15	52.1 51 5	100007.9	00./ 76.0	53.U 55 7	5∠.5 52.4
170 170	2015/09/17	12.27.10 12:27:20	04.0 52.2	200040.9 171707 1	10.2 66.0	55.7 57 Q	02.4 52.2
180	2015/09/17	12:27:25	53.2	207023.9	76.9	537	52.2 52 1
181	2015/09/17	12:27:30	53.3	215105.5	70.5	53.8	52.9
182	2015/09/17	12.27.35	53.3	212987.6	65.5	53.6	52.7

ATTACHMENT 2

FHWA Existing and Future Vehicle Traffic Contour Distance Calculations

FHWA RD-77-108

Traffic Noise Prediction Model Data Input Sheet

Project Name : Mission Valley CPU Project Number : 7899 Modeled Condition : Existing

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

	Segment Speed Distance								
Segment	Roadway	From	То	Traffic Vol.	(Mph)	to CL	% Autos	%MT	% HT
1	Phyllis Place	Abbotshill Road	I-805 SB Ramps	2,270	25	50	96.00	3.00	1.00
2	Sea World Drive	Mission Bay Parkway	Friars Road	34,200	50	50	96.00	3.00	1.00
3	Sea World Drive	Friars Road	I-5 SB Ramps	29,490	40	50	96.00	3.00	1.00
4	Tecolote Road	I-5 SB Ramps	I-5 NB Ramps	30,470	40	50	96.00	3.00	1.00
5	Tecolote Road	I-5 NB Ramps	Morena Boulevard	22,410	35	50	96.00	3.00	1.00
6	Mission Valley Road	Metropolitan Drive	Mission Center Road	7,440	25	50	96.00	3.00	1.00
7	Civita Boulevard	Mission Center Road	Qualcomm Way	2,480	25	50	96.00	3.00	1.00
8	Westside Drive	Mission Center Road	Via Alta	4,070	25	50	96.00	3.00	1.00
9	Friars Road	Sea World Drive	Napa Street	13,650	55	50	96.00	3.00	1.00
10	Friars Road	Napa Street	Colusa Street	19,170	45	50	96.00	3.00	1.00
11	Friars Road	Colusa Street	Via Las Cumbres	19,200	45	50	96.00	3.00	1.00
12	Friars Road	Via Las Cumbres	Fashion Valley Road	22,270	45	50	96.00	3.00	1.00
13	Friars Road	Fashion Valley Road	Via De La Moda	26,100	45	50	96.00	3.00	1.00
14	Friars Road	Via De La Moda	Fashion Valley Driveway	25,920	45	50	96.00	3.00	1.00
15	Friars Road	Fashion Valley Driveway	Avenida De Las Tiendas	26,830	45	50	96.00	3.00	1.00
16	Friars Road	Avenida De Las Tiendas	Ulric Street/SR-163 SB Ramps	40,510	45	50	96.00	3.00	1.00
17	Friars Road	Ulric Street/SR-163 SB Ramps	SR-163 NB Ramps	53,170	45	50	96.00	3.00	1.00
18	Friars Road	SR-163 NB Ramps	Frazee Road	54,150	45	50	96.00	3.00	1.00
19	Friars Road	Frazee Road	Mission Center Road	42,780	50	50	96.00	3.00	1.00
20	Friars Road	Mission Center Road	Qualcomm Way	37,050	50	50	96.00	3.00	1.00
21	Friars Road	Qualcomm Way	River Run Drive	33,250	50	50	96.00	3.00	1.00
22	Friars Road	River Run Drive	Fenton Parkway	22,080	50	50	96.00	3.00	1.00
23	Friars Road	Fenton Parkway	Northside Drive	28,430	50	50	96.00	3.00	1.00
24	Friars Road	Northside Drive	San Diego Mission Road	45,330	50	50	96.00	3.00	1.00
25	Friars Road	San Diego Mission Road	I-15 SB Ramps	57,740	50	50	96.00	3.00	1.00
26	Friars Road	I-15 SB Ramps	I-15 NB Ramps	46,570	45	50	96.00	3.00	1.00
27	Friars Road	I-15 NB Ramps	Rancho Mission Road	51,610	45	50	96.00	3.00	1.00
28	Friars Road	Rancho Mission Road	Santo Road	39,430	45	50	96.00	3.00	1.00
29	Friars Road	Santo Road	Riverdale Street	43,380	45	50	96.00	3.00	1.00
30	Friars Road	Riverdale Street	Mission Gorge Road	31,300	45	50	96.00	3.00	1.00

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31	Mission Gorge Road	Friars Road	Zion Avenue	40,690	45	50	96.00	3.00	1.00
32	Hazard Center Drive	Western Terminus	Mission Center Road	8,710	35	50	96.00	3.00	1.00
33	Rio San Diego Drive	Gill Village Way	Qualcomm Way	10,500	40	50	96.00	3.00	1.00
34	Rio San Diego Drive	Qualcomm Way	River Run Drive	11,280	40	50	96.00	3.00	1.00
35	Rio San Diego Drive	River Run Drive	Fenton Parkway	9,090	40	50	96.00	3.00	1.00
36	San Diego Mission Road	Friars Road EB Ramps	Rancho Mission Road	7,590	40	50	96.00	3.00	1.00
37	San Diego Mission Road	Rancho Mission Road	950 Feet West of Fairmount Avenue	8,020	35	50	96.00	3.00	1.00
38	San Diego Mission Road	950 Feet West of Fairmount Avenue	Fairmount Avenue	8,020	35	50	96.00	3.00	1.00
39	Taylor Street	Pacific Highway	Morena Boulevard	19,060	35	50	96.00	3.00	1.00
40	Taylor Street	Morena Boulevard	I-8 EB Ramps	17,750	35	50	96.00	3.00	1.00
41	Taylor Street	I-8 EB Ramps	Hotel Circle South	14,410	35	50	96.00	3.00	1.00
42	Hotel Circle North	Hotel Circle South	Hotel Circle Place	15,340	35	50	96.00	3.00	1.00
43	Hotel Circle North	Hotel Circle Place	I-8 WB Ramps	6,510	35	50	96.00	3.00	1.00
44	Hotel Circle North	I-8 WB Ramps	Fashion Valley Road	15,510	40	50	96.00	3.00	1.00
45	Hotel Circle North	Fashion Valley Road	Camino De La Reina	12,460	40	50	96.00	3.00	1.00
46	Camino De La Reina	Hotel Circle North	Avenida Del Rio	8,480	25	50	96.00	3.00	1.00
47	Camino De La Reina	Avenida Del Rio	Camino De La Siesta	13,360	30	50	96.00	3.00	1.00
48	Camino De La Reina	Camino De La Siesta	Mission Center Road	10,730	30	50	96.00	3.00	1.00
49	Camino De La Reina	Mission Center Road	Camino Del Este	18,530	30	50	96.00	3.00	1.00
50	Camino De La Reina	Camino Del Este	Qualcomm Way	13,770	30	50	96.00	3.00	1.00
51	Camino Del Rio North	Camino De La Siesta	Mission Center Road	5,430	35	50	96.00	3.00	1.00
52	Camino Del Rio North	Mission Center Road	I-8 WB Ramps	24,030	35	50	96.00	3.00	1.00
53	Camino Del Rio North	I-8 WB Ramps	Camino Del Este	11,910	35	50	96.00	3.00	1.00
54	Camino Del Rio North	Camino Del Este	Qualcomm Way	12,180	35	50	96.00	3.00	1.00
55	Camino Del Rio North	Qualcomm Way	Mission City Parkway	10,590	45	50	96.00	3.00	1.00
56	Camino Del Rio North	Mission City Parkway	800 Feet East of Mission City Parkway	8,080	30	50	96.00	3.00	1.00
57	Camino Del Rio North	800 Feet East of Mission City Parkway	1800 Feet West of Ward Road	8,060	45	50	96.00	3.00	1.00
58	Camino Del Rio North	1800 Feet West of Ward Road	Ward Road	8,920	45	50	96.00	3.00	1.00
59	Camino Del Rio North	Ward Road	1000 Feet West of Fairmount Avenue	11,830	45	50	96.00	3.00	1.00
60	Camino Del Rio North	1000 Feet West of Fairmount Avenue	Fairmount Avenue	13,470	45	50	96.00	3.00	1.00
61	Hotel Circle South	Hotel Circle North	1200 Feet East of Hotel Circle North	12,010	35	50	96.00	3.00	1.00
62	Hotel Circle South	1200 Feet East of Hotel Circle North	I-8 EB Ramps	12,340	35	50	96.00	3.00	1.00
63	Hotel Circle South	I-8 EB Ramps	Bachman Place	17,200	35	50	96.00	3.00	1.00
64	Hotel Circle South	Bachman Place	Hotel Circle North	15,580	35	50	96.00	3.00	1.00
65	Camino Del Rio South	Western Terminus	1800 Feet west of Mission Center Road	7,330	25	50	96.00	3.00	1.00
66	Camino Del Rio South	1800 Feet west of Mission Center Road	Mission Center Road	6,870	35	50	96.00	3.00	1.00
67	Camino Del Rio South	Mission Center Road	Texas Street	7,410	35	50	96.00	3.00	1.00
68	Camino Del Rio South	Texas Street	Mission City Parkway	8.140	35	50	96.00	3.00	1 00
69	Camino Del Rio South	Mission City Parkway	I-15 SB Offramp	11.750	45	50	96.00	3.00	1 00
70	Camino Del Rio South	I-15 SB Offramp	I-15 SB Onramp	9,580	40	50	96.00	3.00	1 00
71	Camino Del Rio South	I-15 SB Onramp	Fairmount Avenue	6.370	40	50	96.00	3.00	1 00
72	Morena Boulevard	Tecolote Road	West Morena Boulevard	16.180	35	50	96.00	3.00	1.00
73	Morena Boulevard	West Morena Boulevard	Linda Vista Road	17.740	40	50	96.00	3.00	1.00
74	Morena Boulevard	Linda Vista Road	I-8 WB Offramp	41,930	40	50	96.00	3.00	1.00
75	Morena Boulevard	I-8 WB Offramp	Taylor Street	11,570	35	50	96.00	3.00	1.00
76	Napa Street	Morena Boulevard	Friars Road	13.430	25	50	96.00	3.00	1.00
77	Colusa Street	Linda Vista Road	Friars Road	2 720	25	50	96.00	3.00	1.00
78	Via Las Cumbres	Linda Vista Road	Friars Road	10,920	25	50	96.00	3.00	1 00
79	Fashion Vallev Road	Friars Road	Hotel Circle North	9.980	35	50	96.00	3.00	1.00
80	Bachman Place	Hotel Circle South	Lewis Street	9.140	40	50	96.00	3.00	1 00
81	Avenida Del Rio	Fashion Valley Parking Lot	Camino De La Reina	8.740	35	50	96.00	3.00	1 00
82	Ulric Street	Fashion Hills Boulevard	600 Feet South of Fashion Hills Boulevard	20.380	40	50	96.00	3.00	1 00
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83	Ulric Street	600 Feet South of Fashion Hills Boulevard	Friars Road	20,430	40	50	96.00	3.00	1.00
84	Camino De La Siesta	Camino De La Reina	Camino Del Rio North	5,150	25	50	96.00	3.00	1.00
85	Metropolitan Drive	Mission Valley Road	Murray Canyon Road	3,840	25	50	96.00	3.00	1.00
86	Murray Canyon Road	Metropolitan Drive	Frazee Road	7,400	30	50	96.00	3.00	1.00
87	Frazee Road	Murray Canyon Road	Friars Road	14,670	30	50	96.00	3.00	1.00
88	Frazee Road	Friars Road	Hazard Center Drive	17,050	30	50	96.00	3.00	1.00
89	Mission Center Road	Murray Ridge Road	1200 Feet West of Murray Ridge Road	10,970	45	50	96.00	3.00	1.00
90	Mission Center Road	1200 Feet West of Murray Ridge Road	950 Feet North of Mission Valley Road	10,720	45	50	96.00	3.00	1.00
91	Mission Center Road	950 Feet North of Mission Valley Road	Mission Valley Road	10,940	40	50	96.00	3.00	1.00
92	Mission Center Road	Mission Valley Road	Westside Drive	14,170	40	50	96.00	3.00	1.00
93	Mission Center Road	Westside Drive	Friars Road WB Ramps	26,020	40	50	96.00	3.00	1.00
94	Mission Center Road	Friars Road WB Ramps	Friars Road EB Ramps	22,830	40	50	96.00	3.00	1.00
95	Mission Center Road	Friars Road EB Ramps	Mission Center Court	19,470	40	50	96.00	3.00	1.00
96	Mission Center Road	Mission Center Court	Hazard Center Drive	19,450	40	50	96.00	3.00	1.00
97	Mission Center Road	Hazard Center Drive	Camino De La Reina	27,060	40	50	96.00	3.00	1.00
98	Mission Center Road	Camino De La Reina	Camino Del Rio North	23,280	40	50	96.00	3.00	1.00
99	Auto Circle	Camino Del Rio North	I-8 EB Ramps	34,100	40	50	96.00	3.00	1.00
100	Auto Circle	I-8 EB Ramps	Camino Del Rio South	20,980	40	50	96.00	3.00	1.00
101	Via Alta	Westside Drive	Franklin Ridge Road	1,340	25	50	96.00	3.00	1.00
102	Murray Ridge Road	Mission Center Road	I-805 NB Ramps	20,000	35	50	96.00	3.00	1.00
103	Murray Ridge Road	I-805 NB Ramps	I-805 SB Ramps	11,700	35	50	96.00	3.00	1.00
104	Russell Park Wav	Friars Road	Civita Boulevard	1.020	30	50	96.00	3.00	1 00
105	Camino Del Este	Rio San Diego Drive	Camino De La Reina	8,450	35	50	96.00	3.00	1 00
106	Camino Del Este	Camino De La Reina	Camino Del Rio North	9.880	25	50	96.00	3.00	1 00
107	Qualcomm Wav	Friars Road WB Ramps	Friars Road EB Ramps	9.300	35	50	96.00	3.00	1 00
108	Qualcomm Way	Friars Road EB Ramps	Rio San Diego Drive	10.200	35	50	96.00	3.00	1.00
109	Qualcomm Way	Rio San Diego Drive	Camino Del Rio North	24.330	35	50	96.00	3.00	1.00
110	Qualcomm Way	Camino Del Rio North	I-8 WB Ramps	23.560	35	50	96.00	3.00	1.00
111	Qualcomm Way	I-8 WB Ramps	I-8 EB Ramps	36,410	35	50	96.00	3.00	1.00
112	Qualcomm Way	I-8 EB Ramps	Camino Del Rio South	25,830	35	50	96.00	3.00	1.00
113	Texas Street	Camino Del Rio South	1400 Feet North of Madison Ave	29.050	40	50	96.00	3.00	1.00
114	Texas Street	1400 Feet North of Madison Ave	Madison Avenue	29 240	40	50	96.00	3.00	1.00
115	Texas Street	Madison Avenue	Meade Ave	17.090	25	50	96.00	3.00	1.00
116	Texas Street	Meade Ave	El Caion Boulevard	14,310	25	50	96.00	3.00	1.00
117	River Run Drive	Friars Road	Rio San Diego Drive	4.030	25	50	96.00	3.00	1.00
118	Fenton Parkway	Portofino Driveway	Friars Road	4,120	25	50	96.00	3.00	1.00
110	Fenton Parkway	Friars Road	Rio San Diego Drive	12 610	30	50	96.00	3.00	1.00
120	Fenton Parkway	Rio San Diego Drive	Del Rio Apartments Driveway	5 400	30	50	96.00	3.00	1.00
120	Mission City Parkway	Camino Del Rio North	Camino Del Rio South	6,430	35	50	96.00	3.00	1.00
122	Northside Drive	Portofino Driveway	Friars Road	6,590	25	50	96.00	3.00	1.00
122	Northside Drive	Friars Road	Fenton Marketplace Driveway	20,310	30	50	96.00	3.00	1.00
123	Northside Drive	Fenton Marketolace Driveway	Lowe's Frontage Road	15 890	30	50	90.00	3.00	1.00
124	Mission Village Drive	Ronda Avenue	Friars Road WB Ramps	17 220	30 45	50	90.00	3.00	1.00
126	Mission Village Drive	Friars Road WB Ramps	Friars Road FB Ramps	13 660	45	50	96.00	3.00	1.00
120	Rancho Mission Road	Friars Road	San Diego Mission Road	12 820	35	50	96.00	3.00	1.00
127	Ward Road	San Diego Mission Road	Camino Del Rio North	9 580	35	50	90.00	3.00	1.00
120	Santo Road	Northern Terminus	Friars Road	6,360	20	50	90.00	2.00	1.00
120	Riverdale Street	Zion Road	Friars Road	2 770	20	50	90.00	3.00	1.00
121	Riverdale Street	Eriars Road	Vandever Avenue	8 900	30	50	00.00 06.00	3.00	1.00
132	Mission Gorge Road	Friars Road	Camino Del Rio North	14 710	30	50	90.00 96.00	3.00	1.00
122	Fairmount Avenue	Camino Del Rio North/I-8 WR Offramp	I-8 FB Offramp	40 210	35	50	06.00 06 00	3.00	1.00
13/	Fairmount Avenue	I-8 EB Offramp	Camino Del Rio South	82 880	35 35	50	90.00 96.00	3.00	1.00
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FHWA RD-77-108 **Traffic Noise Prediction Model** Predicted Noise Levels

