

## 3.6 NOISE

The following section compares the probable significant noise impacts from the Preferred Alternative and the Straight Street Grid Option to those associated with the Redevelopment Alternatives (Alternatives 1 - 3) in the 2008 *New Whatcom Redevelopment Project Draft EIS* (DEIS) and identifies any new or increased significant impacts and/or mitigation. This section is based on the September 2008, *Supplemental Noise Technical Memorandum* prepared by The Landau Associates (see **Appendix K** for the full report).

### 3.6.1 Affected Environment

#### Study Area

In the DEIS, thirteen offsite receiver locations were selected to represent groupings of sensitive noise receivers that share common characteristics such as elevation, location in the study area, or land use. The DEIS also analyzes three additional onsite receiver locations to represent groups of new onsite sensitive receivers assumed under the DEIS Alternatives. See Figure 3.6-1 of the DEIS for a map of the receiver locations. The same 16 receiver locations were considered in this SDEIS.

#### Methodology

As discussed in Section 3.6.1 and Appendix K, the noise analysis in the DEIS provides a qualitative review of existing and future non-traffic-related noise and a quantitative analysis of traffic-related noise for both future onsite and offsite representative noise receivers. Sound levels were measured at five representative offsite receiver locations. Eight additional offsite receiver locations were modeled using a traffic noise model to calibrate existing sound levels and to identify existing noise sources.

In the DEIS, determination of the existing and future traffic conditions was based on PM peak hour traffic data presented in the *Transportation Discipline Report* (see DEIS Appendix N). An updated *Transportation Discipline Report* (see **Appendix M**) has been prepared for this SDEIS.

Future traffic noise levels were modeled using a traffic noise model. This analysis was completed for the No Build Alternative, Alternative 1 and Alternative 3. Existing and future traffic noise levels were then compared to the FHWA/WSDOT Noise Abatement Criteria (see Table 3.6-2 in the DEIS). Non-traffic noise levels were then compared to the Department of Ecology (Ecology) Environmental Noise Level criteria (see Table 3.6-3 in the DEIS).

#### Existing Noise Environment

The existing New Whatcom site is mostly vacant, although the site supports some industrial land uses. Onsite noise sources (including noise from trucks and marine vessel activity) are considered to contribute limited noise to the existing ambient conditions in the area. The existing noise environment in the vicinity of the site is typical of urban areas and is characterized by noise levels generated by vehicular traffic on nearby streets and highways, passing trains, occasional aircraft flyovers, barking dogs, lawn mowers, etc. Vehicular traffic on the existing roadway network is the dominant noise source in the study area. Noise is also generated by

train traffic on the Burlington Northern Santa Fe (BNSF) railway corridor that runs through the site and north along Roeder Avenue.

Table 3.6-4 in the DEIS identifies existing measured or modeled noise levels at each receiver location and compares these levels to applicable traffic noise criteria. All receivers, with the exception of those currently located along the primary offsite roadway network (identified as Receivers R7 and R8) currently experience noise levels at or above the FHWA/WSDOT noise impact criteria during the noisiest time period of the day (the PM peak hour).

Existing sources of noise and noise conditions on the New Whatcom site and in the site vicinity have generally remained the same as presented in the DEIS; therefore, no further discussion of existing conditions is warranted in this SDEIS (see DEIS Section 3.6.1 for a detailed description of the existing noise conditions).

### 3.6.2 Impacts

As described in **Chapter 2**, levels of redevelopment under the Preferred Alternative would be within the range of redevelopment assumed for DEIS Alternatives 1 - 3 and similar to Alternative 2. The DEIS analysis focused on the impacts of Alternatives 1 and 3 in order to provide a bracketed range of potential impacts; Alternative 2 was assumed to fall within the range of impacts identified for Alternatives 1 and 3. For purposes of this noise analysis, impacts from the Preferred Alternative are highlighted and compared to Alternatives 1 and 3.