Project Name : Mission Valley CPU Project Number : 7899 Modeled Condition : Existing Assessment Metric: Hard

				Noise Levels, dBA Hard				Distance to Traffic Noise Level Contours, Feet					
Segmen	t Roadway	From	То	Auto	MT	HT	Total	75 dB	70 dB	65 dB	60 dB	55 dB	50 dB
1	Phyllis Place	Abbotshill Road	I-805 SB Ramps	53.3	49.8	52.7	57.0	1	3	8	25	79	251
2	Sea World Drive	Mission Bay Parkway	Friars Road	73.7	66.3	65.8	75.0	50	158	500	1,581	5,000	15,811
3	Sea World Drive	Friars Road	I-5 SB Ramps	70.3	64.2	64.2	72.0	25	79	251	792	2,506	7,924
4	Tecolote Road	I-5 SB Ramps	I-5 NB Ramps	70.4	64.3	64.4	72.2	26	83	262	830	2,624	8,298
5	Tecolote Road	I-5 NB Ramps	Morena Boulevard	67.4	62.1	62.5	69.5	14	45	141	446	1,409	4,456
6	Mission Valley Road	Metropolitan Drive	Mission Center Road	58.4	55.0	57.9	62.1	3	8	26	81	256	811
7	Civita Boulevard	Mission Center Road	Qualcomm Way	53.7	50.2	53.1	57.3	1	3	8	27	85	269
8	Westside Drive	Mission Center Road	Via Alta	55.8	52.4	55.2	59.5	1	4	14	45	141	446
9	Friars Road	Sea World Drive	Napa Street	70.9	63.0	62.1	72.0	25	79	251	792	2,506	7,924
10	Friars Road	Napa Street	Colusa Street	69.9	63.1	62.8	71.4	22	69	218	690	2,183	6,902
11	Friars Road	Colusa Street	Via Las Cumbres	69.9	63.1	62.8	71.4	22	69	218	690	2,183	6,902
12	Friars Road	Via Las Cumbres	Fashion Valley Road	70.5	63.7	63.5	72.0	25	79	251	792	2,506	7,924
13	Friars Road	Fashion Valley Road	Via De La Moda	71.2	64.4	64.2	72.7	29	93	294	931	2,944	9,310
14	Friars Road	Via De La Moda	Fashion Valley Driveway	71.2	64.4	64.1	72.7	29	93	294	931	2,944	9,310
15	Friars Road	Fashion Valley Driveway	Avenida De Las Tiendas	71.4	64.6	64.3	72.8	30	95	301	953	3,013	9,527
16	Friars Road	Avenida De Las Tiendas	Ulric Street/SR-163 SB Ramps	73.1	66.3	66.1	74.6	46	144	456	1,442	4,560	14,420
17	Friars Road	Ulric Street/SR-163 SB Ramps	SR-163 NB Ramps	74.3	67.5	67.3	75.8	60	190	601	1,901	6,011	19,009
18	Friars Road	SR-163 NB Ramps	Frazee Road	74.4	67.6	67.3	75.9	62	195	615	1,945	6,151	19,452
19	Friars Road	Frazee Road	Mission Center Road	74.7	67.3	66.7	76.0	63	199	629	1,991	6,295	19,905
20	Friars Road	Mission Center Road	Qualcomm Way	74.1	66.7	66.1	75.4	55	173	548	1,734	5,482	17,337
21	Friars Road	Qualcomm Way	River Run Drive	73.6	66.2	65.6	74.9	49	155	489	1,545	4,886	15,451
22	Friars Road	River Run Drive	Fenton Parkway	71.8	64.4	63.9	73.1	32	102	323	1,021	3,228	10,209
23	Friars Road	Fenton Parkway	Northside Drive	72.9	65.5	65.0	74.2	42	132	416	1,315	4,159	13,151
24	Friars Road	Northside Drive	San Diego Mission Road	75.0	67.5	67.0	76.2	66	208	659	2,084	6,591	20,843
25	Friars Road	San Diego Mission Road	I-15 SB Ramps	76.0	68.6	68.0	77.3	85	269	849	2,685	8,491	26,852
26	Friars Road	I-15 SB Ramps	I-15 NB Ramps	73.8	67.0	66.7	75.2	52	166	524	1,656	5,236	16,557
27	Friars Road	I-15 NB Ramps	Rancho Mission Road	74.2	67.4	67.1	75.7	59	186	587	1,858	5,874	18,577
28	Friars Road	Rancho Mission Road	Santo Road	73.0	66.2	66.0	74.5	45	141	446	1,409	4,456	14,092
29	Friars Road	Santo Road	Riverdale Street	73.4	66.6	66.4	74.9	49	155	489	1,545	4,886	15,451
30	Friars Road	Riverdale Street	Mission Gorge Road	72.0	65.2	65.0	73.5	35	112	354	1,119	3,540	11,194

31	Mission Gorge Road	Friars Road	Zion Avenue	73.2	66.4	66.1	74.6	46	144
32	Hazard Center Drive	Western Terminus	Mission Center Road	63.3	58.0	58.4	65.4	5	17
33	Rio San Diego Drive	Gill Village Way	Qualcomm Way	65.8	59.7	59.7	67.5	9	28
34	Rio San Diego Drive	Qualcomm Way	River Run Drive	66.1	60.0	60.0	67.9	10	31
35	Rio San Diego Drive	River Run Drive	Fenton Parkway	65.2	59.1	59.1	66.9	8	24
36	San Diego Mission Road	Friars Road EB Ramps	Rancho Mission Road	64.4	58.3	58.3	66.1	6	20
37	San Diego Mission Road	Rancho Mission Road	950 Feet West of Fairmount Avenue	63.0	57.6	58.0	65.0	5	16
38	San Diego Mission Road	950 Feet West of Fairmount Avenue	Fairmount Avenue	63.0	57.6	58.0	65.0	5	16
39	Taylor Street	Pacific Highway	Morena Boulevard	66.7	61.4	61.8	68.8	12	38
40	Taylor Street	Morena Boulevard	I-8 EB Ramps	66.4	61.1	61.5	68.5	11	35
41	Taylor Street	I-8 EB Ramps	Hotel Circle South	65.5	60.2	60.6	67.6	9	29
42	Hotel Circle North	Hotel Circle South	Hotel Circle Place	65.8	60.4	60.9	67.9	10	31
43	Hotel Circle North	Hotel Circle Place	I-8 WB Ramps	62.1	56.7	57.1	64.1	4	13
44	Hotel Circle North	I-8 WB Ramps	Fashion Valley Road	67.5	61.4	61.4	69.2	13	42
45	Hotel Circle North	Fashion Valley Road	Camino De La Reina	66.6	60.4	60.5	68.3	11	34
46	Camino De La Reina	Hotel Circle North	Avenida Del Rio	59.0	55.6	58.4	62.7	3	9
47	Camino De La Reina	Avenida Del Rio	Camino De La Siesta	63.3	58.8	61.1	66.2	7	21
48	Camino De La Reina	Camino De La Siesta	Mission Center Road	62.3	57.8	60.2	65.3	5	17
49	Camino De La Reina	Mission Center Road	Camino Del Este	64.7	60.2	62.6	67.6	9	29
50	Camino De La Reina	Camino Del Este	Qualcomm Way	63.4	58.9	61.3	66.3	7	21
51	Camino Del Rio North	Camino De La Siesta	Mission Center Road	61.3	55.9	56.3	63.3	3	11
52	Camino Del Rio North	Mission Center Road	I-8 WB Ramps	67.7	62.4	62.8	69.8	15	48
53	Camino Del Rio North	I-8 WB Ramps	Camino Del Este	64 7	59.3	59.8	66.8	8	24
54	Camino Del Rio North	Camino Del Este	Qualcomm Way	64.8	59.4	59.8	66.9	8	24
55	Camino Del Rio North	Qualcomm Way	Mission City Parkway	67.3	60.5	60.2	68.8	12	38
56	Camino Del Rio North	Mission City Parkway	800 Feet Fast of Mission City Parkway	61.1	56.6	59.0	64 0	4	13
57	Camino Del Rio North	800 Feet East of Mission City Parkway	1800 Feet West of Ward Road	66 1	59.3	59 1	67.6	9	29
58	Camino Del Rio North	1800 Feet West of Ward Road	Ward Road	66.6	59.8	59.5	68.1	10	32
59	Camino Del Rio North	Ward Road	1000 Feet West of Fairmount Avenue	67.8	61.0	60.7	69.3	13	43
60	Camino Del Rio North	1000 Feet West of Fairmount Avenue		68.4	61.6	61 3	69.8	15	48
61	Hotel Circle South	Hotel Circle North	1200 Feet East of Hotel Circle North	64 7	59.4	59.8	66 8	8	-10 24
62	Hotel Circle South	1200 Eeet East of Hotel Circle North	L8 EB Ramps	64.8	59.4	59.0	66.9	8	24 24
63	Hotel Circle South	I-8 FB Ramps	Bachman Place	66.3	60.9	61 3	68.4	11	27
64	Hotel Circle South	Bachman Place	Hotel Circle North	65.9	60.5	60.9	67.9	10	31
65	Camino Del Rio South	Western Terminus	1800 Feet west of Mission Center Road	58.4	54 Q	57.8	62.0	3	8
66	Camino Del Rio South	1800 Feet west of Mission Center Road	Mission Center Road	62 3	56.9	57.0	64.4	1	1/
67	Camino Del Rio South	Mission Center Road	Texas Street	62.6	57.3	57.7	64.7	- 5	14
68	Camino Del Rio South	Texas Street	Mission City Parkway	63.0	57.7	58.1	65 1	5	16
69	Camino Del Rio South	Mission City Parkway	L15 SB Offramp	67.8	61.0	60 7	60.2	13	10
70	Camino Del Rio South	I-15 SB Offramp	L15 SB Onramp	65 A	59.3	50.7	67.1	8	72 26
70	Camino Del Rio South	I-15 SB Onramp		63.6	57.5	57.6	65.4	5	17
70	Morena Boulevard	Tecolote Road	West Morona Boulovard	66.0	57.5 60.7	61.1	69.4	10	22
72	Morena Boulevard	West Morena Boulevard	Linda Vieta Road	69.1	62.0	62.0	60.9	10	32
73	Morena Boulevard	Linda Vista Road		71.9	02.0 65.7	65.9	72.6	10	40
74	Morena Boulevard		Toylor Street	64.6	50.2	50.6	73.0 66.6	30 7	22
75	Nana Street	Norona Boulevard	Friero Dood	04.0	59.Z	59.0	64.7	/ E	23
70	Colusa Street	Linda Vista Road	Filais Road	01.0 E4.4	57.0	60.4 52.5	04.7 57.7	5	10
11 70	Via Las Cumbres	Linda Vista Road	Filats Rudu Eriare Dood	04.1 64.2	50.0	00.0 F0.4	51.1 66 4	ו ד	ა იი
70 70	Fashion Valley Pood	Friars Road	Filals Ruau Hatal Cirala North	04.J	00.9 E0.6	59.4	00.4 66.0	1	22
19 80	Rachman Place	Hotel Circle South		00.9 65 0	50.0	59.0	00.0	0	20 24
0U 04	Avenida Del Die	Fashion Valley Parking Let		00.Z	59.1 E9.0	59.1 E0 4	00.9 65 4	0 E	24 47
01	Lilric Street	Fashion Hills Boulevard	Callinu De La Rellia	03.3	0.00	00.4		5 47	1/
oΖ			OUD FEEL SOULD OF FASHION FILLS BOULEVARD	00./	02.0	02.0	70.4	17	55

456	1,442	4,560	14,420
55	173	548	1,734
89	281	889	2,812
97	308	975	3,083
77	245	774	2,449
64	204	644	2,037
50	158	500	1,581
50	158	500	1,581
120	379	1,199	3,793
112	354	1,119	3,540
91	288	910	2,877
97	308	975	3,083
41	129	406	1,285
132	416	1,315	4,159
107	338	1.069	3,380
29	93	294	931
66	208	659	2.084
54	169	536	1.694
91	288	910	2.877
67	213	674	2 133
34	107	338	1 069
151	477	1 510	4 775
76	239	757	2 393
77	245	774	2,000
120	379	1 199	3 793
40	126	397	1 256
91	288	910	2 877
102	323	1 021	3 228
135	426	1 346	4 256
151	420	1,540	4,230
76	230	757	2 202
77	200	77/	2,000
100	240	1 00/	2,443
07	308	075	3 083
25	70	251	702
20 11	138	135	1 377
47	148	467	1,377
51	162	512	1,470
132	416	1 315	4 159
81	256	811	2 564
55	173	548	1 734
102	323	1 021	3 228
151	477	1,021	4 775
362	1 145	3 622	11 454
72	220	723	2 285
12	1/8	123	2,205
4/	20	407	204
9 80	29 210	800 90	294
63 09	∠10 100	620	2,103
03 77	199	029 771	1,991
1 I 55	240 470	114 E49	2,449 4 704
00 172	113	040 1 724	1,734 E 490
113	040	1,734	J,40Z

83	Ulric Street	600 Feet South of Fashion Hills Boulevard	Friars Road	68.7	62.6	62.6	70.4	17	55
84	Camino De La Siesta	Camino De La Reina	Camino Del Rio North	56.8	53.4	56.3	60.5	2	6
85	Metropolitan Drive	Mission Valley Road	Murray Canyon Road	55.6	52.1	55.0	59.2	1	4
86	Murray Canyon Road	Metropolitan Drive	Frazee Road	60.7	56.2	58.6	63.6	4	11
87	Frazee Road	Murray Canyon Road	Friars Road	63.7	59.2	61.5	66.6	7	23
88	Frazee Road	Friars Road	Hazard Center Drive	64.3	59.8	62.2	67.3	8	27
89	Mission Center Road	Murray Ridge Road	1200 Feet West of Murray Ridge Road	67.5	60.7	60.4	69.0	13	40
90	Mission Center Road	1200 Feet West of Murray Ridge Road	950 Feet North of Mission Valley Road	67.4	60.6	60.3	68.9	12	39
91	Mission Center Road	950 Feet North of Mission Valley Road	Mission Valley Road	66.0	59.9	59.9	67.7	9	29
92	Mission Center Road	Mission Valley Road	Westside Drive	67.1	61.0	61.0	68.8	12	38
93	Mission Center Road	Westside Drive	Friars Road WB Ramps	69.8	63.6	63.7	71.5	22	71
94	Mission Center Road	Friars Road WB Ramps	Friars Road EB Ramps	69.2	63.1	63.1	70.9	19	62
95	Mission Center Road	Friars Road EB Ramps	Mission Center Court	68.5	62.4	62.4	70.2	17	52
96	Mission Center Road	Mission Center Court	Hazard Center Drive	68.5	62.4	62.4	70.2	17	52
97	Mission Center Road	Hazard Center Drive	Camino De La Reina	69.9	63.8	63.8	71.7	23	74
98	Mission Center Road	Camino De La Reina	Camino Del Rio North	69.3	63.1	63.2	71.0	20	63
99	Auto Circle	Camino Del Rio North	I-8 EB Ramps	70.9	64.8	64.9	72.7	29	93
100	Auto Circle	I-8 EB Ramps	Camino Del Rio South	68.8	62.7	62.7	70.6	18	57
101	Via Alta	Westside Drive	Franklin Ridge Road	51.0	47.6	50.4	54.7	0	1
102	Murray Ridge Road	Mission Center Road	I-805 NB Ramps	66.9	61.6	62.0	69.0	13	40
103	Murray Ridge Road	I-805 NB Ramps	I-805 SB Ramps	64.6	59.2	59.7	66.7	7	23
104	Russell Park Way	Friars Road	Civita Boulevard	52.1	47.6	50.0	55.0	1	2
105	Camino Del Este	Rio San Diego Drive	Camino De La Reina	63.2	57.8	58.3	65.3	5	17
106	Camino Del Este	Camino De La Reina	Camino Del Rio North	59.7	56.2	59.1	63.3	3	11
107	Qualcomm Way	Friars Road WB Ramps	Friars Road EB Ramps	63.6	58.3	58.7	65.7	6	19
108	Qualcomm Way	Friars Road EB Ramps	Rio San Diego Drive	64.0	58.7	59.1	66.1	6	20
109	Qualcomm Way	Rio San Diego Drive	Camino Del Rio North	67.8	62.4	62.9	69.9	15	49
110	Qualcomm Way	Camino Del Rio North	I-8 WB Ramps	67.7	62.3	62.7	69.7	15	47
111	Qualcomm Way	I-8 WB Ramps	I-8 EB Ramps	69.5	64.2	64.6	71.6	23	72
112	Qualcomm Way	I-8 EB Ramps	Camino Del Rio South	68.0	62.7	63.1	70.1	16	51
113	Texas Street	Camino Del Rio South	1400 Feet North of Madison Ave	70.2	64.1	64.2	72.0	25	79
114	Texas Street	1400 Feet North of Madison Ave	Madison Avenue	70.3	64.1	64.2	72.0	25	79
115	Texas Street	Madison Avenue	Meade Ave	62.0	58.6	61.5	65.7	6	19
116	Texas Street	Meade Ave	El Caion Boulevard	61.3	57.8	60.7	65.0	5	16
117	River Run Drive	Friars Road	Rio San Diego Drive	55.8	52.3	55.2	59.4	1	4
118	Fenton Parkway	Portofino Driveway	Friars Road	55.9	52.4	55.3	59.5	1	4
119	Fenton Parkway	Friars Road	Rio San Diego Drive	63.0	58.5	60.9	66.0	6	20
120	Fenton Parkway	Rio San Diego Drive	Del Rio Apartments Driveway	59.3	54.8	57.2	62.3	3	8
121	Mission City Parkway	Camino Del Rio North	Camino Del Rio South	62.0	56.6	57.1	64.1	4	13
122	Northside Drive	Portofino Driveway	Friars Road	57.9	54.5	57.3	61.6	2	7
123	Northside Drive	Friars Road	Fenton Marketplace Driveway	65.1	60.6	63.0	68.0	10	32
124	Northside Drive	Fenton Marketplace Driveway	Lowe's Frontage Road	64.0	59.5	61.9	67.0	8	25
125	Mission Village Drive	Ronda Avenue	Friars Road WB Ramps	69.4	62.6	62.4	70.9	19	62
126	Mission Village Drive	Friars Road WB Ramps	Friars Road EB Ramps	68.4	61.6	61.4	69.9	15	49
127	Rancho Mission Road	Friars Road	San Diego Mission Road	65.0	59.6	60.1	67.1	8	26
128	Ward Road	San Diego Mission Road	Camino Del Rio North	63.7	58.4	58.8	65.8	6	19
129	Santo Road	Northern Terminus	Friars Road	60.0	55.6	57.9	63.0	3	10
130	Riverdale Street	Zion Road	Friars Road	56.4	51.9	54.3	59.4	1	4
131	Riverdale Street	Friars Road	Vandever Avenue	61.5	57.0	59.4	64.4	4	14
132	Mission Gorge Road	Friars Road	Camino Del Rio North	63.7	59.2	61.6	66.6	7	23
133	Fairmount Avenue	Camino Del Rio North/I-8 WB Offramp	I-8 EB Offramp	70.0	64.6	65.0	72.0	25	79
134	Fairmount Avenue	I-8 EB Offramp	Camino Del Rio South	73.1	67.8	68.2	75.2	52	166

173	548	1,734	5,482
18	56	177	561
13	42	132	416
36	115	362	1,145
72	229	723	2,285
85	269	849	2,685
126	397	1,256	3,972
123	388	1,227	3,881
93	294	931	2,944
120	379	1,199	3,793
223	706	2.233	7.063
195	615	1.945	6.151
166	524	1,656	5,236
166	524	1.656	5.236
234	740	2.339	7.396
199	629	1.991	6.295
294	931	2.944	9.310
182	574	1.815	5.741
5	15	47	148
126	397	1 256	3 972
74	234	740	2 339
5	16	50	158
54	169	536	1 694
34	107	338	1,001
59	186	587	1,858
64	204	644	2 037
155	204 489	1 545	4 886
1/18	403	1,040	4,000
220	707	2 285	+,000 7 227
229 162	512	2,205	7,227 5,116
102 251	702	2 506	7 024
251	792	2,500	7,924
50	192	2,500	1,924
59	159	507	1,000
1/	130	138	/35
14	44	1/1	433
62	40	620	440
03	199	260	940
Z1 11	120	209	049 1 205
41	129	400	1,200
23 100	72	229	723
70	310	990 700	3,100
19	201	192	2,300
190	490	1,940	0,101
155	489	1,545	4,886
81	256	811	2,564
60	190	601	1,901
32	100	315	998
14	44	138	435
44	138	435	1,377
12	229	723	2,285
251	/92	2,506	7,924
524	1,656	5,236	16,557

FHWA RD-77-108

Traffic Noise Prediction Model Data Input Sheet

Project Name : Mission Valley CPU Project Number : 7899 Modeled Condition : Freeway Existing