Draft EIS (Alternatives 1 – 4)

#### Construction

As indicated in the DEIS, all redevelopment alternatives are expected to have some level of initial and ongoing phased construction as the area changes from its industrial use to a mixed-use neighborhood. All alternatives would include similar construction activities, such as clearing, grading, excavating and demolition; therefore, noise impacts associated with construction activities would be similar for all alternatives. Pile-driving activities would be assumed to affect the largest number of receivers on and surrounding the site during construction activities. Pile driving would be intermittently intrusive throughout the construction period.

As construction of roadway and infrastructure improvements, as well as building and parking construction, would be phased over the buildout period and would be temporary in nature, only short-term construction impacts would result and would not be expected to be significant.

#### Operations

Operational noise impacts would result from both vehicular traffic noise sources and non-traffic noise sources (general human activity, rail and marine traffic, mechanical equipment, light and marine industrial operations, etc.) Noise from these sources would be typical of an urban environment and would not be expected to significantly impact offsite sensitive receivers.

### *Non-traffic Noise*

The Redevelopment Alternatives would result in reductions in large marine vessel traffic and increases in small recreational vessel traffic associated with the marina and transient moorage. Changes in vessel traffic would not be expected to result in a net increase in perceptible noise levels from marine vessels at the site or in the site vicinity.

Other background noise sources, such as passenger and freight railroad operations, are expected to continue to contribute to the background noise within the site area. Under DEIS Alternatives 1 and 2/2A, a portion of the railroad corridor would be relocated approximately 500 feet to the east and south. This relocation would serve to decrease noise to future onsite sensitive receivers by moving the noise source to a greater distance from new onsite uses. Relocating the rail corridor adjacent to the bluff would be expected to increase noise levels for the first row of receivers positioned closest to the top of the bluff; beyond that point, noise levels could decrease.

The Redevelopment Alternatives assume a variety of onsite noise-generating sources, such as light and marine industrial businesses, a new marina and ongoing operational activities at the Bellingham Shipping Terminal in the vicinity of areas that would also support office, institutional, recreational, and residential uses. Given the potential proximity of new onsite receivers to these noise sources, certain noise issues could arise among various onsite uses. Site planning, design, building orientation and building techniques could be considered to ensure that future onsite noise levels would adhere to Ecology's Environmental Noise Regulations.

### *Traffic Noise*

The DEIS analysis indicates that the highest future noise increases would occur at the residential units located near Laurel St. (see Table 3.6-6 in the DEIS for assumed traffic noise levels at all receiver locations). These units are located in proximity to planned Redevelopment Areas 5 and 7 (the areas closest to the bluff). Predicted increases during the PM peak hour range from a 3 dBA increase under the No Action Alternative, to a 4 dBA increase under DEIS Alternative 3 and a 5 dBA increase under DEIS Alternative 1, as compared to existing conditions. The No Action Alternative and DEIS Alternative 3 did not assume major improvements to Laurel St.; however, roadway improvements to Laurel St., including a new bridge connection, were included and modeled for DEIS Alternative 1. All other noise increases would range between 1 and 2 dBA over existing conditions; none of the predicted increases would be considered a significant noise impact.

### Preferred Alternative

#### Construction

The type and timing of the construction activities associated with the Preferred Alternative would be similar to DEIS Alternatives 1 - 3; therefore, the Preferred Alternative construction noise levels would be similar to those outlined in the DEIS.

As the construction activities associated with the Preferred Alternative would be phased over the buildout period and would be temporary in nature, short-term construction impacts would result and would not be expected to be significant.

## Operations

### *Non-Traffic Noise*

Redevelopment under the Preferred Alternative would include a similar mix of land uses and densities to those assumed under DEIS Alternative 1 - 3; therefore, the types of noise generated would be similar. These noise sources (including noise from rail and marine activity, industrial operations and other operational sources) would be considered part of the ambient noise environment that is typical of an urban, waterfront community and would be expected to increase as a result of the New Whatcom redevelopment. Under the Preferred Alternative there would be a reduction in noise associated with industrial uses. The ambient noise level increases anticipated for the Preferred Alternative would be similar to those anticipated for DEIS Alternatives 1 - 3 and are not expected to be significant.