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

		Se	egment		Speed	Distance							
Segment	Roadway	From	То	Traffic Vol.	(Mph)	to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	K-Factor
1	I-5	Washington Street	Old Town Avenue	203,000	65	50	96.10	2.90	1.00	80.00	10.00	10.00	
2	I-5	Old Town Avenue	I-8	205,000	65	50	96.10	2.90	1.00	80.00	10.00	10.00	
3	I-5	I-8	Sea World Drive	207,000	65	50	96.10	2.90	1.00	80.00	10.00	10.00	
4	I-5	Sea World Drive	Clairemont Drive	222,000	65	50	96.10	2.90	1.00	80.00	10.00	10.00	
5	I-8	Midway Drive	I-5	102,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
6	I-8	I-5	Morena Boulevard	134,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
7	I-8	Morena Boulevard	Hotel Circle/Taylor Street	196,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
8	I-8	Hotel Circle/Taylor Street	Hotel Circle	199,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
9	I-8	Hotel Circle	SR-163	215,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
10	I-8	SR-163	Mission Center Road	221,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
11	I-8	Mission Center Road	Texas Street	237,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
12	I-8	Texas Street	I-805	210,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
13	I-8	I-805	I-15	246,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
14	I-8	I-15	Fairmount Avenue	224,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
15	I-8	Fairmount Avenue	Waring Road	247,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
16	I-15	El Cajon Boulevard	Adams Avenue	169,000	65	50	96.00	2.80	1.20	80.00	10.00	10.00	
17	I-15	Adams Avenue	I-8	177,000	65	50	96.00	2.80	1.20	80.00	10.00	10.00	
18	I-15	I-8	Friars Road	217,000	65	50	96.00	2.80	1.20	80.00	10.00	10.00	
19	I-15	Friars Road	Aero Drive	224,000	65	50	96.00	2.80	1.20	80.00	10.00	10.00	
20	I-805	El Cajon Boulevard	Adams Avenue	192,000	65	50	93.60	4.10	2.30	80.00	10.00	10.00	
21	I-805	Adams Avenue	I-8	213,000	65	50	93.60	4.10	2.30	80.00	10.00	10.00	
22	I-805	I-8	Murray Ridge	203,000	65	50	93.60	4.10	2.30	80.00	10.00	10.00	
23	I-805	Murray Ridge	Kearny Villa Road	199,000	65	50	93.60	4.10	2.30	80.00	10.00	10.00	
24	SR-163	Washington Street	6th Avenue	130,000	65	50	96.50	2.70	0.80	80.00	10.00	10.00	
25	SR-163	6th Avenue	I-8	162,000	65	50	96.50	2.70	0.80	80.00	10.00	10.00	
26	SR-163	I-8	Friars Road	153,000	65	50	96.50	2.70	0.80	80.00	10.00	10.00	
27	SR-163	Friars Road	Genesee Avenue	179,000	65	50	96.50	2.70	0.80	80.00	10.00	10.00	
28	SR-163	Genesee Avenue	Mesa College Drive	163,000	65	50	96.50	2.70	0.80	80.00	10.00	10.00	

FHWA RD-77-108 Traffic Noise Prediction Model Predicted Noise Levels

Project Name : Mission Valley CPUProject Number : 7899Modeled Condition : Freeway ExistingAssessment Metric:Soft

		Se	egment	No	oise Levels	s, dBA So	ft		Distanc	e to Traffic	c Noise Le	vel Contou	urs, Feet
Segmer	nt Roadway	From	То	Auto	MT	HT	Total	75 dB	70 dB	65 dB	60 dB	55 dB	50 dB
1	I-5	Washington Street	Old Town Avenue	84.8	75.7	74.5	85.6	254	548	1,181	2,545	5,482	11,811
2	I-5	Old Town Avenue	I-8	84.8	75.7	74.6	85.7	258	557	1,199	2,584	5,567	11,994
3	I-5	I-8	Sea World Drive	84.8	75.8	74.6	85.7	258	557	1,199	2,584	5,567	11,994
4	I-5	Sea World Drive	Clairemont Drive	85.1	76.1	74.9	86.0	271	583	1,256	2,706	5,830	12,559
5	I-8	Midway Drive	I-5	81.8	72.1	70.0	82.5	158	341	734	1,581	3,406	7,339
6	I-8	I-5	Morena Boulevard	83.0	73.2	71.2	83.7	190	410	882	1,901	4,095	8,823
7	I-8	Morena Boulevard	Hotel Circle/Taylor Street	84.6	74.9	72.8	85.3	243	524	1,128	2,430	5,236	11,280
8	I-8	Hotel Circle/Taylor Street	Hotel Circle	84.7	75.0	72.9	85.4	247	532	1,145	2,468	5,317	11,454
9	I-8	Hotel Circle	SR-163	85.0	75.3	73.2	85.7	258	557	1,199	2,584	5,567	11,994
10	I-8	SR-163	Mission Center Road	85.2	75.4	73.4	85.8	262	565	1,218	2,624	5,653	12,180
11	I-8	Mission Center Road	Texas Street	85.5	75.7	73.7	86.1	275	592	1,275	2,748	5,920	12,754
12	I-8	Texas Street	I-805	84.9	75.2	73.1	85.6	254	548	1,181	2,545	5,482	11,811
13	I-8	I-805	I-15	85.6	75.9	73.8	86.3	283	610	1,315	2,833	6,104	13,151
14	I-8	I-15	Fairmount Avenue	85.2	75.5	73.4	85.9	266	574	1,237	2,665	5,741	12,368
15	I-8	Fairmount Avenue	Waring Road	85.6	75.9	73.8	86.3	283	610	1,315	2,833	6,104	13,151
16	I-15	El Cajon Boulevard	Adams Avenue	83.9	74.7	74.5	84.9	229	492	1,061	2,285	4,924	10,608
17	I-15	Adams Avenue	I-8	84.2	74.9	74.7	85.1	236	508	1,094	2,357	5,077	10,939
18	I-15	I-8	Friars Road	85.0	75.8	75.6	86.0	271	583	1,256	2,706	5,830	12,559
19	I-15	Friars Road	Aero Drive	85.2	76.0	75.8	86.1	275	592	1,275	2,748	5,920	12,754
20	I-805	El Cajon Boulevard	Adams Avenue	84.4	77.0	77.9	85.9	266	574	1,237	2,665	5,741	12,368
21	I-805	Adams Avenue	I-8	84.8	77.4	78.4	86.3	283	610	1,315	2,833	6,104	13,151
22	I-805	I-8	Murray Ridge	84.6	77.2	78.2	86.1	275	592	1,275	2,748	5,920	12,754
23	I-805	Murray Ridge	Kearny Villa Road	84.5	77.1	78.1	86.0	271	583	1,256	2,706	5,830	12,559
24	SR-163	Washington Street	6th Avenue	82.8	73.4	71.6	83.6	187	403	869	1,872	4,033	8,689
25	SR-163	6th Avenue	I-8	83.8	74.4	72.6	84.5	215	463	998	2,149	4,631	9,976
26	SR-163	I-8	Friars Road	83.5	74.2	72.3	84.3	208	449	967	2,084	4,491	9,675
27	SR-163	Friars Road	Genesee Avenue	84.2	74.8	73.0	85.0	232	500	1,077	2,321	5,000	10,772
28	SR-163	Genesee Avenue	Mesa College Drive	83.8	74.4	72.6	84.6	218	470	1,013	2,183	4,702	10,131

FHWA RD-77-108

Traffic Noise Prediction Model Data Input Sheet

Project Name : Mission Valley CPU Project Number : 7899 Modeled Condition : 2050

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

			Segment		Speed	Distance			
Segment	Roadway	From	То	Traffic Vol.	(Mph)	to CL	% Autos	%MT	% HT
1	Phyllis Place	Abbotshill Road	I-805 SB Ramps	32,600	25	50	96.00	3.00	1.00
2	Sea World Drive	Mission Bay Parkway	Friars Road	41,200	50	50	96.00	3.00	1.00
3	Sea World Drive	Friars Road	I-5 SB Ramps	34,800	40	50	96.00	3.00	1.00
4	Tecolote Road	I-5 SB Ramps	I-5 NB Ramps	34,800	40	50	96.00	3.00	1.00
5	Tecolote Road	I-5 NB Ramps	Morena Boulevard	31,900	35	50	96.00	3.00	1.00
6	Mission Valley Road	Metropolitan Drive	Mission Center Road	16,400	25	50	96.00	3.00	1.00
7	Civita Boulevard	Mission Center Road	Via Alta	5,000	25	50	96.00	3.00	1.00
8	Civita Boulevard	Via Alta	Qualcomm Way	4,200	25	50	96.00	3.00	1.00
9	Civita Boulevard	Qualcomm Way	Franklin Ridge Road	11,000	25	50	96.00	3.00	1.00
10	Westside Drive	Mission Center Road	Via Alta	5,100	25	50	96.00	3.00	1.00
11	Friars Road	Sea World Drive	Napa Street	15,400	55	50	96.00	3.00	1.00
12	Friars Road	Napa Street	Colusa Street	19,400	45	50	96.00	3.00	1.00
13	Friars Road	Colusa Street	Via Las Cumbres	25,200	45	50	96.00	3.00	1.00
14	Friars Road	Via Las Cumbres	Fashion Valley Road	24,600	45	50	96.00	3.00	1.00
15	Friars Road	Fashion Valley Road	Via De La Moda	27,200	45	50	96.00	3.00	1.00
16	Friars Road	Via De La Moda	Fashion Valley Driveway	26,500	45	50	96.00	3.00	1.00
17	Friars Road	Fashion Valley Driveway	Avenida De Las Tiendas	41,300	45	50	96.00	3.00	1.00
18	Friars Road	Avenida De Las Tiendas	Ulric Street/SR-163 SB Ramps	58,200	45	50	96.00	3.00	1.00
19	Friars Road	Ulric Street/SR-163 SB Ramps	SR-163 NB Ramps	55,600	45	50	96.00	3.00	1.00
20	Friars Road	SR-163 NB Ramps	Frazee Road	45,400	45	50	96.00	3.00	1.00
21	Friars Road	Frazee Road	Mission Center Road	41,500	50	50	96.00	3.00	1.00
22	Friars Road	Mission Center Road	Qualcomm Way	35,500	50	50	96.00	3.00	1.00
23	Friars Road	Qualcomm Way	River Run Drive	38,900	50	50	96.00	3.00	1.00
24	Friars Road	River Run Drive	Fenton Parkway	40,200	50	50	96.00	3.00	1.00
25	Friars Road	Fenton Parkway	Northside Drive	34,300	50	50	96.00	3.00	1.00
26	Friars Road	Northside Drive	San Diego Mission Road	51,700	50	50	96.00	3.00	1.00
27	Friars Road	San Diego Mission Road	I-15 SB Ramps	85,200	50	50	96.00	3.00	1.00
28	Friars Road	I-15 SB Ramps	I-15 NB Ramps	74,100	45	50	96.00	3.00	1.00
29	Friars Road	I-15 NB Ramps	Rancho Mission Road	70,300	45	50	96.00	3.00	1.00
30	Friars Road	Rancho Mission Road	Santo Road	58,700	45	50	96.00	3.00	1.00
31	Friars Road	Santo Road	Riverdale Street	62,000	45	50	96.00	3.00	1.00
32	Friars Road	Riverdale Street	Mission Gorge Road	42,600	45	50	96.00	3.00	1.00

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33	Mission Gorge Road	Friars Road	Zion Avenue	33,200	45	50	96.00	3.00	1.00
34	Hazard Center Drive	Avenida Del Rio	Hazard Center W. Driveway	12,500	35	50	96.00	3.00	1.00
35	Hazard Center Drive	Hazard Center W. Driveway	Mission Center Road	15,900	35	50	96.00	3.00	1.00
36	Rio San Diego Drive	Gill Village Way	Qualcomm Way	15,600	40	50	96.00	3.00	1.00
37	Rio San Diego Drive	Qualcomm Way	River Run Drive	14,700	40	50	96.00	3.00	1.00
38	Rio San Diego Drive	River Run Drive	Fenton Parkway	13,900	40	50	96.00	3.00	1.00
39	San Diego Mission Road	Friars Road EB Ramps	Rancho Mission Road	12,400	40	50	96.00	3.00	1.00
40	San Diego Mission Road	Rancho Mission Road	950 Feet West of Fairmount Avenue	13,700	35	50	96.00	3.00	1.00
41	San Diego Mission Road	950 Feet West of Fairmount Avenue	Fairmount Avenue	13,700	35	50	96.00	3.00	1.00
42	Taylor Street	Pacific Highway	Morena Boulevard	18,800	35	50	96.00	3.00	1.00
43	Taylor Street	Morena Boulevard	I-8 EB Ramps	4,000	35	50	96.00	3.00	1.00
44	Taylor Street	I-8 EB Ramps	Hotel Circle South	5,000	35	50	96.00	3.00	1.00
45	Hotel Circle North	Hotel Circle South	Fashion Valley Road	8,200	35	50	96.00	3.00	1.00
46	Hotel Circle North	Fashion Valley Road	I-8 WB Off-Ramp	14,200	35	50	96.00	3.00	1.00
47	Hotel Circle North	I-8 WB Off-Ramp	Street "J"	25,000	35	50	96.00	3.00	1.00
48	Hotel Circle North	Street "J"	I-8 WB On-Ramp	15,300	35	50	96.00	3.00	1.00
49	Hotel Circle North	I-8 WB On-Ramp	Hotel Circle South	3,300	35	50	96.00	3.00	1.00
50	Camino De La Reina	Hotel Circle North	Avenida Del Rio	9,900	25	50	96.00	3.00	1.00
51	Camino De La Reina	Avenida Del Rio	Camino De La Siesta	17,100	30	50	96.00	3.00	1.00
52	Camino De La Reina	Camino De La Siesta	Mission Center Road	10,800	30	50	96.00	3.00	1.00
53	Camino De La Reina	Mission Center Road	Camino Del Este	19,700	30	50	96.00	3.00	1.00
54	Camino De La Reina	Camino Del Este	Qualcomm Way	13,200	30	50	96.00	3.00	1.00
55	Camino Del Rio North	Camino De La Siesta	Mission Center Road	12,800	35	50	96.00	3.00	1.00
56	Camino Del Rio North	Mission Center Road	I-8 WB Ramps	29,600	35	50	96.00	3.00	1.00
57	Camino Del Rio North	I-8 WB Ramps	Camino Del Este	11,300	35	50	96.00	3.00	1.00
58	Camino Del Rio North	Camino Del Este	Qualcomm Way	21,500	35	50	96.00	3.00	1.00
59	Camino Del Rio North	Qualcomm Way	Mission City Parkway	15,700	45	50	96.00	3.00	1.00
60	Camino Del Rio North	Mission City Parkway	800 Feet East of Mission City Parkway	8,900	30	50	96.00	3.00	1.00
61	Camino Del Rio North	800 Feet East of Mission City Parkway	1800 Feet West of Ward Road	8,900	45	50	96.00	3.00	1.00
62	Camino Del Rio North	1800 Feet West of Ward Road	Ward Road	9,700	45	50	96.00	3.00	1.00
63	Camino Del Rio North	Ward Road	1000 Feet West of Fairmount Avenue	9,700	45	50	96.00	3.00	1.00
64	Camino Del Rio North	1000 Feet West of Fairmount Avenue	Fairmount Avenue	20,400	45	50	96.00	3.00	1.00
65	Hotel Circle South	Taylor Street	I-8 EB Off-Ramp	3,100	35	50	96.00	3.00	1.00
66	Hotel Circle South	I-8 EB Off-Ramp	Street "J"	15,500	35	50	96.00	3.00	1.00
67	Hotel Circle South	Street "J"	I-8 EB On-Ramp	30,200	35	50	96.00	3.00	1.00
68	Hotel Circle South	I-8 EB On-Ramp	Bachman Place	14,100	35	50	96.00	3.00	1.00
69	Hotel Circle South	Bachman Place	Hotel Circle North	14,700	35	50	96.00	3.00	1.00
70	Camino Del Rio South	Western Terminus	1800 Feet west of Mission Center Road	7,500	25	50	96.00	3.00	1.00
71	Camino Del Rio South	1800 Feet west of Mission Center Road	Mission Center Road	7,500	35	50	96.00	3.00	1.00
72	Camino Del Rio South	Mission Center Road	Texas Street	8,700	35	50	96.00	3.00	1.00
73	Camino Del Rio South	Texas Street	Mission City Parkway	11,200	35	50	96.00	3.00	1.00
74	Camino Del Rio South	Mission City Parkway	I-15 SB Offramp	14,100	45	50	96.00	3.00	1.00
75	Camino Del Rio South	I-15 SB Offramp	I-15 SB Onramp	17,000	40	50	96.00	3.00	1.00
76	Camino Del Rio South	I-15 SB Onramp	Fairmount Avenue	7,700	40	50	96.00	3.00	1.00
77	West Morena Boulevard	Tecolote Road	Morena Boulevard	16,700	35	50	96.00	3.00	1.00
78	Morena Boulevard	West Morena Boulevard	Linda Vista Road	16,100	40	50	96.00	3.00	1.00
79	Morena Boulevard	Linda Vista Road	I-8 WB Offramp	28,900	40	50	96.00	3.00	1 00
80	Morena Boulevard	I-8 WB Offramp	Taylor Street	15.600	35	50	96.00	3.00	1.00
81	Napa Street	Morena Boulevard	Friars Road	15,700	25	50	96.00	3.00	1.00
82	Colusa Street	Linda Vista Road	Friars Road	2,700	25	50	96.00	3.00	1.00
83	Via Las Cumbres	Linda Vista Road	Friars Road	12,200	35	50	96.00	3.00	1.00
84	Via Las Cumbres	Friars Road	Riverwalk Drive	11,300	35	50	96.00	3.00	1.00

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85	Street "J"	Riverwalk Drive	Levi-Cushman Street "B"	17,200	35	50	96.00	3.00	1.00
86	Street "J"	Levi-Cushman Street "B"	Hotel Circle North	17,900	35	50	96.00	3.00	1.00
87	Street "J"	Hotel Circle North	Hotel Circle South	-	35	50		3.00	1.00
88	Fashion Valley Road	Friars Road	Riverwalk Drive	8,200	35	50	96.00	3.00	1.00
89	Fashion Valley Road	Riverwalk Drive	Levi-Cushman Street "B"	17,400	35	50	96.00	3.00	1.00
90	Fashion Valley Road	Levi-Cushman Street "B"	Hotel Circle North	24,600	35	50	96.00	3.00	1.00
91	Bachman Place	Hotel Circle South	Lewis Street	20,800	40	50	96.00	3.00	1.00
92	Avenida Del Rio	Fashion Valley Parking Lot	Camino De La Reina	19,100	35	50	96.00	3.00	1.00
93	Ulric Street	Fashion Hills Boulevard	600 Feet South of Fashion Hills Boulevard	25,800	40	50	96.00	3.00	1.00
94	Ulric Street	600 Feet South of Fashion Hills Boulevard	Friars Road	27,100	40	50	96.00	3.00	1.00
95	Camino De La Siesta	Camino De La Reina	Camino Del Rio North	9,400	25	50	96.00	3.00	1.00
96	Metropolitan Drive	Mission Valley Road	Murray Canyon Road	11,400	25	50	96.00	3.00	1.00
97	Murray Canyon Road	Metropolitan Drive	Frazee Road	5,600	30	50	96.00	3.00	1.00
98	Frazee Road	Metropolitan Drive	Murray Canyon Road	6,200	25	50	96.00	3.00	1.00
99	Frazee Road	Murray Canyon Road	Friars Road	20,400	30	50	96.00	3.00	1.00
100	Frazee Road	Friars Road	Hazard Center Drive	19,200	30	50	96.00	3.00	1.00
101	Mission Center Road	Murray Ridge Road	1200 Feet West of Murray Ridge Road	14,700	45	50	96.00	3.00	1.00
102	Mission Center Road	1200 Feet West of Murray Ridge Road	950 Feet North of Mission Valley Road	14,700	45	50	96.00	3.00	1.00
103	Mission Center Road	950 Feet North of Mission Valley Road	Mission Valley Road	14,700	40	50	96.00	3.00	1.00
104	Mission Center Road	Mission Valley Road	Westside Drive	20,100	40	50	96.00	3.00	1.00
105	Mission Center Road	Westside Drive	Friars Road WB Ramps	33,000	40	50	96.00	3.00	1.00
106	Mission Center Road	Friars Road WB Ramps	Friars Road EB Ramps	25,600	40	50	96.00	3.00	1.00
107	Mission Center Road	Friars Road EB Ramps	Mission Center Court	22,400	40	50	96.00	3.00	1.00
108	Mission Center Road	Mission Center Court	Hazard Center Drive	26,100	40	50	96.00	3.00	1.00
109	Mission Center Road	Hazard Center Drive	Camino De La Reina	32,100	40	50	96.00	3.00	1.00
110	Mission Center Road	Camino De La Reina	Camino Del Rio North	31,700	40	50	96.00	3.00	1.00
111	Auto Circle	Camino Del Rio North	I-8 EB Ramps	41,100	40	50	96.00	3.00	1.00
112	Auto Circle	I-8 EB Ramps	Camino Del Rio South	18,000	40	50	96.00	3.00	1.00
113	Via Alta	Franklin Ridge Road	Civita Boulevard	10,900	25	50	96.00	3.00	1 00
114	Via Alta	Civita Boulevard	Westside Drive	6,400	25	50	96.00	3.00	1.00
115	Murray Ridge Road	Mission Center Road	I-805 NB Ramps	23,800	35	50	96.00	3.00	1.00
116	Murray Ridge Road	I-805 NB Ramps	I-805 SB Ramps	24,300	35	50	96.00	3.00	1.00
117	Russell Park Wav	Friars Road	Civita Boulevard	7,400	30	50	96.00	3.00	1 00
118	Camino Del Este	Rio San Diego Drive	Camino De La Reina	13,900	35	50	96.00	3.00	1.00
119	Camino Del Este	Camino De La Reina	Camino Del Rio North	18,200	25	50	96.00	3.00	1.00
120	Franklin Ridge Road	Phyllis Place	Via Alta	31,800	 25	50	96.00	3.00	1 00
121	Franklin Ridge Road	Via Alta	Civita Boulevard	17,100	25	50	96.00	3.00	1.00
122	Qualcomm Way	Civita Boulevard	Friars Road WB Ramps	19,700	30	50	96.00	3.00	1.00
123	Qualcomm Way	Friars Road WB Ramps	Friars Road EB Ramps	30,300	35	50	96.00	3.00	1 00
124	Qualcomm Way	Friars Road EB Ramps	Rio San Diego Drive	26.300	35	50	96.00	3.00	1 00
125	Qualcomm Way	Rio San Diego Drive	Camino Del Rio North	42,700	35	50	96.00	3.00	1.00
126	Qualcomm Way	Camino Del Rio North	I-8 WB Ramps	49.400	35	50	96.00	3.00	1.00
127	Qualcomm Way	I-8 WB Ramps	I-8 EB Ramps	53.500	35	50	96.00	3.00	1.00
128	Qualcomm Way	I-8 EB Ramps	Camino Del Rio South	32,100	35	50	96.00	3.00	1.00
120	Texas Street	Camino Del Rio South	1400 Feet North of Madison Ave	33 200	40	50	96.00	3.00	1.00
120	Texas Street	1400 Feet North of Madison Ave	Madison Avenue	33 200	40	50	96.00	3.00	1.00
131	Texas Street	Madison Avenue	Meade Ave	20 400	25	50	96.00	3.00	1 00
132	Texas Street	Meade Ave	El Caion Boulevard	15 600	25 25	50	90.00 96.00	3.00	1.00
132	River Run Drive	Friars Road	Rio San Diego Drive	4,100	25	50	96.00	3.00	1 00
134	Fenton Parkway	Portofino Driveway	Friars Road	4,900	25	50	96.00	3.00	1.00
135	Fenton Parkway	Friars Road	Rio San Diego Drive	15,700	30	50	96.00	3.00	1 00
136	Fenton Parkway	Rio San Diego Drive	Del Rio Apartments Driveway	9.300	30	50	96.00	3.00	1 00
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137	Fenton Parkway	Del Rio Apartments Driveway	New Street I	9,300	30	50	96.00	3.00	1.00
138	Fenton Parkway	New Street I	Camino Del Rio North	13,900	30	50	96.00	3.00	1.00
139	Mission City Parkway	Camino Del Rio North	Camino Del Rio South	11,000	35	50	96.00	3.00	1.00
140	Northside Drive	Portofino Driveway	Friars Road	5,100	25	50	96.00	3.00	1.00
141	Northside Drive	Friars Road	Fenton Marketplace Driveway	24,600	30	50	96.00	3.00	1.00
142	Northside Drive	Fenton Marketplace Driveway	Lowe's Frontage Road	19,600	30	50	96.00	3.00	1.00
143	Mission Village Drive	Ronda Avenue	Friars Road WB Ramps	17,900	45	50	96.00	3.00	1.00
144	Mission Village Drive	Friars Road WB Ramps	Friars Road EB Ramps	30,600	45	50	96.00	3.00	1.00
145	Rancho Mission Road	Friars Road	San Diego Mission Road	16,200	35	50	96.00	3.00	1.00
146	Rancho Mission Road	San Diego Mission Road	Camino Del Rio North	19,300	35	50	96.00	3.00	1.00
147	Santo Road	Northern Terminus	Friars Road	15,700	30	50	96.00	3.00	1.00
148	Riverdale Street	Zion Road	Friars Road	2,200	30	50	96.00	3.00	1.00
149	Riverdale Street	Friars Road	Vandever Avenue	26,500	30	50	96.00	3.00	1.00
150	Mission Gorge Road	Friars Road	Camino Del Rio North	22,700	30	50	96.00	3.00	1.00
151	Fairmount Avenue	Camino Del Rio North/I-8 WB Offramp	I-8 EB Offramp	53,300	35	50	96.00	3.00	1.00
152	Fairmount Avenue	I-8 EB Offramp	Camino Del Rio South	93,300	35	50	96.00	3.00	1.00
153	Riverwalk Drive	West of Street "J"		6,000	25	50	96.00	3.00	1.00
154	Riverwalk Drive	Street "J"	Fashion Valley Road	3,700	25	50	96.00	3.00	1.00
155	Riverwalk Drive	Fashion Valley Road	Avenida Del Rio	15,200	25	50	96.00	3.00	1.00
156	Levi-Cushman Street "B"	Via Las Cumbres	Fashion Valley Road	11,300	35	50	96.00	3.00	1.00
157	Goshen Street	Linda Vista Road	Gaines Street	4,300	25	50	96.00	3.00	1.00
158	Goshen Street	Gaines Street	Friars Road	3,400	25	50	96.00	3.00	1.00
159	Goshen Street	Friars Road	South End	5,000	25	50	96.00	3.00	1.00
160	New Street "I"	Mission City Parkway	Eastern End	11,900	25	50	96.00	3.00	1.00
161	Gill Village Way	Friars Road	Rio San Diego Drive	5,700	25	50	96.00	3.00	1.00
162	Rio Bonito Way	Friars Road	Rio San Diego Drive	4,100	25	50	96.00	3.00	1.00
163	Mission Valley Road	Frazee Road	Metropolitan Drive	6,500	25	50	96.00	3.00	1.00
164	Metropolitan Drive	Murray Canyon Road	Frazee Road	200	25	50	96.00	3.00	1.00