### *Traffic Noise*

Offsite Traffic Noise: For this SDEIS noise analysis, the estimated PM peak hour traffic volumes for the Preferred Alternative provided in the *Supplemental Transportation Discipline Report* (see **Appendix M**) are compared to those assumed for the DEIS Alternatives. Both overall traffic volumes and individual roadway volumes are reviewed. As shown in **Table 3.6-1**, the traffic volumes assumed for the Preferred Alternative would fall within the range of volumes assumed for Alternatives 1 - 3.

**Table 3.6-1  
ESTIMATED VEHICLE TRIP GENERATION SUMMARY**

Scenario	PM Peak Hour Net New Vehicle Trips		
	Total	In	Out
<b><i>Preferred Alternative</i></b>			
Net New Trips 2016	<b>1,975</b>	641	1,334
Net New Trips 2026	<b>4,806</b>	1,465	3,341
<b><i>Alternative 1 – High Density</i></b>			
Net New Trips 2016	<b>2,212</b>	878	1,334
Net New Trips 2026	<b>5,713</b>	1,967	3,746
<b><i>Alternative 3 – Low Density</i></b>			
Net New Trips 2016	<b>1,055</b>	390	665
Net New Trips 2026	<b>3,887</b>	1,319	2,568

Source: *The Transpo Group 2007, 2008.*

Since the traffic volumes for the Preferred Alternative would fall within the range of volumes estimated for DEIS Alternatives 1 - 3, it is assumed that the Preferred Alternative would result in similar noise levels and further modeling is not necessary.

The Preferred Alternative does not assume the development of the Laurel St. Bridge as a new connection to the site; therefore, the noise levels at those receivers closest to the bluff (represented by receivers R7 and R8) could be more representative of the levels predicted for Alternative 3, rather than for Alternative 1. Worst-case noise increases during the PM peak

hour would generally range between 1 and 2 dBA over existing noise levels; significant impacts to offsite noise receivers would not be expected.

Onsite Traffic Noise: Traffic-related noise impacts to onsite receivers associated with the Preferred Alternative, would also be assumed to be similar to those discussed in the DEIS for Alternatives 1 - 3. Onsite exterior noise levels would be generally expected to meet applicable noise criteria. Predicted noise levels within portions of the Marines Trades Area, however, could be higher for new residential receivers during the noisiest traffic period. Design and construction methods to achieve noise attenuation could be considered as part of the future permit process for proposed developments in direct proximity to residential receivers within this area.

## Straight Street Grid Option

Redevelopment under the Straight Street Grid Option would include a similar mix of land uses and densities and associated traffic volumes to those proposed under Preferred Alternative. Accordingly, it is assumed that construction and operation of redevelopment under the Straight Street Grid Option would result in noise impacts similar to those described under the Preferred Alternative; no significant noise impacts would be anticipated.

### 3.6.3 Conclusions

The potential for significant noise impacts under the Preferred Alternative or the Straight Street Grid Option would be within the range of impacts identified under DEIS Alternatives 1 - 3. No significant noise impacts would be anticipated with the Preferred Alternative or the Straight Street Grid Option.

### 3.6.4 Mitigation Measures

Mitigation measures to address the potential for significant noise impacts from Alternatives 1 - 3 during both construction and operation are identified in the DEIS (see DEIS Section 3.6.3 for a list of these measures). These mitigation measures would also apply to the Preferred Alternative and the Straight Street Grid Option. Because no additional significant impacts were identified for the Preferred Alternative or the Straight Street Grid Option, no additional mitigation measures would be warranted.

### 3.6.5 Significant Unavoidable Adverse Impacts

No significant adverse noise impacts would be anticipated to result from redevelopment under the Preferred Alternative or the Straight Street Grid Option.