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80.00	10.00	10.00
80.00	10.00	10.00

FHWA RD-77-108 Traffic Noise Prediction Model Predicted Noise Levels

Project Name : Mission Valley CPU Project Number : 7899 Modeled Condition : 2050 Assessment Metric: Hard

				Noise Levels, dBA Hard Distance to Traffic Noise Level Contours						urs, Feet			
Segmer	nt Roadway	From	То	Auto	MT	HT	Total	75 dB	70 dB	65 dB	60 dB	55 dB	50 dB
1	Phyllis Place	Abbotshill Road	I-805 SB Ramps	64.9	61.4	64.3	68.5	11	35	112	354	1,119	3,540
2	Sea World Drive	Mission Bay Parkway	Friars Road	74.5	67.1	66.6	75.8	60	190	601	1,901	6,011	19,009
3	Sea World Drive	Friars Road	I-5 SB Ramps	71.0	64.9	64.9	72.7	29	93	294	931	2,944	9,310
4	Tecolote Road	I-5 SB Ramps	I-5 NB Ramps	71.0	64.9	64.9	72.7	29	93	294	931	2,944	9,310
5	Tecolote Road	I-5 NB Ramps	Morena Boulevard	69.0	63.6	64.0	71.0	20	63	199	629	1,991	6,295
6	Mission Valley Road	Metropolitan Drive	Mission Center Road	61.9	58.4	61.3	65.5	6	18	56	177	561	1,774
7	Civita Boulevard	Mission Center Road	Via Alta	56.7	53.3	56.1	60.4	2	5	17	55	173	548
8	Civita Boulevard	Via Alta	Qualcomm Way	56.0	52.5	55.4	59.6	1	5	14	46	144	456
9	Civita Boulevard	Qualcomm Way	Franklin Ridge Road	60.1	56.7	59.6	63.8	4	12	38	120	379	1,199
10	Westside Drive	Mission Center Road	Via Alta	56.8	53.4	56.2	60.5	2	6	18	56	177	561
11	Friars Road	Sea World Drive	Napa Street	71.5	63.5	62.7	72.6	29	91	288	910	2,877	9,099
12	Friars Road	Napa Street	Colusa Street	69.9	63.1	62.9	71.4	22	69	218	690	2,183	6,902
13	Friars Road	Colusa Street	Via Las Cumbres	71.1	64.3	64.0	72.6	29	91	288	910	2,877	9,099
14	Friars Road	Via Las Cumbres	Fashion Valley Road	71.0	64.2	63.9	72.5	28	89	281	889	2,812	8,891
15	Friars Road	Fashion Valley Road	Via De La Moda	71.4	64.6	64.3	72.9	31	97	308	975	3,083	9,749
16	Friars Road	Via De La Moda	Fashion Valley Driveway	71.3	64.5	64.2	72.8	30	95	301	953	3,013	9,527
17	Friars Road	Fashion Valley Driveway	Avenida De Las Tiendas	73.2	66.4	66.2	74.7	47	148	467	1,476	4,666	14,756
18	Friars Road	Avenida De Las Tiendas	Ulric Street/SR-163 SB Ramps	74.7	67.9	67.6	76.2	66	208	659	2,084	6,591	20,843
19	Friars Road	Ulric Street/SR-163 SB Ramps	SR-163 NB Ramps	74.5	67.7	67.4	76.0	63	199	629	1,991	6,295	19,905
20	Friars Road	SR-163 NB Ramps	Frazee Road	73.6	66.8	66.6	75.1	51	162	512	1,618	5,116	16,180
21	Friars Road	Frazee Road	Mission Center Road	74.6	67.2	66.6	75.8	60	190	601	1,901	6,011	19,009
22	Friars Road	Mission Center Road	Qualcomm Way	73.9	66.5	65.9	75.2	52	166	524	1,656	5,236	16,557
23	Friars Road	Qualcomm Way	River Run Drive	74.3	66.9	66.3	75.6	57	182	574	1,815	5,741	18,154
24	Friars Road	River Run Drive	Fenton Parkway	74.4	67.0	66.5	75.7	59	186	587	1,858	5,874	18,577
25	Friars Road	Fenton Parkway	Northside Drive	73.7	66.3	65.8	75.0	50	158	500	1,581	5,000	15,811
26	Friars Road	Northside Drive	San Diego Mission Road	75.5	68.1	67.6	76.8	76	239	757	2,393	7,568	23,932
27	Friars Road	San Diego Mission Road	I-15 SB Ramps	77.7	70.3	69.7	79.0	126	397	1,256	3,972	12,559	39,716
28	Friars Road	I-15 SB Ramps	I-15 NB Ramps	75.8	69.0	68.7	77.2	83	262	830	2,624	8,298	26,240
29	Friars Road	I-15 NB Ramps	Rancho Mission Road	75.5	68.7	68.5	77.0	79	251	792	2,506	7,924	25,059
30	Friars Road	Rancho Mission Road	Santo Road	74.8	68.0	67.7	76.2	66	208	659	2,084	6,591	20,843
31	Friars Road	Santo Road	Riverdale Street	75.0	68.2	67.9	76.5	71	223	706	2,233	7,063	22,334
32	Friars Road	Riverdale Street	Mission Gorge Road	73.4	66.6	66.3	74.8	48	151	477	1,510	4,775	15,100
33	Mission Gorge Road	Friars Road	Zion Avenue	72.3	65.5	65.2	73.8	38	120				
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34	Hazard Center Drive	Avenida Del Rio	Hazard Center W. Driveway	64.9	59.5	60.0	67.0	8	25				
35	Hazard Center Drive	Hazard Center W. Driveway	Mission Center Road	65.9	60.6	61.0	68.0	10	32				
36	Rio San Diego Drive	Gill Village Way	Qualcomm Way	67.5	61.4	61.5	69.3	13	43				
37	Rio San Diego Drive	Qualcomm Way	River Run Drive	67.3	61.1	61.2	69.0	13	40				
38	Rio San Diego Drive	River Run Drive	Fenton Parkway	67.0	60.9	61.0	68.8	12	38				
39	San Diego Mission Road	Friars Road EB Ramps	Rancho Mission Road	66.5	60.4	60.5	68.3	11	34				
40	San Diego Mission Road	Rancho Mission Road	950 Feet West of Fairmount Avenue	65.3	59.9	60.4	67.4	9	27				
41	San Diego Mission Road	950 Feet West of Fairmount Avenue	Fairmount Avenue	65.3	59.9	60.4	67.4	9	27				
42	Taylor Street	Pacific Highway	Morena Boulevard	66.7	61.3	61.7	68.7	12	37				
43	Taylor Street	Morena Boulevard	I-8 EB Ramps	59.9	54.6	55.0	62.0	3	8				
44	Taylor Street	I-8 EB Ramps	Hotel Circle South	60.9	55.6	56.0	63.0	3	10				
45	Hotel Circle North	Hotel Circle South	Fashion Valley Road	63.1	57.7	58.1	65.1	5	16				
46	Hotel Circle North	Fashion Valley Road	I-8 WB Off-Ramp	65.5	60.1	60.5	67.5	9	28				
47	Hotel Circle North	I-8 WB Off-Ramp	Street "J"	67.9	62.5	63.0	70.0	16	50				
48	Hotel Circle North	Street "J"	I-8 WB On-Ramp	65.8	60.4	60.8	67.8	10	30				
49	Hotel Circle North	I-8 WB On-Ramp	Hotel Circle South	59.1	53.8	54.2	61.2	2	7				
50	Camino De La Reina	Hotel Circle North	Avenida Del Rio	59.7	56.2	59.1	63.4	3	11				
51	Camino De La Reina	Avenida Del Rio	Camino De La Siesta	64.3	59.9	62.2	67.3	8	27				
52	Camino De La Reina	Camino De La Siesta	Mission Center Road	62.3	57.9	60.2	65.3	5	17				
53	Camino De La Reina	Mission Center Road	Camino Del Este	64.9	60.5	62.8	67.9	10	31				
54	Camino De La Reina	Camino Del Este	Qualcomm Way	63.2	58.7	61.1	66.2	7	21				
55	Camino Del Rio North	Camino De La Siesta	Mission Center Road	65.0	59.6	60.1	67.1	8	26				
56	Camino Del Rio North	Mission Center Road	I-8 WB Ramps	68.6	63.3	63.7	70.7	19	_= 59				
57	Camino Del Rio North	I-8 WB Ramps	Camino Del Este	64.5	59.1	59.5	66.5	7	22				
58	Camino Del Rio North	Camino Del Este	Qualcomm Way	67.3	61.9	62.3	69.3	13	43				
59	Camino Del Rio North	Qualcomm Wav	Mission City Parkway	69.0	62.2	62 0	70.5	18	56				
60	Camino Del Rio North	Mission City Parkway	800 Feet Fast of Mission City Parkway	61.5	57 0	59 4	64.4	4	14				
61	Camino Del Rio North	800 Feet East of Mission City Parkway	1800 Feet West of Ward Road	66.6	59.8	59.5	68.0	10	32				
62	Camino Del Rio North	1800 Feet West of Ward Road	Ward Road	66.9	60 1	59.9	68.4	10	35				
63	Camino Del Rio North	Ward Road	1000 Feet West of Fairmount Avenue	66.9	60.1	59.9	68.4	11	35				
64	Camino Del Rio North	1000 Feet West of Fairmount Avenue	Fairmount Avenue	70.2	63.4	63.1	71.6	23	72				
65	Hotel Circle South	Taylor Street	I-8 FB Off-Ramp	58.8	53.5	53.9	60.9	2	6				
66	Hotel Circle South	I-8 EB Off-Ramp	Street ""	65.8	60.5	60.9	67.9	10	31				
67	Hotel Circle South	Street "J"	I-8 FB On-Ramp	68.7	63.4	63.8	70.8	19	60				
68	Hotel Circle South	I-8 EB On-Ramp	Bachman Place	65.4	60.1	60.5	67.5	q	28				
69	Hotel Circle South	Bachman Place	Hotel Circle North	65.4	60.2	60.7	67.7	9	20				
70	Camino Del Rio South	Western Terminus	1800 Feet west of Mission Center Road	58 5	55 0	57.9	62.1	3	8				
71	Camino Del Rio South	1800 Feet west of Mission Center Road	Mission Center Road	62.7	57.3	57.7	64.8	5	15				
72	Camino Del Rio South	Mission Center Road	Texas Street	63.3	58.0	58.4	65.4	5	17				
73	Camino Del Rio South	Texas Street	Mission City Parkway	64.4	59.0	59 5	66 5	7	22				
74	Camino Del Rio South	Mission City Parkway	I-15 SB Offramp	68.6	61.8	61 5	70.0	, 16	50				
75	Camino Del Rio South	I-15 SB Offramp	I-15 SB Onramp	67.9	61.8	61.8	69.6	14	46				
76	Camino Del Rio South	I-15 SB Onramp	Fairmount Avenue	64 5	58.3	58.4	66.2	7	21				
77	West Morena Boulevard	Tecolote Road	Morena Boulevard	66.2	60.8	61.2	68.2	, 10	23				
78	Morena Boulevard	West Morena Boulevard	Linda Vista Road	67.7	61.5	61.6	69 <i>4</i>	14	44				
70	Morena Boulevard	Linda Vista Road		70.2	6/ 1	64.1	71 0	24	77				
80	Morena Boulevard	I-8 WB Offramp	Taylor Street	65 0	60.5	60 0	67 0	<u>∠</u> -+ 1∩	21				
81	Napa Street	Morena Boulevard	Friars Road	61 7	58.2	61 1	65 /	5	17				
82	Colusa Street	Linda Vista Road	Friars Road	54.0	50.2	53.5	57 7	1	2				
83	Via Las Cumbres	Linda Vista Road	Friars Road	6/ Q	50.0	50.0	66.0	י و	24				
84	Via Las Cumbres	Friars Road	Riverwalk Drive	64 5	50.4	59.9 50 5	66 5	7	24 22				
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379	1,199	3,793	11,994
79	251	792	2,506
100	315	998	3,155
135	426	1,346	4,256
126	397	1,256	3,972
120	379	1,199	3,793
107	338	1,069	3,380
87	275	869	2,748
87	275	869	2,748
117	371	1,172	3,707
25	79	251	792
32	100	315	998
51	162	512	1,618
89	281	889	2,812
158	500	1,581	5,000
95	301	953	3,013
21	66	208	659
35	109	346	1,094
85	269	849	2,685
54	169	536	1.694
97	308	975	3.083
66	208	659	2.084
81	256	811	2.564
186	587	1.858	5.874
71	223	706	2.233
135	426	1.346	4.256
177	561	1,774	5.610
44	138	435	1.377
100	315	998	3 155
109	346	1 094	3 459
109	346	1.094	3,459
229	723	2 285	7 227
19	62	195	615
97	308	975	3 083
190	601	1.901	6.011
89	281	889	2 812
93	294	931	2.944
26	81	256	811
48	151	477	1.510
55	173	548	1,734
71	223	706	2 233
158	500	1 581	5,000
144	456	1 442	4 560
66	208	659	2 084
104	330	1 045	3,303
138	435	1,377	4 355
245	774	2 449	7 744
97	308	975	3 083
55	173	548	1 734
9	29	93	294
77	245	774	2 4 4 9
71	223	706	2.233
	-	-	,

85	Street "J"	Riverwalk Drive	Levi-Cushman Street "B"	66.3	60.9	61.3	68.4	11	35
86	Street "J"	Levi-Cushman Street "B"	Hotel Circle North	66.5	61.1	61.5	68.5	11	35
87	Street "J"	Hotel Circle North	Hotel Circle South				#VALUE!		
88	Fashion Valley Road	Friars Road	Riverwalk Drive	63.1	57.7	58.1	65.1	5	16
89	Fashion Valley Road	Riverwalk Drive	Levi-Cushman Street "B"	66.3	61.0	61.4	68.4	11	35
90	Fashion Valley Road	Levi-Cushman Street "B"	Hotel Circle North	67.8	62.5	62.9	69.9	15	49
91	Bachman Place	Hotel Circle South	Lewis Street	68.8	62.7	62.7	70.5	18	56
92	Avenida Del Rio	Fashion Valley Parking Lot	Camino De La Reina	66.7	61.4	61.8	68.8	12	38
93	Ulric Street	Fashion Hills Boulevard	600 Feet South of Fashion Hills Boulevard	69.7	63.6	63.6	71.4	22	69
94	Ulric Street	600 Feet South of Fashion Hills Boulevard	Friars Road	69.9	63.8	63.9	71.7	23	74
95	Camino De La Siesta	Camino De La Reina	Camino Del Rio North	59.5	56.0	58.9	63.1	3	10
96	Metropolitan Drive	Mission Valley Road	Murray Canyon Road	60.3	56.9	59.7	64.0	4	13
97	Murray Canyon Road	Metropolitan Drive	Frazee Road	59.5	55.0	57.4	62.4	3	9
98	Frazee Road	Metropolitan Drive	Murray Canyon Road	57.6	54.2	57.1	61.3	2	7
99	Frazee Road	Murray Canyon Road	Friars Road	65.1	60.6	63.0	68.0	10	32
100	Frazee Road	Friars Road	Hazard Center Drive	64.8	60.4	62.7	67.8	10	30
101	Mission Center Road	Murray Ridge Road	1200 Feet West of Murray Ridge Road	68.7	61.9	61.7	70.2	17	52
102	Mission Center Road	1200 Feet West of Murray Ridge Road	950 Feet North of Mission Valley Road	68.7	61.9	61.7	70.2	17	52
103	Mission Center Road	950 Feet North of Mission Valley Road	Mission Valley Road	67.3	61.1	61.2	69.0	13	40
104	Mission Center Road	Mission Valley Road	Westside Drive	68.6	62.5	62.6	70.4	17	55
105	Mission Center Road	Westside Drive	Friars Road WB Ramps	70.8	64.7	64.7	72.5	28	89
106	Mission Center Road	Friars Road WB Ramps	Friars Road EB Ramps	69.7	63.6	63.6	71.4	22	69
107	Mission Center Road	Friars Road EB Ramps	Mission Center Court	69.1	63.0	63.0	70.8	19	60
108	Mission Center Road	Mission Center Court	Hazard Center Drive	69.8	63.6	63.7	71.5	22	71
109	Mission Center Road	Hazard Center Drive	Camino De La Reina	70.7	64.5	64.6	72.4	27	87
110	Mission Center Road	Camino De La Reina	Camino Del Rio North	70.6	64.5	64.5	72.3	27	85
111	Auto Circle	Camino Del Rio North	I-8 EB Ramps	71.7	65.6	65.7	73.5	35	112
112	Auto Circle	I-8 EB Ramps	Camino Del Rio South	68.2	62.0	62.1	69.9	15	49
113	Via Alta	Franklin Ridge Road	Civita Boulevard	60.1	56.7	59.5	63.8	4	12
114	Via Alta	Civita Boulevard	Westside Drive	57.8	54.3	57.2	61.5	2	7
115	Murray Ridge Road	Mission Center Road	I-805 NB Ramps	67.7	62.3	62.8	69.8	15	48
116	Murray Ridge Road	I-805 NB Ramps	I-805 SB Ramps	67.8	62.4	62.8	69.9	15	49
117	Russell Park Way	Friars Road	Civita Boulevard	60.7	56.2	58.6	63.6	4	11
118	Camino Del Este	Rio San Diego Drive	Camino De La Reina	65.4	60.0	60.4	67.4	9	27
119	Camino Del Este	Camino De La Reina	Camino Del Rio North	62.3	58.9	61.7	66.0	6	20
120	Franklin Ridge Road	Phyllis Place	Via Alta	64.7	61.3	64.2	68.4	11	35
121	Franklin Ridge Road	Via Alta	Civita Boulevard	62.0	58.6	61.5	65.7	6	19
122	Qualcomm Way	Civita Boulevard	Friars Road WB Ramps	64.9	60.5	62.8	67.9	10	31
123	Qualcomm Way	Friars Road WB Ramps	Friars Road EB Ramps	68.7	63.4	63.8	70.8	19	60
124	Qualcomm Way	Friars Road EB Ramps	Rio San Diego Drive	68.1	62.8	63.2	70.2	17	52
125	Qualcomm Way	Rio San Diego Drive	Camino Del Rio North	70.2	64.9	65.3	72.3	27	85
126	Qualcomm Way	Camino Del Rio North	I-8 WB Ramps	70.9	65.5	65.9	72.9	31	97
127	Qualcomm Way	I-8 WB Ramps	I-8 EB Ramps	71.2	65.9	66.3	73.3	34	107
128	Qualcomm Way	I-8 EB Ramps	Camino Del Rio South	69.0	63.6	64.1	71.1	20	64
129	Texas Street	Camino Del Rio South	1400 Feet North of Madison Ave	70.8	64.7	64.7	72.5	28	89
130	Texas Street	1400 Feet North of Madison Ave	Madison Avenue	70.8	64.7	64.7	72.5	28	89
131	Texas Street	Madison Avenue	Meade Ave	62.8	59.4	62.2	66.5	7	22
132	Texas Street	Meade Ave	El Cajon Boulevard	61.7	58.2	61.1	65.3	5	17
133	River Run Drive	Friars Road	Rio San Diego Drive	55.8	52.4	55.3	59.5	1	4
134	Fenton Parkway	Portofino Driveway	Friars Road	56.6	53.2	56.0	60.3	2	5
135	Fenton Parkway	Friars Road	Rio San Diego Drive	64.0	59.5	61.8	66.9	8	24
136	Fenton Parkway	Rio San Diego Drive	Del Rio Apartments Driveway	61.7	57.2	59.6	64.6	5	14
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109	346	1,094	3,459	
112	354	1,119	3,540	
51	162	512	1,618	
109	346	1,094	3,459	
155	489	1,545	4,886	
177	561	1,774	5,610	
120	379	1,199	3,793	
218	690	2,183	6,902	
234	740	2,339	7,396	
32	102	323	1,021	
40	126	397	1,256	
27	87	275	869	
21	67	213	674	
100	315	998	3,155	
95	301	953	3,013	
166	524	1,656	5,236	
166	524	1,656	5,236	
126	397	1,256	3,972	
173	548	1,734	5,482	
281	889	2,812	8,891	
218	690	2,183	6,902	
190	601	1,901	6,011	
223	706	2,233	7,063	
275	869	2,748	8,689	
269	849	2,685	8,491	
354	1,119	3,540	11,194	
155	489	1,545	4,886	
38	120	379	1,199	
22	71	223	706	
151	477	1,510	4,775	
155	489	1,545	4,886	
36	115	362	1,145	
87	275	869	2,748	
63	199	629	1,991	
109	346	1,094	3,459	
59	186	587	1,858	
97	308	975	3,083	
190	601	1,901	6,011	
166	524	1,656	5,236	
269	849	2,685	8,491	
308	975	3,083	9,749	
338	1,069	3,380	10,690	
204	644	2,037	6,441	
281	889	2,812	8,891	
281	889	2,812	8,891	
71	223	706	2,233	
54	169	536	1,694	
14	45	141	446	
17	54	169	536	
77	245	774	2,449	
46	144	456	1,442	

137	Fenton Parkway	Del Rio Apartments Driveway	New Street I	61.7	57.2	59.6	64.6	5	14
138	Fenton Parkway	New Street I	Camino Del Rio North	63.4	59.0	61.3	66.4	7	22
139	Mission City Parkway	Camino Del Rio North	Camino Del Rio South	64.3	59.0	59.4	66.4	7	22
140	Northside Drive	Portofino Driveway	Friars Road	56.8	53.4	56.2	60.5	2	6
141	Northside Drive	Friars Road	Fenton Marketplace Driveway	65.9	61.4	63.8	68.9	12	39
142	Northside Drive	Fenton Marketplace Driveway	Lowe's Frontage Road	64.9	60.4	62.8	67.9	10	31
143	Mission Village Drive	Ronda Avenue	Friars Road WB Ramps	69.6	62.8	62.5	71.1	20	64
144	Mission Village Drive	Friars Road WB Ramps	Friars Road EB Ramps	71.9	65.1	64.9	73.4	35	109
145	Rancho Mission Road	Friars Road	San Diego Mission Road	66.0	60.7	61.1	68.1	10	32
146	Rancho Mission Road	San Diego Mission Road	Camino Del Rio North	66.8	61.4	61.8	68.9	12	39
147	Santo Road	Northern Terminus	Friars Road	64.0	59.5	61.8	66.9	8	24
148	Riverdale Street	Zion Road	Friars Road	55.4	50.9	53.3	58.4	1	3
149	Riverdale Street	Friars Road	Vandever Avenue	66.2	61.8	64.1	69.2	13	42
150	Mission Gorge Road	Friars Road	Camino Del Rio North	65.6	61.1	63.4	68.5	11	35
151	Fairmount Avenue	Camino Del Rio North/I-8 WB Offramp	I-8 EB Offramp	71.2	65.8	66.3	73.3	34	107
152	Fairmount Avenue	I-8 EB Offramp	Camino Del Rio South	73.6	68.3	68.7	75.7	59	186
153	Riverwalk Drive	West of Street "J"		57.5	54.1	56.9	61.2	2	7
154	Riverwalk Drive	Street "J"	Fashion Valley Road	55.4	52.0	54.8	59.1	1	4
155	Riverwalk Drive	Fashion Valley Road	Avenida Del Rio	61.5	58.1	61.0	65.2	5	17
156	Levi-Cushman Street "B"	Via Las Cumbres	Fashion Valley Road	64.5	59.1	59.5	66.5	7	22
157	Goshen Street	Linda Vista Road	Gaines Street	56.1	52.6	55.5	59.7	1	5
158	Goshen Street	Gaines Street	Friars Road	55.0	51.6	54.5	58.7	1	4
159	Goshen Street	Friars Road	South End	56.7	53.3	56.1	60.4	2	5
160	New Street "I"	Mission City Parkway	Eastern End	60.5	57.0	59.9	64.1	4	13
161	Gill Village Way	Friars Road	Rio San Diego Drive	57.3	53.8	56.7	61.0	2	6
162	Rio Bonito Way	Friars Road	Rio San Diego Drive	55.8	52.4	55.3	59.5	1	4
163	Mission Valley Road	Frazee Road	Metropolitan Drive	57.8	54.4	57.3	61.5	2	7
164	Metropolitan Drive	Murray Canyon Road	Frazee Road	42.7	39.3	42.2	46.4	0	0

46	144	456	1,442
69	218	690	2,183
69	218	690	2,183
18	56	177	561
123	388	1,227	3,881
97	308	975	3,083
204	644	2,037	6,441
346	1,094	3,459	10,939
102	323	1,021	3,228
123	388	1,227	3,881
77	245	774	2,449
11	35	109	346
132	416	1,315	4,159
112	354	1,119	3,540
338	1,069	3,380	10,690
587	1,858	5,874	18,577
21	66	208	659
13	41	129	406
52	166	524	1,656
71	223	706	2,233
15	47	148	467
12	37	117	371
17	55	173	548
41	129	406	1,285
20	63	199	629
14	45	141	446
22	71	223	706
1	2	7	22

FHWA RD-77-108

Traffic Noise Prediction Model Data Input Sheet

Project Name : Mission Valley CPU Project Number : 7899 Modeled Condition : Freeway 2050

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

			Speed	Distance	•								
Segment	Roadway	From	То	Traffic Vol.	(Mph)	to CL	% Autos	%MT	% HT	Day %	Eve %	Night %	K-Factor
1	I-5	Washington Street	Old Town Avenue	185,100	65	50	96.10	2.90	1.00	80.00	10.00	10.00	
2	I-5	Old Town Avenue	I-8	231,000	65	50	96.10	2.90	1.00	80.00	10.00	10.00	
3	I-5	I-8	Sea World Drive	192,600	65	50	96.10	2.90	1.00	80.00	10.00	10.00	
4	I-5	Sea World Drive	Clairemont Drive	243,600	65	50	96.10	2.90	1.00	80.00	10.00	10.00	
5	I-8	Midway Drive	I-5	107,900	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
6	I-8	I-5	Morena Boulevard	150,100	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
7	I-8	Morena Boulevard	Hotel Circle/Taylor Street	199,400	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
8	I-8	Hotel Circle/Taylor Street	Hotel Circle	199,400	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
9	I-8	Hotel Circle	SR-163	211,300	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
10	I-8	SR-163	Mission Center Road	196,300	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
11	I-8	Mission Center Road	Texas Street	221,500	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
12	I-8	Texas Street	I-805	193,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
13	I-8	I-805	I-15	247,000	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
14	I-8	I-15	Fairmount Avenue	297,300	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
15	I-8	Fairmount Avenue	Waring Road	242,200	65	50	96.80	2.50	0.70	80.00	10.00	10.00	
16	I-15	El Cajon Boulevard	Adams Avenue	209,000	65	50	96.00	2.80	1.20	80.00	10.00	10.00	
17	I-15	Adams Avenue	I-8	219,600	65	50	96.00	2.80	1.20	80.00	10.00	10.00	
18	I-15	I-8	Friars Road	276,100	65	50	96.00	2.80	1.20	80.00	10.00	10.00	
19	I-15	Friars Road	Aero Drive	255,100	65	50	96.00	2.80	1.20	80.00	10.00	10.00	
20	I-805	El Cajon Boulevard	Adams Avenue	223,600	65	50	93.60	4.10	2.30	80.00	10.00	10.00	
21	I-805	Adams Avenue	I-8	250,700	65	50	93.60	4.10	2.30	80.00	10.00	10.00	
22	I-805	I-8	Murray Ridge	254,800	65	50	93.60	4.10	2.30	80.00	10.00	10.00	
23	I-805	Murray Ridge	Kearny Villa Road	260,900	65	50	93.60	4.10	2.30	80.00	10.00	10.00	
24	SR-163	Washington Street	6th Avenue	134,700	65	50	96.50	2.70	0.80	80.00	10.00	10.00	
25	SR-163	6th Avenue	I-8	194,600	65	50	96.50	2.70	0.80	80.00	10.00	10.00	
26	SR-163	I-8	Friars Road	187,300	65	50	96.50	2.70	0.80	80.00	10.00	10.00	
27	SR-163	Friars Road	Genesee Avenue	214,900	65	50	96.50	2.70	0.80	80.00	10.00	10.00	
28	SR-163	Genesee Avenue	Mesa College Drive	211, <u>1</u> 00	65	50	96.50	2.70	0.80	80.00	10.00	10.00	

FHWA RD-77-108 Traffic Noise Prediction Model Predicted Noise Levels

Project Name : Mission Valley CPU Project Number : 7899 Modeled Condition : Freeway 2050 Assessment Metric: Soft

		Se	Segment		Noise Levels, dBA Soft					Distance to Traffic Noise Level Contours, Feet					
Segmer	nt Roadway	From	То	Auto	MT	HT	Total	75 dB	70 dB	65 dB	60 dB	55 dB	50 dB		
1	I-5	Washington Street	Old Town Avenue	84.3	75.3	74.1	85.2	239	516	1,111	2,393	5,156	11,108		
2	I-5	Old Town Avenue	I-8	85.3	76.3	75.1	86.2	279	601	1,295	2,790	6,011	12,951		
3	I-5	I-8	Sea World Drive	84.5	75.5	74.3	85.4	247	532	1,145	2,468	5,317	11,454		
4	I-5	Sea World Drive	Clairemont Drive	85.5	76.5	75.3	86.4	288	620	1,335	2,877	6,199	13,355		
5	I-8	Midway Drive	I-5	82.0	72.3	70.2	82.7	163	351	757	1,630	3,513	7,568		
6	I-8	I-5	Morena Boulevard	83.5	73.7	71.7	84.2	205	442	953	2,053	4,422	9,527		
7	I-8	Morena Boulevard	Hotel Circle/Taylor Street	84.7	75.0	72.9	85.4	247	532	1,145	2,468	5,317	11,454		
8	I-8	Hotel Circle/Taylor Street	Hotel Circle	84.7	75.0	72.9	85.4	247	532	1,145	2,468	5,317	11,454		
9	I-8	Hotel Circle	SR-163	85.0	75.2	73.2	85.6	254	548	1,181	2,545	5,482	11,811		
10	I-8	SR-163	Mission Center Road	84.6	74.9	72.8	85.3	243	524	1,128	2,430	5,236	11,280		
11	I-8	Mission Center Road	Texas Street	85.2	75.4	73.4	85.9	266	574	1,237	2,665	5,741	12,368		
12	I-8	Texas Street	I-805	84.6	74.8	72.8	85.3	243	524	1,128	2,430	5,236	11,280		
13	I-8	I-805	I-15	85.6	75.9	73.8	86.3	283	610	1,315	2,833	6,104	13,151		
14	I-8	I-15	Fairmount Avenue	86.4	76.7	74.6	87.1	320	690	1,487	3,204	6,902	14,870		
15	I-8	Fairmount Avenue	Waring Road	85.5	75.8	73.8	86.2	279	601	1,295	2,790	6,011	12,951		
16	I-15	El Cajon Boulevard	Adams Avenue	84.9	75.7	75.5	85.8	262	565	1,218	2,624	5,653	12,180		
17	I-15	Adams Avenue	I-8	85.1	75.9	75.7	86.0	271	583	1,256	2,706	5,830	12,559		
18	I-15	I-8	Friars Road	86.1	76.9	76.7	87.0	315	680	1,464	3,155	6,797	14,643		
19	I-15	Friars Road	Aero Drive	85.7	76.5	76.3	86.7	301	649	1,398	3,013	6,491	13,984		
20	I-805	El Cajon Boulevard	Adams Avenue	85.1	77.6	78.6	86.5	292	629	1,356	2,922	6,295	13,561		
21	I-805	Adams Avenue	I-8	85.6	78.1	79.1	87.0	315	680	1,464	3,155	6,797	14,643		
22	I-805	I-8	Murray Ridge	85.6	78.2	79.1	87.1	320	690	1,487	3,204	6,902	14,870		
23	I-805	Murray Ridge	Kearny Villa Road	85.7	78.3	79.2	87.2	325	701	1,510	3,253	7,009	15,100		
24	SR-163	Washington Street	6th Avenue	83.0	73.6	71.8	83.7	190	410	882	1,901	4,095	8,823		
25	SR-163	6th Avenue	I-8	84.6	75.2	73.4	85.3	243	524	1,128	2,430	5,236	11,280		
26	SR-163	I-8	Friars Road	84.4	75.0	73.2	85.2	239	516	1,111	2,393	5,156	11,108		
27	SR-163	Friars Road	Genesee Avenue	85.0	75.6	73.8	85.8	262	565	1,218	2,624	5,653	12,180		
28	SR-163	Genesee Avenue	Mesa College Drive	84.9	75.5	73.7	85.7	258	557	1,199	2,584	5,567	11,994		

ATTACHMENT 3

Trolley Contours Noise Calculation Data

Green Line Trolley Speeds

Stations	Distance (mi)	Time (sec)*	Time (hr)	Speed (mph)
Grantville to Mission San Diego	0.90	90	0.025	36
Mission San Diego to Stadium	0.50	90	0.025	20
Stadium to Fenton Parkway	0.49	30	0.008	58
Fenton Parkway to Rio Vista	0.95	90	0.025	38
Rio Vista to Mission Valley Center	0.51	90	0.025	20
Mission Valley Center to Hazard Center	0.50	90	0.025	20
Hazard Center to Fashion Valley	0.73	90	0.025	29
Fashion Valley to Morena/Linda Vista	1.66	150	0.042	40
Morena/Linda Vista to Old Town	0.82	150	0.042	20

*Published schedule minus 30 sec to account for stops

Noise Model Based on Federal Transit Adminstration General Transit Noise Assessment Developed for Chicago Create Project Copyright 2006, HMMH Inc. Case:

7899 Mission Valley CPU

RESULTS			
Noise Source	Ldn (dB)	Leq - daytime (dB)	Leq - nighttime (dB)
All Sources	72	68	65
Source 1 - 36 mph	63	59	56
Source 2 - 20 mph	58	54	51
Source 3 - 58 mph	67	64	60
Source 4 - 38 mph	64	60	57
Source 5 - 29 mph	61	58	54
Source 6 - 40 mph	64	60	57
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)

Enter data for up to 8 noise sour NOISE SOURCE PARAMETERS	ces below - see reference l	ist for source numb	ers.
Parameter	Source 1		Source 2
Source Num.	RRT/LRT	4	RRT/LRT
Distance (source to receiver)	distance (ft)	50	distance (ft)
Daytime Hours	speed (mph)	36	speed (mph)

Parameter	Source 1		Source 2		Source 3		Source 4		Source 5		Source 6		Source 7
Source Num.	RRT/LRT	4											
Distance (source to receiver)	distance (ft)	50											
Daytime Hours	speed (mph)	36	speed (mph)	20	speed (mph)	58	speed (mph)	38	speed (mph)	29	speed (mph)	40	
(7 AM - 10 PM)	trains/hour	7.66667											
	cars/train	5											
Nighttime Hours	speed (mph)	36	speed (mph)	20	speed (mph)	58	speed (mph)	38	speed (mph)	29	speed (mph)	40	
(10 PM - 7 AM)	trains/hour	3.66667											
	cars/train	5											
Wheel Flats?	% of cars w/ wheel flats	0.00%	% of cars w/ wheel flats	0.00%	% of cars w/ wheel flats	0.00%	% of cars w/ wheel flats	0.00%	% of cars w/ wheel flats	0.00%	% of cars w/ wheel flats	0.00%	
Jointed Track?	Y/N	N	Y/N	Ν									
Embedded Track?	Y/N	Ν											
Aerial Structure?	Y/N	N	Y/N	Ν	Y/N	Ν	Y/N	Ν	Y/N	N	Y/N	Ν	
Barrier Present?	Y/N	N											
Intervening Rows of of Buildings	number of rows	0											

SOURCE REFERENCE LIST				
Source	Number			
Commuter Electric Locomotive	1			
Commuter Diesel Locomotive	2			
Commuter Rail Cars	3			
RRT/LRT	4			
AGT, Steel Wheel	5			
AGT, Rubber Tire	6			
Monorail	7			
Maglev	8			
Freight Locomotive	9			
Freight Cars	10			
Hopper Cars (empty)	11			
Hopper Cars (full)	12			
Crossover	13			
Automobiles	14			
City Buses	15			
Commuter Buses	16			
Rail Yard or Shop	17			
Layover Tracks	18			
Bus Storage Yard	19			
Bus Op. Facility	20			
Bus Transit Center	21			
Parking Garage	22			
Park & Ride Lot	23			

2

Green Line Trolley Noise Levels

Stations	Noise Level at 50	Distance to Noise Contour:			
Stations	feet (CNEL)	75 CNEL	70 CNEL	65 CNEL	60 CNEL
Grantville to Mission San Diego	63	3	10	33	105
Mission San Diego to Stadium	58	1	3	10	32
Stadium to Fenton Parkway	67	9	27	86	272
Fenton Parkway to Rio Vista	64	4	12	37	117
Rio Vista to Mission Valley Center	63	3	10	33	105
Mission Valley Center to Hazard Center	63	3	10	33	105
Hazard Center to Fashion Valley	61	2	7	22	68
Fashion Valley to Morena/Linda Vista	64	4	13	41	130
Morena/Linda Vista to Old Town	63	3	10	33	105

Trolley Vibration

 $Lv = 85.88 - 1.06\log(D) - 2.32 \log (D)^2 - 0.87 \log(D)^3$

Distance 25 feet VdB = 77.487598

Speed	Adjustment	VdB		Distance to 72 VdB	Distance to 65 VdB
36	-2.8	74.7	Grantville to Mission San Diego	37	92
20	-8.0	69.5	Mission San Diego to Stadium	14	48
58	1.3	78.8	Stadium to Fenton Parkway	66	143
38	-2.4	75.1	Fenton Parkway to Rio Vista	39	97
20	-7.9	69.6	Rio Vista to Mission Valley Center	14	48
20	-7.9	69.6	Mission Valley Center to Hazard Center	14	48
29	-4.7	72.8	Hazard Center to Fashion Valley	27	75
40	-2.0	75.5	Fashion Valley to Morena/Linda Vista	42	101
20	-8.0	69.4	Morena/Linda Vista to Old Town	14	48

		Dista	nce to VdB	(feet)	
Speed	Adjustment	75	72	65	VdB
15	-10.5	1	9	33	67.0
20	-8.0	6	14	48	69.5
25	-6.0	11	21	63	71.5
30	-4.4	16	28	77	73.1
35	-3.1	21	35	90	74.4
40	-1.9	26	42	102	75.5
45	-0.9	31	49	114	76.6
50	0.0	36	55	125	77.5
55	0.8	41	62	136	78.3
60	1.6	45	68	147	79.1